

# Door Opening Solution

**ASSA ABLOY**

The global leader in  
door opening solutions





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| TYPE                     | BRAND & PRODUCT                                                                                                                                                                                                                                                                           |
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| 1 HINGE                  | MCKINNEY CONDENSED<br>YALE<br>RIXSON PIVOTS                                                                                                                                                                                                                                               |
| 2 DOOR CLOSER            | YALE 3000 SERIES<br>NORTON 7500/7700 SERIES<br>NORTON 7900 SERIES<br>ABLOY DOOR CLOSER<br>ABLOY CONCEALED PRODUCTS<br>ABLOY FIRE DOOR CLOSING SYSTEMS<br>ASSA ABLOY DOOR CLOSER BROCHURE<br>LOCKWOOD SURFACE MOUNTED DOOR CLOSER<br>KING FLOOR CLOSERS<br>RIXSON HEAVY-DUTY FLOOR CLOSERS |
| 3 MECHANICAL LOCK        | YALE 5000 SERIES MORTISE LOCK<br>YALE M8700 SERIES<br>YALE 8800 SERIES<br>SARGENT 7800 & 8200 SERIES<br>VACHETTE MORTISE LOCK<br>ADAMS RITE 1850S SERIES<br>ADAMS RITE 1850S-050 SERIES                                                                                                   |
| 4 ELECTROMECHANICAL LOCK | TRIMEC ELECTRIC STRIKE<br>TRIMEC ELECTROMAGNETIC LOCK<br>SECURITRON<br>SARGENT ECOFLEX<br>ABLOY EL460, EL461, EL560, EL561<br>APERIO WIRELESS LOCK<br>APERIO WIRELESS DOOR CONTROL                                                                                                        |
| 5 CYLINDER               | ASSA CYLINDER<br>ABLOY CYLINDER<br>MUL-T LOCK CYLINDER                                                                                                                                                                                                                                    |
| 6 EXIT-DEVICE            | YALE 7000 SERIES<br>SARGENT 90 SERIES<br>JPM PANIC EXIT DEVICE                                                                                                                                                                                                                            |
| 7 LEVER HANDLE           | VALLI & VALLI<br>VALLI FUSITAL<br>YALE LEVER HANDLE                                                                                                                                                                                                                                       |
| 8 DIGITAL DOOR LOCK      | YALE DIGITAL DOOR LOCK                                                                                                                                                                                                                                                                    |
| 9 ACCESSORIES            | ROCKWOOD CONDENSED CATALOG<br>ROCKWOOD ARCHITECTURAL CATALOG<br>PEMKO CONDENSED CATALOG<br>PEMKO SLIDING FOLDING CATALOG<br>RIXSON CHECKMATE<br>RIXSON ELECTROMAGNETIC DOOR HOLDER<br>SECURITRON ACCESS CONTROL PRODUCT                                                                   |
| 10 PROJECT REFERENCE     |                                                                                                                                                                                                                                                                                           |

# Hinges

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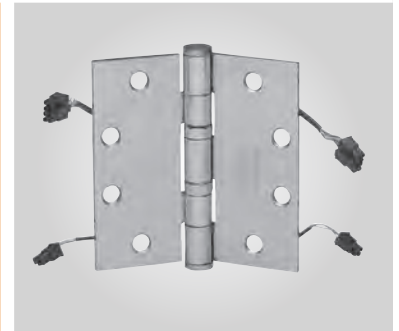
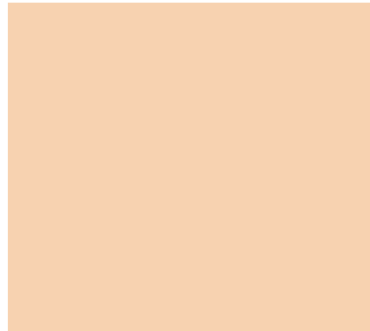






A Selection of McKinney Hinges including:

- Standard
- Decorative
- Custom & Specialty
- Continuous
- Electrified



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# McKinney Condensed Catalog

**McKinney**  
**ASSA ABLOY**

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in door opening solutions



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McKinney Products Company designs and manufactures high quality architectural hinges for commercial use. With roots in Cincinnati OH, McKinney moved to and manufactured in the heart of the Pennsylvania steel industry for many years.

McKinney became an ASSA ABLOY Group brand in 1996. With the resources of ASSA ABLOY, McKinney greatly expanded its research and development, and manufacturing capabilities. These expanded capabilities have had the greatest impact on improving custom hinge manufacturing.

A variety of materials and hinge types can be custom manufactured in our Berlin, CT plant, including the ElectroLynx® hinges and Power over Ethernet (PoE) hinges. For more information on custom manufactured hinges, call McKinney at 1-800-346-7707.

### Innovation

To support today's need for electronic security applications, McKinney has developed a variety of electric hinges used in remote door monitoring and access control systems, and received a patent on the Power over Ethernet (PoE) hinge. In addition McKinney has teamed up with other ASSA ABLOY Group brands to offer StormPro tornado resistant solutions.

### Decorative Hinges

McKinney offers decorative architectural hinges with special tips and finishes. Designed to suite with hardware from ASSA ABLOY Group brands, these commercial decorative hinges open up a whole new world of design options for your door openings.

### LEED Certification

McKinney can help to achieve prerequisites and accumulate points in several categories and credit areas of LEED. For further information, please call 1-800-346-7707 or refer to our website [www.McKinneyhinge.com](http://www.McKinneyhinge.com).

## Sales & Support

McKinney is represented by the ASSA ABLOY Door Security Solutions team.

Phone: 1-800-DSS-EZ4U (800-377-3948)  
Address: 110 Sargent Drive, New Haven, CT 06511  
Web site: [www.assaabloydss.com](http://www.assaabloydss.com)  
Email: Contact your local ASSA ABLOY Door Security Solution Representative via e-mail by going to [www.assaabloydss.com](http://www.assaabloydss.com) and clicking on "Sales Support".

Customer Service Representatives are available during regular business hours at 1-800-346-7707 or email [customerservice@McKinneyhinge.com](mailto:customerservice@McKinneyhinge.com). The website is available 24/7 with the current catalogs, sell sheets and the most up-to-date templates.

McKinney has improved lead times through partnerships with other ASSA ABLOY facilities. A number of popular items are stocked and ready to ship from warehouses in Ventura CA, Pomona CA, Mason City IA, Memphis TN and Berlin CT. In addition, over 400 stock items are included in a 3-day QuickShip Program from the Berlin, CT plant.

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Visit [www.McKinneyhinge.com](http://www.McKinneyhinge.com)

## Technical References

### Recommended Size of Hinges Per Door, Either Wood or Metal

| Door               |                        | Hinge           |       |
|--------------------|------------------------|-----------------|-------|
| Thickness In. (mm) | Width In. (mm)         | Height In. (mm) | Gauge |
| 1 3/8" (35)        | up to 36" (914)        | 3 1/2" (89)     | .123  |
| 1 3/8" (35)        | over 36" (914)         | 4" (102)        | .130  |
| 1 3/4" (44)        | up to 36" (914)        | 4 1/2" (114)    | .134  |
| 1 3/4" (44)        | 36" - 48" (914 - 1219) | 5" (127)        | .146  |
| 1 3/4" (44)        | over 48" (1219)        | 6" (152)        | .160  |
| 2" 2 1/2" (51-64)  | up to 42" (1067)       | 5" (127)        | .190  |
| 2" 2 1/2" (51-64)  | over 42" (1067)        | 6" (152) HW     | .203  |

### Expected Frequency of Door Operation

| Door                          | Expected Daily Cycles | Frequency Yearly |         |  |
|-------------------------------|-----------------------|------------------|---------|--|
| <b>Commercial</b>             |                       |                  |         |  |
| Commercial Store Entrance     | 5,000                 | 1,500,000        | High    |  |
| Office Building Entrance      | 4,000                 | 1,200,000        |         |  |
| Theatre Entrance              | 1,000                 | 450,000          |         |  |
| School Entrance               | 1,250                 | 225,000          |         |  |
| School Restroom Door          | 1,250                 | 225,000          |         |  |
| Store or Bank Entrance        | 500                   | 150,000          |         |  |
| Office Building Restroom Door | 400                   | 118,000          | Average |  |
| School Corridor Door          | 80                    | 15,000           |         |  |
| Office Building Corridor Door | 75                    | 22,000           |         |  |
| Store Restroom Door           | 60                    | 18,000           | Low     |  |
| <b>Residential</b>            |                       |                  |         |  |
| Entrance                      | 40                    | 15,000           |         |  |
| Restroom Door                 | 25                    | 9,000            |         |  |
| Corridor Door                 | 10                    | 3,600            |         |  |
| Closet Door                   | 6                     | 2,200            |         |  |

NOTE: McKinney recommends that bearing hinges be used on all above categories other than residential. One Cycle = one complete opening and closing.

### Recommended Number of Hinges Per 3'0" Wide Door\*, Either Wood or Metal

| Door Height In. (mm)       | Number of Hinges per Door |
|----------------------------|---------------------------|
| Up to 60" (1524)           | 2                         |
| 60" to 90" (1524 to 2286)  | 3                         |
| 90" to 120" (2286 to 3048) | 4                         |

\* Consult factory for doors wider than 3'0". Doors up to 60" in height shall be provided with two hinges and an additional hinge for each additional 30" of door height or fraction thereof. The distance between hinges shall be permitted to exceed 30". Where spring hinges are used, a minimum of two must be provided.

### Standards

- Template hinges are made in sizes, gauges, and with screw holes located to conform to ANSI/ BHMA A156.7 and U.S. Government standards CS9-65 and SDI. Templates are available on McKinney's Website at www.McKinneyhinge.com, or upon request
- McKinney finishes meet or exceed ANSI/BHMA A156.1, A156.18 and BHMA 1301 standards for materials and finishes
- McKinney bearing hinges meet or exceed the testing requirements of NFPA-80 Table 6.4.3.1 2010 Builders Hardware
- McKinney spring hinges meet or exceed testing requirements of ANSI/BHMA A156.17 and are UL listed in both the USA and Canada
- McKinney continuous hinges meet or exceed testing requirements of ANSI/BHMA A156.26 and are UL listed in both the USA and Canada

\* Heavy weight hinges should be used on all heavy weight doors or those exposed to high frequency use. Five knuckle heavy weight hinges have four bearings. The following gauges of metal apply:  
Heavy weight 4 1/2" (114) high = .180 gauge  
Heavy weight 5" (127) high = .190 gauge  
Heavy weight 6" (152) high = .203 gauge

NOTE: Five knuckle 8" (203) high hinges have six bearings.

### Door Weights Per Square Foot

Based upon 3'0" x 7'0" Door Size

#### Hollow Metal Door Weights by Gauge

|          | Lbs. Per Square Foot |
|----------|----------------------|
| 20 Gauge | 4                    |
| 18 Gauge | 5                    |
| 16 Gauge | 6                    |
| 14 Gauge | 7                    |

### Door Weights Per Square Foot

Based upon 3'0" x 7'0" Door Size

#### Wood Door Weights by Door Thickness

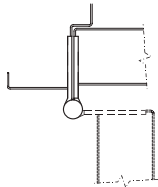
|                       | Lbs. Per Square Foot |             |
|-----------------------|----------------------|-------------|
|                       | 1 3/8" door          | 1 3/4" door |
| Particle/Mineral Core | 4.75                 | 5.25        |
| Stave Core Wood       | 3.75                 | 4.25        |
| Hollow Core Wood      | 1.3                  | 1.5         |

NOTE: Weights do not include hardware. Metal and wood door weights are approximate and will vary slightly among door manufacturers.



## Full Mortise Hinges

### MODERNE Two Knuckle Full Mortise

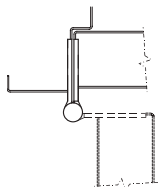


Offers the most security in a standard hinge. The bearing hinges have a stainless steel pin and anti-friction bushing in the door leaf, which provides additional protection against vertical and lateral wear.

- Plain bearing hinges have an anti-friction component inserted between the two barrels
- The slim barrel Moderne two knuckle hinge is available in steel and non-ferrous base
- Standard and heavy weight
- Pins in all bearing hinges are stainless steel
- Pins in plain bearing hinges are steel; stainless steel pins are available
- Decorative tips available
- Standard hinges are packed with all machine by all wood screws
- By design, pins are non-rising, non-removable and tamper protected by a flush, non-removable cap at the end of the barrel. A door can not be removed when in the closed position, thus affording maximum security. Intermediate hinges can be ordered opposite hand and installed upside down, to inhibit removal of the door in an open position
- Available non-removable door (NRD) hinges have a set screw in the barrel of one hinge in the set of 3
- Two knuckle hinges are handed

| Type         | Size In. (mm)         | Plain Bearing |       | Standard Weight Bearing |                 |        | Heavy Weight Bearing |                 |        |
|--------------|-----------------------|---------------|-------|-------------------------|-----------------|--------|----------------------|-----------------|--------|
|              |                       | Gauge         | Steel | Gauge                   | Stainless Steel | Steel  | Gauge                | Stainless Steel | Steel  |
| 2<br>Knuckle | 4" x 4" (102 x 102)   | .130          | T2731 | .130                    | TA3331          | TA2731 | -                    | -               | -      |
|              | 4½" x 4" (114 x 102)  | .134          | T2731 | .134                    | TA3331          | TA2731 | .180                 | TA3350          | TA3750 |
|              | 4½" x 4½" (114 x 114) | .134          | T2731 | .134                    | TA3331          | TA2731 | .180                 | TA3350          | TA3750 |
|              | 5" x 4" (127 x 102)   | .146          | T2731 | .146                    | TA3331          | TA2731 | .190                 | TA3350          | TA3750 |
|              | 5" x 4½" (127 x 114)  | .146          | T2731 | .146                    | TA3331          | TA2731 | .190                 | TA3350          | TA3750 |
|              | 5" x 5" (127 x 127)   | .146          | T2731 | .146                    | TA3331          | TA2731 | .190                 | TA3350          | TA3750 |

### Three Knuckle Full Mortise



Bearing hinges have concealed vertical and lateral thrust twin anti-friction type bearings at both joints.

- Pins in all non-ferrous bearing hinges are stainless steel
- Pins in all ferrous hinges are steel
- Pins in all hinges are non-rising type
- Standard hinges are packed with all machine by all wood screws
- Decorative tips available
- Available in 3K-ET style, furnished with button tips (same pin and plug as five knuckle hinge)

| Type         | Size In. (mm)                                               | Plain Bearing |       | Standard Weight Bearing |                           |        | Heavy Weight Bearing |                           |        |
|--------------|-------------------------------------------------------------|---------------|-------|-------------------------|---------------------------|--------|----------------------|---------------------------|--------|
|              |                                                             | Gauge         | Steel | Gauge                   | Brass/<br>Stainless Steel | Steel  | Gauge                | Brass/<br>Stainless Steel | Steel  |
| 3<br>Knuckle | 3½" x 3½" (89 x 89)                                         | .123          | T714  | .123+                   | TA314                     | TA714  | -                    | -                         | -      |
|              | 4" x 4" (102 x 102)                                         | .130          | T714  | .130+                   | TA314                     | TA714  | -                    | -                         | -      |
|              | 4½" x 4" (114 x 102)                                        | .134          | T714  | .134                    | TA314                     | TA714  | .180+                | TA386                     | TA786  |
|              | 4½" x 4½" (114 x 114)                                       | .134          | T714  | .134                    | TA314                     | TA714  | .180                 | TA386                     | TA786  |
|              | 5" x 4" (127 x 102)                                         | .146          | T714  | .146+                   | TA314                     | TA714  | .190+                | TA386                     | TA786  |
|              | 5" x 4½" (127 x 114)                                        | .146          | T714  | .146+                   | TA314                     | TA714  | .190                 | TA386                     | TA786  |
|              | 5" x 5" (127 x 127)                                         | .146          | T714  | .146+                   | TA314                     | TA714  | .190+                | TA386                     | TA786  |
|              | 8" x 6" (203 x 152)                                         | -             | -     | -                       | -                         | -      | .225*+               | TA386                     | TA786  |
|              | 8" x 8" (203 x 203)                                         | -             | -     | -                       | -                         | -      | .225*+               | TA386                     | TA786  |
|              | When door is beveled on hinge side specify handing required |               |       |                         |                           | TA5314 | TA5714               |                           | TA5386 |

+Not available in brass  
\*Not available in stainless steel

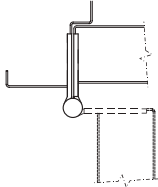
## Full Mortise Hinges

### Five Knuckle Full Mortise



Bearing hinges are furnished with an oil impregnated (TA) bearing on hinges up to 5" high.

- Pins in all non-ferrous bearing hinges are stainless steel
- Pins in all ferrous hinges are steel
- Pins in all hinges are non-rising type
- Standard hinges are packed with all machine by all wood screws
- Concealed bearings (TCA are available in 4½" and 5" only)
- Ball bearings (TB are an available option)



| Type                                                        | Size In. (mm)         | Plain Bearing |       | Standard Weight Bearing |                           |                    | Heavy Weight Bearing |                           |         |
|-------------------------------------------------------------|-----------------------|---------------|-------|-------------------------|---------------------------|--------------------|----------------------|---------------------------|---------|
|                                                             |                       | Gauge         | Steel | Gauge                   | Brass/<br>Stainless Steel | Steel              | Gauge                | Brass/<br>Stainless Steel | Steel   |
| 5<br>Knuckle                                                | 3½" x 3½" (89 x 89)   | .123          | T2714 | .123+                   | TA2314                    | TA2714             | —                    | —                         | —       |
|                                                             | 4" x 4" (102 x 102)   | .130          | T2714 | .130+                   | TA2314                    | TA2714             | —                    | —                         | —       |
|                                                             | 4½" x 4" (114 x 102)  | .134          | T2714 | .134                    | TA2314                    | TA2714             | .180                 | T4A3386                   | T4A3786 |
|                                                             | 4½" x 4½" (114 x 114) | .134          | T2714 | .134                    | TA2314                    | TA2714             | .180                 | T4A3386                   | T4A3786 |
|                                                             | 5" x 4½" (127 x 114)  | .146          | T2714 | .146+                   | TA2314                    | TA2714             | .190                 | T4A3386                   | T4A3786 |
|                                                             | 5" x 5" (127 x 127)   | .146          | T2714 | .146+                   | TA2314                    | TA2714             | .190+                | T4A3386                   | T4A3786 |
|                                                             | 6" x 6" (152 x 152)   | .160          | T2714 | .160+                   | TA2314                    | TA2714             | .203+                | T4A3386                   | T4A3786 |
|                                                             | 8" x 6" (203 x 152)   | —             | —     | —                       | —                         | —                  | .203+ <sup>^</sup>   | —                         | T4A3786 |
| 8" x 8" (203 x 203)                                         | —                     | —             | —     | —                       | —                         | .203+ <sup>^</sup> | —                    | T4A3786                   |         |
| When door is beveled on hinge side specify handing required |                       |               | T4714 |                         | TA4314                    | TA4714             |                      | T4A4386                   | T4A4786 |

\* Not available in stainless steel

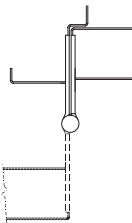
+ Not available in brass

<sup>^</sup> 8" x 6" (203 x 152) and 8" x 8" (203 x 203) hinges have six bearings and seven knuckles

### Wide Throw Full Mortise



- For use when necessary for door to open around a large reveal



| Type                                                        | Size In. (mm)        | Standard Weight Bearing |                            |        |                 | Heavy Weight Bearing |                            |         |                 |
|-------------------------------------------------------------|----------------------|-------------------------|----------------------------|--------|-----------------|----------------------|----------------------------|---------|-----------------|
|                                                             |                      | Gauge                   | Door Thickness<br>In. (mm) | Steel  | Stainless Steel | Gauge                | Door Thickness<br>In. (mm) | Steel   | Stainless Steel |
| 5<br>Knuckle                                                | 4½" x 6" (114 x 152) | .134                    | 1¾" (44)                   | TA2798 | TA2398          | .180                 | 1¾" (44)                   | T4A3786 | T4A3386         |
|                                                             | 4½" x 7" (114 x 178) | .134                    | 1¾" (44)                   | TA2798 | TA2398          | .180                 | 1¾" (44)                   | T4A3786 | T4A3386         |
|                                                             | 4½" x 8" (114 x 203) | .134                    | 1¾" (44)                   | TA2798 | TA2398          | .180                 | 1¾" (44)                   | T4A3786 | T4A3386         |
|                                                             | 5" x 7" (127 x 178)  | .146                    | 1¾" (44)                   | TA2798 | TA2398          | .190                 | 1¾" (44)                   | T4A3786 | T4A3386         |
|                                                             | 5" x 8" (127 x 203)  | .146                    | 1¾" (44)                   | TA2798 | TA2398          | .190                 | 1¾" (44)                   | T4A3786 | T4A3386         |
| When door is beveled on hinge side specify handing required |                      |                         | —                          | TA4798 | TA4398          |                      | —                          | T4A4786 | T4A4386         |

## Full Mortise Hinges

### Swing Clear Full Mortise



Hinge allows maximum clearance for passage of beds, tables and other equipment through doorway for barrier free access.

- Packed with all wood and all machine screws
- Available with Hospital Tips
- Available with CC or QC option for Electric Hinges



| Type                                                         | Standard Weight Bearing |       |                         |        |                 | Heavy Weight Bearing |       |                         |         |                 |
|--------------------------------------------------------------|-------------------------|-------|-------------------------|--------|-----------------|----------------------|-------|-------------------------|---------|-----------------|
|                                                              | Size In. (mm)           | Gauge | Door Thickness In. (mm) | Steel  | Stainless Steel | Size In. (mm)        | Gauge | Door Thickness In. (mm) | Steel   | Stainless Steel |
| 3 Knuckle                                                    | —                       | —     | —                       | —      | —               | 5" (127)             | .190  | 1 3/4" (44)             | TA795   | —               |
| When door is beveled on hinge side, specify handing required |                         |       |                         | —      | —               | —                    |       | —                       | TA5795  | —               |
| 5 Knuckle                                                    | 4 1/2" (114)            | .134  | 1-3/4 (44)              | TA2895 | TA2395          | 4 1/2" (114)         | .180  | 1 3/4" (44)             | T4A3795 | T4A3395         |
|                                                              | 5" (127)                |       |                         |        |                 | 5" (127)             | .190  | 1 3/4" (44)             | T4A3795 | T4A3395         |
| When door is beveled on hinge side, specify handing required |                         |       |                         | TA4895 | TA4395          | —                    |       | —                       | T4A4795 | T4A4395         |

## Half Mortise Hinges

### Half Mortise



Door leaf is mortised into the edge of the door, and jamb leaf is surface applied into jamb.

- Furnished with a NRP which allows the hinge to be reversible
- Supplied with all machine screws



| Type                                                         | Size In. (mm) | Door Thickness In. (mm) | Plain Bearing |       | Standard Weight Bearing |                 |        | Heavy Weight Bearing |                 |         |
|--------------------------------------------------------------|---------------|-------------------------|---------------|-------|-------------------------|-----------------|--------|----------------------|-----------------|---------|
|                                                              |               |                         | Gauge         | Steel | Gauge                   | Stainless Steel | Steel  | Gauge                | Stainless Steel | Steel   |
| 3 Knuckle                                                    | 4 1/2" (114)  | 1 3/4" (44)             | —             | —     | .134                    | TA374           | TA774  | .180                 | TA384           | TA784   |
|                                                              | 5" (127)      | 1 3/4" (44)             | —             | —     | .146                    | TA374           | TA774  | .190                 | TA384           | TA784   |
|                                                              | 6" (152)      | 1 3/4" (44)             | —             | —     | —                       | —               | —      | .203                 | TA384           | TA784   |
|                                                              | 6" (152)      | 2 1/4" (57)             | —             | —     | —                       | —               | —      | .203                 | TA384           | TA784   |
| When door is beveled on hinge side, specify handing required |               |                         | —             | —     | —                       | TA5374          | TA5774 | —                    | TA5384          | TA5784  |
| 5 Knuckle                                                    | 4 1/2" (114)  | 1 3/4" (44)             | .134          | T2774 | .134                    | TA3374          | TA2774 | .180                 | T4A3384         | T4A3784 |
|                                                              | 5" (127)      | 1 3/4" (44)             | —             | —     | .146                    | TA3374          | TA2774 | .190                 | T4A3384         | T4A3784 |
|                                                              | 6" (152)      | 1 3/4" (44)             | —             | —     | —                       | —               | —      | .203                 | T4A3384         | T4A3784 |
|                                                              | 6" (152)      | 2 1/4" (57)             | —             | —     | —                       | —               | —      | .203                 | T4A3384         | T4A3784 |
| When door is beveled on hinge side, specify handing required |               |                         | —             | —     | —                       | TA4374          | TA4774 | —                    | T4A4384         | T4A4784 |

## Half Mortise Hinges

### Swing Clear Half Mortise



Swing clear hinges allow for maximum clearance for passage of beds, tables and other equipment.

- Door leaf is mortised into the edge of the door
- Jamb leaf is surface applied into jamb
- Hospital tips available
- Furnished with a NRP which allows the hinge to be reversible
- Supplied with wood and machine screws



| Heavy Weight Bearing                                         |               |       |                         |         |
|--------------------------------------------------------------|---------------|-------|-------------------------|---------|
| Type                                                         | Size In. (mm) | Gauge | Door Thickness In. (mm) | Steel   |
| 3 Knuckle                                                    | 5" (127)      | .190  | 1 3/4" (44)             | TA789   |
| When door is beveled on hinge side, specify handing required |               |       |                         | TA5789  |
| 5 Knuckle                                                    | 5" (127)      | .190  | 1 3/4" (44)             | T4A3789 |
| When door is beveled on hinge side, specify handing required |               |       |                         | T4A4789 |

## Full Surface Hinges

### Full Surface



Door leaf is applied to the surface of the door with grommet nuts and bolts.

- Narrow leaf is applied to the surface of the jamb with machine screws



| Type      | Size In. (mm) | Standard Weight Bearing |                 |        | Heavy Weight Bearing |                 |         |
|-----------|---------------|-------------------------|-----------------|--------|----------------------|-----------------|---------|
|           |               | Gauge                   | Stainless Steel | Steel  | Gauge                | Stainless Steel | Steel   |
| 3 Knuckle | 4 1/2" (114)  | .134                    | TA371           | TA771  | .180                 | TA381           | TA781   |
|           | 5" (127)      | .146                    | TA371           | TA771  | .190                 | TA381           | TA781   |
| 5 Knuckle | 4 1/2" (114)  | .134                    | —               | TA2771 | .180                 | T4A3381         | T4A3781 |
|           | 5" (127)      | .146                    | —               | TA2771 | .190                 | T4A3381         | T4A3781 |
|           | 6" (152)      | —                       | —               | TA2771 | .203*                | T4A3381         | T4A3781 |

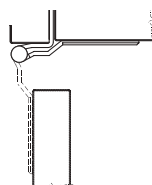
\*Not available in TCA style

### Swing Clear Full Surface



Swing clear hinges allow for maximum clearance for passage of beds, tables and other equipment.

- Door leaf is applied to surface of the door
- Jamb leaf is surface applied into jamb



| Heavy Weight Bearing |               |       |                         |       |
|----------------------|---------------|-------|-------------------------|-------|
| Type                 | Size In. (mm) | Gauge | Door Thickness In. (mm) | Steel |
| 3 Knuckle            | 5" (127)      | .190  | 1 3/4" (44)             | TA797 |

Backplates available (BP-11 Series)

## Half Surface Hinges

### Half Surface



Mortised into the frame, surface mounted to the door. Used for retrofit applications.

- Machine screws supplied for jambs, thru bolts and grommets on the door
- Furnished with NRP which allows the hinge to be reversible

| Type         | Size In. (mm) | Door Thickness In. (mm) | Plain Bearing |       | Standard Weight Bearing |                 |        | Heavy Weight Bearing |                 |         |
|--------------|---------------|-------------------------|---------------|-------|-------------------------|-----------------|--------|----------------------|-----------------|---------|
|              |               |                         | Gauge         | Steel | Gauge                   | Stainless Steel | Steel  | Gauge                | Stainless Steel | Steel   |
| 3<br>Knuckle | 4½" (114)     | 1¾" (44)                | -             | -     | .134                    | TA372           | TA772  | .180                 | TA382           | TA782   |
|              | 5" (127)      | 1¾" (44)                | -             | -     | .146                    | TA372           | TA772  | .190                 | TA382           | TA782   |
| 5<br>Knuckle | 4½" (114)     | 1¾" (44)                | .134          | T2772 | .134                    | TA3372          | TA2772 | .180                 | T4A3382         | T4A3782 |
|              | 5" (127)      | 1¾" (44)                | -             | -     | .146                    | TA3372          | TA2772 | .190                 | T4A3382         | T4A3782 |
|              | 6" (152)      | 1¾" (44)                | -             | -     | -                       | -               | -      | .203*                | T4A3382         | T4A3782 |
|              | 6" (152)      | 2¼" (57)                | -             | -     | -                       | -               | -      | .203*                | T4A3382         | T4A3782 |

\* Not available in TCA style Backplates available (BP-10 Series)

### Swing Clear Half Surface



Swing clear hinges allow for maximum clearance for passage of beds, tables and other equipment

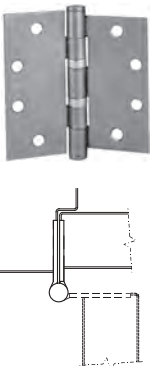
- Door leaf is mortised into the edge of the door
- Jamb leaf is surface applied into jamb

| Type         | Size In. (mm) | Gauge | Heavy Weight Bearing    |         |
|--------------|---------------|-------|-------------------------|---------|
|              |               |       | Door Thickness In. (mm) | Steel   |
| 3<br>Knuckle | 5" (127)      | .190  | 1¾" (44)                | TA796   |
| 5<br>Knuckle | 5" (127)      | .190  | 1¾" (44)                | T4A3796 |

## Custom Hinges

The McKinney facility in Berlin, CT can manufacture a variety of custom hinges including special hole patterns, special sizes, special swages. Consult factory for availability, call 860-828-7221.

### Full Mortise Interim Hinges



Recommended for installations where door and frame are prepped for two different size hinges.

- For new or retrofit installations
- An equal amount is trimmed from the top and bottom of the leaf
- Interim hinges are supplied with a no hole bottom plug and the pin is held in place by an NRP set screw
- Available in both standard (TA2714; TA2314) and heavy weight (T4A3786; T4A3386)
- Consult factory for other sizes

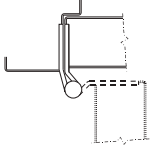
| Size In. (mm)        | Standard Weight Bearing |        | Heavy Weight Bearing |         |
|----------------------|-------------------------|--------|----------------------|---------|
|                      | Gauge                   | Steel  | Gauge                | Steel   |
| 5" x 4½" (114 x 114) | .146                    | TA2714 | .190                 | T4A3786 |
| 5" x 4½" (127 x 114) | .146                    | TA2314 | .190                 | T4A3386 |

## Custom Hinges

### Raised Barrel Hinges



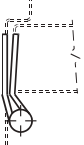
Standard weight raised barrel hinges are recommended for use on average frequency and/or medium weight wood or metal doors where the door is set in a deep revealed frame. Heavy weight raised barrel hinges are recommended for use on high frequency and/or heavy wood or metal doors where the door is set in a deep revealed frame.



- Standard weight raised barrel hinges are supplied with a no hole bottom plug and the pin is held in place by an NRP set screw which allows the hinge to be reversible. Specify RB-TA4714/RB-TA4314 for doors beveled on hinge side
- Heavy weight raised barrel hinges are supplied with a no hole bottom plug and the pin is held in place by an

- NRP set screw which allows the hinge to be reversible. Specify RB-T4A4786/RB-T4A4386 for doors beveled on hinge side
- Door leaf mortised into door
- Frame leaf may be mortised or surface applied
- Reversible Hinge
- Available in QC or CC Electric Hinge Options

Square Edge Application



Beveled Edge Application

| Size In. (mm)         | Standard Weight Bearing |           |                 | Heavy Weight Bearing |            |                 |
|-----------------------|-------------------------|-----------|-----------------|----------------------|------------|-----------------|
|                       | Gauge                   | Steel     | Stainless Steel | Gauge                | Steel      | Stainless Steel |
| 4½" x 4½" (114 x 114) | .134                    | RB-TA2714 | RB-TA2314       | .180                 | RB-T4A3786 | RB-T4A3386      |

### Slip-In Hinge: Type 1 and Type 2



Type 1



Type 2

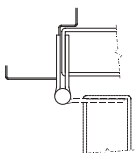
Recommended for use on average frequency and/or medium weight aluminum doors with aluminum frames in schools, hospitals and other public buildings where medium traffic is experienced.

#### Type 1

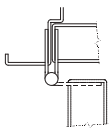
- One leaf has standard punching and countersinking and the other leaf is drilled and tapped so it can be inserted through a slot in the door or frame
- Both leaves are specially swaged to provide 3/16" clearance between leaves when parallel
- Hinges are handed - Indicate hand when ordering
- Packed with wood and machine screws

#### Type 2

- Both leaves are drilled and tapped so they can be inserted through a slot in the door and frame
- Both leaves are specially swaged to provide 5/16" clearance between the leaves when parallel
- Hinges are non-handed
- Packed with all machine screws



Type 1 Application



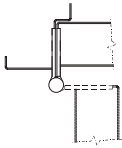
Type 2 Application

| Type | Size In. (mm)         | Standard Weight Bearing |        |                 |
|------|-----------------------|-------------------------|--------|-----------------|
|      |                       | Gauge                   | Steel  | Stainless Steel |
| 1    | 4½" x 4" (114 x 102)  | .134                    | TA2714 | TA2314          |
|      | 4½" x 4½" (114 x 114) | .134                    | TA2714 | TA2314          |
| 2    | 4½" x 4" (114 x 102)  | .134                    | TA2714 | TA2314          |
|      | 4½" x 4½" (114 x 114) | .134                    | TA2714 | TA2314          |

## MACPRO® by McKinney

The MacPro line by McKinney offers contract grade hinges to get the job done right. High quality and lower prices equal an extraordinary value, ideal when you need large quantities of standard hinges. Five knuckle series and spring hinge series available.

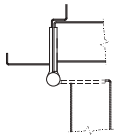
### MacPro Five Knuckle Series



- Plain bearing hinges are for standard weight doors only
- For doors with a closing device, MPB79 bearing hinge must be used
- For heavy weight doors with a closing device, select a MPB68, heavy weight bearing hinge
- MacPro by McKinney templated hinges are made to conform to ANSI/BHMA 156.1, 156.7

| Size In. (mm)         | Plain Bearing |       | Standard Weight Bearing |                 |       | Heavy Weight Bearing |                 |       |
|-----------------------|---------------|-------|-------------------------|-----------------|-------|----------------------|-----------------|-------|
|                       | Gauge         | Steel | Gauge                   | Stainless Steel | Steel | Gauge                | Stainless Steel | Steel |
| 4½" x 4" (114 x 102)  |               |       | .134                    |                 | MPB79 |                      |                 |       |
| 4½" x 4½" (114 x 114) | .134          | MP79  | .134                    | MPB91           | MPB79 | .180                 | MPB99           | MPB68 |

### MacPro Spring Hinge Series

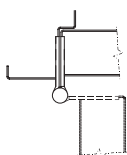


- Coil spring provides dependable closing power
- Two concealed tee bearings for vertical and lateral loads

| Size In. (mm)         | Heavy Weight Bearing |             |
|-----------------------|----------------------|-------------|
|                       | Gauge                | Steel       |
| 4½" x 4½" (102 x 102) | .134                 | MPS60       |
| 4½" x 4½" (102 x 102) | .134                 | MPB679 Set+ |

+ Set includes two MPS60 spring hinges and one MPB79 butt hinge

## McKinney StormPro® Tornado Resistant Hinges



Application

Built to withstand the extreme wind speeds and flying debris associated with severe weather conditions, McKinney StormPro® hinges are part of the integrated unit when used with CECO StormPro® 361, Curries StormPro® 361 and Baron F-5 doors and frames, along with other StormPro® hardware by ASSA ABLOY Group brands.

- Use for the common flush door/frame/wall application
- Fire rated thru 3 hours
- Packed with stainless steel machine screws
- Available with QC Electric Hinge option

| Size In. (mm)         | Heavy Weight Bearing |                 |        |
|-----------------------|----------------------|-----------------|--------|
|                       | Gauge                | Stainless Steel | Steel  |
| 4½" x 4½" (127 x 102) | .180                 | SP3386          | SP3786 |
| 5" x 4½" (127 x 102)  | .180                 | SP3386          | SP3786 |



StormPro® Tornado resistant hinges should be specified and ordered as a complete integrated unit including the frame and door along with other StormPro® hardware

## Decorative Hinges

McKinney offers decorative architectural hinges designed to suite with hardware from the ASSA ABLOY Group brands. Open up a whole new world of design options for your door openings.

### Two Knuckle Hinge / Three Knuckle Hinge

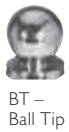


- Standard weight
- 4 x 4, 4.5 x 4, 4.5 x 4.5, 5 x 5 sizes available
- Electrified options available
  - ElectroLynx® quick connect
  - Concealed circuit
- Two knuckle are handed
- Three knuckle are non-handed

### Tips



ST – Steeple Tip



BT – Ball Tip



FT – Flat Tip



RT – Round Tip

- Steeple Tip and Ball Tip are available on 3 knuckle and 5 knuckle hinges
- Flat Tip and Round Tip are available on 2 knuckle and 3 knuckle hinges

### Split Finishing



- Split finishing, where the hinge and tips are different finishes, can create a dramatic look by mixing dark with light or satin with polished
- Available on 2, 3, and 5 knuckle hinges

### the good design studio

The Good Design Studio - your resource for beautiful doors, frames and hardware from ASSA ABLOY Group brands. Visit [www.thegooddesignstudio.com](http://www.thegooddesignstudio.com) to learn more.



CORBIN RUSSWIN 25M and SARGENT REM lever



McKINNEY 2 knuckle hinge with square end tips



ROCKWOOD door pull, door stop and coat hook

## Specialty Hinges and Accessories

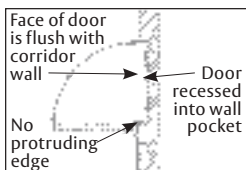
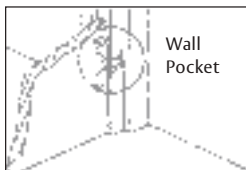
### Pocket Hinges



PH-4

Pivot style fully mortised, semi-concealed hinges constructed of investment cast steel, with two thrust bearings for vertical loads, and roller bearings for lateral support. For standard 2" (51) frame.

UL listed (USA and Canada) for use on both hollow metal or steel covered composite fire doors rated up to three hours, and wood core type fire doors rated 20 minutes. Meets material and performance requirements of NFPA 80 and ANSI 156.1.



| Number of Hinges Required per Door | Maximum Door Size Ft. (mm) | Maximum Door Size Lbs. (kg) |
|------------------------------------|----------------------------|-----------------------------|
| 2                                  | 3'0" x 7'0" (914 x 2134)   | 150 (68)                    |
| 3                                  | 3'0" x 7'0" (914 x 2134)   | 250 (113)                   |
| 4                                  | 4'0" x 7'0" (1219 x 2134)  | 350 (159)                   |

| Size of Wood Screws | Gauge | Each per Box | Size of Machine Screws |
|---------------------|-------|--------------|------------------------|
| 1½" x 12            | .187  | 3            | ¾" x 12-24             |





## Security Hinges

### Full Mortise Institutional



Hospital Tip



PSF Security Stud

Full mortise institutional hinges (prefix HTB) are designed especially for maximum security installations including hospitals, high security schools, institutions, and prisons. Institutional hinges are available in either steel or stainless steel. Available with Torx pin head security machine screws (suffix TXS).

- One piece non-removable pin is held intact by the insertion of two sets of dowels held in double shear into an internally constructed shelf
- Knuckles with tapered hospital tips prevent tampering and removal of pins
- To further enhance its security, this hinge is available with an optional prison safety feature (suffix PSF)
- Single studs projecting from the back of each leaf fit into the hinge reinforcement on jamb and door to prevent shearing of screws
- Consult the factory for additional information regarding our security hinge line which includes additional sizes and electrification of hinge (magnetic monitoring not available with PSF security stud)
- Additional finishes are available in steel
- Ball bearings are supplied as a standard on institutional hinges

| Size, In. (mm)           | Gauge Diameter | Outside Diameter | Stud Projection | Stud      | Steel Hinges | Stainless Steel Hinges |
|--------------------------|----------------|------------------|-----------------|-----------|--------------|------------------------|
| 4½" x 4½"<br>(114 x 114) | .180           | .720 (18)        | 7/16 (11.1)     | ½" (12.7) | HTB786       | HTB386 (32D)           |
| 4½" x 4½"<br>(114 x 114) | .180           | .720 (18)        | 7/16 (11.1)     | ½" (12.7) | HTB786 PSF   | HTB386 PSF (32D)       |

NOTE: PSF = prison safety feature

### Full Mortise Anchor



Horizontal Frame Leg



TA792 Anchor Hinge Set

Anchor hinges are used in abusive areas in which the door, jamb, and hinges experience unusual strain. All anchor sets consist of the top anchor and two 5" x 4½" (127 x 114) three knuckle full mortise heavy weight hinges. Anchor sets are handed.

- NRP furnished on set as standard. (Set consists of one anchor and two heavy weight full mortise three knuckle hinges)
- Anchor hinges are handed
- Can be swaged for either square edge or beveled (hinge side) edge

| Type      | Size, In. (mm)          | Gauge | Application                                   | Square Edge Door |                 | Beveled Edge Door |                 |
|-----------|-------------------------|-------|-----------------------------------------------|------------------|-----------------|-------------------|-----------------|
|           |                         |       |                                               | Steel            | Stainless Steel | Steel             | Stainless Steel |
| 3 Knuckle | 5" x 4½"<br>(127 x 114) | .190  | Anchor plate for top of door only             | TA791            | TA391           | TA5791            | TA5391          |
|           |                         |       | Anchor plate for top of door and frame header | TA792            | TA392           | TA5792            | TA5392          |
|           |                         |       | Anchor plate for frame header only            | TA793            | TA393           | TA5793            | TA5393          |
|           |                         |       | Anchor plate for top of door and frame header | TA794*           | TA394*          | TA5794*           | TA5394*         |

\*Door plate is 4" (102) and are recommended for doors where door holders, door closers, or other hardware present mounting conflicts with the standard hinge anchor plate.

## Rescue Hardware

### Jamb Mount Pivot Set: EP5-J



EP5-J

For use on average frequency double acting interior doors in schools, hospitals, institutions, and other public buildings. Header pivot solid brass material. Top door pivot has an oil impregnated porous metal bearing and rounded corners. Bottom jamb bracket solid brass material with 1/4" (6) vertical adjustment. Bottom door pivot has an anti-friction bearing unit and rounded corners. Pivot point 1 1/4" (32) from jamb. Full mortise only on jambs and door.

| Number                   | Maximum Door Weight, Lbs. (kg) | Maximum Door Size Ft. (mm) |
|--------------------------|--------------------------------|----------------------------|
| EP5-J Jamb Mounted Pivot | up to 125 (57)                 | 3'6" x 8'0" (1067 x 2438)  |

### Combination Strike and Stop: CSS-9



CSS-9  
Offset Hung



CSS-9  
Center Hung

Recommended for installations on hospital or nursing home bathroom doors along with McKinney EP5-J. This unit allows center hung or 1/8" inset doors to be opened in both directions without damaging the frame.

- .095 gauge brass material polished and plated
- Manufactured for use with cylindrical or bored locks
- Packed with 1/2 x 8-32 machine screws
- Consult the factory for use with Mortise locks by ASSA ABLOY brands. Cannot be used with deadbolts

### Emergency Door Stop: DS-6



DS-6

For use with McKinney EP5-J pivots in schools, hospitals, institutions, and other public buildings. Used for converting double acting doors, hung on center pivots, to single acting doors.

- Furnished in brass material with rubber bumper insert
- Spring action stop with fingertip release using a pullman-type latch
- Highly polished, then naturally finished or finely plated
- Mortise only on frame

| Number | Size of Surface Plates In. (mm) | Screws       |
|--------|---------------------------------|--------------|
| DS-6   | 4 1/2" x 1 5/8" (114 x 41)      | 1/2" x 12-24 |

### Double Lipped Strike: DLS-8



DLS-8

Recommended for installations on hospital or nursing home doors along with the EP5-J and DS-6. This unit allows center hung or 1/8" inset doors to be opened in both directions without damaging the frame.

- Made from .095 gauge brass
- Polished and plated
- Available in center hung or offset
- For frame size 5 3/4" (146) and 6 3/4" (171)
- Supplied with six each 1/2" x 8" machine screws
- Other sizes available upon request

## Spring Hinges

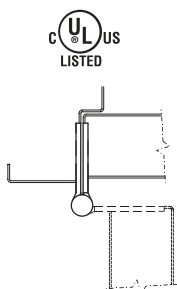
### Full Mortise Single Acting



Grade 1, surpassing a million cycles

For use on wood or metal doors in apartments, hotels, motels, offices, and other public buildings. Two concealed tee bearings for vertical and lateral loads. Coil spring design provides dependable closing power.

- The 1500 Series has infinite adjustment, and tension can be added or reduced
- Locking screw prevents tampering after tension is set
- NFPA 80 requires a minimum of two spring hinges on labeled doors
- 1502 Now available in reverse action, specify 1502R
- Consult the factory for the TRS security option



| Size In. (mm)               | Gauge | Door Thickness In. (mm) | Steel               |                                                     | Stainless Steel     |
|-----------------------------|-------|-------------------------|---------------------|-----------------------------------------------------|---------------------|
|                             |       |                         | Single Hinge        | Set                                                 | Single Hinge        |
| 4" x 4" (102 x 102)         | .130  | 1 3/4" (44)             | 1502 (Full Mortise) | –                                                   | –                   |
| 4 1/2" x 4" (114 x 102)     | .134  | 1 3/4" (44)             | 1502 (Full Mortise) | 1522 (Set of 2 1502 spring hinges and 1 springless) | 1552 (Full Mortise) |
| 4 1/2" x 4 1/2" (114 x 114) | .134  | 1 3/4" (44)             | 1502 (Full Mortise) | –                                                   | –                   |
| 4 1/2" (114)                | .134  | 1 3/4" (44)             | 1572 (Half Mortise) | –                                                   | –                   |

### Applications

| Hinge             | Hinges Per Door       |              | Maximum Door Size and Weight |                  |  |
|-------------------|-----------------------|--------------|------------------------------|------------------|--|
|                   | Size                  | Weight, Lbs. | Door Width, Ft.              | Door Height, Ft. |  |
| 1502              | 3 4" x 4"             | 125          | 3'0"                         | 7'0"             |  |
| 1502, 1552        | 3 4 1/2" x 4"         | 150          | 3'0"                         | 7'0"             |  |
| 1502, 1552, 1572* | 3 4 1/2" x 4 1/2"     | 150          | 3'0"                         | 7'0"             |  |
| 1522              | 1 Set 4 1/2" x 4"     | 115          | 3'0"                         | 7'0"             |  |
| 1522              | 1 Set 4 1/2" x 4 1/2" | 115          | 3'0"                         | 7'0"             |  |

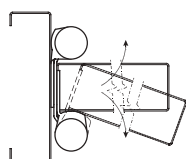
\* Backplates available (BP-12 Series)

### Full Mortise Double Acting



Double acting hinge is designed to be applied directly to the jamb without the use of a hanging strip. Door flange requires a shallow mortise. Springs are made of high grade tempered steel.

- 3" (76), 4" (102), 5" (127) and 6" (152) hinges are for wood doors not weighted with plate glass or heavy hardware
- Hinge capacity decreases as door height increases
- For stock hollow metal doors, use 6" x 4 1/2" (152 x 114)
- 8" (203) 9001 is designed for use on wood or heavy doors of metal construction
- 8" (203) 19001 is designed for use on trucking doorways



| Hinge | Size, In. (mm) | Maximum Door Thickness, In. (mm) | 2 Hinges Per Door    |                   | 3 Hinges Per Door    |                   | Door Height, Ft. |
|-------|----------------|----------------------------------|----------------------|-------------------|----------------------|-------------------|------------------|
|       |                |                                  | Door Width, Ft. (mm) | Weight, Lbs. (kg) | Door Width, Ft. (mm) | Weight, Lbs. (kg) |                  |
| 1001  | 3" (76)        | 3/4" to 1" (19 to 25)            | 2'0" (610)           | 35 (16)           | 2'8" (813)           | 40 (18)           | 5'0" (1524)      |
| 1001  | 4" (102)       | 7/8" to 1 1/4" (22 to 32)        | 2'4" (711)           | 60 (27)           | 3'0" (914)           | 75 (34)           | 6'8" (2032)      |
| 1001  | 5" (127)       | 1 1/8" to 1 1/2" (29 to 38)      | 2'8" (813)           | 65 (29)           | 3'0" (914)           | 90 (41)           | 6'8" (2032)      |
| 1001  | 6" (152)       | 1 1/4" to 1 3/4" (32 to 44)      | 2'8" (813)           | 75 (34)           | 3'0" (914)           | 107 (49)          | 7'0" (2134)      |
| 1001  | 6" x 4 1/2"    | 1 3/4" (44) (152 x 114)          | 2'8" (813)           | 75 (34)           | 3'0" (914)           | 107 (49)          | 7'0" (2134)      |
| 9001  | 8" (203)       | 1 1/2" to 2" (38 to 51)          | 3'6" (1067)          | 100 (45)          | 4'0" (1219)          | 143 (65)          | 7'0" (2134)      |
| 19001 | 8" (203)       | 1 3/4" (44)                      | 3'6" (1067)          | 100 (45)          | 4'0" (1219)          | 143 (65)          | 7'0" (2134)      |

## Full Mortise Electric Hinges

### ElectroLynx® Hinge (QC option)



QC-12



Features concealed plug connectors that eliminate the need for separate or exposed wiring. Standard connectors make installation quick and simple. Brass eyelets add protection and durability.

- The QC option is available on standard and heavy weight full mortise bearing hinges as well as swing clear and wide throw hinges
- Electric hinges allow a constant flow of energy from the power source through the hinge to electrified door hardware. No external wires can be seen, eliminating tampering and improving the aesthetics of the door opening
- Materials: brass, stainless steel, and steel
- For 4 amp continuous @ 24 volts AC or DC per circuit, 28 gauge multi-strand wires are used. A pigtail is provided for connection to the source wiring
- An 8 position connector is used for QC2, QC4, QC6 and QC8 wire hinges. An 8 position and a 4 position

connector is used for QC12 wire hinges. A QC2A wire hinge is available for power on, power off applications

- Hand of hinge must be specified on two knuckle hinges
- Full Mortise QC hinges are available in most BHMA and McKinney powder coat finishes
- Wires are coordinated to work with other ASSA ABLOY Group brands electro-mechanical hardware
- Electric hinges should be installed in the center position on the door. Installation instructions are packed with each hinge
- Hinges are factory tested and specially packaged to minimize against damage during shipment

#### Standard ElectroLynx Retrofit Cable Sizes

| Actual Cable Length | 12 Conductor and Molex both ends | 12 Conductor and Molex one end, pinned one end | Typical Application                                                                                            |
|---------------------|----------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 3"                  | QC-C003                          | QC-C003P                                       | Between hinge and the end of an exit device.                                                                   |
| 6"                  | QC-C006                          | QC-C006P                                       |                                                                                                                |
| 12"                 | QC-C012                          | QC-C012P                                       |                                                                                                                |
| 26"                 | QC-C200                          | QC-C200P                                       | Between hinge and through the door to the lockset or exit device trim.                                         |
| 32"                 | QC-C206                          | QC-C206P                                       |                                                                                                                |
| 38"                 | QC-C300                          | QC-C300P                                       |                                                                                                                |
| 44"                 | QC-C306                          | QC-C306P                                       |                                                                                                                |
| 50"                 | QC-C400                          | QC-C400P                                       |                                                                                                                |
| 15' 2"              | QC-C1500                         | QC-C1500P                                      | From the hinge location, up the jamb to above the ceiling, or up and around full lite or half lite metal door. |

### ElectroLynx® Power over Ethernet Hinges



Patent No. 7,824,200



The patented McKinney ElectroLynx® Power over Ethernet (PoE) Quick Connect hinge provides for the passing of Ethernet data through the door opening. Installation is a snap with the friendly "plug and play" connectors which allow power to be linked from the incoming source through the door to the electrified hardware. PoE data is bidirectional.

- Brass eyelets add protection and durability to the PoE hinge which features common wire colors coordinated to work with intelligent Power over Ethernet electromechanical hardware from SARGENT and Corbin Russwin
- The PoE hinge should be installed in the second from bottom hinge position on the door. Once installed, it will give no outward indication of its function and will transfer power and data efficiently and reliably, as long as the wire capacity is not exceeded
- All PoE hinges are factory tested and specially packaged to minimize damage during shipment. Installation instructions are packed with each hinge.
- Along with the PoE hinge, mating PoE door and frame side harnesses are required to complete the opening. The required PoE harnesses must be ordered separately
- See full line catalog for PoE harness part numbers.
- Specify suffix PoE

\* Refer to individual full line catalog pages regarding the availability of these options.

Hardwiring Made Easy™



ElectroLynx®

As part of their promise to provide innovative, fast and effective high security solutions to their customers, certain ASSA ABLOY Group brands offer ElectroLynx®, a universal quick-connect system that simplifies the electrification of the door opening. ElectroLynx® is a registered trademark of ASSA ABLOY Inc.



**Yale<sup>®</sup>**

Hinges



## 36. Hinges

### Stainless steel butt hinges

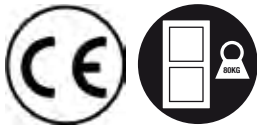
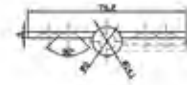
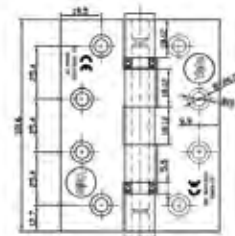
High quality stainless steel butt hinges.



#### Specifications:

- Butt hinge with ball bearings
- Stainless steel AISI 304
- Square corners
- Can be used on doors up to 120 kg

#### Features:

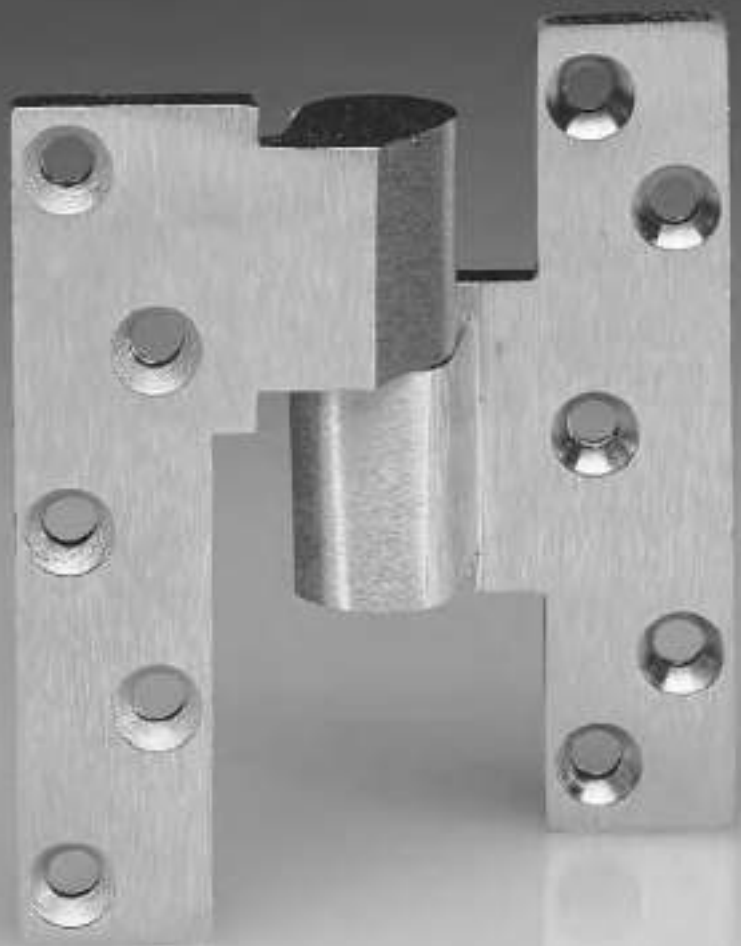
- CE marked
- Tested to EN 1935:2002 class 13
- Fire tested to EN1634-1:2014
- Available in satin and polished stainless steel and PVD finishes



|  |     |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 2BB403030-SSS                                                                       | Set of butt hinges 4" x 3" x 3 mm (101 x 76 x 3 mm) - Satin stainless steel            |
| 2BB403530-SSS                                                                       | Set of butt hinges 4" x 3.5" x 3 mm (101 x 89 x 3 mm) - Satin stainless steel          |
| 2BB404030-SSS                                                                       | Set of butt hinges 4" x 4" x 3 mm (101 X 101 X 3mm) - Satin stainless steel            |
| 2BB454030-SSS                                                                       | Set of butt hinges 4.5" x 3.5" x 3mm (114 X 101 X 3 mm) - Satin stainless steel        |
| 2BB454530-SSS                                                                       | Set of butt hinges 4.5" x 4.5" x 3mm (114 X 114 X 3 mm) - Satin stainless steel        |
| 2BB454035-SSS                                                                       | Set of butt hinges 4.5" x 4" x 3.5 mm (114 X 101 X 3.5 mm) - Satin stainless steel     |
| 2BB454535-SSS                                                                       | Set of butt hinges 4.5" x 4.5" x 3.5mm (114 X 114 X 3.5 mm) - Satin stainless steel    |
| 2BB403030-PSS                                                                       | Set of butt hinges 4" x 3" x 3 mm (101 x 76 x 3 mm) - Polished stainless steel         |
| 2BB403530-PSS                                                                       | Set of butt hinges 4" x 3.5" x 3 mm (101 x 89 x 3 mm) - Polished stainless steel       |
| 2BB404030-PSS                                                                       | Set of butt hinges 4" x 4" x 3 mm (101 X 101 X 3mm) - Polished stainless steel         |
| 2BB454030-PSS                                                                       | Set of butt hinges 4.5" x 3.5" x 3mm (114 X 101 X 3 mm) - Polished stainless steel     |
| 2BB454530-PSS                                                                       | Set of butt hinges 4.5" x 4.5" x 3mm (114 X 114 X 3 mm) - Polished stainless steel     |
| 2BB454035-PSS                                                                       | Set of butt hinges 4.5" x 4" x 3.5 mm (114 X 101 X 3.5 mm) - Polished stainless steel  |
| 2BB454535-PSS                                                                       | Set of butt hinges 4.5" x 4.5" x 3.5mm (114 X 114 X 3.5 mm) - Polished stainless steel |
| 2BB403030-PVD                                                                       | Set of butt hinges 4" x 3" x 3 mm (101 x 76 x 3 mm) - PVD                              |
| 2BB403530-PVD                                                                       | Set of butt hinges 4" x 3.5" x 3 mm (101 x 89 x 3 mm) - PVD                            |
| 2BB404030-PVD                                                                       | Set of butt hinges 4" x 4" x 3 mm (101 X 101 X 3 mm) - PVD                             |
| 2BB454030-PVD                                                                       | Set of butt hinges 4.5" x 3.5" x 3mm (114 X 101 X 3 mm) - PVD                          |
| 2BB454530-PVD                                                                       | Set of butt hinges 4.5" x 4.5" x 3mm (114 X 114 X 3 mm) - PVD                          |
| 2BB454035-PVD                                                                       | Set of butt hinges 4.5" x 4" x 3.5 mm (114 X 101 X 3.5 mm) - PVD                       |
| 2BB454535-PVD                                                                       | Set of butt hinges 4.5" x 4.5" x 3.5mm (114 X 114 X 3.5 mm) - PVD                      |

# Pivot and Pivot Sets

Architectural Solutions for  
Durable and Efficient  
Hanging of Doors



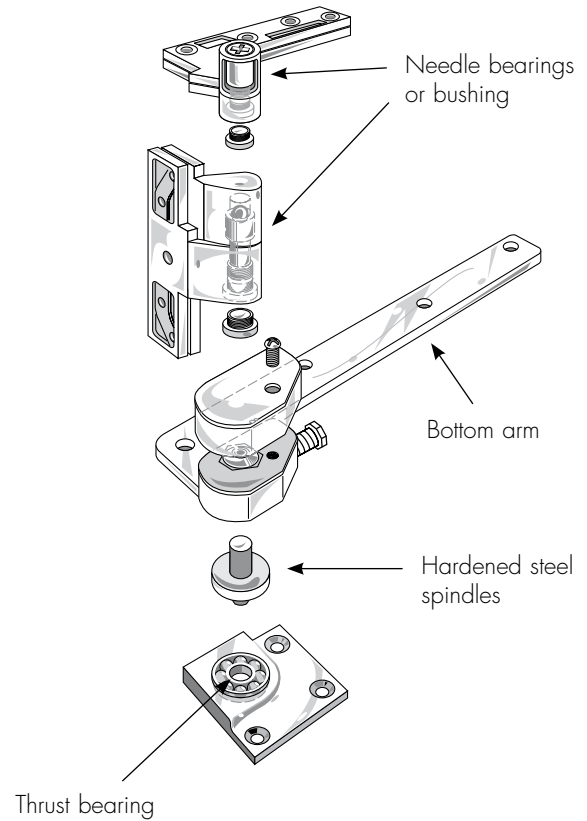
**RIXSON®**  
**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions



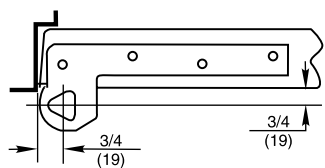
Pivot sets provide the best possible means of hanging a door. They are designed to work with the laws of physics to provide long-lasting performance and reliability.

- The weight of the door is supported at the bottom by the floor
  - Uses principles of gravity to its advantage
  - Door swings with less resistance
  - Heavier doors can be accommodated
- Reduced stress on frame
  - Fasteners are in shear, not tension
  - Eliminates door sag
  - Vertically adjustable
- Heavy-duty hardened steel spindles
  - Thrust bearing supports vertical load
  - Needle bearings and bushings for lateral force
  - Extra heavy-duty models also have an additional surface applied thrust bearing to handle heavier or high-traffic doors
- Offset pivots provide better weight distribution and can accommodate taller doors
- Intermediate pivots are used for alignment and to ensure proper installation of bottom pivot or floor closer
- Center hung pivots are used for aesthetics or if the pivot point is going to be moved nearer the lock edge of the door
- **PIVOTS DO NOT RETURN DOORS TO CENTER.** Pivots in this section are for door hanging means only. For door control see door closer catalog sections.



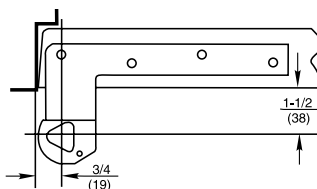
147 Pivot set and M19  
Intermediate pivot shown  
(recommended)

### 1. OFFSET VS. CENTER HUNG APPLICATION



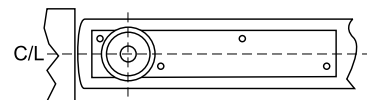
#### 3/4" Offset

Pivot point located 3/4" from the heel edge of the door and 3/4" from face of door



#### 1-1/2" Offset

Pivot point located 3/4" from the heel edge of the door and 1-1/2" from face of door. Extended offsets should be used when there is cladding on the face of door or trim on the frame



#### Center Hung

Pivot point centered in thickness of door.

### 2. SIZE OF DOOR (WIDTH, HEIGHT, THICKNESS)

Estimated door weights pounds per square foot (PSF)

| DOOR MATERIAL                         | DOOR THICKNESS    |        |        |
|---------------------------------------|-------------------|--------|--------|
|                                       | 1-3/4"            | 2-1/4" | 3"     |
| Hollow Metal                          | 6.5               | 7      | —      |
| Solid Core Wood                       | 7                 | 9      | 11.5   |
| Aluminum/Glass Storefront             | 3.5               | 4      | —      |
| Bullet Resistent                      | 20                | 21     | —      |
| MDF                                   | 7                 | 9      | 11.5   |
| TEMPERED GLASS                        | GLASS THICKNESS   |        |        |
|                                       | 3/8"              | 1/2"   | 3/4"   |
|                                       | 5                 | 7      | 9.75   |
| LEAD LINING<br>(add to door weight)   | LEAD THICKNESS    |        |        |
|                                       | 1/16"             | 1/8"   | 1/4"   |
|                                       | 5                 | 8      | 9.75   |
| 3/4" CLADDING<br>(add to door weight) | CLADDING MATERIAL |        |        |
|                                       | Wood              | Stone  | Bronze |
|                                       | 3                 | 10.5   | 28     |

Example: 3/6 X 8/0 X 1/2" Tempered Glass Door

Door: 28sq ft x 7lb./sq ft = 196lbs

For doors of other sizes, consult factory

Example: 3/0 X 7/0 X 1-3/4" WD X 1/4" Lead lining


Door: 21sq ft x 7lb./sq ft = 147lbs

Lead Lining: 9.75 = 204.75lbs


Total Door weight: 351.75lbs

### 2. SIZE OF DOOR (WIDTH, HEIGHT, THICKNESS)

| Application                     | Daily Cycles | Yearly Cycles |         |
|---------------------------------|--------------|---------------|---------|
| Large department store entrance | 5,000        | 1,500,000     |         |
| Large office building entrance  | 4,000        | 1,200,000     |         |
| Theater entrance                | 1,000        | 365,000       |         |
| School entrance                 | 1,250        | 225,000       | High    |
| School restroom door            | 1,250        | 225,000       |         |
| Store or bank entrance          | 500          | 150,000       |         |
| Office building restroom door   | 400          | 118,000       |         |
| School corridor door            | 80           | 15,000        |         |
| Office building corridor door   | 75           | 22,000        | Average |
| Store restroom door             | 60           | 18,000        |         |
| Residential entrance door       | 40           | 15,000        |         |
| Residential restroom door       | 25           | 9,000         |         |
| Residential hallway door        | 10           | 3,600         | Low     |
| Residential closet door         | 6            | 2,200         |         |

**Fire Rated – Prefix F** 

Pivots for fire rated doors (up to 3 hours) include a steel top pivot and must have additional steel intermediate pivots. For F519 pocket pivot, door assemblies must have been tested with pocket pivots.

**Twenty-minute label – Suffix - 20** 

This UL rating is for 20-minute assemblies. Product with this rating has an authorized label.

**Handing**

All offset pivots and pivot sets are handed. Suffix RH or LH.

**Extended Spindle – Suffix extra length needed**

Any special coverings or severe door undercuts will affect the spindle height. In these applications, an extended spindle may be required. Most standard spindle heights accommodate door undercuts up to 1/2". Extended spindles available in 1/2" increments up to 2" longer than standard. See template.

**1-1/2" Offset – Suffix 1-1/2**

Offset is the distance from the face of the door to the pivot point. Extended offsets should not be used unless there is cladding on the face of the door or there is trim to clear on the frame. 1-1/2" offset arms and pivots are for doors with cladding or trim that project 3/4" from the face of the door. The greater the offset the less weight can be carried by the pivot.

**Less Top Pivot – Suffix LTP**

For conditions requiring special top pivots or for arch top doors, the pivot set should be ordered less top pivot – LTP. For offset installations, an additional load bearing intermediate (side jamb) M190 pivot is required. All intermediate pivots for that opening should be M190's, not M19's.

**Special Layouts – Suffix SPLO#**

Unique installations or specially engineered products are called special layouts. These numbers must be assigned by the technical support department and they must be called out specifically by their number when ordering.

**Door Thickness – Suffix 1-3/4", 2", 2-1/4", 2-1/2" or 3"**

When ordering L series pivot for lead-lined doors, the thickness of the door must be given. The purpose of the L product is to have screws spaced so they straddle the lead in the center of the door. Also used when lead lining is under the skins of the door. Recommended for use on extra heavy or high traffic doors.

**Electrolynx® Connectors – Suffix QC – Number of Wires**

The plug-in connectors, with easy color coded wire system, eliminate matching wires. Must be used with ASSA ABLOY doors, frames and hardware. Available 4, 6, 8 or 12 wires for most products.

*Hardwiring Made Easy®*

**CERTIFICATIONS**

All Rixson® pivots and pivot sets are in compliance with ANSI/BHMA A156.4 Standards. See individual products for sub sections.

**LIMITED WARRANTY**

Rixson pivot sets are warranted for 2 years for defect. See Rixson Price Book for specific details of the limited warranty.

**SPECIFICATIONS**

All pivots and pivot sets shall be of one manufacturer. All heavy-duty pivots shall have a minimum of 2 bearings internal to the bottom pivot. One shall be a thrust bearing and the other a needle bearing. Separate bearing surfaces shall be in the top pivot. Lead-lined door units and high traffic pivots shall have additional thrust bearing. Fire rated pivot sets shall have steel top pivots. Fire rated doors require steel intermediate pivots.

## MODEL 117-1/4

### Application

- Interior Doors
- Weight to 250 lbs.\*
- Door Width up to 3'6" (1067mm)
- Handed



ANSI /C07172

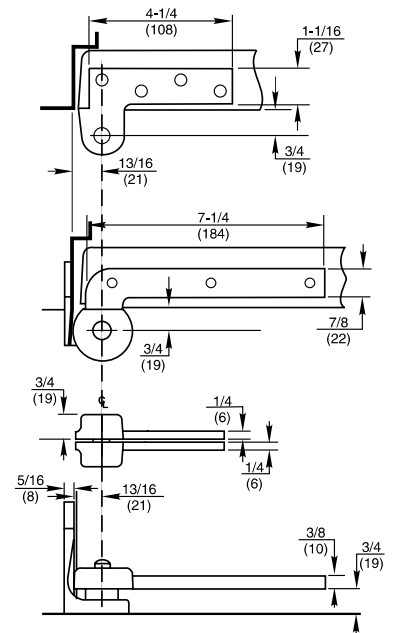
\* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

### Product Description & Features

- Standard top pivot 180 included
- 119 intermediate pivot recommended (order separately); see page 18
- Bottom pivot mortised into side jamb
- Not available for fire-rated doors
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled 1/8" in 2"
- Weight of door borne by floor
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard

### Technical Information

Frame stop required



## MODEL 117

### Application

- Interior Doors
- Weight to 300 lbs.\*
- Door Width up to 3'6" (1067mm)
- Handed



ANSI/C07162/C07202

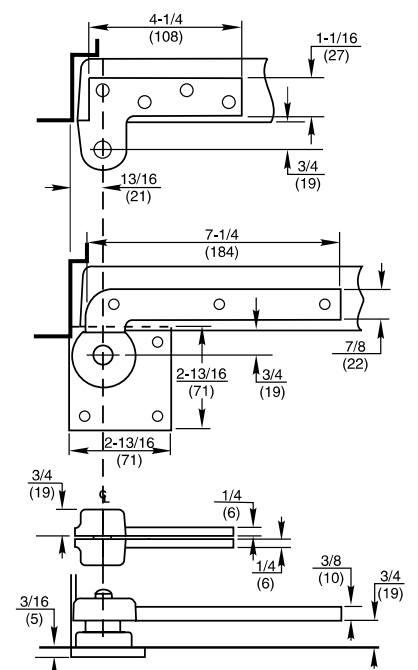
\* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

### Product Description & Features

- Standard top pivot 180 included
- 119 intermediate pivot recommended (order separately); see page 18
- Bottom pivot mortised into floor
- Available for fire door assemblies up to three hours – specify F117. Intermediate pivot required by UL. Specify FM19, (order separately), see page 18
- For 20-minute label suffix “-20” to the part number
- Non-ferrous base material
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Available for 1-1/2" (38mm) offset (door weight 150 lbs) for doors with cladding or frame molding.
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

### Technical Information

Frame stop required



## MODEL L147

### Application

- Exterior or Interior Doors
- Lead-lined/Heavy/High Traffic Doors
- Weight to 800 lbs.
- Door Width up to 4'0" (1219mm)  
Handed



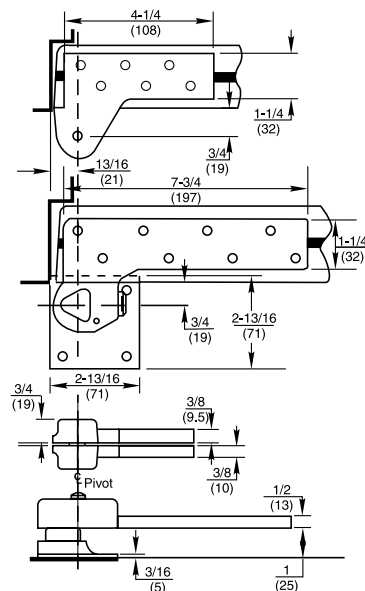
ANSI/C07162/C07202

### Product Description & Features

- Standard top pivot L180 included
- ML19 intermediate pivot required (order separately), see page 19
- Bottom pivot mounts directly to floor
- Doors with lead lining under the skin should also use this product.
- Screw holes in top pivot and bottom arm spaced to straddle lead lining in the middle of the door
- Available for fire door assemblies up to three hours for 1-3/4" (44mm) doors only (ferrous material) – specify FL147. Intermediate pivot required by UL. Specify FML19 (order separately), see page 19
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- Available to accommodate lead in door thicknesses 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) – specify when ordering
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

### Technical Information

Frame stop required



1-3/4" door shown

## MODEL L117

### Application

- Exterior or Interior Doors
- Lead-Lined/Heavy/High Traffic Doors
- Weight to 1,750 lbs.\*
- Door Width up to 4'0" (1219mm)
- Handed



ANSI/C07111

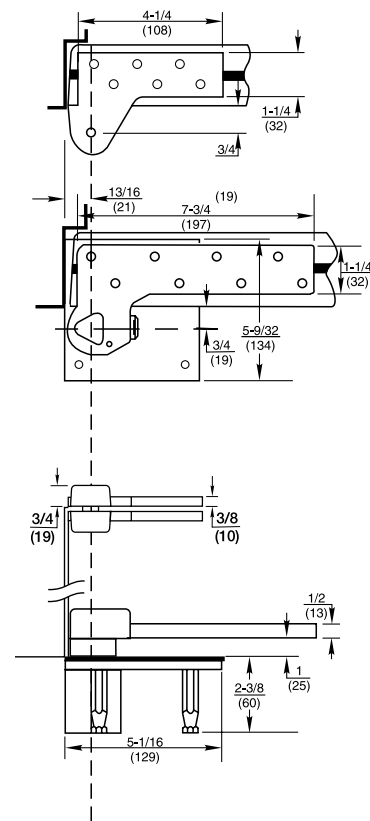
\* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

### Product Description & Features

- Standard top pivot L180 included
- ML19 intermediate pivot required (order separately), see page 19
- Bottom pivot mortised into floor
- Available for fire door assemblies up to three hours (ferrous material). Specify FL117. Intermediate pivot required by UL. Specify FML19 (order separately), see page 19. Note: UL listing for 1-3/4" thick doors only
- Available to accommodate lead in door thicknesses 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) – specify when ordering
- Additional thrust bearing for greater load capacity
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base material for top pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

### Technical Information

Frame stop required



Pivot for 1-3/4" door shown

MODEL 180

**Application**

- Full Mortise
- Non-handed

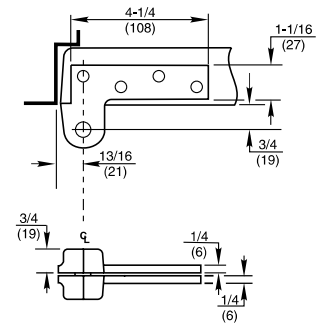


**Product Description & Features**

- Standard top pivot for most offset pivot sets and floor closers
- Oil-impregnated sintered bronze bushing
- Non-ferrous base material
- Available for fire door assemblies (ferrous material) – specify F180 or FH180
- For 20-minute label suffix “-20” to the part number
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Available for 1-1/2" (38mm) offset
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only
- For extra wide or high traffic prefix "H" – H pivots have heavy-duty needle bearings; available in 1-1/2" (38mm) offset

**Technical Information**

Frame stop required



MODEL 180 X 102

**Application**

- Full Mortise
- Non-handed

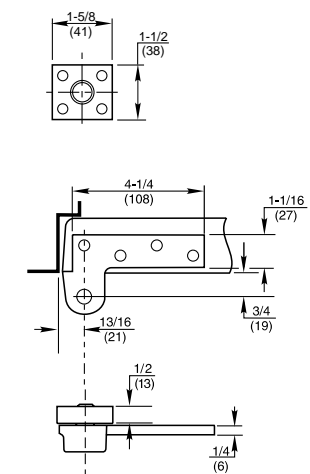


**Product Description & Features**

- Special top pivot for doors in deep reveals or unusual door details where one leaf is too long for the normal door or frame portion
- Oil-impregnated sintered bronze bushings
- Non-ferrous base metal
- Available for 1-1/2" (38mm) offset
- May be inverted
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

**Technical Information**

Frame stop required



MODEL 119

**Application**

- Full Mortise
- Handed

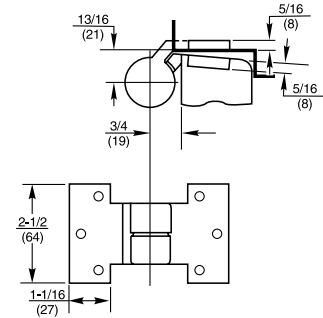


ANSI/C07382

**Product Description & Features**

- Not load-bearing
- Maintains door alignment
- Available 3/4" (19mm) offset only
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- Door edges must be beveled in 1/8" in 2"
- Used with 117, 117-1/4, 195 pivot sets and 127 and 427 floor closers
- Furnished with wood and machine screws

**Technical Information**



MODEL M19

**Application**

- Full Mortise
- Handed

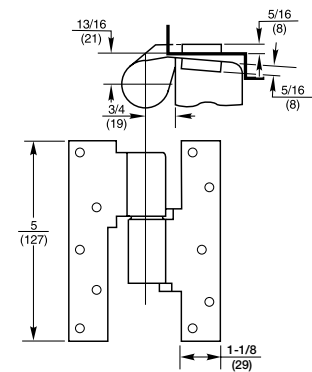


ANSI/C07321/C07371

**Product Description & Features**

- Not load-bearing
- Maintains door alignment
- Aids in installing floor closers and bottom pivots
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base metal
- 3/4" (19mm) offset
- Available for 1-1/2" (38mm) offset
- Available for fire door assemblies (ferrous material) – specify FM19
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws

**Technical Information**



MODEL M190

**Application**

- Heavy-Duty Full Mortise
- Handed



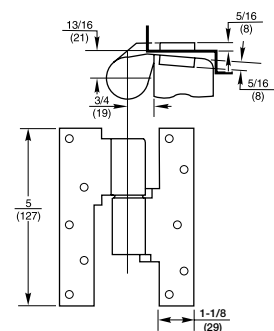
ANSI/C07321/C07371

**Product Description & Features**

Used when frame condition does not allow standard top pivot

- Lateral load-bearing
- Maintains door alignment
- Aids in installing floor closers and bottom pivots
- Heavy-duty needle bearing
- Non-ferrous base metal
- 3/4" (19mm) offset standard
- Available for 1-1/2" (38mm) offset
- Available for fire door assemblies (ferrous material) – specify FM190
- For 20-minute label suffix "-20" to part number
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws

**Technical Information**





# PIVOTS AND PIVOT SETS

## ELECTRIFIED INTERMEDIATE OR SIDE JAMB PIVOTS

### MODEL E-M19

#### Application

- Offset Hung
- Electric Pivot for Power Transfer
- Handed

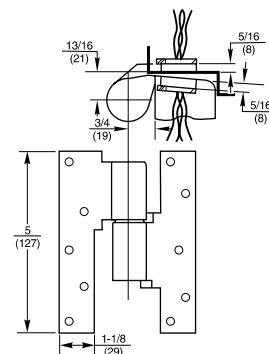


Whenever power transfer pivots are used, the leaves must not be separated

#### Product Description & Features

- Not load-bearing
- Door and jamb portion are factory assembled and cannot be separated
- Always use M19 intermediate pivot to install door
- Specify four, six, eight or twelve wires
- Electrolynx® option available, suffix "QC#" (number of wires)
- 24-gauge wire is rated at 2 amps for low voltage, class II wiring applications
- Available for fire door assemblies (ferrous material) – specify E-FM19
- For 20-minute label, suffix "-20" to the part number
- 3/4" (19mm) offset
- Available 1-1/2" offset
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws

#### Technical Information



Hardwiring Made Easy®



### MODEL E-M19U

#### Application

- Offset Hung
- Electric Pivot for Power Transfer
- Handed
- For Electrified Panic Devices with Large Inrush Current

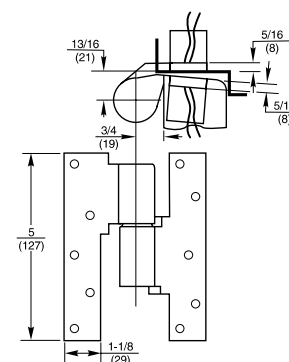


Whenever power transfer pivots are used, the leaves must not be separated

#### Product Description & Features

- Not load-bearing
- Always use M19 intermediate pivot to install door
- Door and jamb portion are factory assembled and cannot be separated
- Junction boxes are supplied with pivots
- Two each 18 gauge wires. Each wire is rated at 2 amps continuously. UL listed for 24-volt, Class I wiring
- Electrolynx® option not available
- Not available in ferrous material
- 3/4" (19mm) offset
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws

#### Technical Information



### MODEL 320

#### Application

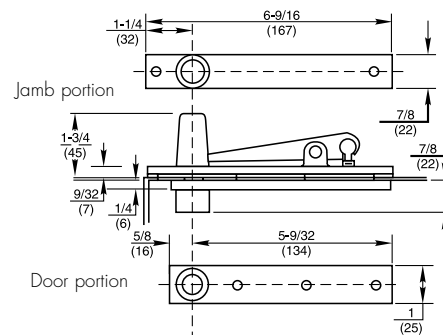
- Fully Concealed
- Non-handed



#### Product Description & Features

- Standard top pivot for Models 127-3/4, 128-3/4, and 176 pivot sets
- Walking beam-type pivot – 1/2" (13mm) diameter pivot pin with 3/4" (19mm) engagement
- Oil-impregnated sintered bronze bushing
- Completely concealed when door is closed
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

#### Technical Information



### MODEL 340

#### Application

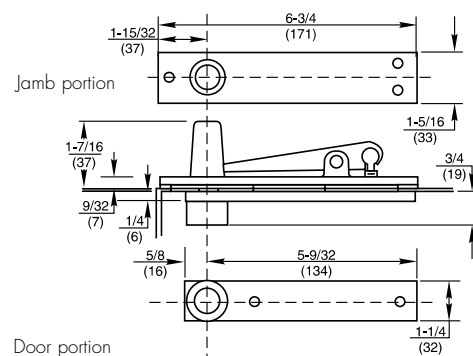
- Fully Concealed
- Non-handed



#### Product Description & Features

- Standard top pivot for Models 370 and 117-3/4 pivot sets. Also used for 28, 30, 40 and 50 Series floor closers
- Walking beam-type pivot – 1/2" (13mm) diameter pivot pin with 3/4" (19mm) engagement
- Oil-impregnated sintered bronze bushing
- Completely concealed when door is closed
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

#### Technical Information



### MODEL H340

#### Application

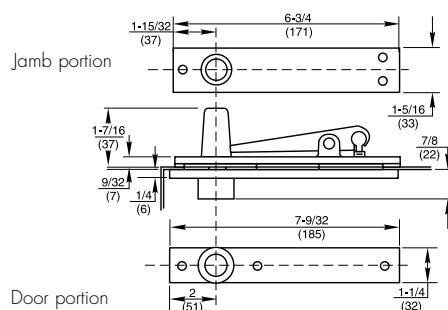
- Fully Concealed
- Heavy-Duty
- Non-handed



#### Product Description & Features

- Standard top pivot for Model H117-3/4 pivot set. Also used for H28 and H40 Series floor closers
- Can be used with any floor closer or pivot set with pivot point 2-3/4", or greater, from edge of the door
- Walking beam-type pivot – 11/16" (17mm) diameter pivot pin with 3/4" (19mm) engagement
- Heavy-duty needle bearing
- Completely concealed when door is closed
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

#### Technical Information



MODEL 345

**Application**

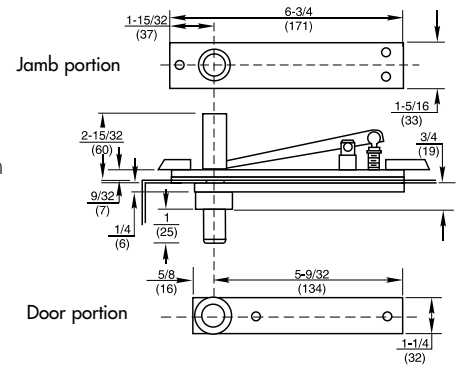
- Fully Concealed
- Center Hung
- Non-handed
- Earthquake Tolerant
- Taller Doors



**Product Description & Features**

- Optional top pivot
- Ideal for locations where there is a fear of dramatic building settling or for doors over 8'6" in height
- Long pivot pin engages in top of door 1-3/4" (44mm)
- Can be used with any center hung bottom pivot or floor closer. Order pivot set or floor closer LTP (less top pivot) with 345 on separate line item
- Walking beam-type pivot – 1/2" (13mm) diameter pivot pin
- Oil-impregnated sintered bronze bushing
- Completely concealed when door is closed
- Furnished with wood and machine screws

**Technical Information**



MODEL H345

**Application**

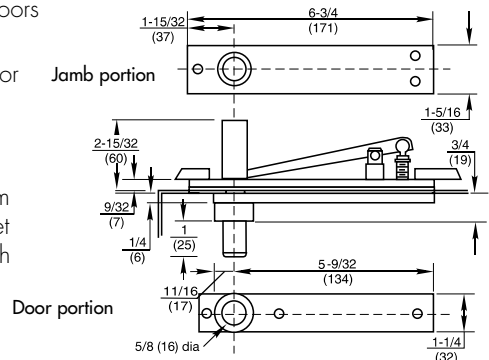
- Fully Concealed
- Center Hung
- Non-handed
- Earthquake Tolerant
- Taller Doors



**Product Description & Features**

- Ideal for locations where there is a fear of dramatic building settling or for doors over 8'6" in height
- Long pivot pin engages in top of door 1-3/4" (44mm)
- Can be used with any center hung bottom pivot or floor closer whose pivot point is 2-3/4, or greater, from the edge of the door. Order pivot set or floor closer LTP (less top pivot) with H345 on separate line item
- Walking beam-type pivot – 11/16" (17mm) diameter pivot pin
- Heavy-duty needle bearing
- Completely concealed when door is closed
- Furnished with wood and machine screws

**Technical Information**



MODEL E-H340

**Application**

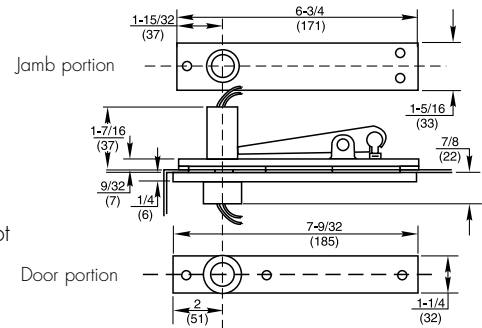
- Center Hung
- Top Pivot for Power Transfer
- Non-handed



**Product Description & Features**

- Walking beam type pivot – 11/16" (17mm) diameter pivot pin with 3/4" (19mm) engagement
- Can be used with any center hung bottom pivot or floor closer. Order the pivot set LTP (less top pivot) with E-H340 as a separate line
- Heavy-duty needle bearing
- Specify two, four, six, eight or twelve wires
- Two-wire is available in 18 gauge and is not available Electrolynx®
- Four, six, eight and twelve wires are 24 gauge and available in Electrolynx®. Suffix QC# (number of wires)
- Completely concealed when door is closed
- Available with longer pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only
- Furnished with wood and machine screws

**Technical Information**



Hardwiring Made Easy®



MODEL E-H345

**Application**

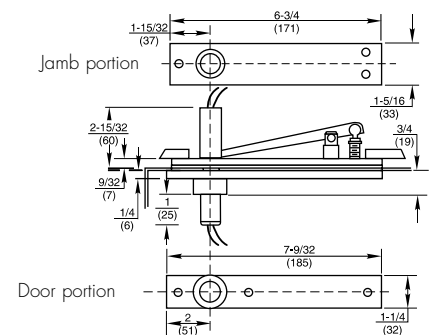
- Fully Concealed
- Center Hung
- Top Pivot for Power Transfer
- Non-handed
- Earthquake Tolerant
- Taller Doors



**Product Description & Features**

- Walking beam-type pivot – 11/16" (17mm) diameter pivot pin
- Longer pivot pin throw engages in top of door 1-3/4" (44mm). Ideal for locations where there is a fear of dramatic building settling
- Can be used with any center hung bottom pivot or floor closer whose pivot point is 2-3/4", or greater, from the edge of the door. Order the pivot set LTP (less top pivot) with E-H345 as a separate line
- Used with heavy-duty pivots & floor closers
- Heavy-duty needle bearing
- For doors over 8'6" in height
- Specify two, four, six, eight or twelve wires
- Two-wire is available in 18 gauge and is not available with Electrolynx®
- Four, six, eight and twelve wires are 24 gauge and available in Electrolynx®. Suffix QC# (number of wires)
- Furnished with wood and machine screws

**Technical Information**



Hardwiring Made Easy®





# Door Closer

ASSA ABLOY

The global leader in  
door opening solutions







# 3000 Series

Architectural Door Closer





3000 series | grade 1 door closer

## the perfect choice

The Yale® 3000 Series Architectural Door Closers offer the perfect combination of reliability, appearance and durability in today's market. With features such as staked valves, self-drilling/self-tapping screws, rack and pinion design and precise valve adjustment, and a complete range of arm and cover options, the Yale® 3000 can meet virtually any application challenge.

This U.L. listed, ANSI Grade 1 closer has a long history of proven quality. It is the ideal choice for upscale facilities that demand superior performance such as: conference centers, office buildings, courthouses, religious facilities, banks, nursing homes, restaurants, hotels and medical offices.

### finishes

Product will be painted with a combination of waterborne acrylic and polyester powder coat. Closers will withstand 100 hours of salt spray. (The ANSI requirement is 25 hours.)

### contents

|                                |       |
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| Sprayed Finishes                        |                                 |                                    |       |            |                 |
|-----------------------------------------|---------------------------------|------------------------------------|-------|------------|-----------------|
| Description                             | Specify Designation (ANSI/BHMA) | Complements the following finishes | Cover |            | Old Designation |
|                                         |                                 |                                    | Metal | Arch Metal |                 |
| Aluminum                                | 689                             | 625, 628, 629, 630, 651, 652       | No    | No         | SB              |
| Statuary Bronze                         | 690                             | 613, 640, 695                      | No    | No         | STAT            |
| Dull Bronze                             | 691                             | 612, 637, 639                      | No    | No         | BL              |
| Black                                   | 693                             | 315                                | No    | No         | 315             |
| Medium Amber                            | 694                             | 312                                | No    | No         | 312             |
| Gold                                    | 696                             | 605, 606, 632, 633                 | No    | No         | GB              |
| Dark Oxidized Satin Bronze - equivalent | 613E                            | 613                                | Yes   | Yes        | —               |
| Prime Coat                              | 600*                            | —                                  | No    | No         | SRI             |

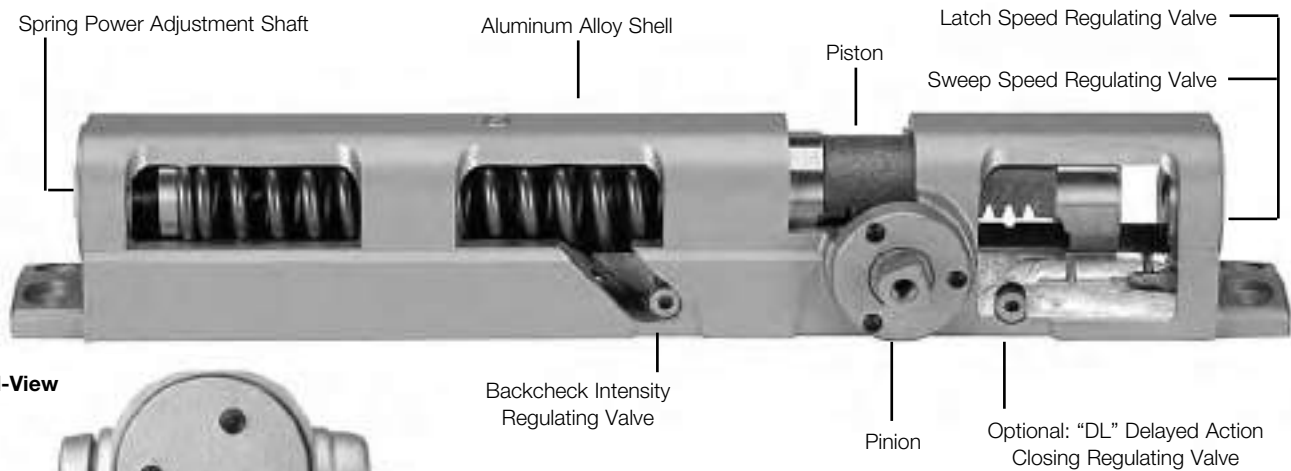
**\* 600 is a special rust inhibiting prime coat. Closers can be ordered prime coat only (specify closer x 600). An additional charge applies if finish coat is required over prime coat (ex: 3501 x 600 x 689).**

| Plated Finishes* | Specify Designation (ANSI/BHMA) | Cover |             | Old Designation |
|------------------|---------------------------------|-------|-------------|-----------------|
|                  |                                 | Metal | Arch. Metal |                 |
| Bright Brass     | 605                             | Yes   | Yes         | US3             |
| Satin Brass      | 606                             | Yes   | Yes         | US4             |
| Bright Bronze    | 611                             | Yes   | Yes         | US9             |
| Satin Bronze     | 612                             | Yes   | Yes         | US10            |
| Bright Chrome    | 625                             | Yes   | Yes         | US26            |
| Satin Chrome     | 626                             | Yes   | Yes         | US26D           |

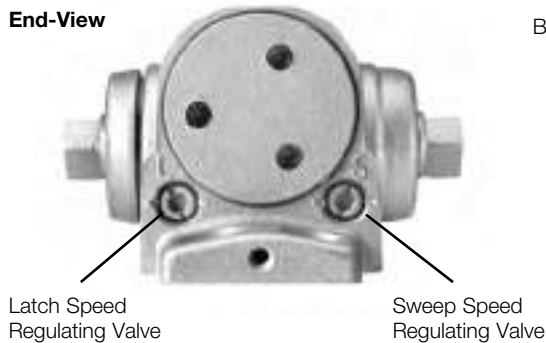
**\* When a plated finish is ordered, arm and cover will be plated unless "cover only" is specified. 3100/3300 - available with plated arm only.**

## overview

### Cutaway View






### End-View



**CAUTION:** Door Closers for Low Opening Force Applications: Door closers installed in openings required to meet the requirements of The Americans with Disabilities Act or ANSI Standard A117.1, when adjusted to meet those requirements, may not provide adequate closing power to dependably close and latch the door.

### compliance standards

 Series 3301 and 3501 door closers are designed to comply with requirements of the Americans with Disabilities Act (A.D.A.) and ANSI standard A117.1. All series 3301/3501 are ANSI/BHMA A156.4 Grade 1 certified.   All Yale® series 3301/3501 closers with non-hold open arms are listed by Underwriters Laboratories for labeled fire doors. This includes compliance to UL10C for 3-hour assemblies. The product is manufactured in an ISO 9001 facility.

### standard on all 3000 series closers

#### Features

- Exceeds 10 million cycles
- Cast aluminum body
- Adjustable spring sizes 1 through 6
- Tri-packed (regular arm, top jamb and parallel arm mounting)
- Non-handed
- Staked valves
- Rack & pinion design
- 1-1/4" (32mm) diameter piston
- 5/8" (16mm) diameter pinion journals
- Separate and independent, latch, sweep and backcheck intensity valves
- 2-1/8" (54mm) projection (standard covers)
- All standard arm applications (with slim, full or metal covers) allow doors to swing 180 degrees, conditions permitting

- 3301 - shipped with slim-line plastic cover
- 3501 - shipped with full cover
- 25-year limited warranty

#### Optional Features

- Metal and architectural covers (3500 or 3501 only)
- Heavy-duty arms: Regular Rigid, Parallel Rigid, Holder/Stop, Holder/Stop Spring, UNI Stop™
- Delayed action
- Lead-lined metal cover (suffix MLL)

## optional features

### delayed action

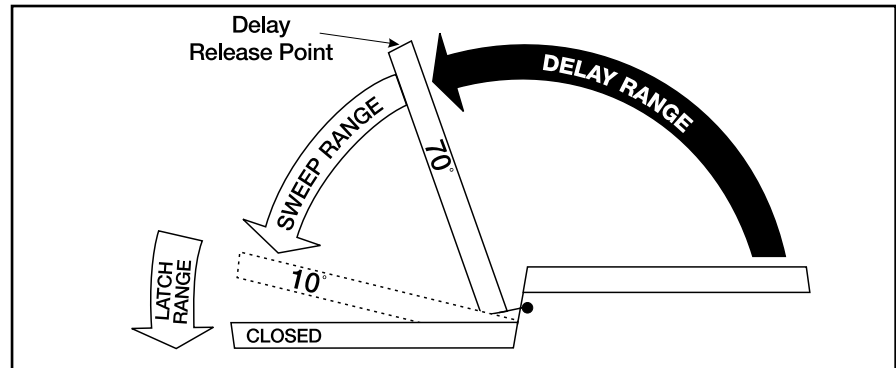
#### Adjustable Delayed Action Closing

An optional hydraulic feature that adds a third speed range to the closing cycle. This feature becomes effective when the door is opened and released at any point beyond 70°. The amount of time delay depends upon the combination of the angle of door release and valve adjustment. The valve can be adjusted with a 1/8" (3mm) hex key from no delay time up to maximum delay times of:

| Door Opened and Released at | Approximate Time of Delay Cycle |
|-----------------------------|---------------------------------|
| 180°                        | 4-5 minutes                     |
| 120°                        | 2-3 minutes                     |
| 90°                         | 25-30 seconds                   |

#### Pressure Relief Safety Valve

The delayed action hydraulic system contains a pressure relief valve. Any time the door is forced toward the closed direction while it is in the closing cycle, the valve will open



and permit the door to close. This prevents damage to door, frame and closer.

#### Suggested Applications

Delayed Action closing allows slow-moving traffic to clear the opening before the door closer's normal closing cycle begins. This feature can be helpful in health care facilities such as hospitals and nursing homes. It provides sufficient time for persons on crutches or in wheelchairs to pass through a door without concern of it closing. At the same time, it can accommodate

the facility's staff with movement of food service carts, beds, and other wheeled traffic.

Use of delayed action closers on many doors throughout industrial and commercial buildings can also assist the flow of traffic. Locations where additional time to clear the opening is advantageous are doors between office and factory/ warehouse facilities, doors to workshops or laboratories, kitchens and food processing areas.

### arms

#### Non-Hold Open

Self-closes door every time door is opened. Auxiliary stop (by others) required except when using the Holder/Stop, Holder/Stop Spring or UNI Stop™ arms.

#### Hold Open

Achieved by means of friction or ball and detent/ roller. Friction hold open has a range of 90° to 180° using template location and mechanical adjustment. Ball and detent or roller hold open is effective in a range of 85° to 110°.

Hold open arm door closers are not permitted to be used on fire door assemblies.

#### Door Opening Degrees

| Arm Function  | Regular Arm, Top Jamb, Parallel Arm | Parallel Rigid Arm | Holder/Stop Parallel Arm | Holder/Stop Spring Parallel Arm | UNI Stop™ Parallel Arm | UNI Stop™ Top Jamb | Low Profile |
|---------------|-------------------------------------|--------------------|--------------------------|---------------------------------|------------------------|--------------------|-------------|
| Non-Hold Open | ✓                                   | ✓                  | 85° to 110°              | 85° to 110°                     | 85° to 110°            | 85° to 110°        | ✓           |
| Hold Open     | 90° to 180°                         | 85° to 180°        | 85° to 110°              | 85° to 110°                     | 85° to 110°            | 85° to 110°        | N/A         |

✓=180° trim and template permitting

## applications



**Regular Arm**

3301

This is the only pull side application where a double lever arm is used. It is the most power-efficient application for a door closer. Sufficient frame, door and/or ceiling clearance must be considered.



3501

Since the arm assembly projects directly out from the frame, this application may present an aesthetics issue or be prone to vandalism.



**Top Jamb**

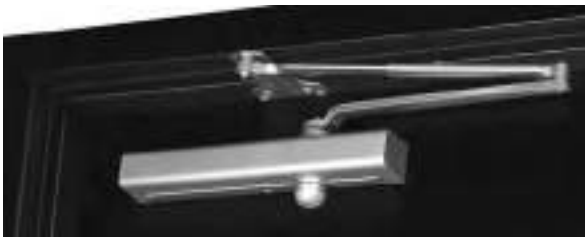
3301

For efficiency reasons this application provides the best alternative to the regular arm application. There must be sufficient frame face and/or ceiling clearance for this application. It requires a top rail on the door of just 2-1/4" (57mm). This application provides the best door control for doors in exterior walls that swing out of a building.



3501

The entire door closer and arm assembly project from the frame, similar to the regular arm application, where matters of appearance and malicious abuse can be of concern. Consideration must be given to depth of reveal.



**Parallel Arm**

3301

This application provides the most appealing design appearance for a surface-mounted door closer having a double lever arm. This also makes it beneficial in vandalism-prone areas. It is on the push side of the door and the arm assembly extends almost parallel to the door. In the closed position, there is very little or no hardware projecting beyond the frame face in most situations.

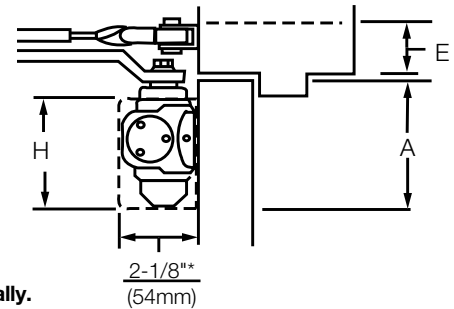
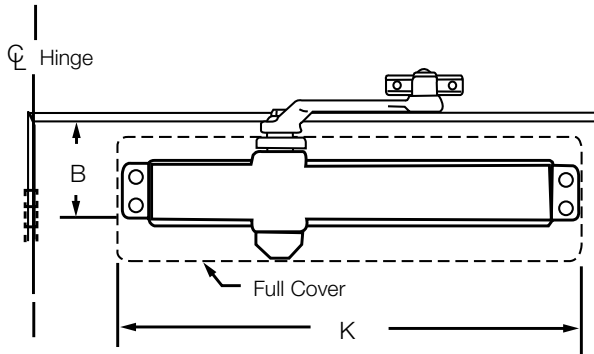


3501

Due to the geometry of the arm it is approximately 25% less power-efficient than a regular arm application. The entire closer and arm assembly are mounted below the frame stop. Top rail clearance dimensions will vary based on the type of cover used. (See page 13.)

## technical details

## regular arm



Mounting holes for closer body are spaced  $3/4''$  (19mm) vertically x  $12''$  (305mm) horizontally.

Note: All measurements are Inches/mm.

Maximum  $180^\circ$  door swing, conditions permitting

| Closer Series | Covers            | E<br>Minimum Ceiling Clearance |               |                          | B<br>Minimum Top Rail    |                          |                          |                          | A<br>Minimum Top Rail Clearance |                           | K<br>Closer Length         | H<br>Closer Height       |
|---------------|-------------------|--------------------------------|---------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------------|---------------------------|----------------------------|--------------------------|
|               |                   | NHO                            | Low Profile   | HO                       | W/O Drop Plate           |                          | W/3146 Drop Plate        |                          | NHO/ HO                         | Low Profile               |                            |                          |
|               |                   |                                |               |                          | NHO/ HO                  | Low Profile              | NHO/ HO                  | Low Profile              |                                 |                           |                            |                          |
| 3100          | No Cover          |                                |               |                          |                          |                          |                          |                          |                                 |                           | $12\text{-}3/4''$<br>(324) |                          |
| 3300          | Slim Line Plastic |                                |               |                          |                          |                          |                          |                          | $3\text{-}1/2''$<br>(89)        | $3\text{-}3/8''$<br>(86)  | $13''$<br>(330)            | $2\text{-}7/8''$<br>(73) |
| 3500          | Full Plastic      | $1\text{-}1/2''$<br>(38)       | $1''$<br>(25) | $1\text{-}5/8''$<br>(41) | $2\text{-}1/2''$<br>(64) | $2\text{-}3/8''$<br>(60) | $1\text{-}5/8''$<br>(41) | $1\text{-}1/2''$<br>(38) |                                 |                           |                            |                          |
| 3500M         | Metal             |                                |               |                          |                          |                          |                          |                          | $4\text{-}1/4''$<br>(108)       | $4\text{-}1/8''$<br>(105) | $13\text{-}5/8''$<br>(346) | $3\text{-}3/4''$<br>(95) |
| 3500A         | Arch. Plastic     |                                |               |                          |                          |                          |                          |                          | $3\text{-}5/8''$<br>(92)        | $3\text{-}1/2''$<br>(89)  | $14''$<br>(356)            | $3\text{-}1/8''$<br>(79) |
| 3500MA        | Arch. Metal       |                                |               |                          |                          |                          |                          |                          | $3\text{-}1/2''$<br>(89)        | $3\text{-}3/8''$<br>(86)  |                            | $3''$<br>(76)            |

| Door Widths<br>Inches (cm) |           | Model Numbers |              |
|----------------------------|-----------|---------------|--------------|
| Interior                   | Exterior  | Non-Hold Open | Hold Open    |
| 30" (76)                   | N/A       |               |              |
| 36" (91)                   | 30" (76)  |               |              |
| 48" (122)                  | 36" (91)  | 3301<br>3501  | 3311<br>3511 |
| N/A                        | 48" (122) |               |              |
| Unusual                    |           |               |              |

Note: 3301/3501 series door closers are set at midpower range from the factory and can be adjusted for door sizes noted above.

\* Projection is for Slim Line or Full Covers. Projection for Metal Covers =  $2\text{-}3/16''$  (56mm). Projection for Architectural Plastic & Architectural Metal Covers =  $2\text{-}1/4''$  (57mm).



# Overhead Door Closer

Featuring efficient 'cam action' technology, it has an in-built power adjustment mechanism which allows you to reduce opening force whilst maximising closing force, making it perfect for almost every new door design.

### Major Features

- Cam action for low opening moment
- Power adjustable Size 2 to 4
- For door width from 850mm to 1100mm
- For door weight 45kg to 80kg
- Max opening angle 120°
- Two speed valves:
  - One to control closing speed from 120° to 0°
  - Second to activate final latch from 15° to 0°
- Overpressure relief valve
- Non-handed
- Optional Features:
  - Backcheck, Delay Action, Adjustable hold-open from 70° to 95°
- Optional Satin Stainless Steel (SSS) Cover



Yale YIC6124 Overhead Door Closer



Satin Stainless Steel (SSS) Cover

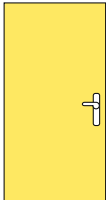
### Standards

Complied with CE standard with Size EN2 - EN4  
 EN 1154: Product performance standard.  
 EN 1634

### Recommended Maximum Door Size

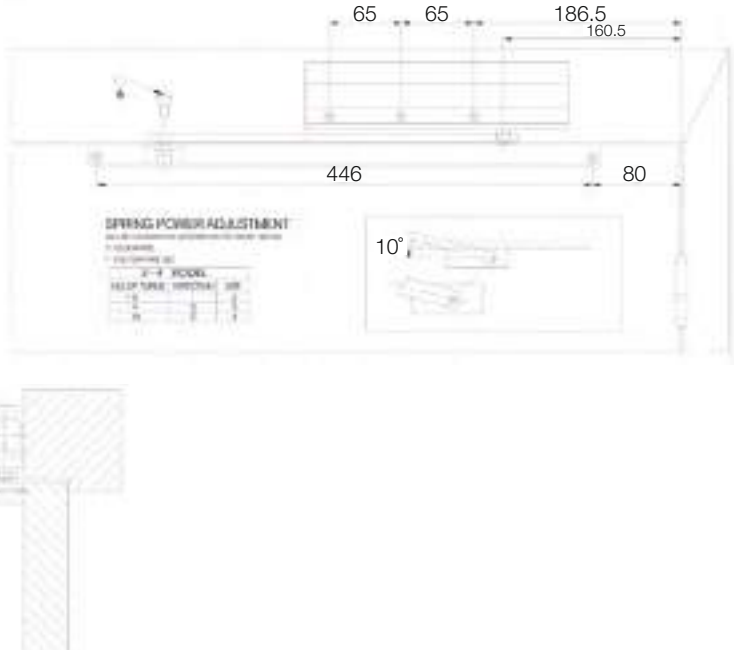
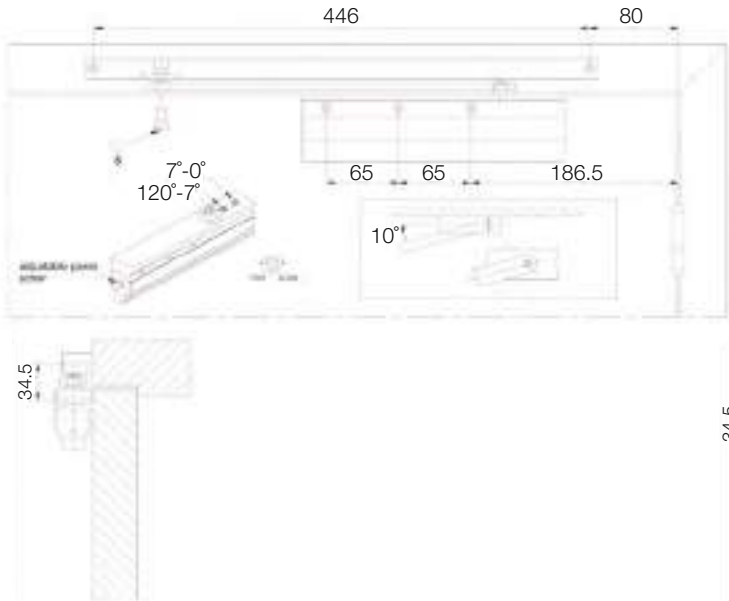
In case of doors subject to wind or air draught select the next size up.

Min power - 2 = 15 Nm  
 Max power - 4 = 32 Nm



Min. 750 x 2100  
 Max. 1100 x 2400

### Limiting Dimensions





# Concealed Door Closer

The beauty of the new Yale YIC5124 Concealed Door Closer is that it stays virtually invisible when the door is closed, keeping your design pure and clean just as you intended. Featuring efficient 'cam action' technology, it has an in-built power adjustment mechanism which allows you to reduce opening force whilst maximising closing force, making it perfect for almost every new door design.

## Major Features

- Cam action for low opening moment
- Power adjustable Size 2 to 4
- Fits timber doors from 45mm thickness
- Fits metal profiles with 36 x 45mm inner chamber
- Max opening angle 120°
- Two speed valves:
  - One to control closing speed from 120° to 0°
  - Second to activate final latch from 15° to 0°
- Overpressure relief valve
- Adjustable hold-open from 70° to 95°
- Non-handed



Yale YIC5124 Concealed Door Closer

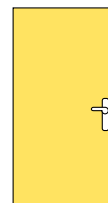
## Standards

Complied with CE standard with Size EN2 - EN4  
EN 1154: Product performance standard.

## Recommended Maximum Door Size

In case of doors subject to wind or air draught select the next size up.

Min power - 2 = 15 Nm  
Max power - 4 = 32 Nm



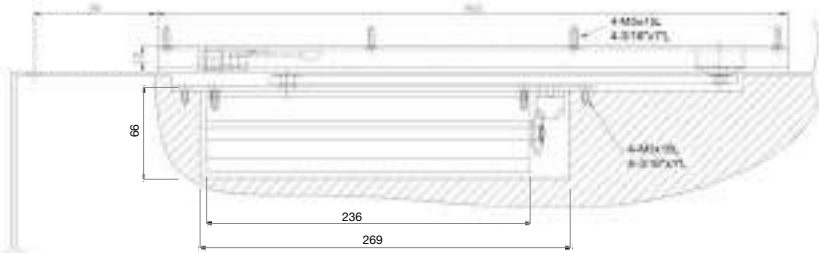
Min. 750 x 2100  
Max. 1100 x 2400

## Limiting Dimensions

Top Rail



Closer Body and Arm Assembly



Door Closer Side Profile



Door Closer Top Plate



# Door Closers

The world's favorite lock



## Yale YIC 3025A Surface Mounted Door Closer

A range of adjustable power door closer units suitable for architectural and commercial applications.

### Standard Features

- Size EN2-EN5 power adjustable
- Door weight range of 20kg ~ 100kg
- Standard arm included; parallel bracket is optional
- Adjustable backcheck
- Closing and latching speed adjustment
- Overload protection
- Non-handed
- Regular & over door mounting; parallel mounting is optional

### Standard Arm

- Closer installed on pull side of door. This mounting position permits opening of 170°.

### Parallel Arm

- Closer installed on push side of door. This mounting position permits opening of 180°.

### Over Door Mounting

- Closer installed on push side of door and top rail where conditions do not allow parallel mounting. This mounting position permits opening of 170°.



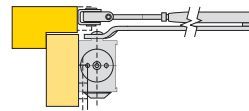
### Standards

- Complied with CE standard with Size EN2 - EN5.
- EN 1154: Product performance standard.
- EN 1634-1:2000

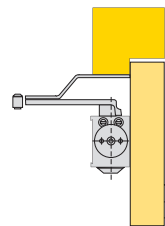
### Standard Finishes

- Silver enamel - SIL

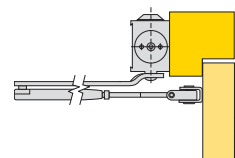
### Applications - Mounting Details



Regular Arm installation closer is fixed to the pull (speed regulating valve towards the hinge) side of the door.



Parallel Arm installation closer is fixed to the push (speed regulating valve opposite to hinge) opposite to hinge side of the door.

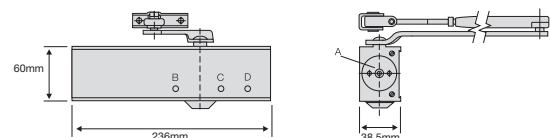


Top jamb installation closer is fixed to the top jamb on the push (speed regulating valve towards the hinge) side of the door.

### How to order

| Ordering No. | Product Description                                              | Door Weight Range |
|--------------|------------------------------------------------------------------|-------------------|
| YIC 3025A    | Yale Surface Mounted Door Closer Power Adjustable Size EN2 - EN5 | 20kg ~ 100kg      |

### Technical Data - Limiting Dimensions Regular Arm



Legend - A. Power Adjustment B. Backcheck C. Closing Speed D. Latching Speed

All dimensions are in mm





# 7500/7700 SERIES

Institutional Door Closer



**Norton**<sup>®</sup>

**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

## OVERVIEW

The 7500 Series Door Closer offers customers the ideal combination of superior performance, strength and quality. Ideal for interior or exterior doors in facilities that demand reliability.

### Features


- Non-handed
- Rack-and-pinion design
- Cast aluminum body
- 2-3/16" (56mm) projection
- 1-1/2" (38mm) diameter piston
- 5/8" (16mm) diameter pinion journals
- Staked valves
- Standard, separate and independent, latch, sweep and backcheck intensity valves
- Backcheck positioning valve
- NorGlide® fluid
- Molded plastic cover
- All standard arm applications allow doors to swing 180°, conditions permitting
- Self-drilling screws
- Full-size template
- Heavy-duty arms: Regular Rigid, Parallel Rigid, CloserPlus®, CloserPlus Spring™ and Unitrol®
- Slide Tracks: push or pull side mounting

### Optional Features

- Corrosion resistant model (non-hold open only). Specify 7500SS
- Metal cover. Specify M suffix
- Lead lined metal cover. Specify MLL suffix
- Enhanced backcheck. Specify EBC suffix
- Delayed action with pressure relief valve
- Retrofit plates

| Features                                                                        | 7500 | 7700 |
|---------------------------------------------------------------------------------|------|------|
| Adjustable spring sizes 1 through 6 (ADA Compliant)                             | X    |      |
| Sized springs 2,3,4,5,6 with 50% power adjustment                               |      | X    |
| Tri-Style® packaging; tri-packed for regular, top jamb or parallel arm mounting | X    |      |
| Bi-packed for regular or top jamb mounting                                      |      | X    |

### Compliance Standards

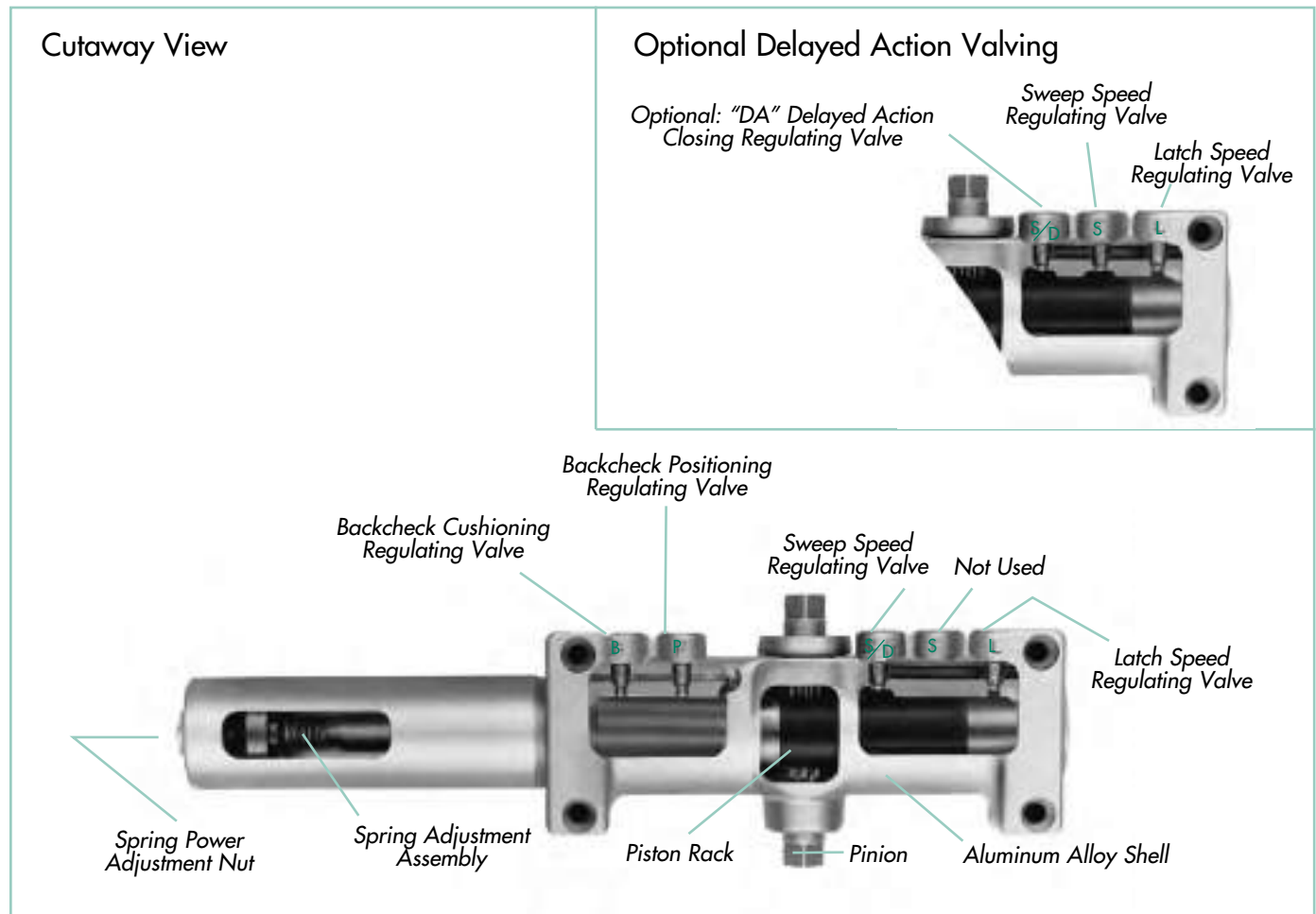
- Exceeds 10 million cycles (witnessed and verified by UL)
- ANSI/BHMA A156.4, Grade 1 certified 
- UL listed
- UL10C compliant for positive pressure
- ADA Compliant (7500)
- 25-year limited warranty

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# 7500/7700 SERIES INSTITUTIONAL DOOR CLOSER

## OVERVIEW



## COMPLIANCE STANDARDS



The series 7500 door closers are designed to comply with requirements of the Americans with Disabilities Act (A.D.A.) and ANSI/BHMA standard A117.1. All series 7500/7700 door closers are ANSI/BHMA A156.4 Grade 1 certified. **BHMA** All Norton series 7500/7700 closers with non-hold open arms are listed by Underwriters' Laboratories for labeled fire doors. **UL** This includes compliance to UL10C for 3-hour assemblies. The product is manufactured in an ISO 9001 facility.

### Windstorm

Norton 7500 door closers are UL certified for inswing and outswing single and pair (up to 8'0" x 8'0") door assemblies to ICC 500 for Storm Shelters. Additionally, the 7500 meets FEMA 361 guidelines.

7500 is part of a complete ASSA ABLOY tornado and hurricane shelter solutions utilizing Ceco StormPro 361, Curries StormPro 361, Fleming F5 doors and frames and McKinney SP hinges.

### CAUTION: Door Closers for Low Opening Force Applications:

Door closers installed in openings required to meet the requirements of the Americans With Disabilities Act or ANSI/BHMA Standard A117.1, when adjusted to meet those requirements, may not provide adequate closing power to dependably close and latch the door.

# 7500/7700 SERIES

## INSTITUTIONAL DOOR CLOSER

### FASTENERS

| Type         | Description                | Arm |    |    |             |    |         |     |       |             |
|--------------|----------------------------|-----|----|----|-------------|----|---------|-----|-------|-------------|
|              |                            | RA  | PA | TJ | Low Profile | PR | CLP/CPS | UNI | UNI-J | Slide Track |
| <b>DOOR</b>  |                            |     |    |    |             |    |         |     |       |             |
| SDST         | Self Drilling Self Tapping | S   | S  | S  | S           | S  | S       | S   | S     | S           |
| MS           | Machine Screw              | S   | S  | S  | S           | S  | S       | S   | S     | S           |
| SN           | Sleeve Nut                 | O   | O  | O  | O           | S  | S       | S   | S     | S           |
| TBGN         | Thru Bolts & Grommet Nuts  | O   | O  | O  | O           | O  | O       | O   | O     | O           |
| SMS          | Sheet Metal Screws         | O   | O  | O  | O           | O  | O       | O   | O     | O           |
| TORX®        | Torx Drive Security Screw  | O   | O  | O  | O           | O  | O       | O   | O     | O           |
| <b>FRAME</b> |                            |     |    |    |             |    |         |     |       |             |
| SDST         | Self Drilling Self Tapping | S   | S  | S  | S           | S  | S       | S   | S     | S           |
| MS           | Machine Screw              | S   | S  | S  | S           | S  | S       | S   | S     | S           |
| SMS          | Sheet Metal Screws         | O   | O  | O  | O           | O  | O       | O   | O     | O           |
| TORX         | Torx Drive Security Screw  | O   | O  | O  | O           | O  | O       | O   | O     | O           |

**S = standard; O = optional**

**SN** are for use on unreinforced hollow metal doors or to prevent any hollow metal door from collapse/dimpling. They can also be used for thru bolting on wood doors. SN are supplied for 1-3/4" (44mm) thick doors unless specified for 2-1/4" (57mm) thick doors.

**TBGN** are an alternative to SN for wood doors. TBGN are supplied standard for 1-3/4" (44mm) thick doors. They can be specified for 1-3/8" (35mm) thick doors.

**SMS** - when specified, closer will be packed with sheet metal screws for the door AND sheet metal screws plus machine screws for the frame.

**TORX** screws with security pin are standard with 7570/7770 Security Door Closers. Torx may be specified for all other series applications. Torx are only available with machine screw threads. Sheet metal screw threads are not available.

### FINISHES

Norton offers waterborne acrylic, polyester powder coat and plated finishes. Custom finishes are available on special order. A sample and approval is required.

Waterborne acrylic and polyester powder coat will withstand 100 hours of salt spray (ANSI requires 25 hours).

| ANSI/BHMA | US     | Description                             |
|-----------|--------|-----------------------------------------|
| 600*      | SRI    | Prime Coat                              |
| 605       | US3    | Bright Brass                            |
| 606       | US4    | Satin Brass                             |
| 611       | US9    | Bright Bronze                           |
| 612       | US10   | Satin Bronze                            |
| 613E      | US10BE | Dark Oxidized Satin Bronze - Equivalent |
| 625       | US26   | Bright Chrome                           |
| 626       | US26D  | Satin Chrome                            |
| 689       | AL     | Aluminum                                |

| ANSI/BHMA | US   | Description     |
|-----------|------|-----------------|
| 690       | STAT | Statuary Bronze |
| 691       | DB   | Dull Bronze     |
| 693       | 315  | Black           |
| 694       | 312  | Medium Amber    |
| 696       | GB   | Gold            |

\* 600 is a special rust-inhibiting prime coat. Closers can be ordered prime coat only (specify closer x 600). An additional charge applies if finish coat is required over prime coat.

- Norton closer bodies and plastic covers are available in waterborne acrylic finishes. Arms and metal covers are available in powder coat or plated finishes.
- When a plated finish is ordered, arm and cover will be plated unless "cover only" is specified.

## FEATURES

### Aluminum Alloy Housing

Closer bodies are constructed of a special aluminum alloy, carefully selected to accommodate interactive steel components and operating conditions.

### Rack & Pinion Operation

Provides a smooth constant control of the door through its full opening and closing cycle. 180° door swing can be achieved when door, frame, hardware and arm function do not interfere.

### Non-handed

With few exceptions all series 7500 and 7700 door closers are non-handed and can be installed on either right or left hand swing doors. Pinion shaft extends vertically through the closer body in both directions. Some options, as noted on pages 6-8, will require that the hand of the closer be specified.

### Sweep Speed Control Valve

Allows adjustment of door speed from the door's full open position down to approximately 10° from the closed position.

### Latch Speed Control Valve

Allows adjustment of door speed from approximately 10° down to the door's fully closed position.

### Tri-Style® Packing

7500 comes with screws, brackets and soffit plates to allow for regular, top jamb, and parallel arm installations.

### Adjustable Backcheck Cushion Valve

Provides control of the door in the opening cycle, beginning at approximately 75° of door opening. It slows/cushions the door opening, when the door is forcibly opened beyond its pre-adjusted limits.

### Adjustable Backcheck Position Valve

Allows the door opening position, where backcheck cushioning begins, to be adjusted to a greater door angle, up to a maximum of 20° farther (approximately 95°).

### Standard Molded Cover

Molded of high-impact U.L. listed material and covers the entire closer body assembly. This cover is non-handed for all applications.

### Warranty

These closers carry a limited 25-year warranty against defect, and life of the building on the aluminum housing.

### Closer Fluid

NorGlide® closer fluid is a specially formulated multi-viscosity hydraulic fluid that contains lubricity and anti-oxidation agents that provide optimum performance and efficiency. This fluid complements the interaction of the door closer's aluminum housing with its steel and brass components, while maintaining stable viscosity to allow the door closer to perform in temperatures ranging from extremely high to as low as -40° F.

## Door Closer Power Options

### Series 7700 Sized Door Closer

Available in five different power sizes (2, 3, 4, 5 or 6). Each power size is adjustable up to 50% stronger than the minimum closing force for that size, as outlined in ANSI/BHMA specification A156.4.

### Series 7500 Multi-Sized Door Closer

Adjustable through the entire power range of door closer sizes 1 through 6, as outlined in ANSI/BHMA standard A156.4.

The series 7500 also conforms to the minimum opening force requirements of the Americans with Disabilities Act (A.D.A.) and ANSI/BHMA standard A117.1 for interior doors.

## OPTIONAL FEATURES

### Corrosion-Resistant Door Closer

The series 7500SS door closers with molded plastic cover are available for use where corrosive conditions exist. This series is provided with brass adjustment valves, a 440 grade stainless steel pinion shaft, an all-aluminum body and bronze closer arm bushings; all other components are of 302/303 grade stainless steel. Fasteners are 8-18 stainless steel. This product is available for standard regular arm, top jamb and parallel arm, non-hold open, applications only.

### Optional Metal Cover

This steel cover is non-handed for regular and parallel arm applications, but is handed for top jamb applications. Cover is available in sprayed or architectural plated finishes.



### Security Cover

Supplied standard with all series 7570/7770 door closers. This deep drawn steel cover is handed for all applications. The cover is fastened to the closer body at two points on top and to the door closer body stand-offs at two points on the bottom.

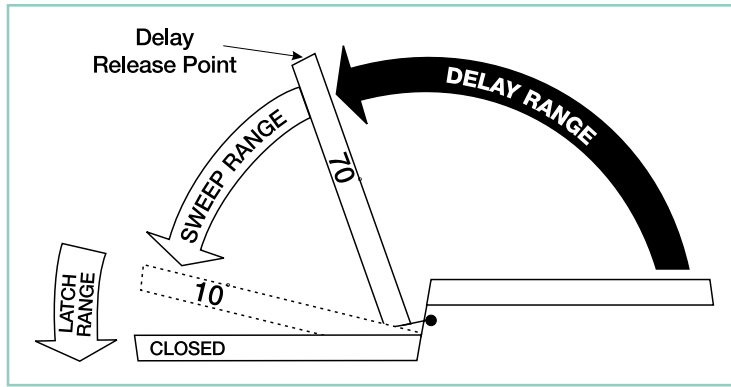
### Optional ABS Cover

Consult factory for details

OPTIONAL FEATURES

**Enhanced Backcheck**

This feature provides adjustable backcheck intensity beginning at approximately 15 degrees of the door opening cycle. It is intended for use in situations where the standard backcheck beginning at approximately 75° of door opening allows too much unrestricted door travel to obtain control of the door without the fear of peripheral damage to the door closer, door, frame, hinges or pivots; or adjacent walls or structures. This feature is most frequently used in schools and detention facilities. Specify suffix EBC.



**Adjustable Delayed Action Closing**

An optional hydraulic feature that adds a third speed range to the closing cycle. This feature becomes effective when the door is opened and released at any point beyond 70°. The amount of time delay depends upon the combination of the angle of door release and valve adjustment. The valve can be adjusted with a 1/8" (3mm) hex key from no delay time up to maximum delay times of:

| Door Opened and Released at | Approximate Time of Delay Cycle |
|-----------------------------|---------------------------------|
| 180°                        | 4-5 minutes                     |
| 120°                        | 2-3 minutes                     |
| 90°                         | 25-30 seconds                   |

**Pressure Relief Safety Valve**

The delayed action hydraulic system contains a pressure relief valve. Any time the door is forced toward the closed direction while it is in the closing cycle, the valve will open and permit the door to close. This prevents damage to door, frame and closer.

Use of delayed action closers on many doors throughout industrial and commercial buildings can also assist the flow of traffic. Locations where additional time to clear the opening is advantageous are doors between office and factory/warehouse facilities, doors to workshops or laboratories, to kitchen and food processing areas, etc.

**Suggested Applications**

Delayed Action closing allows slow-moving traffic to clear the opening before the door closer's normal closing cycle begins. This feature can be helpful in health care facilities such as hospitals and nursing homes. It provides sufficient time for persons on crutches or in wheelchairs to pass through a door without concern of it closing. At the same time, it can accommodate the facility's staff with movement of food service carts, beds, and other wheeled traffic.

OPTIONAL FEATURES ARMS

**Non-Hold Open**

Self-closes door every time door is opened. Auxiliary stop (by others) required except when using the CloserPlus<sup>®</sup>, CloserPlus Spring<sup>™</sup> or Unitrol<sup>®</sup> arms.

**Hold Open**

Achieved by means of friction or ball and detent/roller. Friction hold open has a range of 90° to 180° using template location and mechanical adjustment. Ball and detent or roller hold open is effective in a range of 85° to 110°.

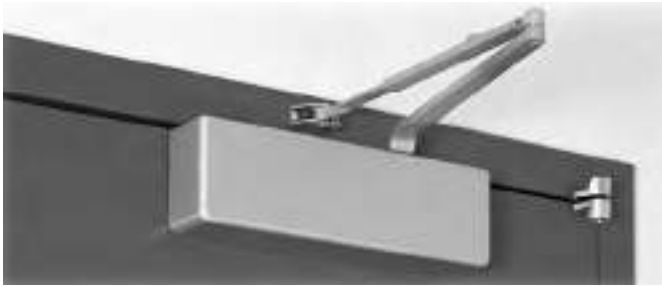
Hold open arm door closers are not permitted to be used on fire door assemblies.

**Door Opening Degrees**

| Arm Function  | Regular Arm, Top Jamb Parallel Arm | Parallel Rigid Arm | CloserPlus <sup>®</sup> Parallel Arm | CloserPlus Spring <sup>™</sup> Parallel Arm | Unitrol <sup>®</sup> Parallel Arm | Unitrol Top Jamb | Low Profile Regular, Parallel | Slide Track      |
|---------------|------------------------------------|--------------------|--------------------------------------|---------------------------------------------|-----------------------------------|------------------|-------------------------------|------------------|
| Non-Hold Open | ✓                                  | ✓                  | 85° to 110°                          | 85° to 110°                                 | 85° to 110°                       | 85° to 110°      | ✓                             | 85° to 110°/180° |
| Hold Open     | 90° to 180°                        | 85° to 180°        | 85° to 110°                          | 85° to 110°                                 | 85° to 110°                       | 85° to 110°      | N/A                           | 85° to 110°      |

✓=180° trim and template permitting

## APPLICATIONS



Non-hold open arm shown

### Regular Arm

This is the only pull-side application where a double lever arm is used. It is the most power efficient application for a door closer. Sufficient frame, door and/or ceiling clearance must be considered.

Since the arm assembly projects directly out from the frame, this application may present an aesthetics issue or be prone to vandalism.



Non-hold open arm shown

### Top Jamb

For efficiency reasons this application provides the best alternative to the regular arm application. There must be sufficient frame face and/or ceiling clearance for this application. It requires a top rail on the door of just 2-1/8" (54mm). This application provides the best door control for doors in exterior walls that swing out of a building.

The entire door closer and arm assembly project from the frame, similar to the regular arm application, where matters of appearance and malicious abuse can be of concern. Consideration must be given to depth of frame reveal.



Non-hold open arm shown

### Parallel Arm

This application provides the most appealing design appearance for a surface-mounted door closer having a double lever arm. This also makes it beneficial in vandalism-prone areas. It is on the push side of the door and the arm assembly extends almost parallel to the door. In the closed position, there is very little or no hardware projecting beyond the frame face in most situations.

Due to the geometry of the arm it is approximately 25% less power-efficient than a regular arm application. The entire closer and arm assembly are mounted below the frame stop, requiring a top rail clearance on the door of between 6-5/8" (168mm), when using a low profile arm, to 7-1/4" (184mm), when using the hold open arm.



Non-hold open arm shown

### Corner Bracket

This application can be used where top jamb and parallel arm application will not accommodate the door and frame conditions. Requires minimal top rail on the door; however, vertical clearance to the floor within the door opening should be checked to ensure code compliance.

The close proximity, for this application, of the door closer to the door's pivot point reduces the door closer's power efficiency by approximately 25% when compared to a regular arm. The projection of the arm from the door face might pose questions regarding design parameters.



APPLICATIONS



Pull Side



Low Profile Pull Side



Push Side



Low Profile Push Side

**Slide Track**

Whether pull or push side mounted, slide track applications provide the designer with the smoothest lines available in a surface mounted door closer. The single lever arm allows components to be located in a stack configuration to minimize projection and eliminate obtrusive arm angles. The arm geometry reduces door closer power efficiency by approximately 25% from that of a regular arm.

A variation of the standard slide track application is available for pocket doors, where it is desirable to have the door closer completely concealed when the door is in the 90° open position. See page 26 for details.

**Standard Unit:**

- Adjustable 85° to 110° (hold open and non-hold open). Track is supplied with a spring buffered stop. An auxiliary stop, by others, is recommended.
- Specify if hold open unit is required.
- 180° swing (non-hold open, pull side only) is also available. This track assembly requires that a door stop, by others, be supplied to stop the door.



**Regular Arm** - Regular Arm allows closer to be installed where there is as little as 1" (25mm) of frame face or ceiling clearance.



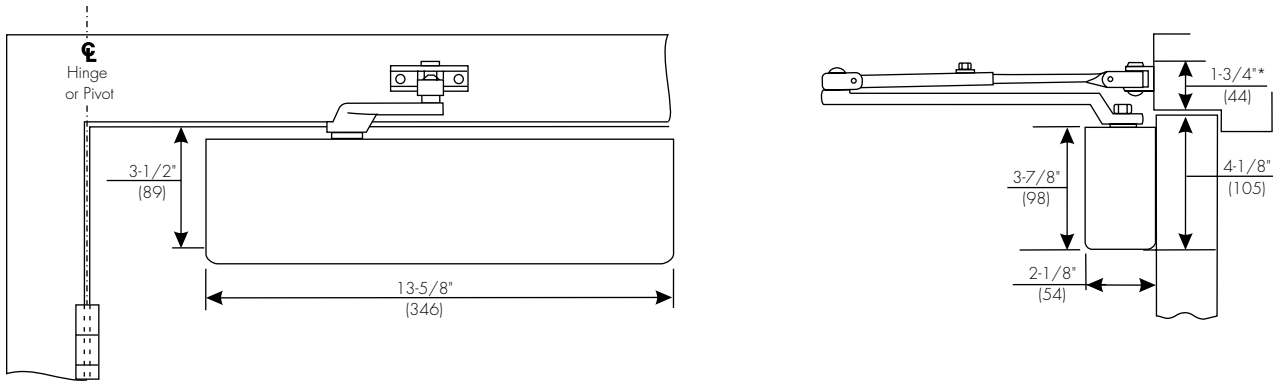
**Parallel Arm** - Parallel Arm allows closer to be installed 1/2" (13mm) higher up on door than standard parallel arm application.

**Low Profile Arm**

Supplied with 7580/7780 series door closers for non-hold open installations only. Low profile arms have a reduced height elbow joint and a straight main arm. This enables the door closer to be installed in less vertical space.

# 7500/7700 SERIES INSTITUTIONAL DOOR CLOSER

## REGULAR ARM



Mounting holes for closer body are spaced 2-3/8" (60mm) vertically x 6-3/4" (171mm) horizontally.  
 \* This dimension will vary. Standard non-hold open arm illustrated.

| Maximum Door Width<br>Inches (cm) |           | Model Number  |           |                     |           |
|-----------------------------------|-----------|---------------|-----------|---------------------|-----------|
|                                   |           | Sized Closers |           | Multi-Sized Closers |           |
| Interior                          | Exterior  | Non-Hold Open | Hold Open | Non-Hold Open       | Hold Open |
| 32" (81)                          | 30" (76)  | 7702          | 7702H     | 7500                | 7500H     |
| 38" (97)                          | 34" (86)  | 7703          | 7703H     |                     |           |
| 48" (122)                         | 42" (107) | 7704          | 7704H     |                     |           |
| 54" (137)                         | 48" (122) | 7705          | 7705H     |                     |           |
| Unusual Conditions                |           | 7706          | 7706H     |                     |           |

Note: Contact factory if door weight exceeds 250 lbs.



# 7900 SERIES

Overhead Concealed  
Door Closers



**Norton**<sup>®</sup>  
**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

OVERVIEW

**Introduction**

Overhead concealed closers provide an aesthetically appealing way to close a door. In situations where a closer is needed but concealment in the frame header is required or desired, the Norton® 7900 closer is the ideal solution for door control. Once installed, only the solid one-piece arm is visible when the door is open; therefore, this unit provides a high degree of vandal resistance. When the door is closed, the closer, arm and slide track are fully concealed. For applications where concealment is required and security is the main concern, the 7970 should be used.

This heavy-duty, durable closer package includes a steel track, steel slider, polymer slider pads and dress plates. The steel track and slider offer additional strength to the unit, while the polymer pads provide quiet operation and easy assembly. Standard features include rack and pinion operation, adjustable sweep and latch, and adjustable backcheck cushioning and positioning.

The 7900 overhead closers are best suited for high-profile applications such as office buildings or conference centers. The 7970 security closers offer the necessary concealment and tamper resistance required in detention and psychiatric facilities. Used in conjunction with the door position switch (DPS) they provide the ability to monitor door status remotely.

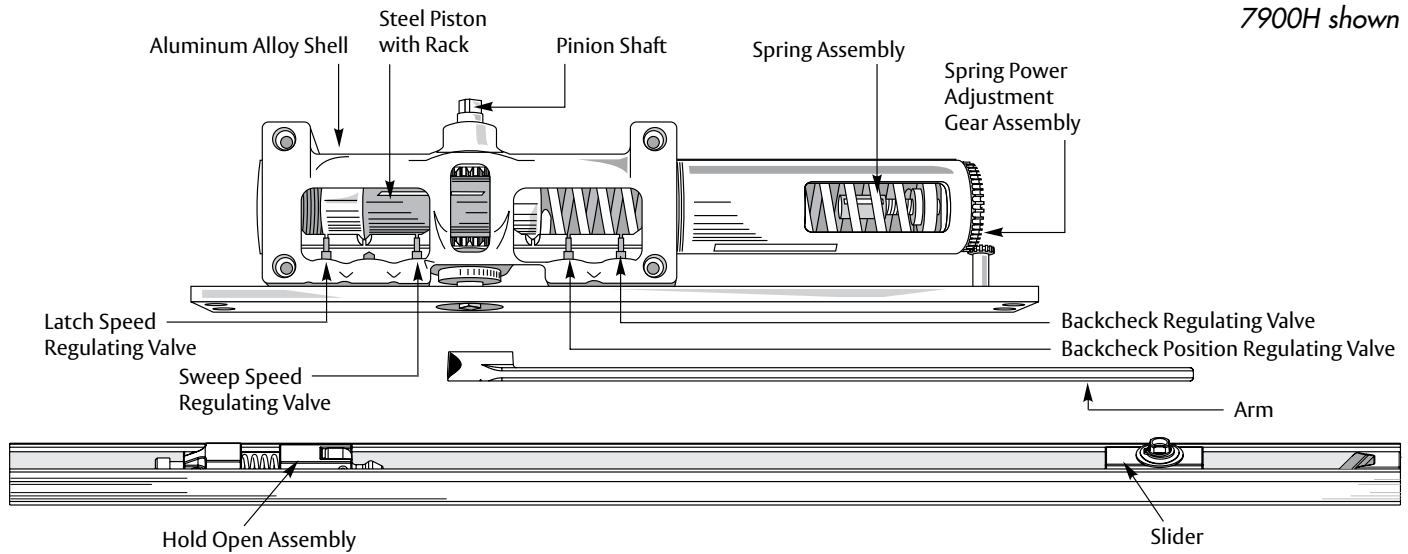
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# 7900 SERIES OVERHEAD CONCEALED DOOR CLOSERS

## OVERVIEW

7900H shown



## FEATURES


- Steel track
- Steel slider
- Polymer slider pads
- Fully adjustable, multi-point hold open (7900)
- Dress plates furnished standard
- Shock absorbing door stop
- Aluminum alloy shell
- Rack & pinion operation
- Non-critical valves
- Adjustable sweep speed
- Adjustable latch speed
- Adjustable backcheck cushioning
- Adjustable backcheck positioning

- Delayed action option
- Enhanced backcheck option
- Power choices
  - Sized closer (4, 5, 6)
  - Multi-size closer (0)
- ANSI A156.4, Grade 1
- Models available to meet ADA/A117.1
- UL listed
- Torx® screws furnished standard (7970 only)
- Door Position Switch (DPS) option (7970 only)
- 10-year limited warranty

# 7900 SERIES

## OVERHEAD CONCEALED DOOR CLOSERS

### DOOR SIZE

| Maximum Door Size<br>Wood or Metal<br>Inches<br>(Centimeters)                                                   |            | Model Number  |           |
|-----------------------------------------------------------------------------------------------------------------|------------|---------------|-----------|
| Interior                                                                                                        | Exterior   | Non-Hold Open | Hold Open |
| 32<br>(81)                                                                                                      | –          | 7904/7974     | 7904H     |
| 38<br>(97)                                                                                                      | 32<br>(81) | 7905/7975     | 7905H     |
| 48<br>(122)                                                                                                     | 38<br>(97) | 7906/7976     | 7906H     |
|  Accessibility Code Compliance |            |               |           |
| 48<br>(122)                                                                                                     | 36<br>(91) | 7900          | 7900H     |

Door sizing information is based on installation on standard weight doors hung on anti-friction hinges or pivots and operating under normal conditions. For doors in excess of 7'6" or on extra-heavy doors, where draft conditions exist or where door swings beyond 150°, use next larger size closer.

Ball-bearing or anti-friction hinges or pivots are always recommended for use with doors having door closers. They are required for fire door applications, except where a door manufacturer has a specifically listed fire door assembly.

When requesting templates, specify door hanging hardware (i.e. B= butt hinges, CP= center hung pivots, OP= offset pivots).

### FINISHES

#### Sprayed Finishes

| Description     | BHMA Designation | Complements the following finishes | Old Norton® Designation |
|-----------------|------------------|------------------------------------|-------------------------|
| Aluminum        | 689              | 628, 625, 629, 630, 651, 652       | AL                      |
| Statuary Bronze | 690              | 640, 613                           | STAT                    |
| Dull Bronze     | 691              | 612, 637, 639                      | DB                      |
| Black           | 693              | 315                                | 315                     |
| Medium Amber    | 694              | 312                                | 312                     |
| Gold            | 696              | 605, 606, 632, 633                 | GB                      |

#### Plated Finishes

| Description   | BHMA Designation | Old Norton Designation |
|---------------|------------------|------------------------|
| Bright Brass  | 605E             | US3                    |
| Satin Brass   | 606E             | US4                    |
| Bright Chrome | 625E             | US26                   |
| Satin Chrome  | 626E             | US26D                  |

Order sprayed and plated finishes by BHMA designations.

**FEATURES****Concealed Transom Mounting:**

Closer is concealed in the header of hollow metal, aluminum or wood frames. Installation requires a minimum 4" (102mm) high frame header. A removable frame stop furnished by the frame supplier is required where doors are less than 2" (51mm) thick. A dust/grout box 2" x 4" (51 x 102mm) x required length furnished by the frame supplier where conditions warrant the need for one. Consult factory for wood header installations.

**Door Thickness:** 1-3/4" - 2-1/4" (44-57mm) thick doors

**Top Rail Mounted Slide Track:**

Slide track is mounted into a recess prepared in the top rail of wood, aluminum or hollow metal doors. Depth of cutout at top of door 1-3/16" (30mm).

**Fire Block Door Liner:**

Available for use in 20-minute fire door assemblies where recognized by the local authority having jurisdiction.

**Standard Door Hanging Hardware:**

Closer and slide track can be installed on doors hung with butt hinges, offset pivots or center pivots. Hinges or pivots furnished by others.

**Concealed Arm:**

Closer arm is concealed when the door is closed. Requires a 3/8" (9.5mm) deep stop side door cutout for arm clearance.

**Shock-Absorbing Door Stop:**

Non-hold open and hold open units have a shock-absorbing adjustable position stop in the slide track. Use of auxiliary door stop is always recommended, not supplied.

**Hold Open:**

Sliding mechanism in channel changes position of hold open. The range of hold open points is dependent upon how the door is hung:

- 85° to 110° for doors hung on butt hinges
- 85° to 95° for doors hung on offset pivots
- 85° to 100° for doors hung on center pivots

**Adjustable Hold Open Tension:**

Hold Open tension can be increased or decreased by adjusting the tension on the slide track spring with a hex-key drive adjusting screw; or the hold open function can be totally eliminated by this same means.

**Aluminum Alloy Shell:**

Series 7900 closer bodies are constructed of a special aluminum alloy carefully selected to accommodate individual closer characteristics and operating conditions.

**Rack & Pinion Operation:**

A smooth power transmission through entire opening and closing cycle is provided by a long addendum gear form.

**Spring Power Adjustment:**

- 50% power adjustment for closer sizes 4, 5 and 6. Each closer can be adjusted by 50% over the minimum closing force for each size.
- Multi-sized power adjustment for closer sizes "0".

**Adjustable Sweep Speed:**

An independent, hex-key operated regulating valve permits adjustment of the general closing speed.

**Adjustable Latch Speed:**

An independent, hex-key operated regulating valve permits adjustment of the door's speed for approximately the last 5 degrees of the closing cycle.

**Adjustable Backcheck Cushioning:**

An independent, hex-key operated regulating valve provides an adjustable hydraulic cushion to the door opening speed toward the end of the opening cycle.

**Adjustable Backcheck Positioning:**

An independent hex-key operated regulating valve allows adjustment of the point in the door's opening cycle at which backcheck cushioning takes effect. It provides a range of 20° within which backcheck can be set.

**Non-Critical Valves:**

All control valves for sweep/latch speed, backcheck control and delayed action closing are non-critical and are adjusted by a standard 1/8" hex-key.

**Non-Hold Open and Hold Open Arms:**

Arm is 13" (330mm) long with an offset bend to permit door openings to 180°. Arm is handed. A special arm is furnished when hold open is required and the door is hung on center hung pivots. This straight arm is 16" long and non-handed.

**Separate Hinges/Pivots:**

Door is hung with butt hinges, 3/4" offset pivots or center pivots (by others). There is no need to open the door closer packaging to supply the hinges/pivots to the job or the door supplier. This eliminates problems with coordination of the hardware with other trades and reduces the probability of lost hardware.



### OPTIONAL FEATURES

#### Enhanced Backcheck:

Adjustable backcheck intensity beginning at approximately 15° of the door opening cycle. It is intended for use in situations where the standard backcheck beginning at approximately 75° of opening allows too much unrestricted door travel to obtain control of the door without the fear of peripheral damage to the door closer, door, frame, hinges or pivots; or adjacent walls or structures. Specify EBC when ordering. **Offered in lieu of standard backcheck and backcheck positioning.**

#### Door Position Switch (7970 only):

This switch is Single Pole Double Throw (SPDT) momentary contact, with one normally open and one normally closed set of contacts. The three switch terminals are wired to the integral conduit box for connection to incoming wiring. The switch and wiring are for operation with 6 to 24 VAC/DC systems.

- **Door Position Switch Adjustment:** Can be made at the opening without removing the closer from the frame. The door position adjustment test socket is accessible during installation for easy adjustment of the switch cam. Test probes from a volt meter are inserted into the test socket while using 1/8" hex wrench to adjust the position switch adjustment.
- **Test Socket:** Volt meter or test light may be connected to test socket to test normally open circuit or normally closed circuit at the door opening. The door position switch may be adjusted at the same time without removal of closer from door.
- **Adjustable Delayed Action Closing:** An optional hydraulic feature that adds a third speed range to the closing control cycle. This feature becomes effective when the door is opened and released at any point beyond 70°. This delayed closing enables traffic to clear the opening before the normal closing cycle starts. This feature is advantageous to the handicapped, elderly or wheeled traffic. **Order by suffixing "DA" to the model number.**

#### Accessibility Code Closer:

These closers provide reduced opening forces to conform with barrier code requirements (as specified in ANSI A117.1) for the handicapped while still providing acceptable door control. **Specify 7900 or 7970.**

## SUGGESTED SPECIFICATIONS

Closers for exterior (and) interior doors shall be full rack and pinion type with cast aluminum alloy shell. Closers shall be concealed in a 4" (102 mm) high frame header. The slide track shall be concealed in the top rail of the door. Hydraulic fluid shall be non-gumming and non-freezing. (Closer shall be provided with a fire-blocking door liner to permit installation in 20-minute wood fire door assemblies.) Closer shall have (four) (five) noncritical valves, hex-key operated, to independently regulate sweep speed, latch speed, backcheck cushioning (and backcheck positioning) (and delayed action closing). [Closers shall be sized units (4, 5 or 6)].

[Closers shall have power adjustment to permit a 50% increase in power over the minimum closing force for any size.] [Closers shall have multi-sized adjustment for (interior doors)(exterior doors)]. Closer shall conform to Accessibility Code specifications. Degree of stop shall be field adjustable.

Slide track shall have a built-in cushioning shock absorber mechanism. (Hold open mechanism shall be capable of release when holding function is not required. Hold open mechanism shall have an adjustable range 85°-110° of door opening and shall release with a manual

pressure on the edge of the door in the direction of closer). Closer to be Norton® [Series 7900] [Series 7970] (with Norton® #790 Fire Block). 7970/7970DPS shall be supplied with Torx® lobular drive fasteners having a center security pin.

### 7970 DPS

Closer to have a door position switch to indicate "Door Open/Door Closed" condition.

## STANDARDS

### ADA

The 7900 and 7970 door closers are designed to comply with requirements of the Americans with Disabilities Act (A.D.A) and ANSI standard A117.1.

### ANSI/BHMA/Federal Specs

All series 7900/7970 closers comply with ANSI A156.4 Grade 1 Specifications, Federal FF-H-121D Specifications (CO5030,CO5040, CO5050 w/o PT4B-4C-4D) and FF-H-121c Specifications (3210-3215-3220).

### NYC Listing

These closers are also listed with New York City Materials and Equipment Acceptance Division (41-60-SM).

### U.L. Listing

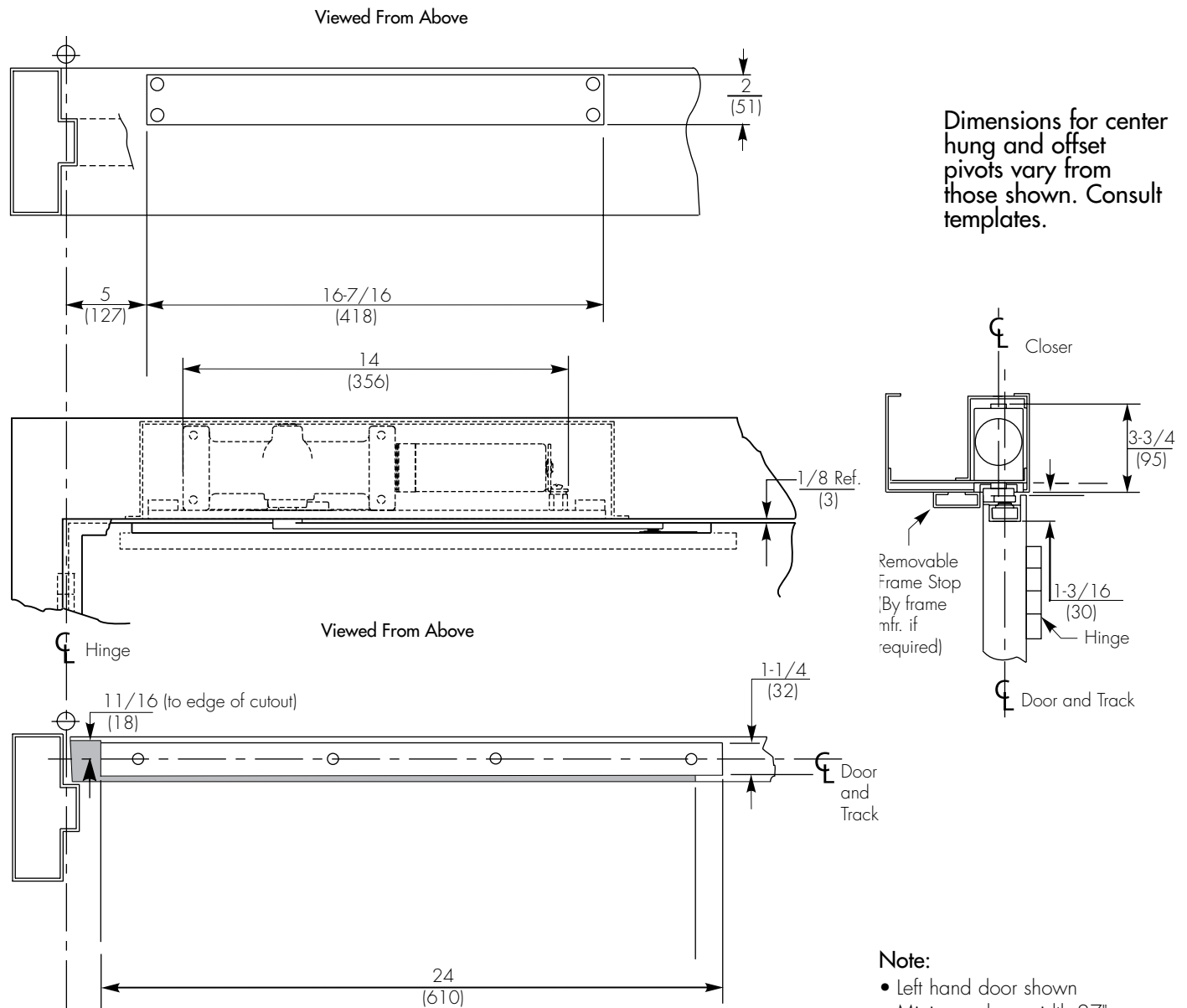
All Norton series 7900/7970 closers with non-hold open arms are listed by Underwriters' Laboratories Inc. and Underwriters' Laboratories of Canada for use on labeled fire doors.

### WHI

The Norton Fire Block door liner is listed with Warnock Hersey International for use in 20-minute (wood) fire doors that are listed with WHI, when used with the Series 7900 door closer. Specify model number 790. The combination of a 7900 door closer installed in a UL labeled hollow metal door frame and a Norton Fire Block installed in a WHI labeled 20-minute (wood) fire door, which has the tested preparation, may qualify as a 20-minute fire door assembly. Always consult local authorities to determine the acceptance and proper application of fire door and hardware applications.

# 7900 SERIES OVERHEAD CONCEALED DOOR CLOSERS

## 7900 BUTT HINGE INSTALLATION



CONTACT US AT:

Norton Door Controls  
3000 Highway 74 East  
Monroe, NC 28112  
Tel: 877-974-2255  
Fax: 800-338-0965

ABLOY Door Security Solutions Canada  
160 Four Valley Drive  
Vaughan, Ontario, L4K 4T9 Canada  
Tel: 800-461-3007  
Fax: 905-738-2478

For a complete listing of products and  
applications please visit our web site.  
[www.nortondoорcontrols.com](http://www.nortondoорcontrols.com)  
[www.assaabloy.ca](http://www.assaabloy.ca)

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# **ABLOY® DOOR CLOSERS**

*Excactly the right choice*





## *Superior performance and reliability*

**ABLOY®** high security products are known and highly respected all over the world.

Every item in our wide product range represents top quality and superior performance.

**ABLOY®** door closers protect door constructions by controlling the opening and closing actions of the door. Reliable performance over a wide operational temperature range guarantees that energy will be saved and security increased.

Production of **ABLOY®** door closers started in the 1930s. Today, we exploit the high quality and advanced technology in our purpose-built production

facilities. Our long experience and extensive expertise combined with customer-oriented research and development mean that we have a wide range of solutions for the varying demands of different door environments.

Our global network of sales offices and distributors will help you to choose right products to increase security and convenience in your specific application. The functions, features, and wide variety of installation alternatives offered by **ABLOY®** door closers give you convenient operation, simplified installation and ease of adjustment and maintenance.





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## COLOURS AVAILABLE

### PLASTIC COVERS

White (RAL 9010)

Silver (RAL 9006)

Brass

Brown (RAL 8014)

Black (RAL 9005)



### METAL COVERS

Stainless steel

Bright brass



Note: **ABLOY® DC270** is available only with metal cover. Colours white, brass, silver and stainless steel.



# OPERATION OF DOOR CLOSERS

## OPERATION

Operation is based on a hydraulically controlled rack and pinion or CAM-action mechanism (DC330, DC250). Within the closer there is oil to control the closing and latching speeds and delayed closing and back check features. The adjustable valves enable the adjustment of the speeds and features.

Opening a door, the spring inside the closer is becoming tense. When door is released the potential of the spring push the piston back and door closes. Pressure relief valves are standard feature (excluding DC210 and DC215) to protect the door from abuse and ensure reliable operation in demanding conditions.

## ADJUSTMENT (C- AND L-VALVE)

Closing speed (Valve C):

The closing speed can be adjusted 180 - 15 degrees (DC330 and DC250 170 - 7 degrees).

Latching speed (Valve L): The latching speed can be adjusted 15 - 0 degrees (DC330 and DC250 7-0 degrees).

## BACK CHECK (BC)

A brake affects door movement from 70°-80° to fully open (180°) and protects the door by preventing it from being pulled open by the wind. This feature can be adjusted by selecting the desired arm position. Adjustment by using valve B. Recommended for use with external doors.

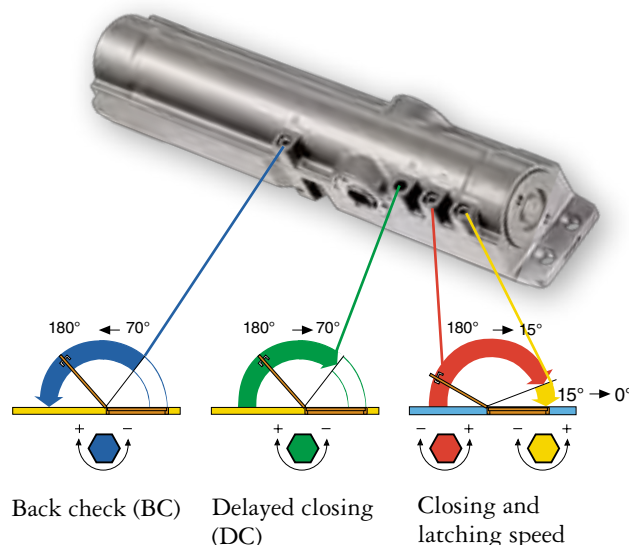
## DELAYED CLOSING (DC)

Delayed closing slows down the movement of the door from fully open (180°) to approximately 70°, after passing this point the door closes at normal speed. The starting angle can be adjusted by selecting desired arm position. Closing speed can be adjusted by adjustable valve D. Adjustable valve enables the adjustment of closing speed. Recommended for internal doors.

## ADJUSTABLE CLOSING FORCE

**ABLOY®** DC334, DC335, DC240, DC247, DC250, DC330, DC270 door closers are equipped with adjustable spring power which ensures the presetting of spring.

Due to adjustable spring power, the same door closer can be used in various applications.

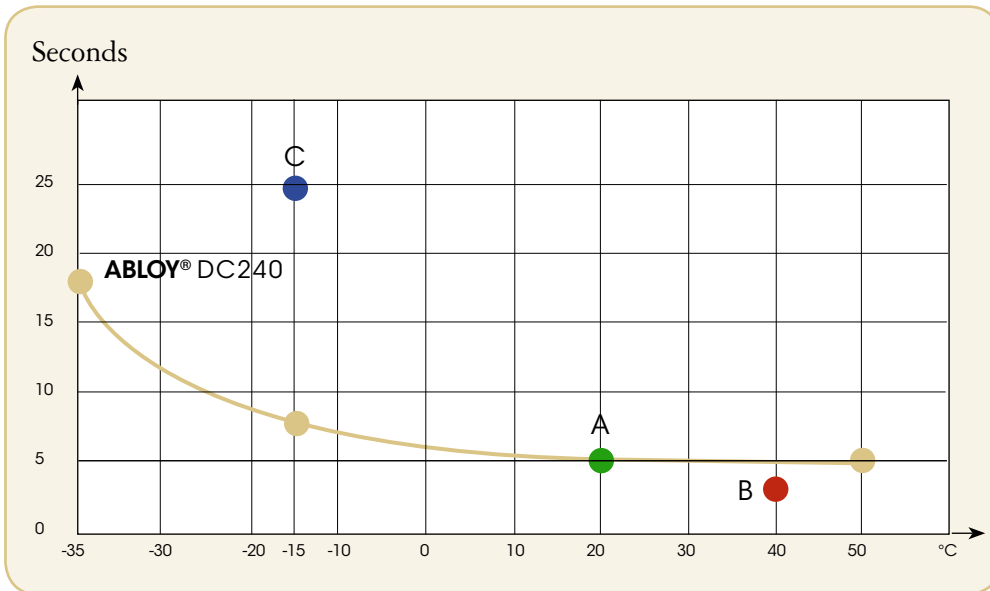


# FUNCTION OF TEMPERATURE

## CLOSING TIME AS A FUNCTION OF TEMPERATURE

Changes in temperature have only a minimal effect on the performance of **ABLOY®** door closers.

**ABLOY®** DC240 guarantee constant closing speed in every situation. High quality hydraulic oil and patented valve systems have already earned this product a legendary reputation.

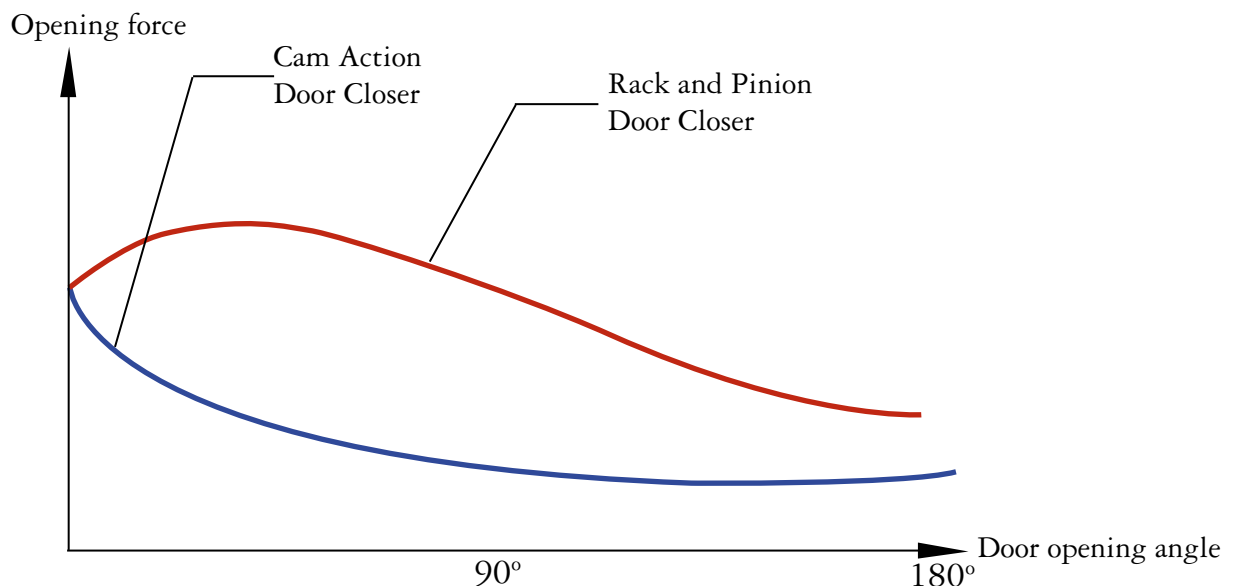


Changes in temperature have only a minimal effect on the performance of **ABLOY®** door closers and adjusted features. **ABLOY®** door closer exceeds standards demands for temperature area.

The EN1154 standard specifies the following:

- A A standard closing time of 5 seconds at +20 °C
- B A minimum closing time of 3 seconds at +40 °C (check point only)
- C A maximum closing time of 25 seconds at -15 °C (check point only)

## DOOR OPENING FORCE WITH SLIDING ARM



# ABLOY® DC330 DOOR CLOSER



## ABLOY® DC330

Non-handed cam action door closer. Thanks to CAM it is light to open but still strong enough to close the door in every situation. **ABLOY® DC330** can be adjusted to meet the requirements of the light opening resistance, for example the DDA (Disability Discrimination Act) in UK. Suitable for external and internal doors. The Maximum door weight 80 kg and door leaf width 1100 mm with a sliding arm installation.

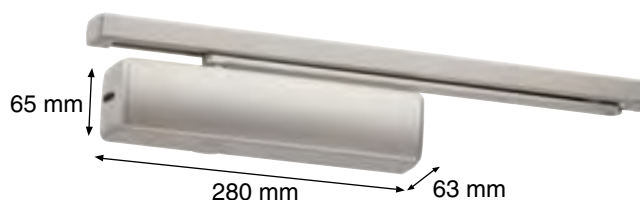
### FEATURES

- CE certified with the sliding arm
- Adjustable closing force size EN 1-4 with the sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Wide operating temperature range:  $-15^{\circ}\text{C} \dots +45^{\circ}\text{C}$
- Adjustable latching starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Pressure relief valve to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy

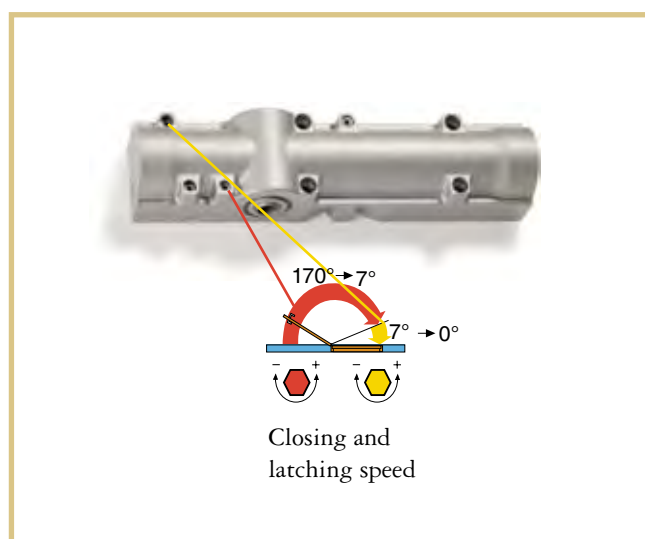
When ordering, please specify

- Door closer model and colour e.g. DC330 (silver)
- Quantity
- Arm type and colour e.g. DC193 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC130.

## DIMENSIONS



## ADJUSTMENT



# ABLOY® DC250 DOOR CLOSER



## ABLOY® DC250

**ABLOY® DC250** is non handed cam action door closer and therefore very easy to install. Thanks to the cam construction it is extremely light to open, yet in terms of closing force strong enough for heavy duty applications. Suitable for external and internal doors. For use with **ABLOY® FD460** series fire door closing systems. Maximum door weight 120 kg and door leaf width 1400 mm with sliding arm installation.

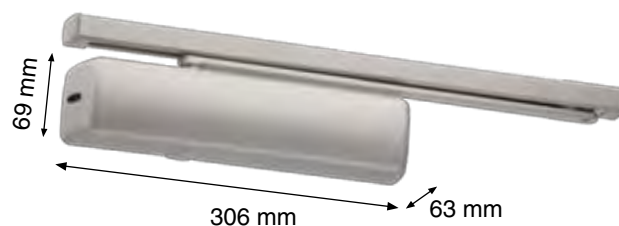
### FEATURES

- CE certified with sliding arm
- Adjustable closing force size EN 1-6 with sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Delayed closing (DC) as an option
- Wide operating temperature range:  $-15^{\circ}\text{C} \dots +45^{\circ}\text{C}$
- Adjustable latching and back check starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Two pressure relief valves to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy

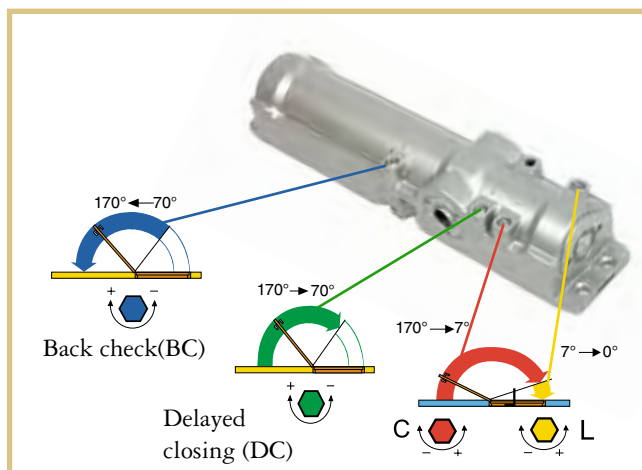
When ordering, please specify

- Door closer model and colour e.g. DC250 (silver)
- Quantity
- Arm type and colour e.g. DC193 silver
- The arm is not included in the delivery or price of the door closer.
- Mounting plate e.g. DC106.

## DIMENSIONS



## ADJUSTMENT





# ABLOY® CONCEALED PRODUCTS

*Prefers the aesthetic advantages*



# ABLOY® DOOR CLOSERS



## *Superior performance and reliability*

**ABLOY®** high security products are known and highly respected all over the world. Every item in our wide product range represents top quality and superior performance.

**ABLOY®** door closers protect door constructions by controlling the opening and closing actions of the door. Reliable performance over a wide operational temperature range guarantees that energy will be saved and security increased.

Production of **ABLOY®** door closers started in the 1930s. Today, we provide high quality and advanced technology in our production facilities.

Our long extensive experience and expertise combined with customer-oriented research and development mean that we have a wide range of solutions for the varying demands of different door environments.

Our global network of sales offices and distributors will help you to choose right products to increase security and convenience in your specific application. The functions, features, and wide variety of installation alternatives offered by **ABLOY®** door closers give you convenient operation, simplified installation and ease of adjustment and maintenance.



# ABLOY® OPERATION OF CONCEALED DOOR CLOSERS



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## OPERATION

The operation of the door closers is based on a hydraulically controlled CAM-action mechanism. Inside the closer oil is used to control the closing and latching speeds. The adjustable valves enable the adjustment of the speeds and features.

Opening a door, the spring inside the closer is becoming tense. When the door is released, the potential of the spring pushes the piston back and the door closes. Pressure relief valve is the standard feature to protect the door from abuse and ensure reliable operation in demanding conditions.

## CONCEALED DOOR CLOSER

Door closer and rail system are mounted inside the door leaf and frame. When the door is open the only visible part is arm. After installation it is easy to adjust the closing force as well as closing and latching speed. Non-handed closer and arm system enable the use of the same products in left and right handed doors.

## ADJUSTABLE CLOSING FORCE

**ABLOY® DC840** and **DC860** door closers are equipped with adjustable spring power which ensures presetting of the spring.

Due to adjustable spring power, the same door closer can be used in various applications

## ADJUSTMENT (C- AND L-VALVE)

Closing speed (Valve C):

The closing speed can be adjusted 120-7 degrees.

Latching speed (Valve L):

The latching speed can be adjusted 7-0 degrees.

## MECHANICAL BACK CHECK

A brake affects door movement from 80 degrees to fully open and protects the door by preventing it from being pulled open by the wind.



# ABLOY® DC840

*“Non handed cam action concealed door closer for heavy duty use”*

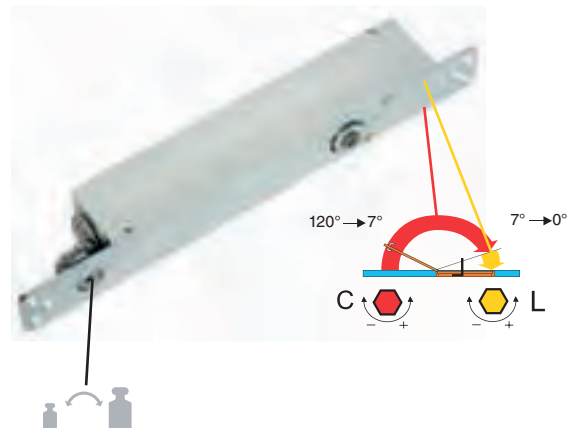
Thanks to the cam construction it is extremely light to open but strong enough to close the door in every situation. **ABLOY®** DC840 can be adjusted to meet the requirements of the light opening resistance for example the DDA (Disability Discrimination Act) in UK. **ABLOY®** DC840 is suitable for 40 mm doors, internal and fire doors. For use with **ABLOY®** FD480 series fire door closing systems.



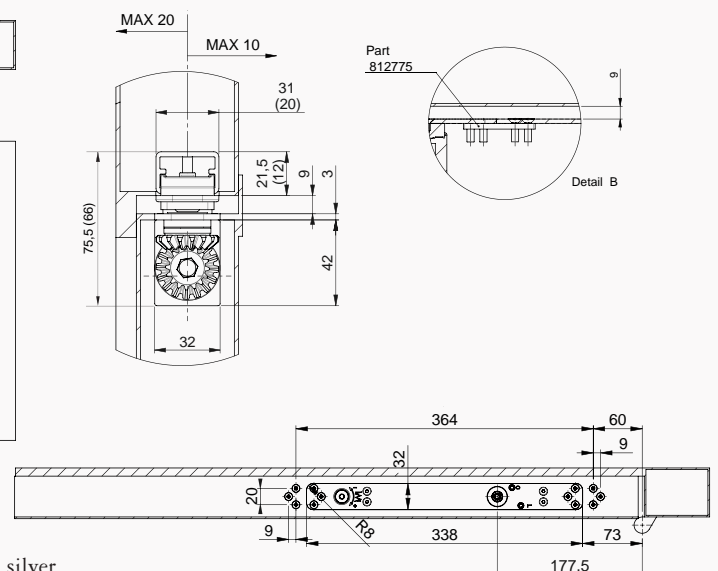
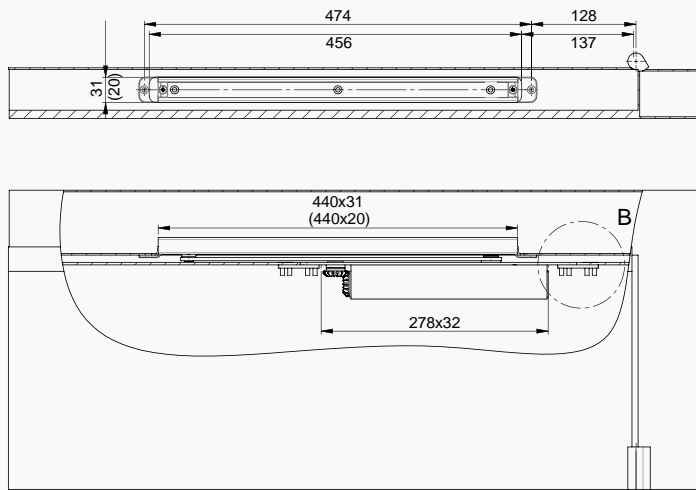
## FEATURES

- CE certified
- Adjustable closing force size EN 1-4
- Separate adjusting valves for closing and latching speed, mechanical BC
- Pressure relief valve to protect against abuse
- Wide operating temperature range: -15...45°C
- Anodized aluminium door closer body
- Two different arm systems: DC892, DC893

## ADJUSTMENT



## INSTALLATION AND DIMENSIONS



Dimensions for DC893  
 Dimensions shown in ( ) = DC892  
 When ordering, please specify

- Door closer model e.g. DC840, quantity, arm type and colour e.g. DC892 silver.
- The arm is not included in the delivery or price of the door closer.

# ABLOY® DC860

*“Concealed door closer for demanding applications”*

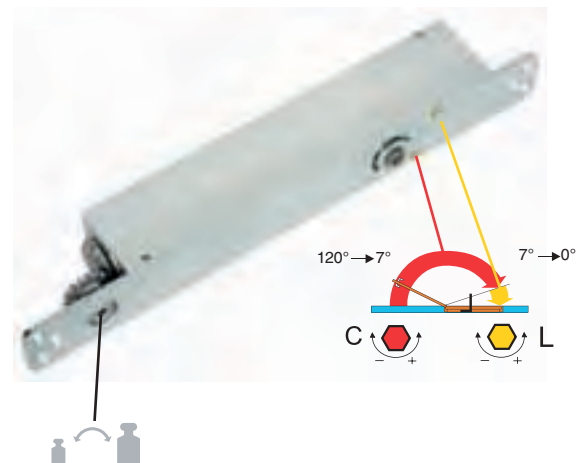
**ABLOY®** DC860 is non-handed cam action door closer and therefore very easy to install. Thanks to the cam construction it is extremely light to open but strong enough to close heavy doors. **ABLOY®** DC860 is suitable for external and internal doors and heavy duty doors. For use with **ABLOY®** FD480 series fire door closing systems.



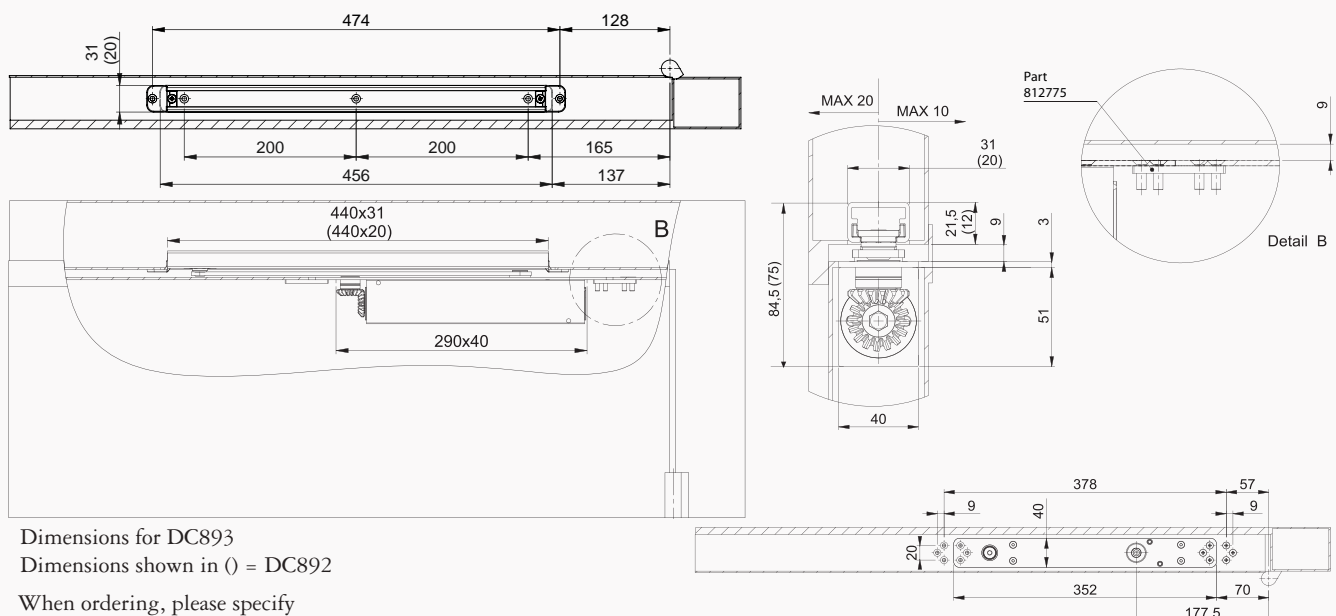
## FEATURES

- CE certified
- Adjustable closing force size EN 1-5
- Separate adjusting valves for closing and latching speed, mechanical BC
- Pressure relief valve to protect against abuse
- Wide operating temperature range: -15...45°C
- Anodized aluminium door closer body
- Two different arm systems: DC892, DC893

## ADJUSTMENT



## INSTALLATION AND DIMENSIONS



Dimensions for DC893

Dimensions shown in ( ) = DC892

When ordering, please specify

- Door closer model e.g. DC860, quantity, arm type and colour e.g. DC892 silver.
- The arm is not included in the delivery or price of the door closer.

# ABLOY® OPERATION OF FIRE DOOR CLOSING SYSTEMS



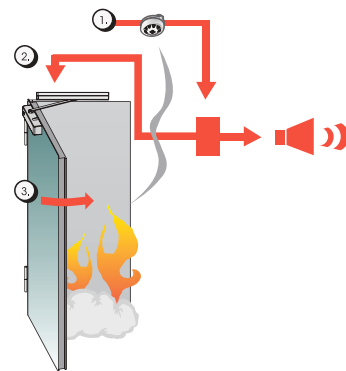
## *Easy access and convenience*

It is vital for fire doors to close in the event of fire. The fire door must close and latch automatically in order to limit the spread of smoke and fire into other parts of the building. During daytime the normal use of fire doors requires the doors to remain open.

**ABLOY®** fire door closing systems guarantee easy access and convenience for use in the day time as well as maximum security in the event of fire. **ABLOY®** fire door closing systems are composed of reliable and compatible components that enable building up a safe, individual solution for each application.

## FUNCTION OF FIRE DOOR CLOSING SYSTEMS

If fire doors are held open they must close in the break out of a fire to retain smoke and flames and prevent the fire from spreading throughout the building. The smoke detector (1) reacts to smoke and activates the alarm to the hold open device of the door (2). The door closer (3) closes and latches the door into closed position. The fire alarm central panel or the fire detector (in a single door system) can activate the alarm.



When ordering, please specify

- Product number (including arm and sliding rail) and colour for the fire door closing system (including arm and sliding rail) e.g. FD481 silver
- Product number for the door closer e.g. DC860



# ABLOY® CONCEALED FIRE DOOR CLOSING SYSTEMS

*“Designed for places that require  
aesthetic and flexible use”*



## ABLOY® FD480 ELECTROMECHANICAL HOLD-OPEN DEVICE FOR SINGLE DOOR

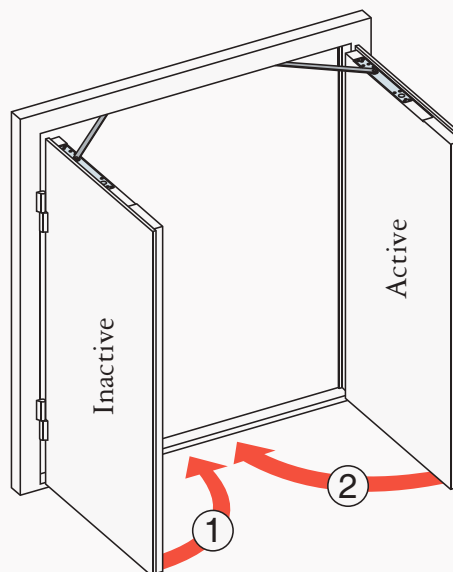
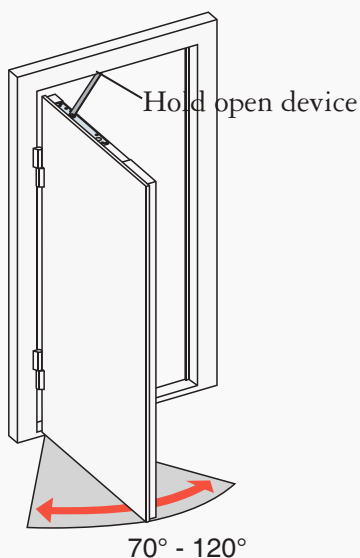
FD480 is applicable for places, where fire doors are constantly kept open. Applications for FD480 are hotels, office buildings and fire doors where hold open function is needed. The maximum door width is 1400 mm.

Fire door is held open by FD480 at the selected angle. When power is switched off, e.g. when smoke detectors react to smoke, the door closes. The hold open angle for the door can be adjusted from 70° to 120°. Hold-open device has adjustable hold-open function. Current consumption 1 x 60 mA (24 VDC).

## ABLOY® FD481 MECHANICAL DOOR COORDINATOR FOR DOUBLE DOORS

FD481 is useful in applications where doors are normally kept closed and the active door is used as a passage door. FD481 is designed for double doors with hinge distance 1350 - 2800 mm.

FD481 mechanical coordinator keeps the active door open when inactive door is open. Active door starts to close when the inactive door is almost closed. After active door is closed it latches the inactive door.



# ABLOY® CONCEALED FIRE DOOR CLOSING SYSTEMS

*“Advanced fire door closing systems for double doors”*



## ABLOY® FD482 FOR DOUBLE DOORS WITH COORDINATOR AND TWO ELECTROMECHANICAL HOLD-OPEN DEVICES

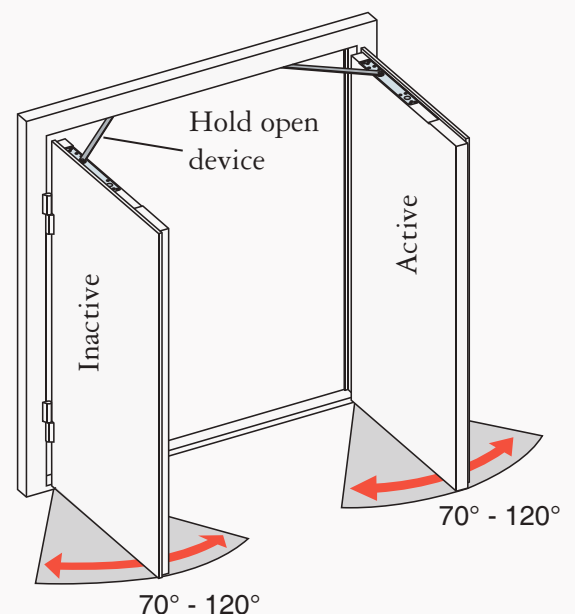
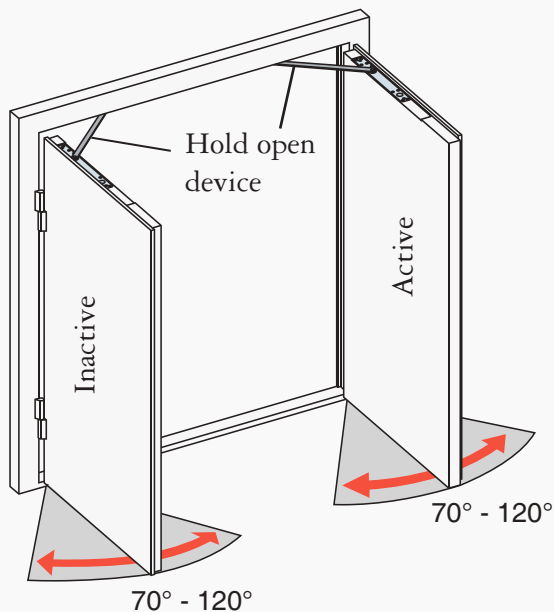
FD482 is designed for places that requires flexible use. Two hold-open devices provide possibility to keep either only the active door or both door leaves open. FD482 is designed for double doors with hinge distance 1350-2800 mm.

The doors are held open by the hold-open devices at the selected angle. When the power is switched off, e.g. when the smoke detectors react to smoke, the inactive door closes first and when it is almost closed, the active door starts to close. Hold-open angle for both doors can be adjusted from 70° to 120°. Current consumption 2 x 60 mA (24 VDC).

## ABLOY® FD484 FOR DOUBLE DOORS WITH COORDINATOR AND ELECTROMECHANICAL HOLD-OPEN DEVICE

FD484 is designed for example hotels and hospital corridors, where both door leaves are usually kept open. FD484 is designed for double doors with hinge distance 1350-2800 mm.

In normal day use both doors are open. The hold open angle for inactive door can be adjusted from 70° to 120°. The hold-open device keeps the inactive door open whereas the coordinator keeps the active door open. When the power is switched off, e.g. when the smoke detectors react to smoke, the inactive door closes first and when it is almost closed, the active door starts to close. Hold-open device include adjustable hold-open force. Current consumption 1 x 60 mA (24 VDC).



# ABLOY® FIRE DOOR CLOSING SYSTEMS

*Maximum security*



# ABLOY® FIREDOOR CLOSING SYSTEMS

## *Maximum security and easy access*

**ABLOY®** high security products are well known and highly respected all over the world. Every item in our wide product range represents top quality and superior performance. Our long extensive experience and expertise combined with customer-oriented research and development ensure a wide range of solutions for the varying demands of different door environments.

Our global network of sales offices and distributors will help you to choose the right products to increase security and convenience in your specific application. The function and features offered by **ABLOY®** fire door closing systems give you convenient operation, simple installation as well as ease of adjustment and maintenance.

*Individual solution for each application*  
*Slim design*   *Simplified installation*  
*Wide range of colours*



### When ordering, please specify

- Product number and colour for the fire door closing system e.g. FD460 Silver (FD460 series includes arm and sliding rail)
- Product number and colour for the door closer e.g. DC250 Aluminium
- Product number and colour for the mounting plate e.g. DC115 White
- Product number and colour for the closing side accessory kit FD120 White, if needed



## Security in the event of fire

It is vital for fire doors to close in the case of fire. The fire door must close and latch automatically in order to limit the spread of smoke and fire into other parts of the building. During daytime the normal use of fire doors requires the doors to remain open.

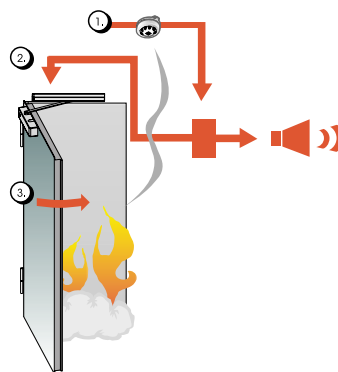
**ABLOY®** fire door closing systems guarantee easy access and convenience for use in the day time as well as maximum security in the event of fire.

**ABLOY®** fire door closing systems are composed of reliable and compatible components that enable building up a safe, individual solution for each application.

**ABLOY®** fire door closing systems are CE certified. Our products are available with wide variety of standard colours as well as all RAL-colours.

## FUNCTION OF FIRE DOOR CLOSING SYSTEMS

If fire doors are held open they must close in the break out of a fire to retain smoke and flames and prevent the fire from spreading throughout the building. The smoke detector (1) reacts to smoke and activates the alarm to the hold open device of the door (2). The door closer (3) closes and latches the door into closed position. The fire alarm central panel or the fire detector (in a single door system) can activate the alarm.



### CONTENT

|                                                                         |    |
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### COLOURS (Door closers, arms and mounting plates)

White (RAL 9010)



Aluminium (RAL 9006)



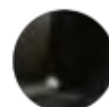
Brass



Brown (RAL 8014)



Black (RAL 9005)



### METAL COVERS

Stainless Steel





# ABLOY® FD440



## ABLOY® FD440 FREESWING SOLUTION FOR SINGLE DOOR

**ABLOY®** FD440 is particularly useful for applications where the door is in frequent use and the opening resistance of a standard door closer may be too heavy, such applications are kindergartens, schools, retirement homes and day centres.

**ABLOY®** FD440 incorporate adjustable closing force sizes EN 2-6 with standard arm FD499. When installed with FD499 arm, the maximum door weight is 120 kg and door width 1400 mm. Adjustable closing force size EN3-4 with sliding free swing arm FD494. When installed with FD494 arm, the maximum door weight is 80 kg and door width 1100 mm.

### PRODUCTS

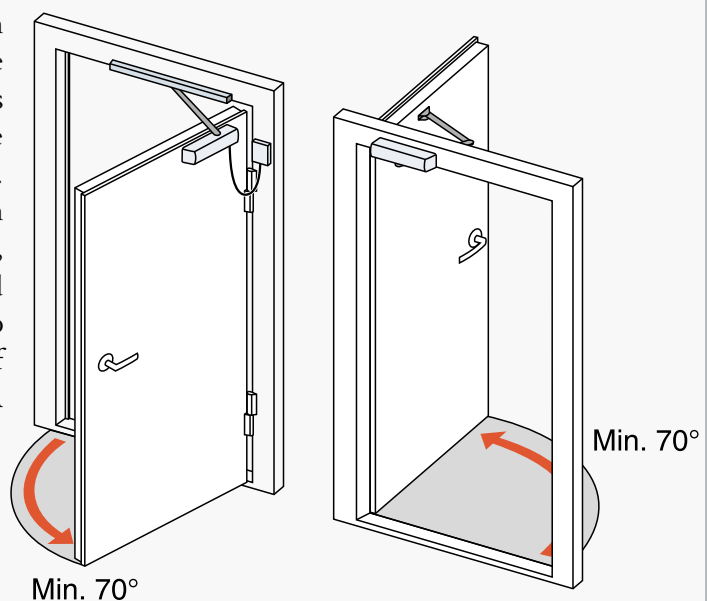
- **ABLOY®** FD440
- Arm type FD494 or FD499
- Power supply EA701 or control unit 7400
- Door release button 7462

If needed:

- Optical smoke detector FD600 2 pcs or heat detector FD602 2 pcs
- FD140 connection box for opening side installation

### FUNCTION

When freeswing arms are used and power is on the first door opening, the opening resistance is like with a normal door closer. The door is opened to the desired angle to determine the opening angle for later use (min. approx. 70°). After the first opening, the freeswing function enables the door to be opened and closed freely, without resistance. When the power is switched off, i.e. when the smoke detectors react to smoke, the FD440 closes the door regardless of the door position. Current consumption 90 mA (24 VDC).



# ABLOY® FD460



## ABLOY® FD460 ELECTROMECHANICAL HOLD OPEN DEVICE FOR SINGLE DOOR

**ABLOY®** FD460 is a small and aesthetic electromechanical hold open device system with a sliding arm. It is applicable for places, where fire doors are constantly kept open. The door is kept open at a selected angle. If fire breaks out, the door is closed, preventing smoke and flames from spreading. Applications for FD460 are hotels, office buildings and other fire doors where hold open function is needed.

The maximum door leaf width is 1400 mm and the maximum door weight 120 kg. **ABLOY®** FD460 is recommended to be used with CAM closers. FD460 is CE certified according EN 1155.

### PRODUCTS

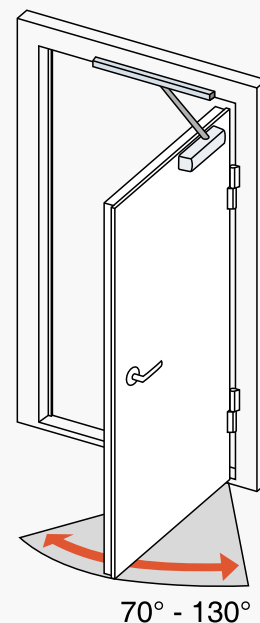
- **ABLOY®** FD460
- Door Closer DC250 / DC330
- Power supply EA701 or control unit 7400
- Door release button 7462

If needed:

- Optical smoke detector FD600 2 pcs or heat detector FD602 2 pcs.

### FUNCTION

The door is held open by hold open device in the selected angle. When power is switched off, e.g. when smoke detectors react to smoke, the door closes. Hold open angle can be adjusted from 70° up to 130°. Hold open device has adjustable hold open force. Current consumption 60 mA (24 VDC).



# ABLOY® FD461



## ABLOY® FD461 MECHANICAL COORDINATOR FOR DOUBLE DOORS

**ABLOY®** FD461 is a stylish and small mechanical coordinator for double doors. FD461 is useful in applications where doors are normally kept closed. The coordinator is integrated inside the covered sliding rails which protects the coordinator from abuse e.g. in schools. FD461 is suitable for all kinds of double doors e.g. entrance halls in office and commercial buildings.

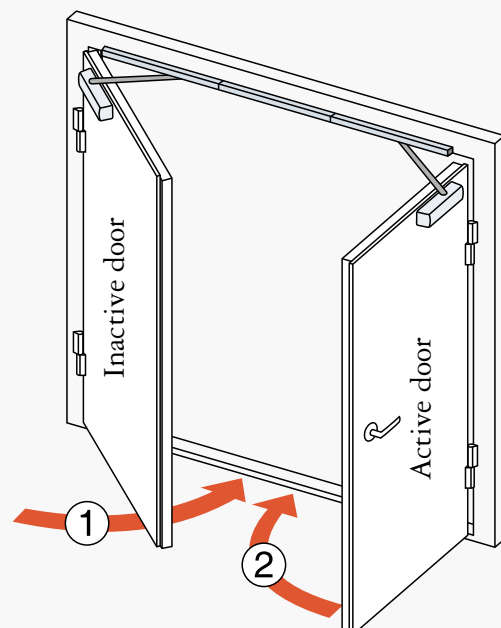
**ABLOY®** FD461 is suitable for double doors with hinge distance 1250-2800 mm and maximum door leaf weight of 120 kg. FD461 is recommended to be used with CAM closers. FD461 is CE certified according EN1158.

## PRODUCTS

- **ABLOY®** FD461
- Door Closers DC250/DC330 2 pcs
- Flush bolt FD108 2 pcs
- Accessory set FD120 for closing side installation
- Carry bar FD101 or FD102

## FUNCTION

FD461 mechanical coordinator keeps the active door open when inactive door is open. Active door starts to close when the inactive door is almost closed. After the active door is closed it latches the inactive door. FD120 must be used with closing side installations.



# ABLOY® FD462



## ABLOY® FD462 COORDINATOR AND TWO ELECTROMECHANICAL HOLD OPEN DEVICES

**ABLOY®** FD462 is a small, aesthetic fire door closing system with a sliding arm, a built-in coordinator and two electromechanical hold open devices for double doors. FD462 has been designed for places that require flexible use. Two electromechanical hold open devices provide possibility to keep either only the active door or both door leaves open.

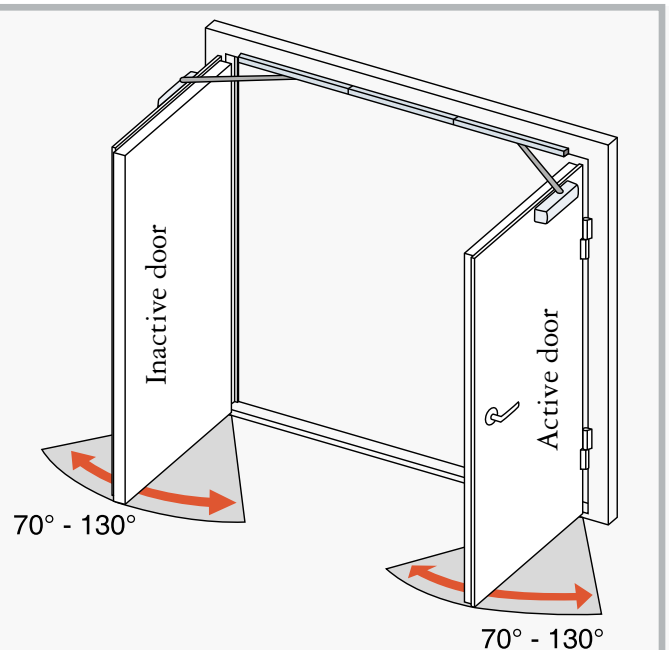
**ABLOY®** FD462 is designed for double doors with hinge distance 1250-2800 mm and maximum door leaf weight 120 kg. FD462 is recommended to be used with CAM closers. FD462 is CE certified according EN1155 and EN1158.

### PRODUCTS

- **ABLOY®** FD462
- Door Closers DC250/330 2 pcs
- Power supply EA701 or control unit 7400
- Door release button 7462
- Optical smoke detector FD600 2 pcs or heat detector FD602 2 pcs
- Flush bolt FD108 2 pcs
- Accessory set FD120 for closing side installation
- Carry bar FD101 or FD102

### FUNCTION

With FD462 the normal day use is convenient because both door leaves can be used independently. Only the active door or both door leaves can be kept open. The mechanical coordinator keeps the active door open when inactive door is open. When the power is switched off, i.e. when the smoke detectors react to smoke, the inactive door closes first and when it is almost closed, the active door starts to close. After the active door is closed it latches the inactive door. Hold open angle for both doors can be adjusted from 70 to 130 degrees. The Hold open devices include adjustable hold open force. Current consumption 120 mA (24 VDC). FD120 must be used with closing side installation of FD462.



# ABLOY® FD464



## ABLOY® FD464 COORDINATOR WITH ONE ELECTROMECHANICAL HOLD OPEN DEVICE

**ABLOY®** FD464 is a small, aesthetic fire door closing system with a sliding arm, one hold open device and the built-in coordinator for double doors. The applications for FD464 are for example hotels and hospital corridors, where both doorleaves are usually kept open.

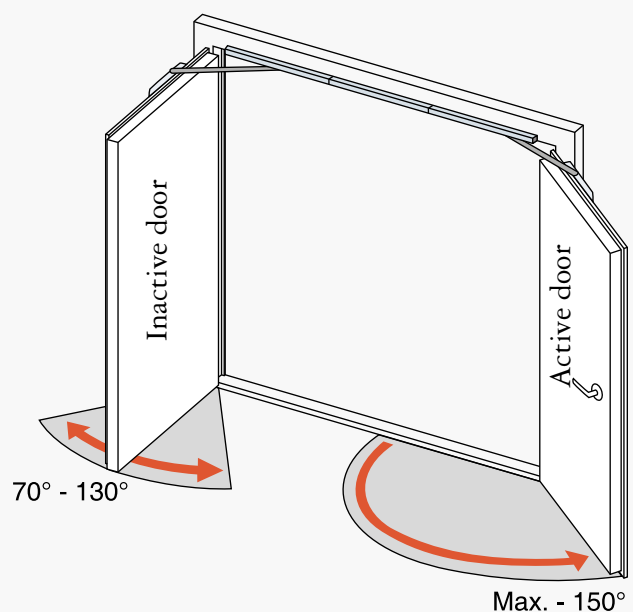
**ABLOY®** FD464 is designed for double doors with hinge distance 1250-2800 mm and maximum door leaf weight 120 kg. FD464 is recommended to be used with CAM closers. CE certified according EN1155 and EN1158.

## PRODUCTS

- FD464
- Door closers DC250/DC330 2 pcs
- Power supply EA701 or control unit 7400
- Door release button 7462
- Optical smoke detector FD600 2 pcs or heat detector FD602 2 pcs
- Flush bolt FD108 2 pcs
- Accessory set FD120 for closing side installation
- Carry bar FD101 or FD102

## FUNCTION

In normal day use both doors are open. The hold open angle for inactive door can be adjusted 70-130 degrees. The hold open device keeps the inactive door open whereas the coordinator keeps the active door open. The maximum hold angle for the active door is 150°. When the power is switched off, i.e. when the smoke detectors react to smoke, the inactive door closes first and when it is almost closed, the active door starts to close. Hold open device includes adjustable hold open force. Current consumption 60mA (24 VDC). FD120 must be used with closing side installations of FD464.





# Door closers

## Technical information

**ASSA ABLOY**

The global leader in door opening solutions.

# Come closer!

## ASSA ABLOY door closers

Come closer and learn about the new door closers from ASSA ABLOY.

### For a whole range of applications and door types

ASSA ABLOY's door closers are ideal for a wide range of situations – from private homes to the commercial or public sector and for heavy or lightweight doors. The modular design simplifies planning, while the intelligent setting adjustment and installation features ensure easy installation. The door closer range is a joint development between companies in the ASSA ABLOY Group.

### Advantages in brief

- Cam-motion® technology for optimum convenience in opening doors
- A single Cam-Motion® closer design for all four mounting positions
- Invisible mounting plate for all models
- Height-adjustable axis
- Height-adjustable guide rail
- Adjustable starting point for latching speed and backcheck
- Uniform mounting points
- Smoke detector harmoniously integrated into the guide rails
- Traversable, electromechanical hold open device
- Contemporary, uniform design
- Unrestricted functionality even in the event of extreme temperature fluctuations

Invisible mounting plate



Height-adjustable axis



Adjustable backcheck



Height-adjustable guide rail



### Adjustment settings easily made

A door is exposed to various stresses on a daily basis: operation by its users, temperature fluctuations, air humidity.

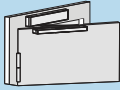
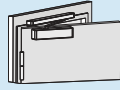
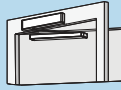
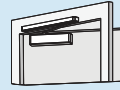
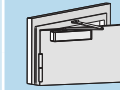
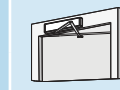
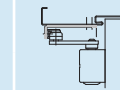
The door hinge wears out, the door “settles” and the door’s closing performance can deteriorate. ASSA ABLOY door closers can be easily adapted to any changes in structural or usage conditions after being installed. ASSA ABLOY door closers simplify adjustments during the mounting process with clever functions. Installation tolerances can be compensated without special components thanks to the height-adjustable axis. Height compensation of 14mm takes all structural conditions into account. The arm height can be adjusted quickly and easily and the closing function is set up optimally.

## ASSA ABLOY door closers

## Overview of functions and mounting positions

| PRODUCT NAME                                  | DOOR CLOSERS WITH GUIDE RAILS |           |       |       |       |       | CONCEALED DOOR CLOSERS |       |
|-----------------------------------------------|-------------------------------|-----------|-------|-------|-------|-------|------------------------|-------|
|                                               | DC700                         | DC700G-FT | DC640 | DC500 | DC340 | DC130 | DC860                  | DC840 |
| Cam Motion® Technology                        | ✓                             | ✓         |       | ✓     |       |       | ✓                      | ✓     |
| ASSA ABLOY Unigue Design                      | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| <b>CLOSING FORCE</b>                          | 3-6                           | 3-6       | 3-4   | 1-4   | 1-4   | 3     | 1-5                    | 1-4   |
| EN1 (≤750mm)                                  |                               |           |       | ✓     | ✓     |       | ✓                      | ✓     |
| EN2 (≤850mm)                                  |                               | ✓         |       | ✓     | ✓     |       | ✓                      | ✓     |
| EN3 (≤950mm)                                  | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| EN4 (≤1100mm)                                 | ✓                             | ✓         | ✓     | ✓     | ✓     |       | ✓                      | ✓     |
| EN5 (≤1250mm)                                 | ✓                             | ✓         |       |       |       |       | ✓                      |       |
| EN6 (≤1400mm)                                 | ✓                             |           |       |       |       |       |                        |       |
| Fire protection doors (≥ EN3)                 | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| Recommended for exterior doors                | ✓                             | ✓         |       |       |       |       | ✓                      |       |
| 1-leaf doors                                  | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| 1-leaf doors with el.mech. HO (EN1155)        | ✓                             |           |       |       |       |       | ✓                      | ✓     |
| 2-leaf doors (EN1158)                         | ✓                             |           |       |       |       |       | ✓                      | ✓     |
| 2-leaf doors with el.mech. HO (EN1155/EN1158) | ✓                             |           |       |       |       |       | ✓                      | ✓     |
| Free swing (EN1155)                           |                               |           | ✓     |       |       |       |                        |       |
| Tandem application                            |                               |           |       |       |       |       |                        |       |
| Double action doors                           |                               |           |       |       |       |       |                        |       |
| <b>FUNCTIONS</b>                              |                               |           |       |       |       |       |                        |       |
| Closing speed adjustable                      | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| Latching speed adjustable                     | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| Backcheck                                     | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     |                        |       |
| Delayed Action                                | o                             |           |       |       | o     |       |                        |       |
| Spindle height adjustable (0-14 mm)           | ✓                             | ✓         | ✓     | ✓     | ✓     |       |                        |       |
| Spindle extension                             |                               |           |       |       |       |       | ✓                      | ✓     |
| Hold Open mechanical (not for fire doors)     | o                             |           |       | o     | o     | o     | o                      | o     |
| Thermodynamic valves                          | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| Max. opening angle                            | 180°                          | 170°      | 180°  | 170°  | 180°  | 180°  | 120°                   | 120°  |
| Glass door application                        | ✓                             |           |       | ✓     |       |       |                        |       |
| Non-handed (left/right)                       | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| EN1154                                        | ✓                             | ✓         | ✓     | ✓     | ✓     | ✓     | ✓                      | ✓     |
| EN1158                                        | ✓                             |           |       |       |       |       | ✓                      | ✓     |
| EN1155                                        | ✓                             |           | ✓     |       |       |       | ✓                      | ✓     |
| CEN/TR 15894                                  | ✓                             | ✓         |       | ✓     |       |       | ✓                      | ✓     |
| <b>PAGE</b>                                   | x-x                           | x-x       | x-x   | x-x   | x-x   | x-x   | x-x                    | x-x   |

✓: standard o: option CE: all products are CE marked

| ASSA ABLOY door closers – mounting positions |                |         | GUIDE RAIL                                                                          |                                                                                     |                                                                                     |                                                                                     | LINK ARM                                                                             |                                                                                       |                                                                                       |
|----------------------------------------------|----------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                              |                |         | Hinge side<br>Frame mounting                                                        | Hinge side<br>Door leaf mounting                                                    | Non-Hinge side<br>Frame mounting                                                    | Non-Hinge side<br>Door leaf mounting                                                | Hinge side<br>Door Leaf mounting                                                     | Non-Hinge side<br>Frame mounting                                                      | Non-Hinge side<br>door leaf mounting<br>(parallel arm inst.)                          |
| Type                                         | Technology     | EN      |  |  |  |  |  |  |  |
| DC700                                        | Cam-Motion®    | 3-6     | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   |                                                                                      |                                                                                       |                                                                                       |
| DC700G-FT                                    | Cam-Motion®    | 3-6     |                                                                                     | ✓                                                                                   |                                                                                     | ✓(BGS)                                                                              |                                                                                      |                                                                                       |                                                                                       |
| DC500                                        | Cam-Motion®    | 1-4     | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   |                                                                                      |                                                                                       |                                                                                       |
| DC640                                        | R&P Free-swing | 3-6     | ✓ (EN 3-4)                                                                          | ✓ (EN 3-4)                                                                          | ✓ (EN 3-4)                                                                          |                                                                                     | ✓                                                                                    | ✓                                                                                     |                                                                                       |
| DC340                                        | Rack & Pinion  | 2-6     |                                                                                     | ✓ (EN 1-4)                                                                          | ✓ (EN 1-4)                                                                          |                                                                                     | ✓                                                                                    | ✓                                                                                     |                                                                                       |
| DC347                                        | Rack & Pinion  | 5-7     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                    | ✓                                                                                     |                                                                                       |
| DC300                                        | Rack & Pinion  | 3-6     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                    | ✓                                                                                     | ✓                                                                                     |
| DC300 Tandem                                 | Rack & Pinion  | > 7     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                    | ✓                                                                                     |                                                                                       |
| DC200                                        | Rack & Pinion  | 2-4     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                    | ✓                                                                                     | ✓                                                                                     |
| DC140                                        | Rack & Pinion  | 2/3/4/5 |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                    | ✓                                                                                     | ✓                                                                                     |
| DC130                                        | Rack & Pinion  | 3       |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                    |                                                                                       |                                                                                       |
| DC120                                        | Rack & Pinion  | 2/3/4   |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                    | ✓                                                                                     | ✓                                                                                     |



## ASSA ABLOY door closers

## Overview of functions and mounting positions

| PRODUCT NAME                              | DOOR CLOSERS WITH LINK ARM |       |       |       |       |         |       | FLOOR SPRINGS |              |              |              |
|-------------------------------------------|----------------------------|-------|-------|-------|-------|---------|-------|---------------|--------------|--------------|--------------|
|                                           | DC640                      | DC347 | DC340 | DC300 | DC200 | DC140   | DC120 | DC477         | DC475        | DC460        | DC420        |
| Cam Motion® Technology                    |                            |       |       |       |       |         |       | ✓             | ✓            | ✓            | ✓            |
| ASSA ABLOY Unigie Design                  | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       |       | ✓             | ✓            | ✓            | ✓            |
| <b>CLOSING FORCE</b>                      | 3-6                        | 5-7   | 2-6   | 3-6   | 2-4   | 2/3/4/5 | 2/3/4 | 2-4           | 3-6          | 2 or 3 or 4  | 2 or 3 or 4  |
| EN1 (≤750mm)                              |                            |       |       |       |       |         |       |               |              |              |              |
| EN2 (≤850mm)                              |                            |       | ✓     |       | ✓     | ✓       | ✓     | ✓<br>(170kg)  | ✓<br>(300kg) | ✓<br>(120kg) | ✓<br>(100kg) |
| EN3 (≤950mm)                              | ✓                          |       | ✓     | ✓     | ✓     | ✓       | ✓     |               |              |              |              |
| EN4 (≤1100mm)                             | ✓                          |       | ✓     | ✓     | ✓     | ✓       | ✓     |               |              |              |              |
| EN5 (≤1250mm)                             | ✓                          | ✓     | ✓     | ✓     |       | ✓       |       |               |              |              |              |
| EN6 (≤1400mm)                             | ✓                          | ✓     | ✓     | ✓     |       |         |       |               |              |              |              |
| EN7 (≤1600mm)                             |                            | ✓     |       |       |       |         |       |               |              |              |              |
| Fire protection doors (≥ EN3)             | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       | ✓     | ✓             | ✓            | ✓            | ✓            |
| Recommended for ext. doors                |                            | ✓     | ✓     | ✓     |       |         |       | ✓             | ✓            |              |              |
| 1-leaf doors                              | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       | ✓     | ✓             | ✓            | ✓            | ✓            |
| 1-leaf doors with el.HO (EN1155)          |                            |       |       |       |       |         |       |               |              |              |              |
| 2-leaf doors (EN1158)                     |                            |       |       |       |       |         |       |               |              |              |              |
| 2-leaf doors with el.HO (EN1155 / EN1158) |                            |       |       |       |       |         |       |               |              |              |              |
| Free swing (EN1155)                       | ✓                          |       |       |       |       |         |       |               |              |              |              |
| Tandem application                        |                            |       |       | ✓     |       |         |       |               |              |              |              |
| Double action doors                       |                            |       |       |       |       |         |       | ✓             | ✓            | ✓            | ✓            |
| <b>FUNCTIONS</b>                          |                            |       |       |       |       |         |       |               |              |              |              |
| Closing speed adjustable                  | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       | ✓     | ✓             | ✓            | ✓            | ✓            |
| Latching speed adjustable                 | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       | ✓     | ✓             | ✓            | ✓            | ✓            |
| Backcheck adjustable                      | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       | ✓     | ✓             | ✓            | ✓            |              |
| Delayed Action                            |                            |       | o     | o     |       |         |       |               |              |              |              |
| Spindle height adjustable (0-14 mm)       | ✓                          | ✓     | ✓     | ✓     | ✓     |         |       |               |              |              |              |
| Spindle extension                         |                            |       |       |       |       |         |       | ✓             | ✓            | ✓            | ✓            |
| Hold Open mechanical (not for fire doors) |                            | o     | o     | o     | o     | o       | o     | o             | o            | o            | o            |
| Thermodynamic valves                      | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       | ✓     | ✓             | ✓            | ✓            | ✓            |
| Max. opening angle                        | 180°                       | 180°  | 180°  | 180°  | 180°  | 180°    | 180°  | 175°          | 175°         | 130°         | 175°         |
| Glass door application                    |                            |       |       | ✓     | ✓     |         |       | ✓             | ✓            | ✓            | ✓            |
| Non-handed (left/right)                   | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       | ✓     | ✓             | ✓            | ✓            | ✓            |
| EN1154                                    | ✓                          | ✓     | ✓     | ✓     | ✓     | ✓       | ✓     | ✓             | ✓            | ✓            | ✓            |
| EN1158                                    |                            |       |       |       |       |         |       |               |              |              |              |
| EN1155                                    | ✓                          |       |       |       |       |         |       |               |              |              |              |
| CEN/TR 15894                              |                            |       |       |       |       |         |       |               | ✓            |              | ✓            |

✓: standard o: option CE: all products are CE marked

# ASSA ABLOY door closers

## use state-of-the-art technology

**Explanation of standards:**

**Safe in an emergency**

You'll be on the safe side with ASSA ABLOY, since our door closers meet national and international provisions and regulations.

Smoke protection and fire doors may only be fitted with door closer systems complying with EN1154/ EN1155/EN1158..

ASSA ABLOY supplies approved door closer systems for single and double leaf smoke and fire doors with different usage requirements.

**EN 1154**

This standard specifies the technical requirements, including those for fire and smoke protection doors, for hand-operated door closing devices on swing doors

with a controlled closing cycle, for which the closing energy is applied by the user when opening the door.

**EN 1155**

This standard specifies the requirements for stand-alone hold open devices or those built into door closers which may be used on fire and smoke protection doors.

**EN 1158**

This standard specifies requirements for both separately mounted door coordinator devices and door coordinator mechanisms incorporated in door closers. There are additional requirements for devices for use on fire/ smoke door assemblies included.

EN 1154:  
Controlled door closing devices.  
Overview recommended door closer data.

| Door closer EN size | Recommended door leaf width mm max. | Closing torque between 0° and 4° |         | Opening torque between 0° and 60° Nm max. |
|---------------------|-------------------------------------|----------------------------------|---------|-------------------------------------------|
|                     |                                     | Nm min.                          | Nm max. |                                           |
| 1                   | 750                                 | 9                                | 13      | 26                                        |
| 2                   | 850                                 | 13                               | 18      | 36                                        |
| 3                   | 950                                 | 18                               | 26      | 47                                        |
| 4                   | 1,100                               | 26                               | 37      | 62                                        |
| 5                   | 1,250                               | 37                               | 54      | 83                                        |
| 6                   | 1,400                               | 54                               | 87      | 134                                       |
| 7                   | 1,600                               | 87                               | 140     | 215                                       |

Example and explanation of CE marking on Door Closer DC300 in accordance with DIN EN1154:

The diagram shows a CE mark with the following information:
 

- CE mark**: The CE symbol.
- Manufacturer & address**: ASSA ABLOY Sicherheitstechnik GmbH, Bildstockstraße 20, 72458 Albstadt.
- Year of issue for CE mark**: 10 (the last two figures).
- Certification centre number**: 1162-CPD-0485.
- Standard for door closer**: EN1154:1996+A1:2002.
- Hazardous substances**: None.
- Door closer classification**: 4 8 <sup>6</sup>/<sub>3</sub> 1 1 4.

**\* Explanation of classification key**

- 4 = Closing of doors from open position of 180°
- 8 = Endurance test of 500,000 test cycles
- 3/6 = Door closer size 3-6
- 1 = Suitable for use with fire and smoke protection doors
- 1 = Meets key requirements for safe usage
- 4 = Very high corrosion resistance

# The door closer matrix

Use this table to find the right door closer for your requirements

| Single leaf door systems |                | Single leaf doors up to 1,100 mm   | Single leaf doors up to 1,400 mm                                         | Single leaf doors up to 1,400 mm hold-open function | Single leaf doors up to 1,400 mm smoke detector |
|--------------------------|----------------|------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------|
| Guide rail               | Hinge side     | DC500, DC 340 (DA), DC130 (950 mm) | DC700                                                                    | DC700G-E, DC700/G460                                | DC700G-S                                        |
|                          | Non-hinge side | DC500, DC 340 (DA), DC130 (950 mm) | DC700                                                                    | DC700G-E, DC700/G460                                | DC700G-S                                        |
| Concealed                |                | DC840 (950 mm)                     | DC860 (1,250 mm)                                                         | DC860/G880 (1,250 mm)                               |                                                 |
| Rack and pinion          | Hinge side     | DC200, DC120                       | DC140 (1,250 mm), DC347 (1600 mm), DC 340 (DA), DC300 Tandem, DC300 (DA) |                                                     |                                                 |
|                          | Non-hinge side | DC200, DC120                       | DC140 (1,250 mm), DC347 (1600 mm), DC340 (DA), DC300 Tandem, DC300 (DA)  |                                                     |                                                 |
| Floor spring             |                | DC477, DC420, DC460                | DC475                                                                    |                                                     |                                                 |
| Free swing               |                | DC640 (guide rail)                 | DC640 (link arm)                                                         |                                                     |                                                 |
| Security door closer     | Hinge side     | DC700G-FT (1,200 mm)               |                                                                          |                                                     |                                                 |
|                          | Non-hinge side | DC700G-FT BGS (1,200 mm)           |                                                                          |                                                     |                                                 |

| Double leaf door systems |                | Double leaf doors up to 2,800 mm | Double leaf doors up to 2,800 mm hold-open function | Double leaf doors up to 2,800 mm smoke detector |
|--------------------------|----------------|----------------------------------|-----------------------------------------------------|-------------------------------------------------|
| Guide rail               | Hinge side     | DC700G-CO, DC700/G461            | DC700G-CO-E, DC700/G462, DC700/G464                 | DC700G-CO-S                                     |
|                          | Non-hinge side | DC700/G461                       | DC700/G462, DC700/G464                              |                                                 |
| Concealed                |                | DC860/G881 (2,500 mm)            | DC860/G884, DC860/G882 (2,500mm)                    |                                                 |

This overview will help you to find the right closer system for your usage requirements with rapidly decreasing opening torque thanks to Cam-Motion®.

All mounting positions with a guide rail door closer



Normal mounting on hinge side



Frame mounting on hinge side

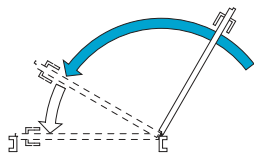


Normal mounting on non-hinge side

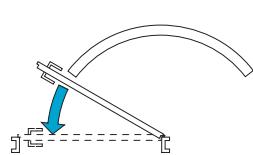


Frame mounting on non-hinge side

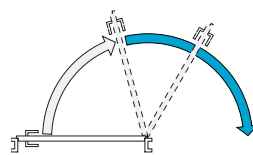
Description of adjustable functions:



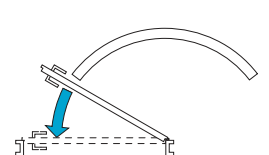
**Closing speed**  
Speed of door leaf during closing.



**Latching speed**  
Speed of closing door leaf at opening angles between 0° and 15° until it reaches its closed position.



**Backcheck**  
Opening motion is hydraulically slowed down from an opening angle of about 75°.



**Closing delay**  
Delay in the closing speed between about 120° and 70°.

# ASSA ABLOY Cam-Motion® technology

## For improved accessibility and reliable closing

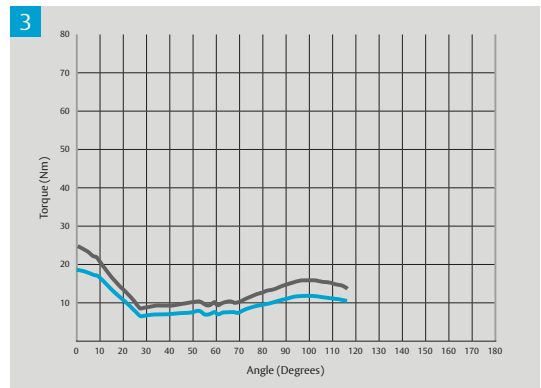
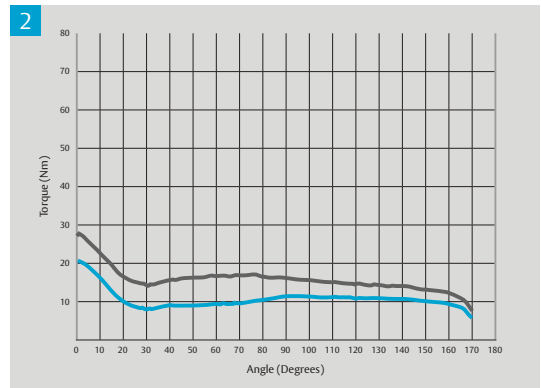
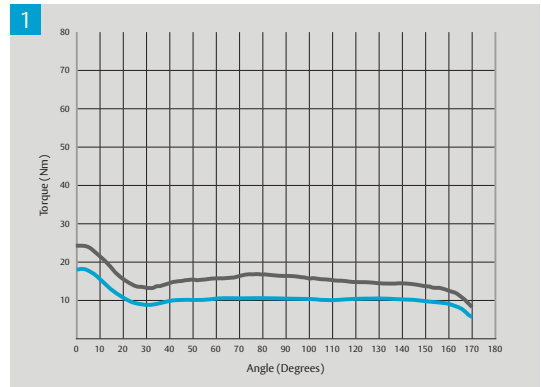
Torque curves:  
 1 Model DC700  
 2 Model DC500  
 3 Model DC840

The graphs demonstrate the most important advantage of ASSA ABLOY Cam-Motion® door closers, which is the rapidly decreasing opening force.

The accessibility is improved due to the rapidly decreasing opening force which enables easier and more comfortable opening of the doors by children, the elderly and the less able, as the closing moment of the door can be easily overcome.

However, this may be only half the story. If the door is a fire door, then according to EN 1154 the minimum door closer power setting must be size 3, and the minimum closing torque requirement is 18Nm. Again, as can be seen, the ASSA ABLOY Cam-Motion® door closers comply with this requirement, ensuring that the door sits firmly in the frame preventing the spread of fire and smoke.

It is the superior design and engineering excellence of ASSA ABLOY's high efficiency Cam-Motion® door closers that permit the co-existence of improved door opening for accessibility, whilst retaining reliable door closing for fire and smoke control



Black line: Opening torque  
 Blue line: Closing torque

## DC700

## Door closer with Cam-Motion® technology and guide rail



## ASSA ABLOY DC700

- Available with height-adjustable guide rail G195 or standard guide rail G193
- Fulfills barrier-free building requirements (CEN TR 15894)
- Certified in compliance with EN 1154, size 3-6
- Suitable for fire and smoke protection doors
- For single action doors up to 1400 mm wide
- Can be used in four installation types: hinge and non-hinge sides in standard and frame installation



|    |                                                  |                         |
|----|--------------------------------------------------|-------------------------|
| CE | Abloy OY<br>PO Box 108<br>80101 Joensuu, Finland | 13                      |
|    | 1162-CPD-0630 EN 1154:1996+A1:2002               | 3 8 $\frac{6}{3}$ 1 1 4 |

|    |                                                  |                         |
|----|--------------------------------------------------|-------------------------|
| CE | Abloy OY<br>PO Box 108<br>80101 Joensuu, Finland | 13                      |
|    | 1162-CPD-0631 EN 1154:1996+A1:2002               | 4 8 $\frac{6}{3}$ 1 1 4 |

## Characteristics for special model DC700AC

- Opening angle of 180° for standard installation on hinge side
- Other features as in Model DC700

## Characteristics for special model DC700DA

- Delayed closing adjustable from front
- Other features as in Model DC700

## Characteristics for DC700

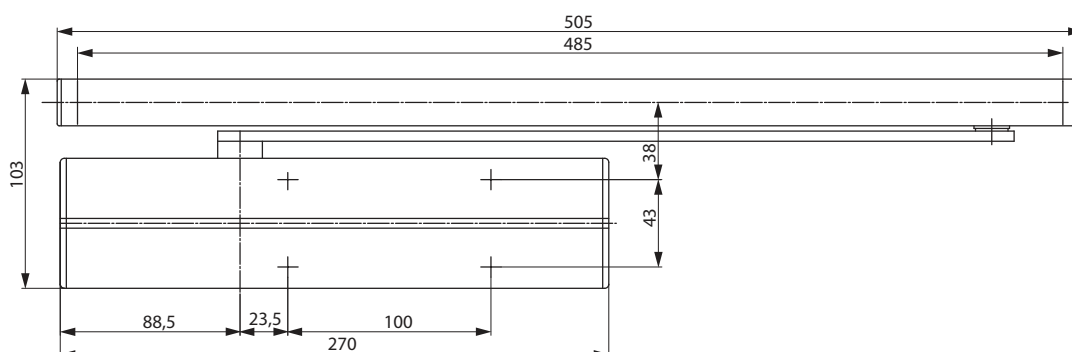
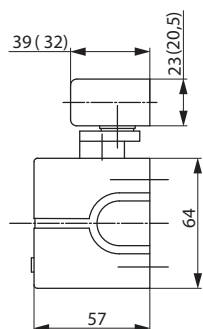
- Can be used with integrated concealed mounting plate, suitable for fire and smoke protection doors
- Can be used for left and right-handed doors
- Axis continuously height adjustable up to 14 mm
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- Thermodynamic valves for consistent performance
- Variable adjustable closing force
- Opening angle up to 170°
- Effective backcheck and latching speed range adjustable
- Large range of applications
- Standard colours: silver EV1; white, similar to RAL9016; brown, similar to RAL8014; black, similar to RAL9005, stainless steel
- Customised finishes available on request

## Characteristics for guide rail G195

- Height-adjustable by 2 mm for tolerance
- Concealed fastening screws
- Installation dimensions: see diagram

## Characteristics for standard guide rail G193

- Without protective cover
- Visible fastening screws
- Installation dimensions: see diagram (dimensions in brackets)



## Technical attributes

| Technical attributes                |                           |
|-------------------------------------|---------------------------|
| Variable adjustable closing force   | EN 3-6                    |
| Door width up to                    | 1400 mm                   |
| Fire and smoke protection           | yes                       |
| DIN door swing directions           | left / right handed       |
| Standard and frame installation     | yes                       |
| Closing speed                       | Variable between 170°-10° |
| Latching speed                      | Variable between 10°-0°   |
| Backcheck                           | Variable above 75°        |
| Opening angle, hinge side (DC700)   | ca. 170°                  |
| Opening angle, hinge side (DC700AC) | 180°                      |
| Opening angle non-hinge side        | ca. 120°                  |
| Delayed closing (DC700DA)           | variable 120° - 70°       |
| Weight                              | 2.7 kg                    |
| Height                              | 64 mm                     |
| Depth                               | 57 mm                     |
| Length                              | 270 mm                    |
| Certified in compliance with        | EN 1154                   |
| CE marking for building products    | yes                       |

## The advantages at a glance

Our service for you: here you can see the individual advantages of our door closer models for your respective field of business.

| Customer segment | Advantages                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project planners | <ul style="list-style-type: none"> <li>- Extensive range of uses: Fire and smoke protection doors as well as standard doors</li> <li>- Modern design</li> <li>- Compact design</li> <li>- Fulfils barrier-free building requirements (DDA, CEN/TR 15894)</li> <li>- Same dimensions and design with and without mounting plate</li> <li>- Comprehensive functions, standard and optional</li> </ul> |
| Builders         | <ul style="list-style-type: none"> <li>- One drilling template overall</li> <li>- Adjustable to nearly all door and frame types</li> <li>- Quick and easy installation</li> <li>- Quickly and easily adjustable</li> <li>- Suitable for left and right handed doors for standard and frame mounting on hinge and non-hinge side</li> </ul>                                                          |
| Trade            | <ul style="list-style-type: none"> <li>- Reduced inventory costs due to modular product range</li> <li>- One single product suitable for a large variety of mounting positions</li> <li>- Complementary accessories available for the whole product range</li> </ul>                                                                                                                                |
| User             | <ul style="list-style-type: none"> <li>- Largely unaffected by temperature fluctuations thanks to thermodynamic valves</li> <li>- Easier door opening and improved accessibility due to rapidly decreasing torque</li> <li>- Backcheck feature offers optimum protection for doors and walls</li> </ul>                                                                                             |

## Specifications for DC700

ASSA ABLOY Door Closer DC700 with Cam-Motion® technology and guide rail in compliance with EN 1154

- Closing power adjustable, EN size 3-6, for doors up to 1400 mm wide
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- Can be used with integrated concealed mounting plate, suitable for fire and smoke protection doors
- CE approved
- 14 mm height adjustable arm system for ease of fitting
- Standard and frame mounting on hinge and non-hinge side of the door
- Suitable for left and right handed doors

## Accessories:

- Standard guide rail G193
- Height-adjustable guide rail G195
- Mounting plate A120
- Mounting plate A130 for guide rail G193 and G195
- Angle bracket A104 for guide rail G193
- Mechanical opening damper A153
- Mechanical hold open device A152 (not for fire and smoke protection doors)
- Glass door shoe A166

## Colour:

- Silver EV1
- White, similar to RAL9016
- Brown, similar to RAL8014
- Black, similar to RAL9005
- Stainless steel
- Customised finish

You can find the complete specifications on the Internet at: (Link of your companies homepage)

## DC700G-E

### Door closer with Cam-Motion® technology and electro-mechanical hold-open device



#### ASSA ABLOY DC700G-E

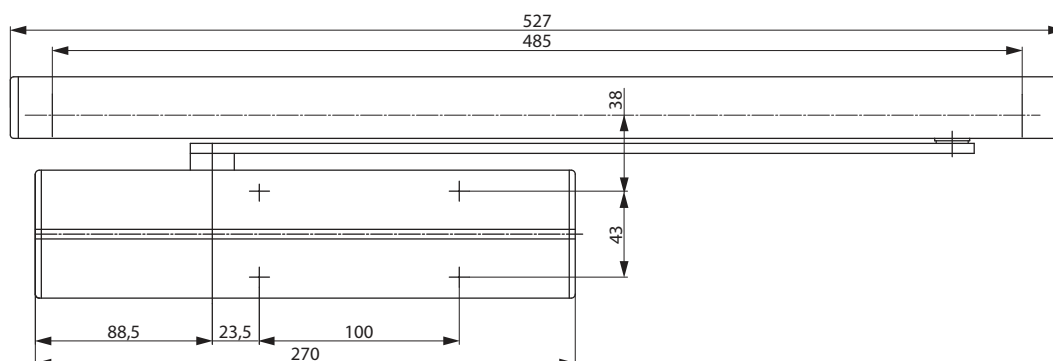
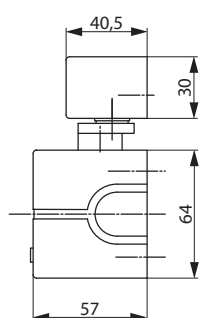
- Certified in compliance with EN 1154/1155, size 3-6
- Hold-open angle continuously adjustable between ca. 80° and 130°
- Hold-open device is traversable
- For fire and smoke protection doors up to 1400 mm
- Fulfills barrier-free building requirements (DDA/ CEN TR 15894)
- DIBt approval with different smoke detection systems

#### Characteristics for DC700G-E

- Electro-mechanical hold-open device
- Supply line 24 V DC, flush or surface mounting
- Continuously adjustable holding force
- Traversable hold-open device, continuously adjustable between ca. 80°-130°
- Can be used for left and right-handed doors
- Standard installation types on the hinge and non-hinge side
- Same drilling template as standard guide rails
- Axis continuously height-adjustable up to 14 mm
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- Thermodynamic valves for consistent performance
- Variable adjustable closing force
- Effective backcheck and latching speed range adjustable
- Large range of applications
- Entry-point in surface- and flush-mounted
- Standard colours: silver EV1, white similar to RAL9016, stainless steel
- Customised finishes available on request



|                            |                                                                               |                      |    |   |               |       |
|----------------------------|-------------------------------------------------------------------------------|----------------------|----|---|---------------|-------|
| CE                         | ASSA ABLOY<br>Sicherheitstechnik GmbH<br>Bildstockstraße 20<br>72458 Albstadt |                      | 10 |   |               |       |
|                            | 0432-CPD-152                                                                  | EN 1155:1997+A1:2002 | 3  | 8 | $\frac{6}{3}$ | 1 1 4 |
| Dangerous substances: None |                                                                               |                      |    |   |               |       |



# DC700G-E

## Technical attributes

### Guide rail G-E

| Technical attributes             |          |
|----------------------------------|----------|
| Power supply                     | 24 V DC  |
| Continuous duty                  | 100 % ED |
| Class of protection              | IP 43    |
| Weight                           | 1.1 kg   |
| Height                           | 30 mm    |
| Depth                            | 40.5 mm  |
| Length                           | 527 mm   |
| Fire and smoke protection        | Yes      |
| CE marking for building products | yes      |
| Certified in compliance with     | EN 1155  |

Facts for door closer see DC700

### The advantages at a glance

Our service for you: here you can see the individual advantages of our door closer models for your respective field of business.

| Customer segment | Advantages                                                                                                                                                                                                                                           |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project planners | - Extensive range of uses: Fire and smoke protection doors as well as standard doors<br>- Modern design<br>- Compact design                                                                                                                          |
| Builders         | - One drilling template overall<br>- Adjustable to nearly all door and frame types<br>- Quick and easy installation<br>- Quickly and easily adjustable<br>- Suitable for left and right hand doors for standard mounting on hinge and non-hinge side |
| Trade            | - Reduced inventory costs due to modular product range<br>- One single product suitable for a large variety of mounting positions<br>- A single model for both hinge and non-hinge side                                                              |
| User             | - Adjustable operating force, to meet door construction requirements and user need                                                                                                                                                                   |

### Specifications for DC700G-E

ASSA ABLOY Door Closer DC700 with Cam-Motion® technology, guide rail with electro-mechanical hold-open device, 24 V DC

- Closing power adjustable, EN size 3-6, for doors up to 1400 mm wide
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- Can be used with mounting plate for fire and smoke protection doors
- CE approved
- 14 mm height adjustable arm system for ease of fitting
- Standard and frame mounting on hinge and non hinge side of the door
- Suitable for left and right handed doors
- Hold-open device continuously adjustable between ca. 80° and 130°
- Hold-open device is traversable

#### Accessories:

- Guide rail G-E
- Mounting plate A131 for guide rail G-E
- Smoke detector station RZ100
- Ceiling smoke detector ORS 142 / TDS 247
- Smoke protection switch
- Optical smoke detector 60060
- Flush-mounted or surface-mounted release button

#### Colour:

- Silver EV1
- White, similar to RAL9016
- Stainless steel
- Customised finish

You can find the complete specifications on the Internet at: (Link of your companies homepage)



## DC700G-CO-E

# Door closer with Cam-Motion® technology, electro-mechanical hold-open device and integrated mechanical door coordinator



### ASSA ABLOY DC700G-CO-E

- Certified in compliance with EN 1155/1158, size 3-6
- Mechanical door coordinator in continuous guide rail
- Hold-open angle continuously adjustable between 80° and 130°
- Hold-open device is traversable
- All components fully integrated into continuous guide rail
- Fulfils barrier-free building requirements (DDA/ CEN TR 15894)
- For fire and smoke protection doors with hinge distance up to 2800 mm
- DIBt approval with different smoke detection systems

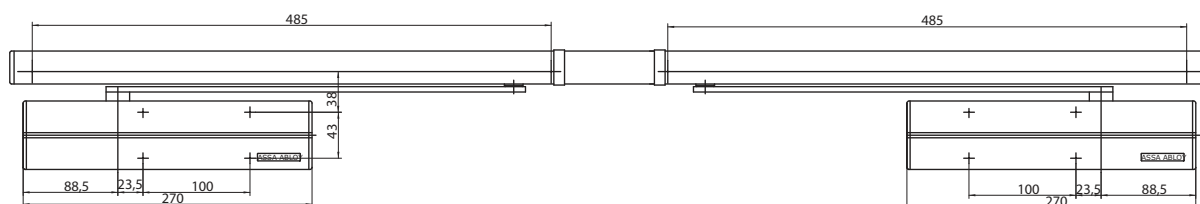
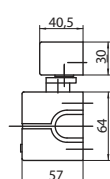
### Characteristics for DC700G-CO-E

- Door coordinator based on wedge system
- Electro-mechanical hold-open device
- Continuously adjustable holding force
- Traversable hold-open device, continuously adjustable between ca. 80°-130°
- Flush or surface installation of wiring possible, 24 V DC
- Can be used for left and right-handed doors
- For standard mounting on hinge side
- Same drilling template as standard guide rails
- Guide rail height-adjustable by 2 mm for tolerance
- Axis continuously height-adjustable up to 14 mm
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- Variable adjustable closing force
- Thermodynamic valves for consistent performance
- Effective backcheck and latching speed range adjustable
- Standard colours: silver EV1, white similar to RAL9016, stainless steel
- Customised finishes available on request



|                            |                                                                               |    |
|----------------------------|-------------------------------------------------------------------------------|----|
| CE                         | ASSA ABLOY<br>Sicherheitstechnik GmbH<br>Bildstockstraße 20<br>72458 Albstadt | 11 |
|                            | 0432-CPD-152 EN 1155:1997+A1:2002                                             |    |
|                            | 3 5 $\frac{6}{3}$ 1 1 4                                                       |    |
| Dangerous substances: None |                                                                               |    |

|                            |                                                                               |    |
|----------------------------|-------------------------------------------------------------------------------|----|
| CE                         | ASSA ABLOY<br>Sicherheitstechnik GmbH<br>Bildstockstraße 20<br>72458 Albstadt | 11 |
|                            | 0432-CPD-160 EN 1158:1997+A1:2002                                             |    |
|                            | 3 5 $\frac{6}{3}$ 1 1 4                                                       |    |
| Dangerous substances: None |                                                                               |    |



# DC700G-CO-E

## Technical attributes

### Guide rail G-CO-E

| Technical attributes             |                                 |
|----------------------------------|---------------------------------|
| Power supply                     | 24 V DC                         |
| Continuous duty                  | 100%                            |
| Class of protection              | IP 43                           |
| Weight                           | 4.5 kg                          |
| Height                           | 30 mm                           |
| Depth                            | 40.5 mm                         |
| Length                           | Depending on overall door width |
| Fire and smoke protection        | Yes                             |
| Certified in compliance with     | EN 1155/1158                    |
| CE marking for building products | Yes                             |

Facts for door closer see DC700

### The advantages at a glance

Our service for you: here you can see the individual advantages of our door closer models for your respective field of business.

| Customer segment | Advantages                                                                                                                                                                                                                                                                                                                                                      |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project planners | <ul style="list-style-type: none"> <li>- Extensive range of uses: Fire and smoke protection doors as well as standard doors</li> <li>- Modern design</li> <li>- Compact design</li> <li>- Hold-open device is traversable</li> <li>- Mechanical door coordinator for optimum functional reliability</li> </ul>                                                  |
| Builders         | <ul style="list-style-type: none"> <li>- One drilling template overall</li> <li>- Simple, rapid installation and adjustment</li> <li>- Can be used for left and right handed doors for standard mounting on hinge side</li> <li>- Adjustable to nearly all door and frame types</li> <li>- Optimum reliability and service life for door coordinator</li> </ul> |
| Trade            | <ul style="list-style-type: none"> <li>- Reduced inventory costs due to modular product range</li> </ul>                                                                                                                                                                                                                                                        |
| User             | <ul style="list-style-type: none"> <li>- Adjustable operating force, to meet door construction requirements and user need</li> <li>- Optimum usage convenience thanks to controlled closing of door in correct order</li> </ul>                                                                                                                                 |

### Specifications for DC700G-CO-E

ASSA ABLOY door closer with Cam-Motion® technology, continuous guide rail with mechanical door selector, electro-mechanical hold-open device, EN size 3-6

- Variable adjustable closing force
- 14 mm height adjustable arm system for ease of fitting
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- Can be used for left and right handed doors for standard mounting on hinge side
- Hold-open angle continuously adjustable between 80° and 130°, holding force adjustable
- Hold-open device is traversable

#### Accessories:

- Guide rail G-CO-E
- Mounting plate A160 for guide rail G-CO-E
- Smoke detector station RZ100
- Ceiling smoke detector ORS 142 / TDS 247
- Smoke protection switch
- Optical smoke detector 60060
- Flush-mounted or surface-mounted release button

#### Colour:

- Silver EV1
- White, similar to RAL9016
- Stainless steel
- Customised finish

You can find the complete specifications on the Internet at: (Link of your companies homepage)

# DC347

## Rack and pinion door closer with extra strong link arm



### ASSA ABLOY DC347

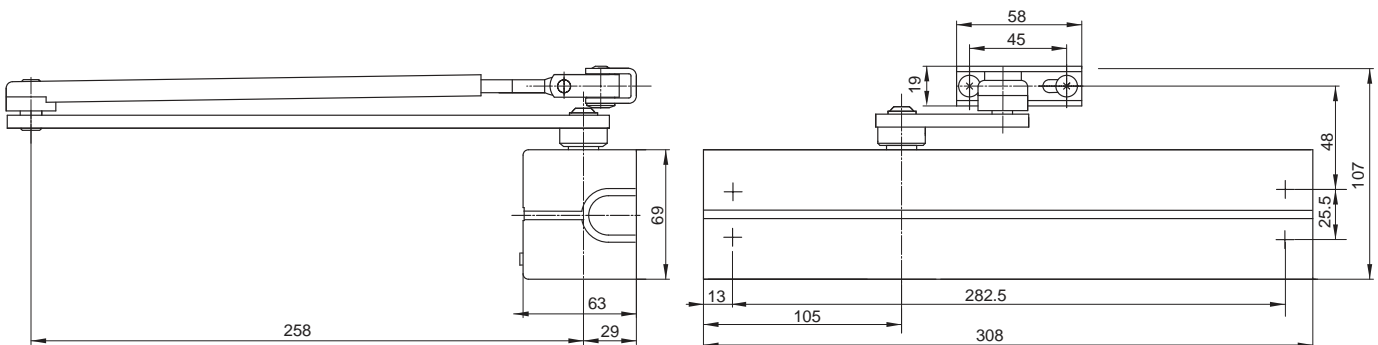
- Certified in compliance with EN 1154, size 5 - 7
- Suitable for fire and smoke protection doors
- For single action doors up to 1600 mm wide

### Characteristics for DC347

- For single action doors up to 1600 mm wide
- Can be used with integrated concealed mounting plate, suitable for fire and smoke protection doors
- Can be used for left and right handed doors
- Axis height-adjustable up to 14 mm
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- Thermodynamic valves for consistent performance
- Variable adjustable closing force
- Opening angle up to 180°
- For heavy door applications
- Standard colours: silver EV1; white, similar to RAL9016; brown, similar to RAL8014; black, similar to RAL9005
- Customised finishes available on request



|               |                                      |               |
|---------------|--------------------------------------|---------------|
| CE            | Abloy Oy                             | 04            |
|               | PO Box 108<br>80101 Joensuu, Finland |               |
| 1162-CPD-0131 | EN1154:1996+A1:2002                  | 4 8 7/5 1 1 3 |



# DC347

## Technical attributes

| Technical attributes              |                          |
|-----------------------------------|--------------------------|
| Door width up to                  | 1600 mm                  |
| Variable adjustable closing force | EN 5-7                   |
| DIN door swing directions         | left / right handed      |
| Closing speed                     | Variable between 180°-0° |
| Latching speed                    | Variable between 15°-0°  |
| Backcheck                         | Variable above 75°       |
| Weight                            | 2.2 kg                   |
| Height                            | 69 mm                    |
| Depth                             | 63 mm                    |
| Length                            | 308 mm                   |
| Fire and smoke protection         | yes                      |
| Certified in compliance with      | EN 1154                  |
| CE marking for building products  | yes                      |

### The advantages at a glance

Our service for you: here you can see the individual advantages of our door closer models for your respective field of business.

| Customer segment | Advantages                                                                                                                                                                                                 |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project planners | - For heavy doors, fire and smoke protection doors as well as standard doors<br>- Modern design<br>- Compact design<br>- Same dimensions and design with and without mounting plate                        |
| Builders         | - Quick and easy installation<br>- Quickly and easily adjustable<br>- Suitable for left and right handed doors, in both door and frame mounted applications                                                |
| Trade            | - One single product suitable for a large variety of mounting positions<br>- Complimentary accessories available                                                                                           |
| User             | - Largely unaffected by temperature fluctuations thanks to thermodynamic valves<br>- Enough closing force for all type of heavy doors<br>- Backcheck feature offers optimum protection for doors and walls |

### Specifications for DC347

ASSA ABLOY Door Closer DC347 featuring rack and pinion technology in compliance with EN 1154

- Closing power variable adjustable, EN size 5 - 7, for doors up to 1600 mm wide
- Closing speed, latching speed and backcheck adjustable via front facing regulating valves
- Can be used with integrated concealed mounting plate, suitable for fire and smoke protection doors
- CE approved
- 14 mm height adjustable arm system for ease of fitting
- Suitable for left and right handed doors

#### Accessories:

- Extra strong link arm L197
- Mounting plate A126
- Angle bracket A107

#### Colour:

- Silver EV1
- White, similar to RAL9016
- Brown, similar to RAL8014
- Black, similar to RAL9005
- Customised finish

You can find the complete specifications on the Internet at: (Link of your companies homepage)

# DC475

Floor spring with Cam-Motion® technology and adjustable closing force for large or very heavy doors



### ASSA ABLOY DC475

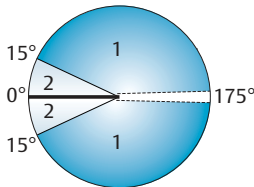
- Certified in compliance with EN 1154, size 3-6, cycle test over 1,000,000 cycles
- Suitable for fire and smoke protection doors
- For double and single action door up to 300 kg

### Characteristics for DC475

- Closing from 175° in both door swing directions with hydraulic control from 175°
- Two thermodynamic valves for consistent performance
- Adjustable door speed and latching speed from top regulating valves
- Backcheck
- Cast iron body
- Adjustments in all directions within the cement box
- Cement box in hot zinc plated
- Cover plates and eyelets made in polished or satin stainless steel and polished brass
- Interchangeable spindle from 0 to +30 mm
- Available without hold-open or with hold-open angle 90° and 105°

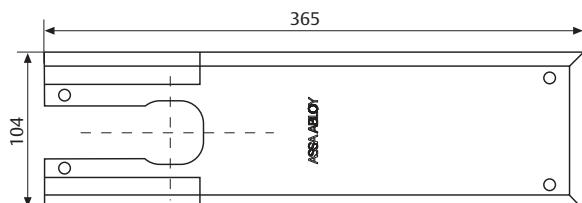
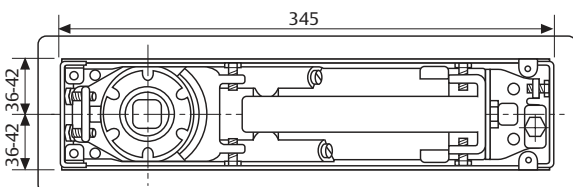
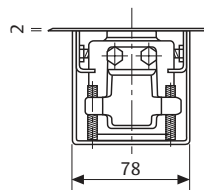
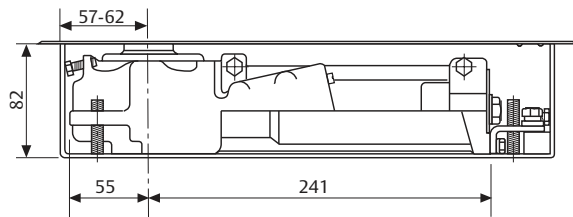


|    |                                                                                                    |                      |   |   |        |   |   |
|----|----------------------------------------------------------------------------------------------------|----------------------|---|---|--------|---|---|
| CE | ASSA ABLOY Italia S.p.A.<br>Via Boverese, 13<br>46017 San Giovanni in Persiceto<br>Bologna - Italy | 04                   |   |   |        |   |   |
|    | 0425 DO.0663                                                                                       | EN 1154:1996+A1:2002 | 3 | 8 | 3<br>6 | 1 | 1 |



### Speed adjustment

- 1 Variable closing speed 175° – 15°
- 2 Variable latching speed 15° – 0°



## Technical attributes

| Technical attributes              |                                                  |
|-----------------------------------|--------------------------------------------------|
| Variable adjustable closing force | EN 3 - 6                                         |
| Door width up to                  | 1400 mm                                          |
| Door weight up to                 | 300 kg                                           |
| Max. opening angle                | 175°                                             |
| Closing speed                     | Variable between 175° - 15°                      |
| Latching speed                    | Variable between 15°- 0°                         |
| Backcheck                         | mechanical                                       |
| Weight                            | 7.3 kg                                           |
| Height                            | 82 mm                                            |
| Length                            | 345 mm                                           |
| Width                             | 78 mm                                            |
| Body adjustment within cement box | vertical 9 mm, side 6 mm, front 5 mm, angular 2° |
| DIN-direction                     | Left / Right handed doors or double action       |
| Hold-open mode                    | 90°/105°/Non Hold Open                           |
| Certified in compliance with      | EN 1154                                          |
| CE marking for building products  | Yes                                              |
| Fire and smoke protection         | Yes                                              |

### The advantages at a glance

Our service for you: here you can see the individual advantages of our door closer models for your respective field of business.

| Customer segment | Advantages                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project planners | <ul style="list-style-type: none"> <li>- Extensive range of uses: Fire and smoke protection doors as well as standard doors</li> <li>- Hold-open at 90°, 105° and non hold-open</li> <li>- Variety of available spindles: square Italian, rectangular German</li> <li>- Architectural finishes: cover plates and eyelets in satin and polished stainless steel or polished brass.</li> </ul> |
| Builders         | <ul style="list-style-type: none"> <li>- Universal for left/right handed and double action doors</li> <li>- Overpressure relief valve to protect unit against abuse</li> <li>- Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door</li> </ul>                                                                          |
| Trade            | <ul style="list-style-type: none"> <li>- Reduced inventory costs due to modular product range</li> <li>- One single product suitable for a large variety of mounting positions</li> <li>- Complementary accessories available for the whole product range</li> </ul>                                                                                                                         |
| User             | <ul style="list-style-type: none"> <li>- Adjustable operating force to meet door construction requirements and user needs</li> <li>- Easier door opening and improved accessibility due to Cam-Motion® technology</li> <li>- Backcheck feature offers optimum protection for doors and walls</li> </ul>                                                                                      |

You can find the complete specifications on the Internet at: (Link of your companies homepage)

### Specifications for DC475

ASSA ABLOY Floor spring DC475 featuring Cam-Motion® technology in compliance with EN 1154, cycle test over 1,000,000 cycles

- Closing power variable adjustable, EN size 3-6, for doors up to 1400 mm wide
- Closing speed, latch speed adjustable from top regulating valves
- CE approved
- 9 mm height adjustable within cement box
- Suitable for Left/Right handed and double leaf doors

### Accessories:

- AC115 - Reversible Bottom Arm Italian spindle
  - AC393 - Reversible Bottom Arm German Spindle
  - AC8 - Double action Top Pivot
  - AC375 - Double action Top Pivot for fire doors
  - AC583 - Right and left bottom arm. Socket for Italian square spindle.
  - AC392 - Right & Left bottom Arm. Socket for German rectangular spindle.
  - AC384 - Top pivot for left or right doors
  - AC612 - Sealing Compound for floor springs
  - AC269 - Cover plate for DC475
- Colour:
- Polished stainless steel
  - Satin stainless steel
  - Polished brass



# Surface Mounted Door Closers



We take the worry out of  
protecting what's valuable to you.  
Lockwood: *no worries*<sup>®</sup>

**LOCKWOOD**

**ASSA ABLOY**

**25YEAR**

**MECHANICAL  
WARRANTY**

[www.lockweb.com.au](http://www.lockweb.com.au)



# Lockwood Surface Mounted Door Closers



Designed and manufactured to exacting standards. These world recognised standards ensure the highest possible quality, efficiency and reliable performance.

All models (except hold-open) are tested and approved on fire doors in accordance with Australian Standard AS1905:1:2005 Fire Resistant Doorsets.

New multi functional designs offer the specifier, stockist or the installer outstanding versatility and low inventory levels.

Effective door installation requires that the door and frame be of sufficient strength or reinforced to ensure secure anchorage of the door closer unit.

A door fitted with a door closer must be hung on good quality, aligned hinges so it swings freely without bias in both directions.

The closed door must be clear in the door frame and when a lock is fitted the latch bolt must engage freely within the strike.

When specifying manually operated door closers the following should be considered: door size, in particular width of door; door weight; type of installation; environmental conditions; location of door; operation frequency of door; the people using the door.

Door size and the pressure exerted on the surface area of the door due to wind gusts or air conditioning and the spring strength required to

hold or close the door against this pressure must be considered along with the ability of the user to exert the force necessary to push or pull the door open. The location of door furniture will influence the leverage available to the person opening the door.

## About Lockwood

Lockwood is the leading brand in the Australian locking industry. With an established reputation for high quality products, this iconic brand provides a wide range of locking solutions to residential housing, commercial building and industrial application markets. Lockwood is supported by an extensive distribution and after-sales support network. Our customers include retailers, architects, trade and industrial personnel, locksmiths and security dealers.

## About ASSA ABLOY

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.

ASSA ABLOY is represented in all major regions, in both mature and emerging markets, with leading positions in Australia, Europe and North America.



## The Lockwood 25 Year Mechanical Warranty

Our belief that we manufacture the finest premium products available in today's market place is backed by the Lockwood 25 Year Mechanical Warranty, ensuring that Lockwood continues to keep Australians safe by delivering security and peace of mind.

For warranty terms and conditions, please visit [www.lockweb.com.au](http://www.lockweb.com.au) or call 1300WARRANTY

# Door Closer Selection

Selection of door closer size is judged in two ways.

1. Does the door closer have the strength to effectively close the door against unexpected air pressures?
2. Is the door closer oversized for the application and therefore affecting the ease of operation?

Efficiency of the door closer also has a major bearing on ease of operation. For optimum performance it is essential that a highly efficient door closer of a correct size is selected.

The use of spring strength adjustability, which allows fine tuning of strength on site, has simplified this task but not removed all of the guesswork. With more architects and engineers becoming conscious of the problems caused by incorrect selection of door closer strength, it has become the responsibility of manufacturers to provide better technical information, such as closing torque and efficiency of their products.

The following chart has been produced to cover most conditions. If you have an unusual application which you feel requires special consideration, please forward all relevant information to your local office and we will be happy to advise the best door control for your application.

Fire doors and pressurised stairwells pose significant challenges in ensuring closing and latching of fire doors. The problems are created by differential air pressures resulting from air conditioning systems on either side of the door. To achieve complete fire safety, fire doors must latch securely at all times. If this performance is not achieved the stairwell may be unsafe, and in the event of fire, loss of life and property may occur. Correct selection of door hardware is of paramount importance in ensuring that the appropriate operating standards are met.

Fire doors which open into a pressurised stairwell must meet the following criteria:

- the door must close against a pressure differential between the air conditioned floor area and non-air conditioned stairwell;
- the door must latch securely every time it closes;
- the door must be able to be opened with a force not exceeding 110N when the stairwell is pressurised; and
- the door must be protected from damage when it is opened by means of a back check action which is built into the door closer.

## Note

- Always round up to the next door width (i.e. for 870 mm door use 950 mm).
- If parallel arm installation, then use next door width (i.e. for 830 mm door use 950 mm).
- For internal doors deduct 200 mm from actual door width (i.e. for 1250 mm internal door use 1050 mm).
- This chart is based on normal climatic conditions (i.e. pressure differential of 30Pa or wind of 15 knots).
- If more severe conditions are expected then use the next door width or contact customer service for more information (refer back page).
- When specifying parallel arm and slide rail functions, allowance should be made for the following power loss:

## Parallel Arm Mounting

Approximately 20% power loss

## Slide Rail Mounting

Approximately 30% power loss

## Power Selection Chart

This chart below will be most useful in selecting the correct door closer. Simply identify the dimensions of the appropriate door and select the recommended door closer.

The chart is intended as a guide only and as such the following variations should be taken into account when making your selection:

- Environmental factors such as the effect of wind or air conditioning pressures.
- An unsheltered external door is a door on which prevailing wind gusts will directly produce a "sail area" effect.
- A sheltered external door is a doorway which is protected by a wind break or wall which acts as a barrier against direct wind gusts.

## Door Closer Selection Chart

| Recommended Door Width | Door Weight (kg) Max | Closer Power Size | Closing Torque (Nm) |
|------------------------|----------------------|-------------------|---------------------|
| 750mm                  | 20                   | 1                 | 9 - <13             |
| 850mm                  | 40                   | 2                 | 13 - <18            |
| 950mm                  | 60                   | 3                 | 18 - <26            |
| 1100mm                 | 80                   | 4                 | 26 - <37            |
| 1250mm                 | 100                  | 5                 | 37 - <54            |
| 1400mm                 | 120                  | 6                 | 54 - <87            |
| 1600mm                 | 160                  | 7                 | 87 - <140           |

# 7726DA Series Premium Range Surface Mounted Door Closer



Rack and pinion adjustable power door closer suitable for architectural and commercial applications.

## Specifications

|                        |                                                                           |
|------------------------|---------------------------------------------------------------------------|
| <b>Power</b>           | EN adjustable 2 to 6.                                                     |
| <b>Back check (BC)</b> | Adjustable.                                                               |
| <b>Hold Open</b>       | Adjustable. Hold-open can be set at any angle up to 150° of opening.      |
| <b>Handing</b>         | Non-handed.<br>Suitable for left or right hand doors.                     |
| <b>Cover</b>           | Fully formed metal.                                                       |
| <b>Materials</b>       | Extruded aluminium body manufactured from high-performance silicon alloy. |
| <b>Mechanism</b>       | Rack and pinion design.                                                   |
| <b>Mounting</b>        | Regular, parallel and over-door mounting.                                 |
| <b>Valves</b>          | Adjustable closing and latching speed valves with overload protection.    |
| <b>Delayed Action</b>  | Adjustable.                                                               |

## Ordering Information

| Model               | Part Numbers | Finishes                 |
|---------------------|--------------|--------------------------|
| <b>Standard Arm</b> | 7726DASSS    | Satin Stainless Steel    |
|                     | 7726DAPSS    | Polished Stainless Steel |
|                     | 7726DASIL    | Silver                   |
| <b>Hold-Open</b>    | 7726HDASSS   | Satin Stainless Steel    |
|                     | 7726HDAPSS   | Polished Stainless Steel |
|                     | 7726HDASIL   | Silver                   |

Other finishes available on request

## Standards and Compliance



The Lockwood 7726DA series closer has been successfully tested up to four hours (depending on type of doorset) on fire door assemblies in accordance with Australian Standard AS1905.1:2005, Part: Fire Resistant Door sets.

Note: Hold open option is not approved on any fire door.

# 7726SRDA Series Premium Range Surface Mounted Door Closer



The Slide Arm Series permit smoother opening by way of reducing power as the door opens. Ideally suited for schools, hospitals or doors where children, disabled or the aged may enter.

## Specifications

|                        |                                                                           |
|------------------------|---------------------------------------------------------------------------|
| <b>Power</b>           | EN adjustable 1 to 5.                                                     |
| <b>Back check (BC)</b> | Adjustable.                                                               |
| <b>Hold Open</b>       | Adjustable. Hold-open can be set at any angle up to 130° of opening.      |
| <b>Handing</b>         | Non-handed.<br>Suitable for left or right hand doors.                     |
| <b>Cover</b>           | Fully formed metal.                                                       |
| <b>Materials</b>       | Extruded aluminium body manufactured from high-performance silicon alloy. |
| <b>Mechanism</b>       | Rack and pinion design.                                                   |
| <b>Mounting</b>        | Regular, parallel and over-door mounting.                                 |
| <b>Valves</b>          | Adjustable closing and latching speed valves with overload protection.    |
| <b>Delayed Action</b>  | Adjustable.                                                               |

## Ordering Information

| Model            | Part Numbers | Finishes                 |
|------------------|--------------|--------------------------|
| <b>Slide Arm</b> | 7726SRDASSS  | Satin Stainless Steel    |
|                  | 7726SRDAPSS  | Polished Stainless Steel |
|                  | 7726SRDASIL  | Silver                   |

Other finishes available on request

## Standards and Compliance



The Lockwood 7726SRDA series closer has been successfully tested up to four hours (depending on type of doorset) on fire door assemblies in accordance with Australian Standard AS1905.1:2005, Part: Fire Resistant Door sets.

Note: Hold open option is not approved on any fire door.

# 7714DA Series Premium Range Surface Mounted Door Closer



Rack and pinion adjustable power door closer suitable for architectural and commercial applications.

## Specifications

|                        |                                                                           |
|------------------------|---------------------------------------------------------------------------|
| <b>Power</b>           | EN adjustable 1 to 4.                                                     |
| <b>Back check (BC)</b> | Adjustable.                                                               |
| <b>Hold Open</b>       | Adjustable. Hold-open can be set at any angle up to 150° of opening.      |
| <b>Handing</b>         | Non-handed.<br>Suitable for left or right hand doors.                     |
| <b>Cover</b>           | Fully formed metal.                                                       |
| <b>Materials</b>       | Extruded aluminium body manufactured from high-performance silicon alloy. |
| <b>Mechanism</b>       | Rack and pinion design.                                                   |
| <b>Mounting</b>        | Regular, parallel and over-door mounting.                                 |
| <b>Valves</b>          | Adjustable closing and latching speed valves with overload protection.    |
| <b>Delayed Action</b>  | Adjustable.                                                               |

## Ordering Information

| Model               | Part Numbers | Finishes                 |
|---------------------|--------------|--------------------------|
| <b>Standard Arm</b> | 7714DASSS    | Satin Stainless Steel    |
|                     | 7714DAPSS    | Polished Stainless Steel |
|                     | 7714DASIL    | Silver                   |
| <b>Hold-Open</b>    | 7714HDASSS   | Satin Stainless Steel    |
|                     | 7714HDAPSS   | Polished Stainless Steel |
|                     | 7714HDASIL   | Silver                   |

Other finishes available upon request

## Standards and Compliance



The Lockwood 7714DA series closer has been successfully tested up to four hours (depending on type of doorset) on fire door assemblies in accordance with Australian Standard AS1905.1:2005, Part: Fire Resistant Door sets.

Note: Hold open option is not approved on any fire door.

# 726 Series Door Closer



A range of adjustable power door closer units suitable for architectural and commercial applications.

## Specifications

|                        |                                                                           |
|------------------------|---------------------------------------------------------------------------|
| <b>Power</b>           | EN adjustable 2 to 6.                                                     |
| <b>Back check (BC)</b> | Adjustable.                                                               |
| <b>Hold Open</b>       | Adjustable. Hold-open can be set at any angle up to 150° of opening.      |
| <b>Handing</b>         | Non-handed.<br>Suitable for left or right hand doors.                     |
| <b>Cover</b>           | Clip-on.                                                                  |
| <b>Materials</b>       | Extruded aluminium body manufactured from high-performance silicon alloy. |
| <b>Mechanism</b>       | Rack and pinion design.                                                   |
| <b>Mounting</b>        | Regular, parallel and over-door mounting.                                 |
| <b>Valves</b>          | Adjustable closing and latching speed valves with overload protection.    |

## Ordering Information

| Model               | Part Numbers | Finishes                 |
|---------------------|--------------|--------------------------|
| <b>Standard Arm</b> | 726SSS       | Satin Stainless Steel    |
|                     | 726PSS       | Polished Stainless Steel |
|                     | 726SIL       | Silver                   |
| <b>Hold-Open</b>    | 726HSSS      | Satin Stainless Steel    |
|                     | 726HPSS      | Polished Stainless Steel |
|                     | 726HSIL      | Silver                   |

For formed cover with these finishes add:  
 7726-171 (SSS,PSS) option  
 726SIL + 726-171SSS = 726SSS

## Standards and Compliance



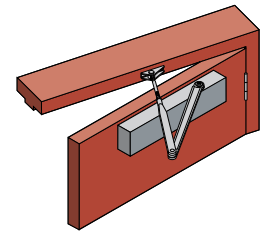
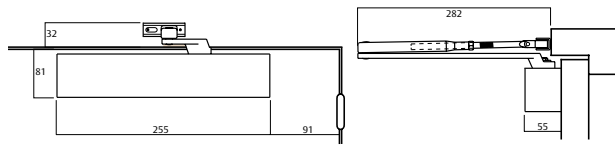
The Lockwood 726 series closer has been successfully tested up to four hours (depending on type of doorset) on fire door assemblies in accordance with Australian Standard AS1905.1:2005, Part: Fire Resistant Door sets.

Note: Hold open option is not approved on any fire door.

# 726 Series Door Closer

## 726 Standard Arm

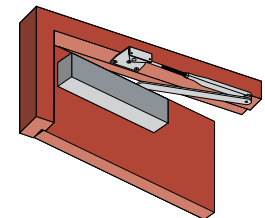
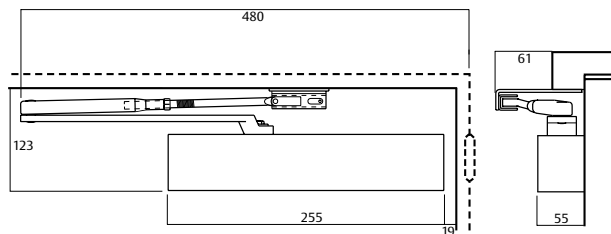
| Part Numbers | Description   |
|--------------|---------------|
| 726          | Non hold-open |
| 726H         | Hold-open     |



Closer installed on pull side of door. This mounting position permits opening of 180°.

## 726 Parallel Arm

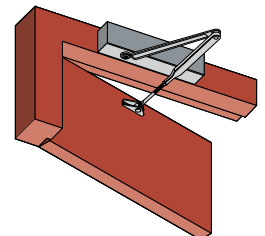
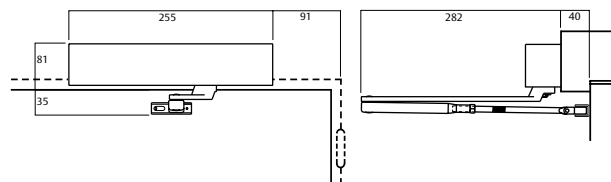
| Part Numbers | Description   |
|--------------|---------------|
| 726          | Non hold-open |
| 726H         | Hold-open     |



Closer installed on push side of door. This mounting position permits opening of 180°.

## 726 Over Door Mounting

| Part Numbers | Description   |
|--------------|---------------|
| 726          | Non hold-open |
| 726H         | Hold-open     |



Closer installed on push side of door and top rail where conditions do not allow parallel mounting. This mounting position permits opening of 180°.

# 726SR Series Slide Door Closer



The Slide Arm Series permit smoother opening by way of reducing power as the door opens. Ideally suited for schools, hospitals or doors where children, disabled or the aged may enter.

## Specifications

|                        |                                                                           |
|------------------------|---------------------------------------------------------------------------|
| <b>Power</b>           | EN adjustable 1 to 5.                                                     |
| <b>Back check (BC)</b> | Adjustable.                                                               |
| <b>Hold Open</b>       | Adjustable. Hold-open can be set at any angle up to 130° of opening.      |
| <b>Handing</b>         | Non-handed.<br>Suitable for left or right hand doors.                     |
| <b>Cover</b>           | Clip-on.                                                                  |
| <b>Materials</b>       | Extruded aluminium body manufactured from high-performance silicon alloy. |
| <b>Mechanism</b>       | Rack and pinion design.                                                   |
| <b>Mounting</b>        | Regular, parallel and over-door mounting.                                 |
| <b>Valves</b>          | Adjustable closing and latching speed valves with overload protection.    |

## Ordering Information

| Model            | Part Numbers | Finishes                 |
|------------------|--------------|--------------------------|
| <b>Slide Arm</b> | 726SRSSS     | Satin Stainless Steel    |
|                  | 726SRPSS     | Polished Stainless Steel |
|                  | 726SR SIL    | Silver                   |
|                  | 726SRGLD     | Gold                     |

For formed cover with these finishes add:  
 7726-171 (SSS,PSS,GLD) option  
 726SR SIL + 726-171SSS = 726SRSSS

## Standards and Compliance



The Lockwood 726SR series closer has been successfully tested upto four hours (depending on type of doorset) on fire door assemblies in accordance with Australian Standard AS1905.1:2005, Part: Fire Resistant Door sets.

Note: Hold open option is not approved on any fire door.



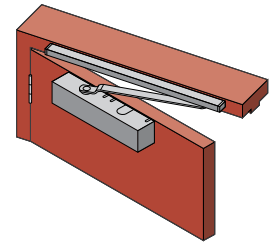
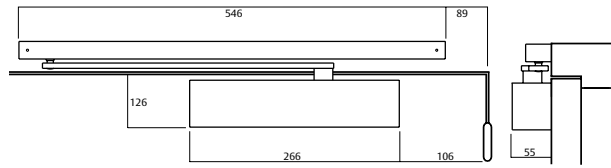
# 726SR Series Slide Door Closer

## 726SR Slide Arm Pull Side

### Part Numbers

726SR

Closer installed on pull side of door. This mounting position permits opening of 130°.

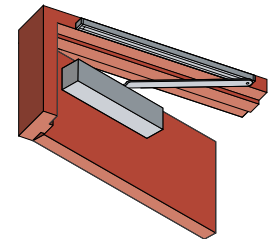
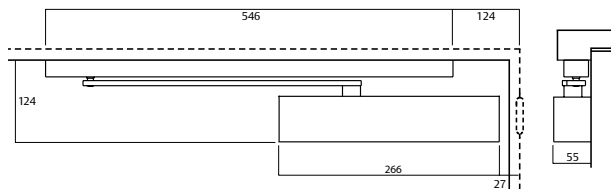


## 726SR Slide Arm Push Side

### Part Numbers

726SR

Closer installed on push side of door. This mounting position permits opening of 130°.

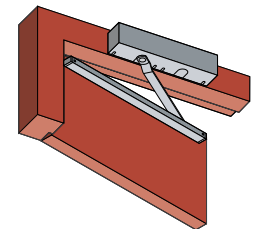
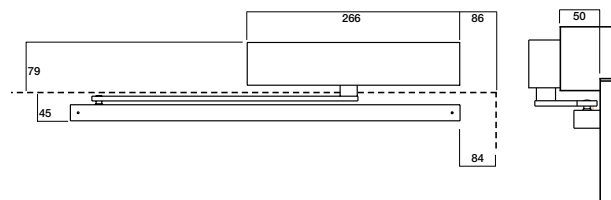


## 726SR Slide Arm Over Door Mounting Push Side

### Part Numbers

726SR

Closer installed on push side of door and top rail where conditions do not allow parallel mounting. This mounting position permits opening of 130°.



**king<sup>®</sup>**

ASSA ABLOY

# FLOOR SPRING

Safety, Security, Stability

## ST80



The global leader in door opening solutions

Samhwa Precision Co.,Ltd./Korea  
ASSA ABLOY Group Company

# ST80 series

Floor spring with adjustable closing force for large and very heavy doors.  
 Certified in compliance with EN 1154 Adjustable size 3~6 or fixed 4, 5, 6  
 Suitable for fire and smoke protection doors (No fire test conducted yet)  
 For double and single action door up to 300kg

## Characteristics

- | Closing from 175° in both door swing directions with hydraulic control from 170°.
- | Three thermodynamic valves for consistent performance.
- | Adjustable closing speed (175°~15°) and latching speed (15°~0°) from top regulating valves.
- | Adjustable hold-open or delay action angle 80° ~ 175°.
- | Cast iron body.
- | Universal cover plate in stainless steel.
- | Standard built-in Back check function.
- | Cement box in hot zinc plated.
- | Extended spindle.

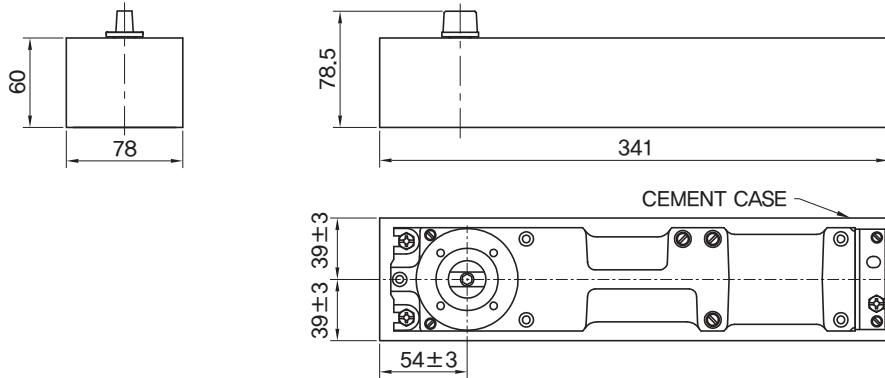
## The advantages at a glance

|                  |                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project planners | Extensive range of uses: Fire and smoke protection doors as well as standard doors. Variable hold open between 80°~175° or delay action.<br>Independent closing and latching valve for easy control.<br>Variety of available spindles: square Italian, square French, rectangular German.<br>Architectural finishes: coverplate in polished stainless steel, satin stainless steel, polished brass |
| Builders         | Universal for left/right handed and double action doors.<br>Overpressure relief valve to protect unit against abuse.<br>Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door. Meet door weight up to 300kgs.                                                                                                                  |
| Traders          | Reduced inventory costs due to modular product range.<br>One single product suitable for a large variety of mounting positions.<br>Complementary accessories available for the whole product range. Extensive interchangeable                                                                                                                                                                      |
| User             | Adjustable operating force to meet door construction requirements and user needs.<br>Easier door opening and improved accessibility due to Cam-Motion technology.<br>Backcheck feature offers optimum protection for doors and walls.<br>Independent closing and latching valve for easy control Variable hold open range                                                                          |

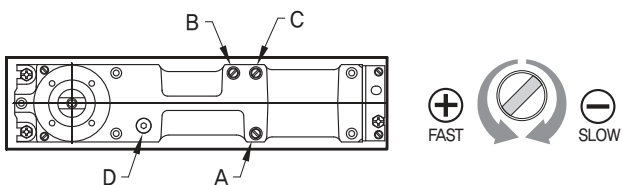
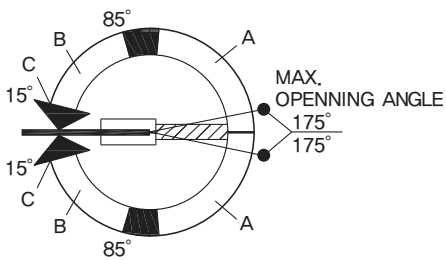
| Technical attributes                                                                          |            | ST80 |   |   | ST80P |
|-----------------------------------------------------------------------------------------------|------------|------|---|---|-------|
| Spring strength (EN)                                                                          |            | 4    | 5 | 6 | 3~6   |
| Spring strength adjustment                                                                    |            | –    | – | – | ●     |
| Standard and external doors                                                                   | ≤ 950mm    | –    | – | – | –     |
|                                                                                               | ≤ 1100mm   | ●    | – | – | ●     |
|                                                                                               | ≤ 1250mm   | –    | ● | – | ●     |
|                                                                                               | ≤ 1400mm   | –    | – | ● | ●     |
| Max. leaf weight (kg)                                                                         |            | 300  |   |   |       |
| Non-handed, suitable for                                                                      |            | ●    |   |   |       |
| Single and double action doors                                                                |            | ●    |   |   |       |
| Closing speed adjustable by valve                                                             | 175° ~ 85° | ●    |   |   |       |
|                                                                                               | 85° ~ 15°  | ●    |   |   |       |
|                                                                                               | 15° ~ 0°   | ●    |   |   |       |
| Backcheck, mechanical                                                                         |            | ●    |   |   |       |
| Delayed action adjustable by valve (selectable alternative to the hold-open feature)          |            | ●    |   |   |       |
| Hold-open                                                                                     | Adjustable | ●    |   |   |       |
| Weight (kg)                                                                                   |            | 9    |   |   |       |
| Dimensions in mm                                                                              | Length     | 341  |   |   |       |
|                                                                                               | Width      | 78   |   |   |       |
|                                                                                               | Height     | 60   |   |   |       |
| Floor spring tested to EN 1154                                                                |            | ●    | ○ | ○ | ●     |
| CE mark for building products (products with factory-fitted hold-open do not carry a CE mark) |            | –    | – | – | –     |
| ANSI 156.4 Grade 1                                                                            |            | ○    | – | – | ○     |

● : Yes    – : No    ○ : On going

## ST80



## Standard and optional functions



### Adjust Closing Speed

- ▮ VALVE "A" – controls closing speed from MAX. (OPENING - 85°)
- ▮ VALVE "B" – controls closing speed from approx. (85° ~ 15°)
- ▮ VALVE "C" – controls closing speed from approx. (15° ~ 0°)
- ▮ VALVE "D" – Adjustable closing force (EN3~6)

### BACK-CHECK

The integrated mechanical back-check function offers optimum protection for doors and wall

### DELAYED ACTION

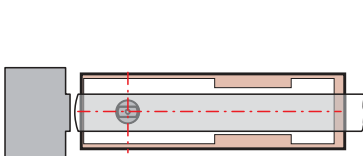
Turn valve "A" clockwise until desired delay time is obtained.

### HOLD OPEN

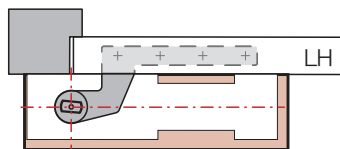
Turn valve "A" completely clockwise. Door will hold at any point beyond approx. 85°. Allow for approx. 4° fall away when considering hold open position.

To release door, manually pull door closed a few inches.

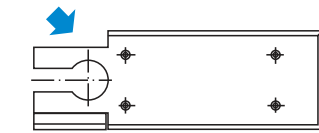
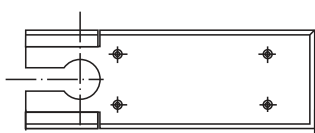
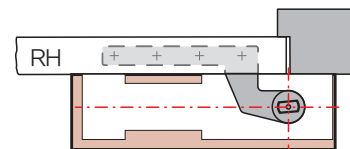
## Application and Installation



Double action door mounting



Single action door mounting



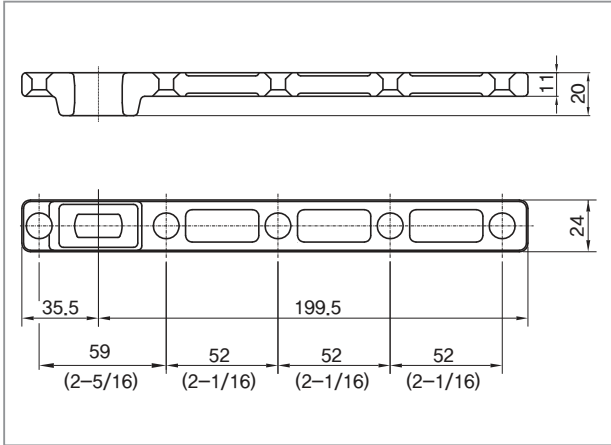
Application for LH offset pivoted door



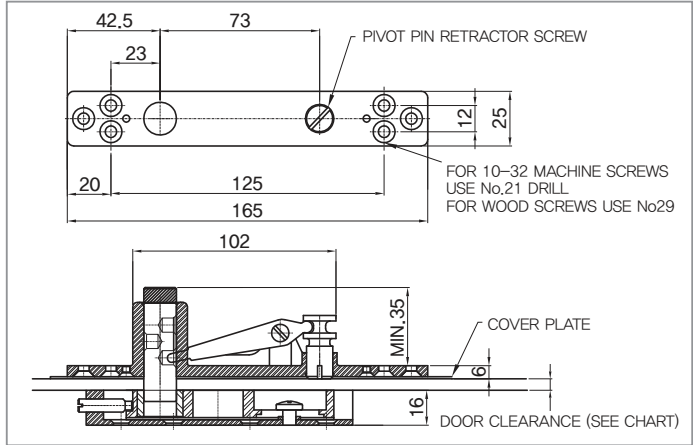
Application for RH offset pivoted door

Standard accessories

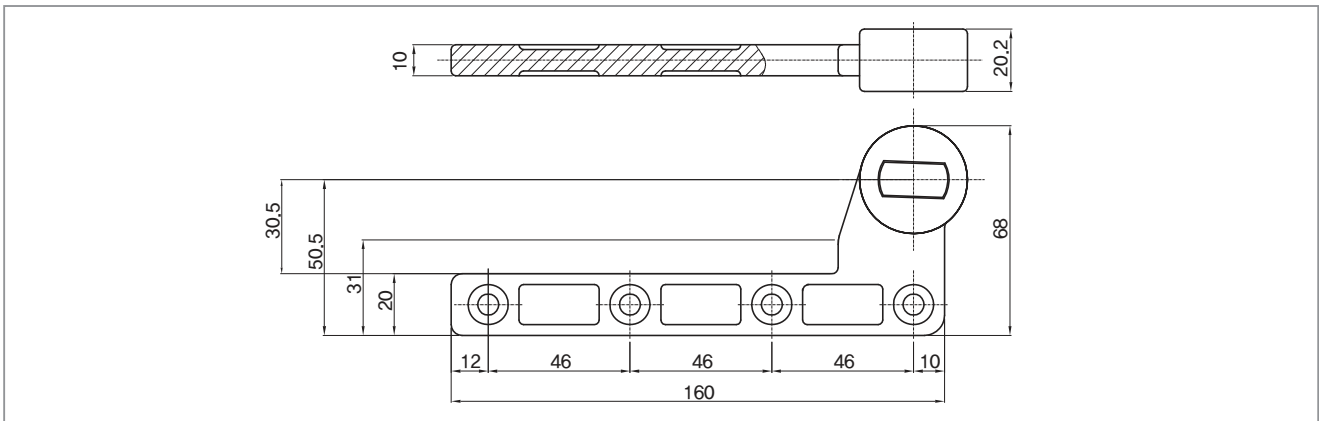
Standard bottom arm 8011



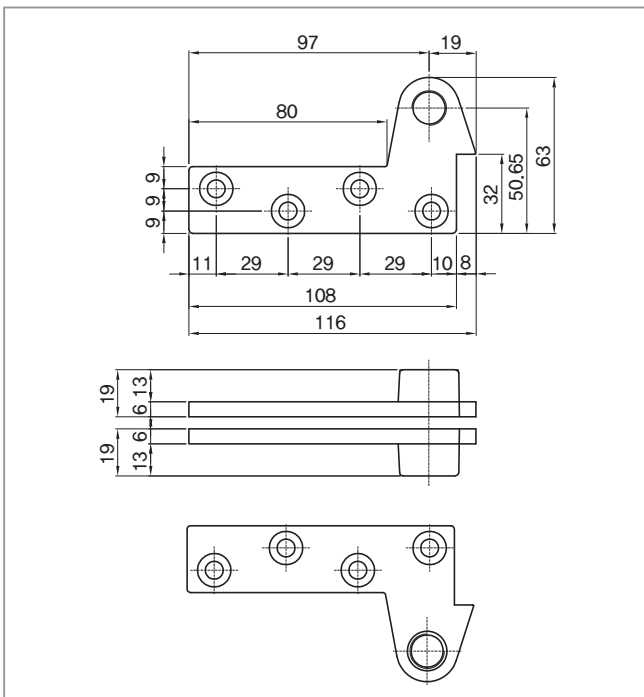
Standard top pivot 8012



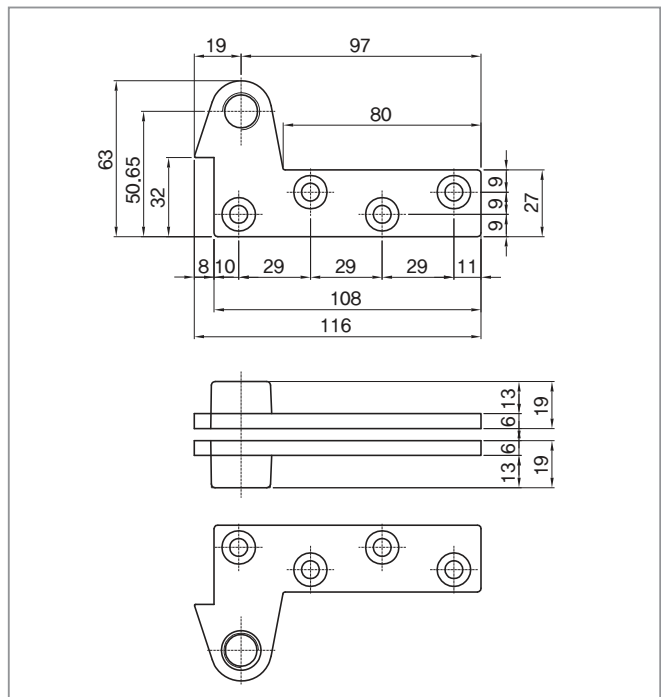
Offset arm (right & left) 8021



Offset top pivot (right) 8023

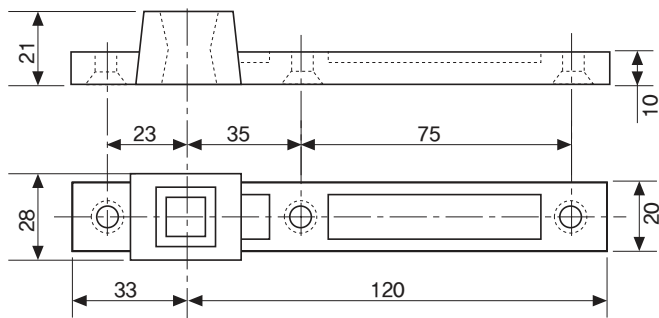
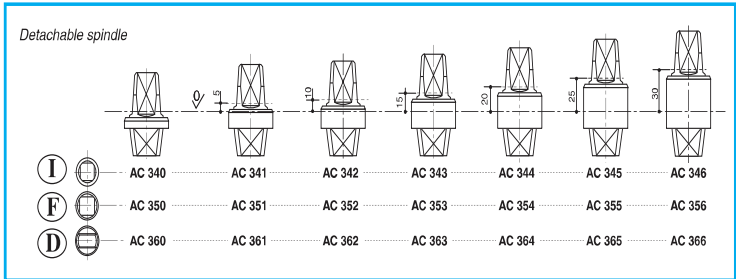
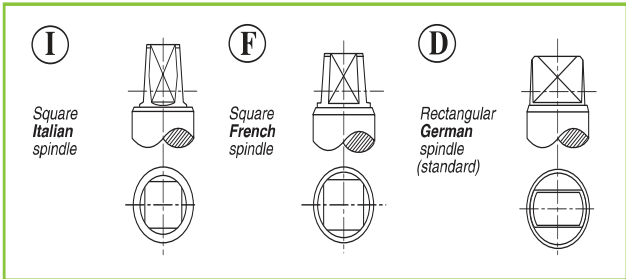


Offset top pivot (left) 8024



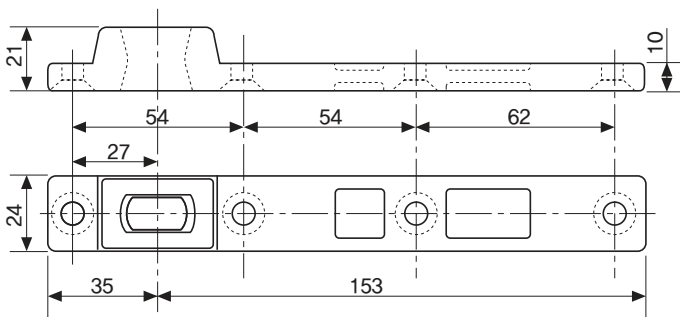
Other accessories

MAB TYPE



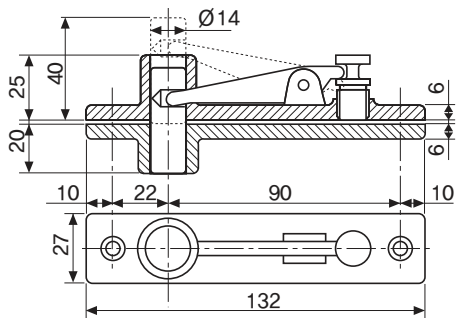
AC115

Reversible bottom arm in steel for double action doors.



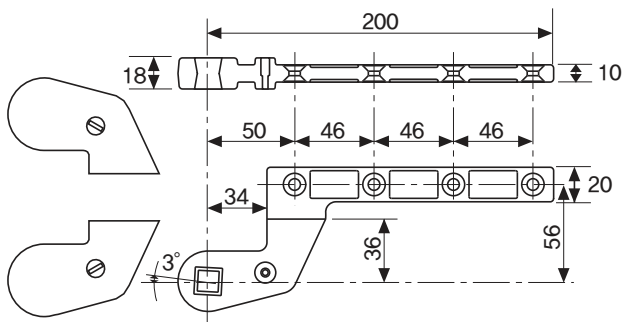
AC393

Reversible bottom arm in steel for double action doors.



AC8

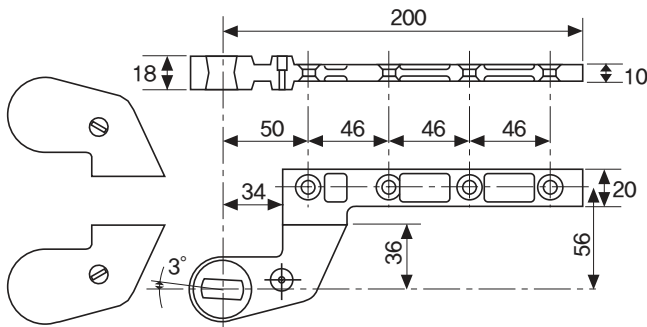
Double action top pivot.



AC583

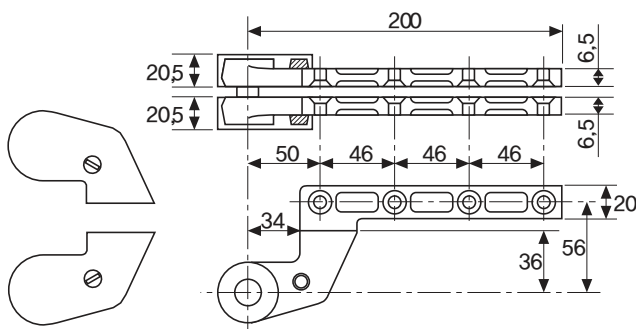
Right and left bottom arm in steel for single action doors, 36 mm offset. Square Italian spindle. Silver painted ABS covers.

Other accessories



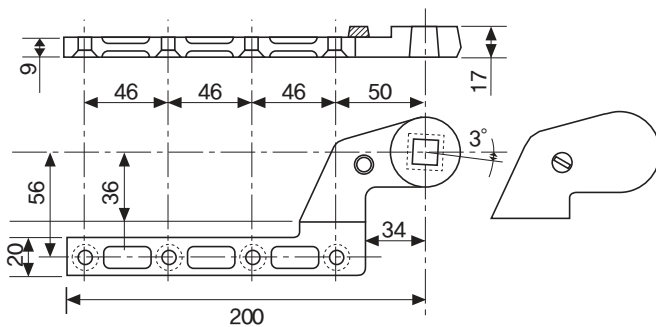
**AC392**

Right and left bottom arm in steel for single action doors, 36 mm off-set, Rectangular German socket. Silver painted ABS covers.



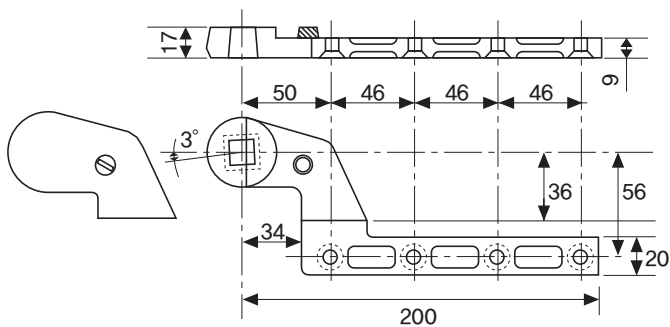
**AC384**

Double action top pivot in full steel 36 mm-off set, Silver painted ABS covers.



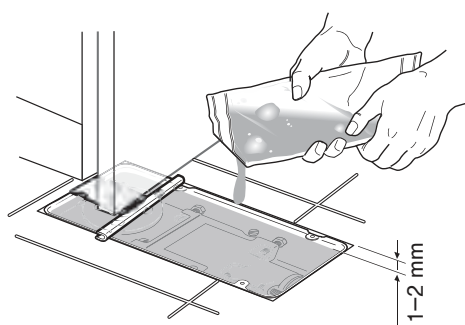
**AC373**

Right bottom arm in steel for single action doors, 36mm offset, Square French spindle. Silver painted ABS covers.



**AC374**

Left bottom arm in steel for single action doors, Square French spindle. Silver painted ABS cover.

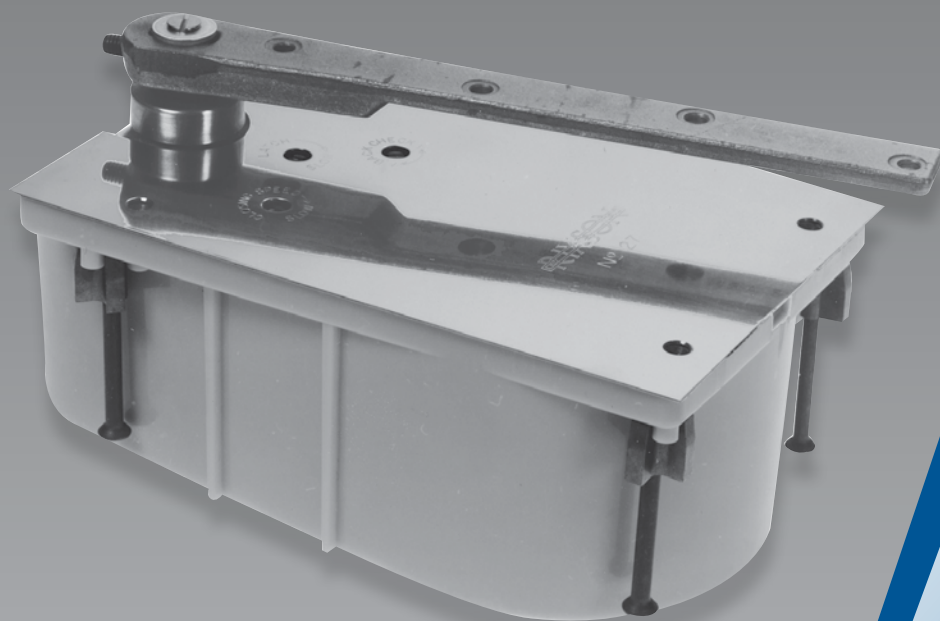


**AC612**

Sealing Compound for floor springs.

# Heavy-Duty Floor Closers

Complete Door Control for  
Exterior and Interior, High Traffic, Heavy  
Doors, Where Concealment is Desired



**RIXSON®**  
**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions



Floor closers provide the best mechanical means to support and control a door. They are designed to work with the laws of physics to provide long-lasting performance and reliability.

### The weight of the door is supported by bottom arm and floor

- Uses laws of gravity to its advantage
- Door swings with less resistance
- Heavier doors can be accommodated
- Reduced stress on frame
- Fasteners are in shear, not tension
- Eliminates door sag
- Vertically adjustable

### Heavy-duty, hardened, one piece steel spindles

- Designed to provide positive dead stop
- Thrust bearing supports vertical load
- Needle bearings for lateral forces
- Extra heavy-duty models also have an additional surface applied thrust bearing to handle heavier doors or doors that have very high traffic

### Bottom arm attached directly to closer spindle

- A mechanical advantage that increases efficiency insuring that ICC/ANSI A117.1 compliant, lower opening forces, will still close the door
- One to one ratio of door swing to spindle rotation makes control more precise
- Floor closers are more efficient than a regular arm surface closer

### Helical torsion spring

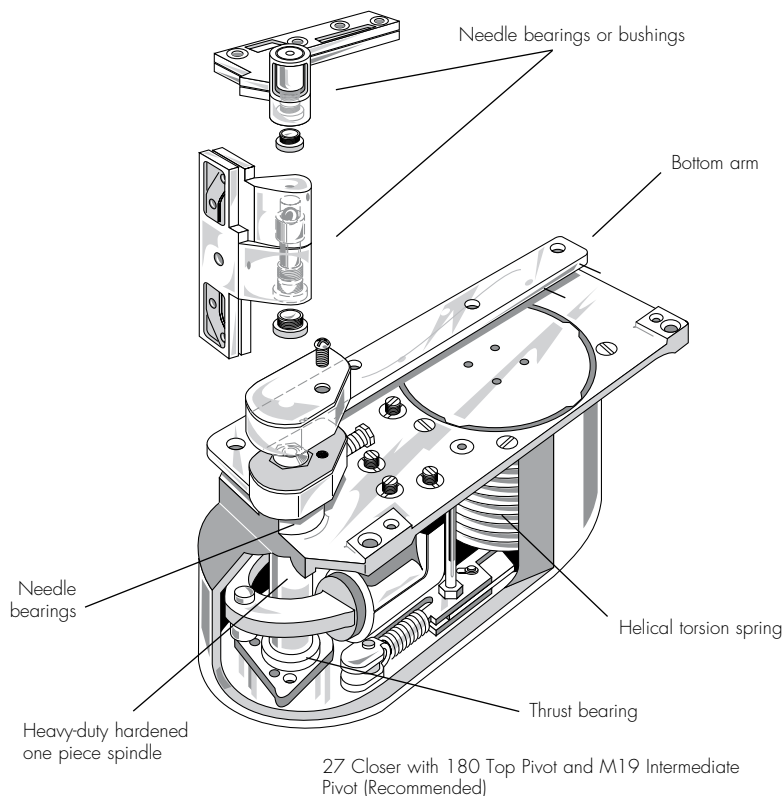
- Operates in same direction as door movement and contributes to even higher closer efficiency
- A torsion spring has a much longer life than standard compression springs

### Advantages of concealed floor closers

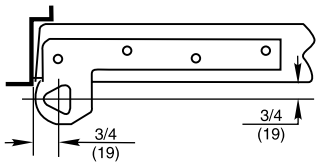
- Aesthetics – let the beauty of the door and its surroundings take center stage
- Vandal resistant – mechanism not exposed
- The solution for arch top doors – offset floor closers
- Both mechanical advantage and aesthetics – a concealed floor closer exclusive

### Many different models to choose from

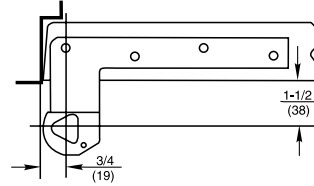
- Use standard product with a top pivot for the best efficiency
- Use a quick install (Q) model to facilitate easy closer removal
- Use extra heavy-duty (L & H) (L-offset) (H-center hung) models for higher traffic/lead lined or extremely heavy doors
- Use model HM with 3/4" offset hinges for hollow metal doors and frames prepared for 4-1/2" hinges
- Closers can be offset hung, center hung or independently hung, single or double acting (center hung only)



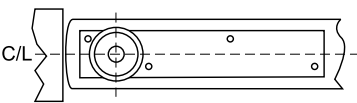
1. OFFSET VS. CENTER HUNG APPLICATION



**3/4" Offset**  
Pivot point located 3/4" from the heel edge of the door and 3/4" from face of door



**1-1/2" Offset**  
Pivot point located 3/4" from the heel edge of the door and 1-1/2" from face of door. Used on doors with cladding on face or trim on frame



**Center Hung**  
Pivot point centered in thickness of door. Distance from heel edge can vary 2-3/4" and up (Not for use on fire rated doors)

2. SIZE OF DOOR (WIDTH, HEIGHT, THICKNESS)

| DOOR MATERIAL                                  | DOOR THICKNESS    |        |        |
|------------------------------------------------|-------------------|--------|--------|
|                                                | 1-3/4"            | 2-1/4" | 3"     |
| Hollow Metal                                   | 6.5               | 7      | —      |
| Solid Core Wood                                | 7                 | 9      | 11.5   |
| Aluminum/Glass Storefront                      | 3.5               | 4      | —      |
| Bullet Resistant                               | 20                | 21     |        |
| MDF                                            | 7                 | 9      | 11.5   |
|                                                | GLASS THICKNESS   |        |        |
| TEMPERED GLASS                                 | 3/8"              | 1/2"   | 3/4"   |
|                                                | 5                 | 7      | 9.75   |
|                                                | LEAD THICKNESS    |        |        |
| LEAD LINING<br>(add to door material weight)   | 1/16"             | 1/8"   | 1/4"   |
|                                                | 5                 | 8      | 9.75   |
|                                                | CLADDING MATERIAL |        |        |
| 3/4" CLADDING<br>(add to door material weight) | Wood              | Stone  | Bronze |
|                                                | 3                 | 10.5   | 28     |

**Example: 3/0 X 7/0 X 1-3/4" WD X 1/4" Lead lining**  
Door: 21sq ft x 7lb./sq ft = 147lbs  
Lead Lining: 21sq ft x 9.75lb./sq ft = 204.75lbs  
Total Door weight = 351.75lbs

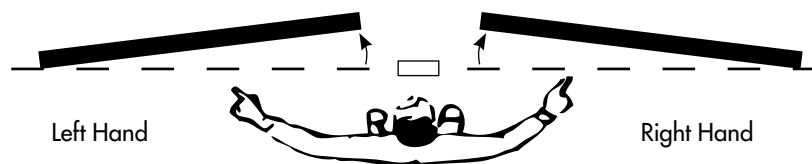
**Example: 3/6 X 8/0 X 1/2" Tempered Glass Door**  
Door: 28sq ft x 7lb./sq ft = 196lbs

For doors of other sizes consult factory

### 3. EXPECTED FREQUENCY OF DOOR OPENING

| Application                     | Daily | Yearly    |         |
|---------------------------------|-------|-----------|---------|
| Large department store entrance | 5,000 | 1,500,000 | High    |
| Large office building entrance  | 4,000 | 1,200,000 |         |
| Theater entrance                | 1,000 | 365,000   |         |
| School entrance                 | 1,250 | 225,000   |         |
| School restroom door            | 1,250 | 225,000   |         |
| Store or bank entrance          | 500   | 150,000   |         |
| Office building restroom door   | 400   | 118,000   |         |
|                                 |       |           |         |
| School corridor door            | 80    | 15,000    | Average |
| Office building corridor door   | 75    | 22,000    |         |
| Store restroom door             | 60    | 18,000    |         |
| Residential entrance door       | 40    | 15,000    |         |
|                                 |       |           |         |
| Residential restroom door       | 25    | 9,000     | Low     |
| Residential hallway door        | 10    | 3,600     |         |
| Residential closet door         | 6     | 2,200     |         |

#### How to Determine Hand of Door



Face a door swinging open away from you. If it opens to the right, it is right handed. If it opens to the left, it is left handed.

**Sealed Closer – Prefix SC**

This option for exterior doors or interior doors, with heavy exposure to water or cleaning solvents, protects the body. The closer body is placed in the cement case. A stainless steel cover plate is then gasketed and fastened to the cement case. This must be ordered with closer and cannot be ordered less the cement case.

**Delayed Action – Prefix DA**

After full open, permits door to remain ajar (at 70 degrees) for up to 40 seconds. Operates by separate valve and can be shut off if not needed. Not available on closers with hold open feature.

**Physically Handicapped – Prefix PH** 


To comply with ICC/ANSI A117.1 established by the Americans with Disabilities Act. PH prefix indicates 5 pounds of opening force, based at 30" from centerline of pivot. PH closers may not be used on labeled fire doors or exterior doors. Rixson accepts no responsibility for PH closers and door latching. Also, be advised that ADA guidelines DO NOT apply to fire rated openings or exterior doors.

**Wood Door – Prefix W**

When using a center hung product with the centering arm (e.g. 28, 30 or 40) a special plate and less obtrusive adjusting screws are needed for wood doors. This plate is reinforcement to the deep mortise required for that arm, protecting veneer.

**Fire Rated – Prefix F** 

Closer packages for fire rated doors (up to 3 hours) include a steel top pivot and must have additional steel intermediate pivots. These closers are non-hold open.

**Twenty Minute Label – Suffix -20** 

This UL rating is for 20 minute doors. Pivots are brass base material and include a visible label.

**8-1/2 Lbs. Opening Force – Prefix PH Suffix 8-1/2**

This is a lighter than normal opening force. Be aware that this may not be strong enough to close fire rated or exterior doors. Rixson accepts no responsibility for PH closers and door latching. Also, be advised that ADA guidelines DO NOT apply to fire rated openings or exterior doors.

**Less All Parts – Suffix LAP**

If a closer is needed for replacement, the arm, cover, cement case, top pivot and floor plate are omitted.

**Less Floor Plate – Suffix LFP**

When thresholds or cover pans are being used, the closer doesn't need the decorative floor plate.

**Less Cement Case – Suffix LCC**

For existing installations or when cement case has been sent earlier in construction. Closer will be packaged without the cement case.

**Less Top Pivot – Suffix LTP**

For unusual head conditions, where the top pivot cannot be used, the closer is shipped without the top pivot. For offset installations, an additional load bearing intermediate (side jamb) M190 pivot is required. All intermediate pivots for that opening should be M190's, not M19's

**Degree of Swing – Follows Model Number**

Single acting heavy-duty floor closers have a deadstop. This means that the door cannot go past a certain point. If ordered as a hold open closer, the hold open position is exactly the same as the deadstop. The degrees available are 85°, 90°, 95° or 105° (180° for model 27 only). It is recommended that the maximum degree of swing be ordered.

Double acting closers have a deadstop at 103° and are available with hold open options at 90° or 100°.

**Non Hold Open – Suffix N**

These closers do not hold the door open. This feature cannot be changed in the field.

**Automatic Hold Open – Suffix A**

These closers hold the door open. This feature cannot be changed in the field. Models 27-180, 30 & 40 only.

**Selective Hold Open – Suffix S**

These closers can be set to hold open or non-hold open. This is done via a screw control on the top of the closer. Available on Models 27 and 28 only.

**Hand- Suffix RH or LH**

All single acting floor closers are handed. All double acting floor closers (30, 40, H40) are non-handed.

### Door Thickness – Suffix 1-3/4, 2, 2-1/4, 2-1/2 or 3

When ordering L product for lead lined doors, the thickness of the door must be given. The purpose of the L product is to have screws spaced so that they straddle the lead in the center of the door. Also used when lead lining is under the skins of the door. Recommended for use on extra heavy or high traffic doors.

### Cold Weather Fluid – Suffix CWF

Cold weather fluid should be specified for exterior doors in consistently cold climates under 32° F for weeks at a time. The hydraulic fluid is of a lower viscosity to prevent sluggish closing. Cannot be used with the delayed action feature.

### Extended Spindle – Suffix Extra Length

Any special floor coverings, or severe door undercuts, will affect the spindle height. In these applications an extended spindle may be required. See product template to determine if an extended spindle is needed. Extended spindles available in 1/2" increments up to 2" longer than standard.

### 1-1/2" Offset – Suffix 1-1/2

Offset is the distance from the face of the door to the pivot point. Extended offsets should not be used unless there is cladding on the face of the door or there is trim to clear on the frame. 1-1/2" offset arms and pivots are for doors with cladding or trim that project 3/4" from the face of the door.

### Cover Pan (Terrazzo) – Suffix Part Number

Closers should always be accessible. They should never be buried beneath flooring materials. A cover pan sits on top of the closer and has the flooring material set in it. This way the sight line for the floor is consistent. Cover pans may require closers with longer spindles. See cover pan template to determine spindle length needed.

### Special Layouts – Suffix SPLO#

Unique installations or specially engineered products are called special layouts. These numbers must be assigned by the technical support department and they must be called out specifically, by their number, when ordered.

## CERTIFICATIONS



All Rixson® heavy-duty floor closers are in compliance with ANSI/BHMA A156.4 Standards. See individual products for sub sections.

## LIMITED WARRANTY

Rixson heavy-duty floor closers models 27/28 and 30/40 are warranted for 10 years against defect. The model 20 closer carries a 2 year warranty. See Rixson Price Book for specific details of the limited warranty.

## SPECIFICATION

Floor closers shall be heavy-duty model 27 (offset) or model 28 (center hung). All closers shall be handed. Choose appropriate functions and strengths to accommodate lead lining, extra high traffic, fire rating, independently hung or quick install models. These closers shall have separate and independent checking valves, to control latch speed, closing speed and adjustable hydraulic backcheck. All single acting closers shall have a built in dead stop feature. All closers shall have one piece spindle assembly. Extra heavy-duty closers shall have minimum of two thrust bearings and one needle bearing. Closers shall not have compression spring.

MODEL 27

**Application**

- Single Acting, Handed
- Exterior or Interior Doors
- Weight to 450 lbs.\*
- Door Width up to 4'0" (1219mm)



ANSI/C06041/C06051

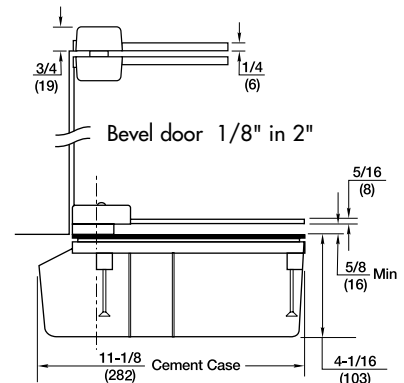
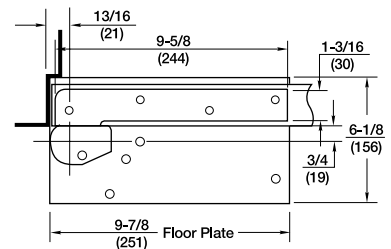
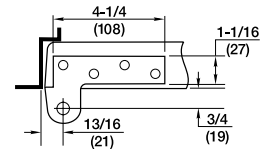
\* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

**Product Description & Features**

- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85°, 90°, 95°, 105°)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option-prefix "DA" (Non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix PH and suffix 8-1/2 lbs.)
- Cold weather fluid available – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Available 1-1/2" offset, for doors with 3/4" cladding or frames with applied molding, maximum door weight 250 lbs.
- Cylolac, rust-proof cement case
- Vertical door adjustment
- Standard top pivot: #180 included
- For arch top doors or applications when the 180 top pivot cannot be used, supply at least two each M190 load-bearing intermediate pivots, mounted together at the top of the straight vertical edge
- Intermediate pivot(s) required: M19 (order separately), see page 18
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies) prefix "F". This package will be supplied with a steel top pivot (F180) and a non-hold open closer. Intermediate pivot required: FM19 (order separately), see page 18
- UL listed closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

**Technical Information**

(Frame stop required)



# HEAVY-DUTY FLOOR CLOSERS

## 3/4" OFFSET HUNG

MODEL 27-180

### Application

- Single Acting, Handed
- Exterior or Interior Doors
- Weight to 450 lbs.\*
- Door Width up to 4'0" (1219mm)



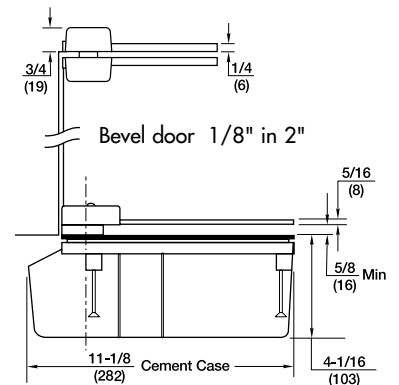
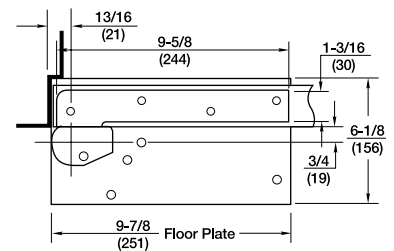
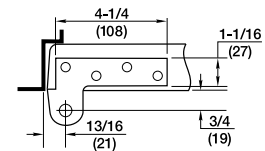
\* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

### Product Description & Features

- Maximum opening 180°, auxiliary floor or wall stop recommended
- Separate and independent valves for closing speed and latch speed
- Adjustable hydraulic backcheck
- Available non-hold open (N) or automatic hold open (A)
- Not available with delayed action (DA)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- Cold weather option – specify "CWF"
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Available 1-1/2" offset, for doors with 3/4" cladding or frames with applied molding, maximum door weight 250 lbs.
- Cylolac, rustproof cement case
- Vertical door adjustment
- Standard top pivot: #180 included
- For arch top doors or applications where a 180 top pivot cannot be used, supply at least two each M190 load-bearing intermediate pivots, mounted together at the top of the vertical edge
- Intermediate pivot(s) required: M19 (order separately), see page 18
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies) prefix "F". This package will be supplied with a steel top pivot (F180) and a non-hold open closer. Intermediate pivot required: FM19 (order separately), see page 18
- UL labeled closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

### Technical Information

(Frame stop required)



MODEL L27-180

**Application**

- Single Acting, Handed
- Exterior or Interior Doors
- Lead-Lined/Heavy/High Traffic Doors
- Weight to 1500 lbs.\*
- Door Width up to 4'0" (1219mm)



ANSI/C06071

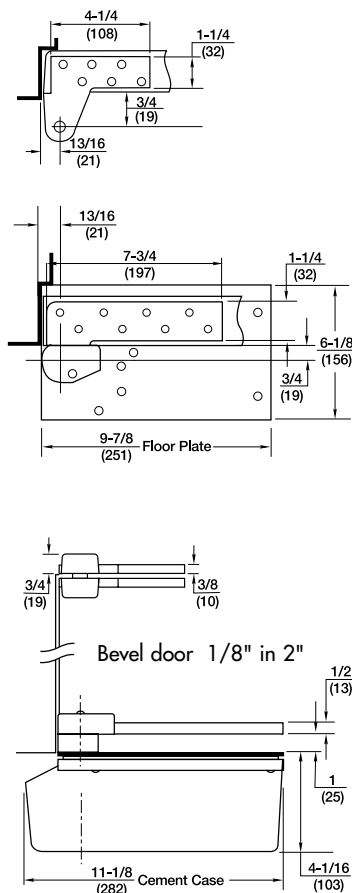
**Product Description & Features**

Heavy-duty bottom arm and top pivot with screw holes spaced to straddle lead lining, or for extra heavy or very high traffic doors.

- Available for the following lead-lined door thicknesses: 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (63mm) or 3" (76mm)
- Additional thrust bearing for greater load capacity
- Built-in positive dead stop prevents door from swinging beyond 180° only
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or automatic hold open (A) at 180°
- Delayed action option – prefix "DA" (non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix PH and suffix 8-1/2 lbs.)
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- For extended offsets, consult factory
- Cast iron cement case
- Vertical door adjustment
- Standard top pivot: L180 included
- For arch top doors or applications where a L180 top pivot cannot be used, supply at least two each ML19 load bearing intermediate pivots, mounted together at the top of the vertical edge
- Intermediate pivot(s) required: ML19 (order separately), see page 19
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies) prefix "F". This package will be supplied with steel top pivot (FL180) and non-hold open closer. Furnish intermediate pivot FML19, order separately, see page 19. Note: UL listing for 1-3/4" thick doors only.
- UL labeled closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

**Technical Information**

(Frame stop required)





# HEAVY-DUTY FLOOR CLOSERS CENTER HUNG SINGLE ACTING

**RIXSON®**  
**ASSA ABLOY**

## MODEL 28

### Application

- Single Acting, Handed
- Exterior or Interior Doors
- Weight to 350 lbs.
- Centering Arm
- Sizes up to 4'0" x 8'6"\*  
(1219 x 2591mm)



ANSI/C06021

\* For doors taller than 8'6"  
use top pivot # 345 in lieu  
of 340

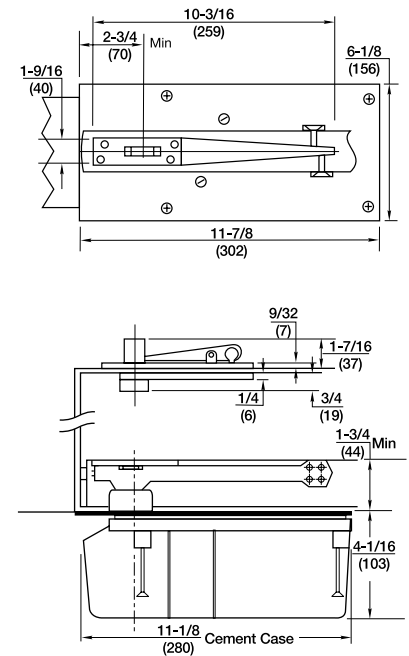
### Product Description & Features

Centering arm with adjusting screws in face of door

- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85°, 90°, 95° or 105°)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA" (non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix 8-1/2 lbs.)
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Arm reinforcement bracket for wood doors - prefix W
- Cylolac, rustproof cement case
- Standard top pivot: #340 included
- Not allowed for fire rated doors
- Frame stop required on the header at the lock side. If not supplied by frame manufacturer, recommend use of 60131 (see Door Control Accessories page 8).
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

### Technical Information

(Frame stop required at lock edge)



Pivot edge of door  
must be radiused.

MODEL H28

**Application**

- Single Acting, Handed
- Exterior or Interior Doors
- Extra Heavy High Traffic Doors
- Weight to 1000 lbs.
- Sizes up to 4'0" x 8'6"\*  
(1219 x 2591mm)



ANSI/CO6061

\* For doors taller than 8'6"  
use top pivot #H345 in lieu  
of H340

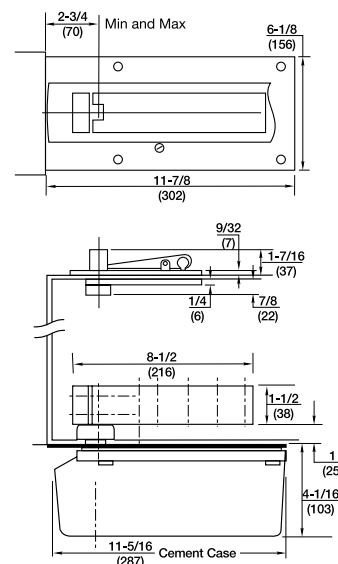
**Product Description & Features**

For high traffic or extra heavy doors (2" min. thickness)

- Additional thrust bearing for greater load capacity
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85, 90, 95 or 105°)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA" (non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Cast iron cement case
- Standard top pivot: H340 included
- Not allowed for fire rated doors
- Frame stop required at header on lock side. If not supplied by frame manufacturer, recommend use of 60131 (see Door Control Accessories page 8).
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

**Technical Information**

(Frame stop required at lock edge)



Pivot edge of door  
must be radiused.

MODEL H28 X 587 ARM

**Application**

- Side Load Arm

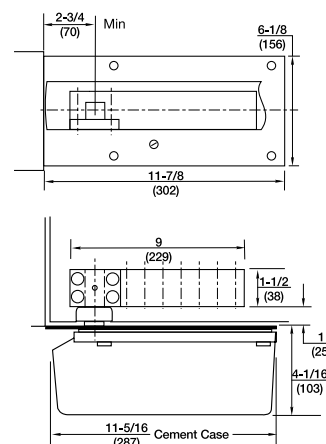


**Product Description & Features**

Identical to Model H28 except:

- Special side load arm for 1-3/4" thick doors
- Allows pivot point to be moved away from pivot edge of door – minimum 2-3/4" backset

**Technical Information**



# HEAVY-DUTY FLOOR CLOSERS CENTER HUNG SINGLE ACTING

## MODEL EH28

### Application

- Single Acting, Handed
- Interior or Exterior Doors
- Floor Closer for Power Transfer
- Weight to 500 lbs.
- Sizes up to 4'0" x 8'6" \*  
(1219 x 2591mm)



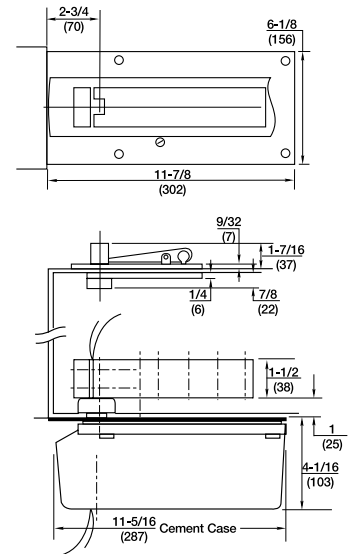
\* For doors taller than 8'6" use top pivot H345 in lieu of H340

### Product Description & Features

- Provides power transfer through closer spindle. Low voltage, Class II wiring (2 wire, 18 gauge only)
- 2" min. door thickness
- Additional thrust bearing for greater load capacity
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85°, 90°, 95° or 105°)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA"
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Cast iron cement case
- Standard top pivot: H340 included
- Not allowed for fire rated doors
- Frame stop required on header on lock side. If not supplied by frame manufacturer, recommend use of 60131 (see Door Control Accessories page 8)
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

### Technical Information

(Frame stop required at lock edge)



Not available with Electrolynx®

Pivot edge of door must be radiused.

## MODEL EH28 X 587 ARM

### Application

- Side Load Arm
- Single Acting, Handed
- Interior or Exterior Doors
- Floor Closer for Power Transfer
- Weight to 500 lbs.
- Sizes up to 4'0" x 8'6" \*  
(1219 x 2591mm)\*

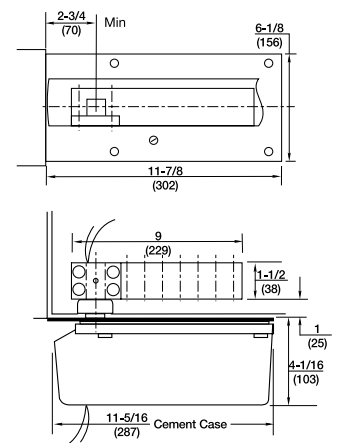


### Product Description & Features

Identical to Model EH28 except:

- Special side load arm for 1-3/4" thick doors
- Allows pivot point to be moved away from pivot edge of door – minimum 2-3/4" backset

### Technical Information



# Mechanical Lock

ASSA ABLOY

The global leader in  
door opening solutions





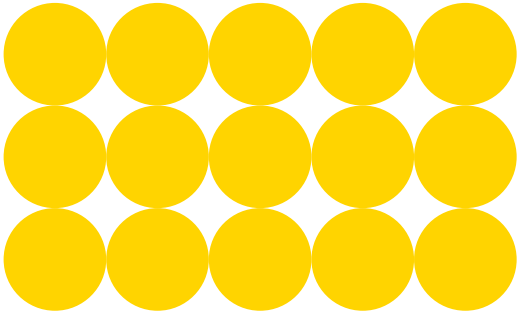
The world's favorite lock



# 5000 Series Mortise Locks



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| Features and Specifications | 3   |
| Product Limiting Dimensions | 4   |
| Lock Functionality          | 5-6 |
| Product Classifications     | 7   |
| How to Order                | 7   |

# 5000 Series Mortise Locks

A range of Yale Mortise Locks consists of various functions to meet most security and locking requirements.

## Features and Specifications

### Standards

- Complies to EN12209:2003 Grade 3
- Fire Safety Standard EN1634-1

### Strength & Durability

- Suit for 30 minutes and 60 minutes Fire Doors

### Backset

- 60mm

### Centers

- 72mm as standard  
78mm for Privacy Lock Case

### Spindle Size

- 8mm X 8mm

### Door Thickness

- Standard offer Door Thickness range 35mm - 50mm.  
Other Door Thickness range upon request

### Handing

- Easily Reversible design without opening lock case.  
Nightlatch & Panic Proof Sashlock with non-handed design.

### Materials

- Zinc Plated Steel Lock Case; Stainless Steel Latchbolt, Deadbolt, Forend & Strike (Square or Radius Available)

### Fixing/Pitching

- Full concealed mortise lock.



## Application

Yale 5000 Series Mortise Lock is suitable for Fire Doors in Commercial / Public Buildings.

This innovative mortise lock range, features a non handed design which is easy to install and suitable for new and most retrofit applications.

## Product Range

Various locking function selection easily reversible and non-handed designs makes this mortise lock versatile for most doors. A wide selection of door furniture options are available to suit Yale Mortise Lock series.

Refer to Door Furniture Section of your Yale Catalogue.

## Deadbolt

20mm throw on a single turn of key or thumbturn.

## Standard Finishes

Forend and Strike in Satin Stainless Steel (SS) or Polished Stainless Steel (PS)

## Locking Functions

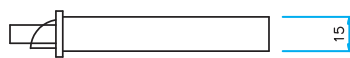
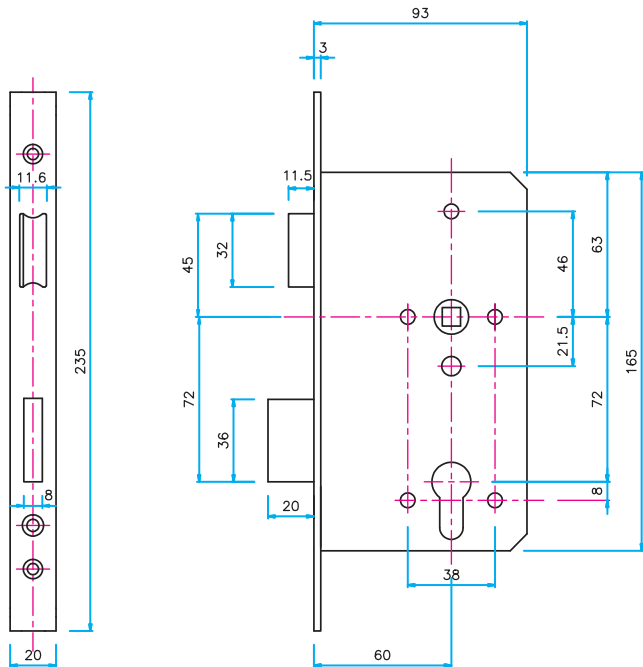
- Passage Latch
- Privacy Lock Case
- Entrance (Sashlock) Lock Case
- Deadbolt Lock Case
- Nightlatch Lock Case
- Panic Proof Sashlock



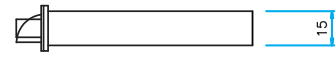
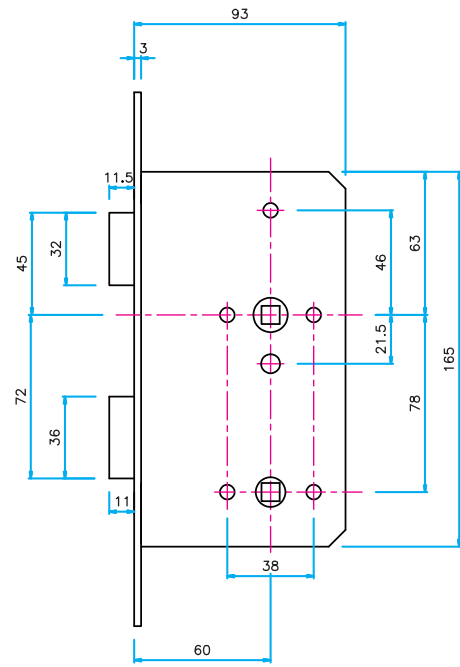
# Mortise Locks

## Product Limiting Dimensions

### Lock Case

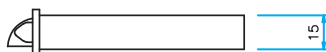
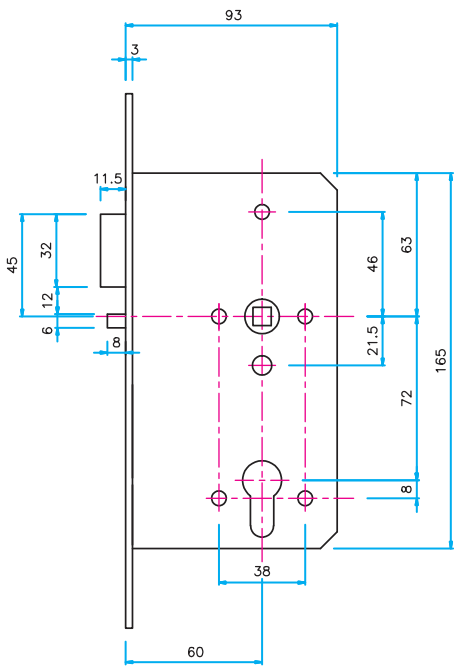


Standard



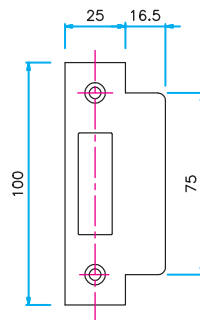
5008 Privacy

### Lock Case



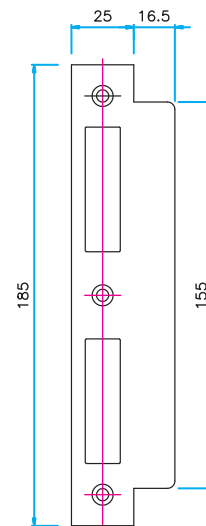
5006 Nightlatch

### Strikes for different functions



5001 Passage

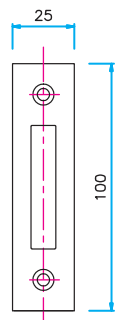
5006 Nightlatch



5008 Privacy

5003 Entrance Sashlock

500AE Panic Proof Sashlock



5004 Deadbolt

All dimensions are in mm

## Lock Functionality

### Passage

**Lock case:**

5001

**Finish:**

SS - Satin Stainless Steel

PS - Polished Stainless Steel

**Description:**

Yale Euro Mortise Lock

Backset: 60mm

Door thickness: 35mm to 50mm

**Outside**

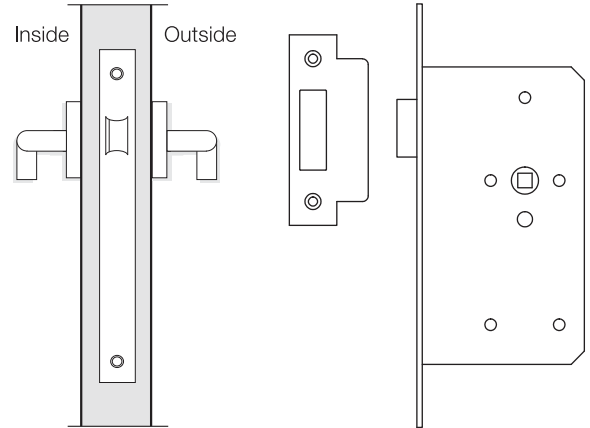
- Latchbolt operated by lever all the times

**Inside**

- Latchbolt operated by lever all the times

**Product Classification**

3X810F-B020



| Lock case | Face plate |                       | Finish |                          |
|-----------|------------|-----------------------|--------|--------------------------|
| 5001      | S          | Standard, Square Ends | SS     | Satin Stainless Steel    |
|           | R          | Optional, Round Ends  | PS     | Polished Stainless Steel |

### Privacy

**Lock case:**

5008

**Finish:**

SS - Satin Stainless Steel

PS - Polished Stainless Steel

**Description:**

Yale Euro Mortise Lock

Backset: 60mm

C to C: 78mm

Door thickness: 35mm to 50mm

**Outside**

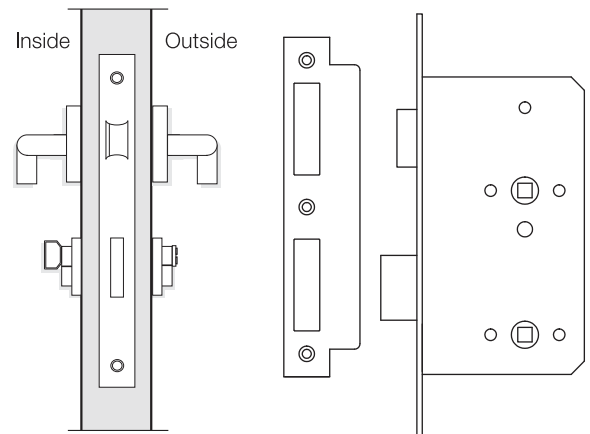
- Latchbolt operated by lever
- Deadbolt operated by emergency release with coin

**Inside**

- Deadbolt operated by thumbturn

**Product Classification**

3X810F-BG20



| Lock case | Face plate |                       | Finish |                          |
|-----------|------------|-----------------------|--------|--------------------------|
| 5008      | S          | Standard, Square Ends | SS     | Satin Stainless Steel    |
|           | R          | Optional, Round Ends  | PS     | Polished Stainless Steel |

### Entrance (Sashlock)

**Lock case:**

5003

**Finish:**

SS - Satin Stainless Steel

PS - Polished Stainless Steel

**Description:**

Yale Euro Mortise Lock

Backset: 60mm

C to C: 72mm

Door thickness: 35mm to 50mm

**Outside**

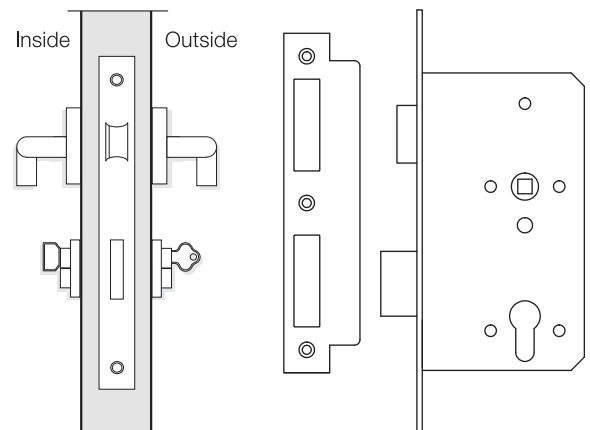
- Latchbolt operated by lever or key cylinder
- Deadbolt operated by key cylinder

**Inside**

- Latchbolt and deadbolt operated by thumbturn
- Latchbolt operated by lever

**Product Classification**

3X810F3BA20



| Lock case | Face plate |                       | Finish |                          |
|-----------|------------|-----------------------|--------|--------------------------|
| 5003      | S          | Standard, Square Ends | SS     | Satin Stainless Steel    |
|           | R          | Optional, Round Ends  | PS     | Polished Stainless Steel |

# Mortise Locks

## Lock Functionality

### Deadbolt

**Lock case:**

5004

**Finish:**

SS - Satin Stainless Steel  
PS - Polished Stainless Steel

**Description:**

Yale Euro Mortise Lock  
Backset: 60mm  
C to C: 72mm  
Door thickness: 35mm to 50mm

**Outside**

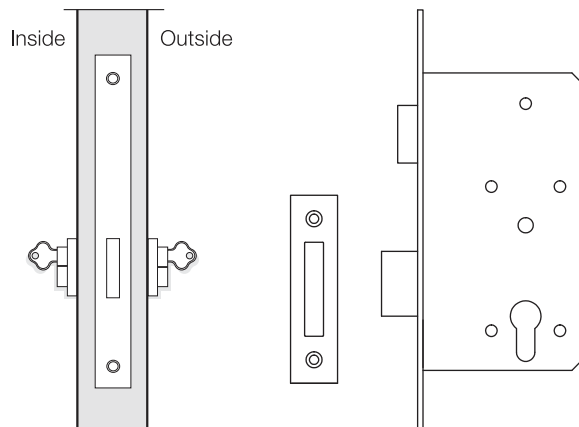
- Deadbolt operated by key cylinder

**Inside**

- Deadbolt operated by key cylinder or thumbturn

**Product Classification**

3X810F3BA00



| Lock case | Face plate |                       | Finish |                          |
|-----------|------------|-----------------------|--------|--------------------------|
| 5004      | S          | Standard, Square Ends | SS     | Satin Stainless Steel    |
|           | R          | Optional, Round Ends  | PS     | Polished Stainless Steel |

### Nightlatch

**Lock case:**

5006

**Finish:**

SS - Satin Stainless Steel  
PS - Polished Stainless Steel

**Description:**

Yale Euro Mortise Lock  
Backset: 60mm  
C to C: 72mm  
Door thickness: 35mm to 50mm

**Outside**

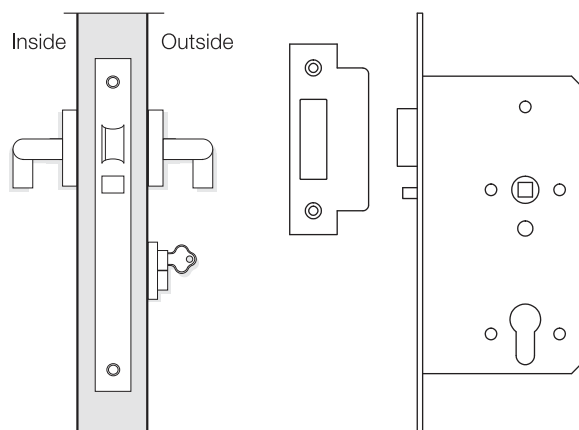
- Latchbolt operated by key cylinder
- Rigid handle outside

**Inside**

- Unlocking all the times
- Internal lever always free

**Product Classification**

3X810F1BB20



| Lock case | Face plate |                       | Finish |                          |
|-----------|------------|-----------------------|--------|--------------------------|
| 5006      | S          | Standard, Square Ends | SS     | Satin Stainless Steel    |
|           | R          | Optional, Round Ends  | PS     | Polished Stainless Steel |

### Panic Proof Sashlock

**Lock case:**

500AE

**Finish:**

SS - Satin Stainless Steel  
PS - Polished Stainless Steel

**Description:**

Yale Euro Mortise Lock  
Backset: 60mm  
C to C: 72mm  
Door thickness: 35mm to 50mm

**Outside**

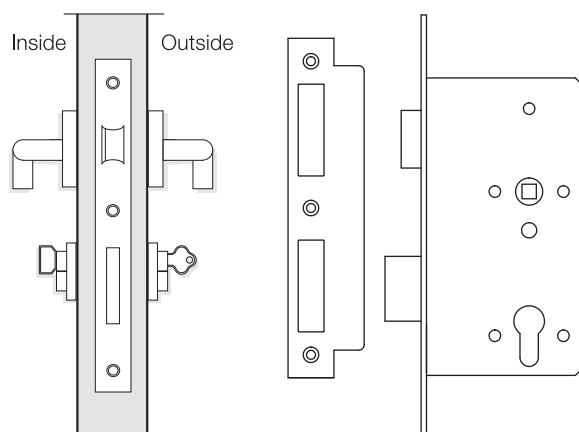
- Latchbolt operated by lever or key cylinder
- Deadbolt operated by key cylinder

**Inside**

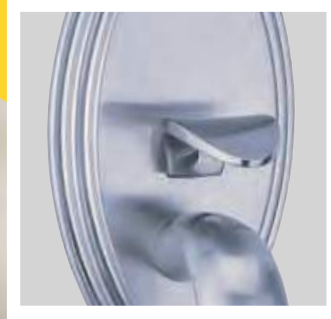
- Latchbolt and deadbolt operated by lever all the times
- Latchbolt and deadbolt operated by thumbturn

**Product Classification**

3X810F3BA20



| Lock case | Face plate |                       | Finish |                          |
|-----------|------------|-----------------------|--------|--------------------------|
| 500AE     | S          | Standard, Square Ends | SS     | Satin Stainless Steel    |
|           | R          | Optional, Round Ends  | PS     | Polished Stainless Steel |



## M8700 SERIES ANSI Mortise Handleset



The world's favorite lock

An ASSA ABLOY Group brand

ASSA ABLOY

# M8700 General Introduction

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With its stylish trim designs and sophisticated locking mechanism, Yale M8700 series ANSI Grade 2 Entrance Handleset helps securing and protecting your home. The stainless steel mortise lock case provides the highest level of key-operated security and represent the industry standard of quality. The elegant trim designs can match with any modern home interior design.

It is ideal for doors with Thickness of 45mm to 55mm (also available on application to suit doors 40mm to 75mm thick) and standard Backset 70mm (2 3/4").

- Exceptional high quality ANSI grade 2 stainless steel mortise lock case
- More than 800,000 times lifecycle tested
- Forged solid brass entrance handlesets (Classic and Elegance Series)
- Various series of handlesets design
- Most of the trims and function design have been patented in the PR China and Hong Kong
- High quality PVD finish provides lifetime protection from corrosion and tarnish
- Toggle at lock front can temporarily unlock the exterior push button for convenience
- Anti-panic function for emergency egress. Turning interior knob retracts the latchbolt and deadbolt simultaneously while exterior push button remains locked.

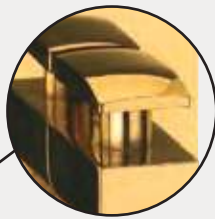
# Special Features

## 1 Patented Escutcheon & Handle Style Design



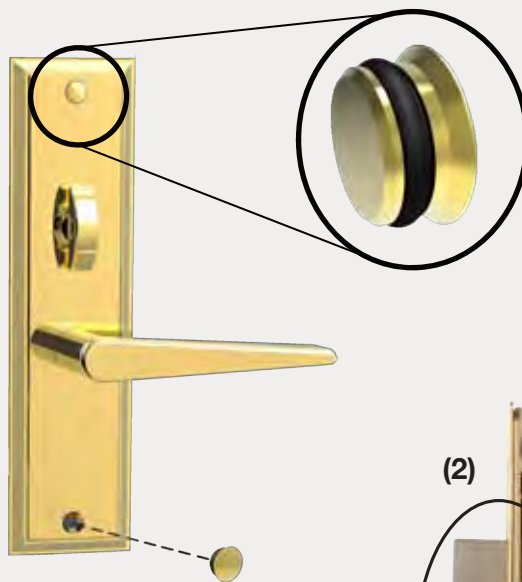
## 2 Patented Push Button Design

Innovative square form push button design (patented, on D Handleset design)



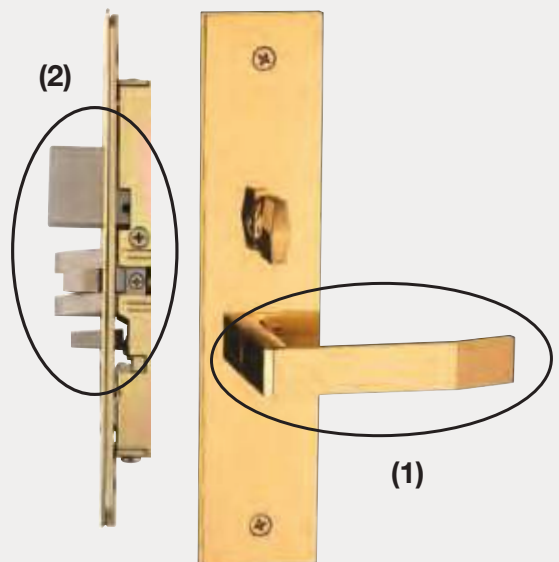
## 3 Novel Screw Cover Design

Cover up the screws so as to enhance the sense of art and give extraordinary cosmetic expression (on Sensation Series Handleset design)



## 4 Patented Anti-panic Function

The latchbolt & deabolt (2) will retract simultaneously by turning the interior lever (1) (patented).





# Exquisite

Classical designs make a bold statement to any door.

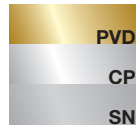
# Classic Series



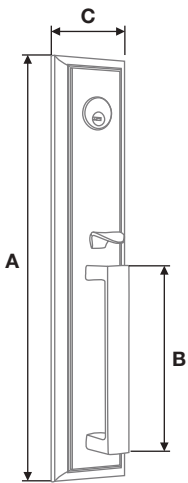
**M8773 AA**



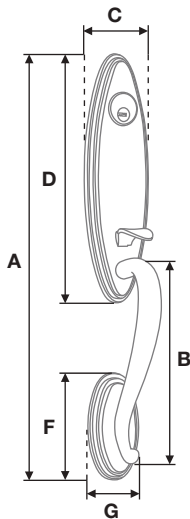
**M8773 BB**



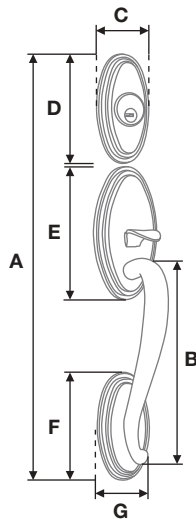
**M8773 BC**



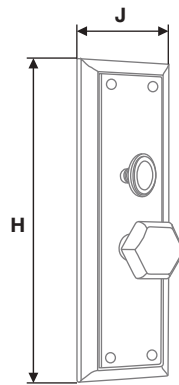
Front Plate Diagram for AA



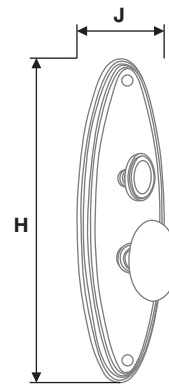
Front Plate Diagram for BB



Front Plate Diagram for BC



Back Plate Diagram for AA



Back Plate Diagram for BB, BC

| Model | Dimension (mm) |     |    |     |     |     |    |     |    |
|-------|----------------|-----|----|-----|-----|-----|----|-----|----|
|       | A              | B   | C  | D   | E   | F   | G  | H   | J  |
| AA    | 445            | 190 | 86 | -   | -   | -   | -  | 280 | 86 |
| BB    | 435            | 210 | 75 | 255 | -   | 112 | 60 | 255 | 75 |
| BC    | 440            | 210 | 72 | 112 | 137 | 112 | 60 | 255 | 75 |

\*Escutcheon thickness : 20mm (AA) / 14mm (BB & BC)



# Classic Series



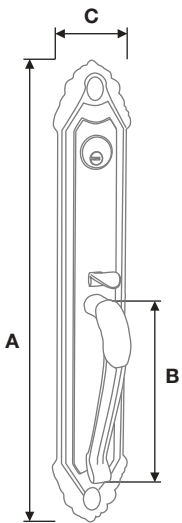
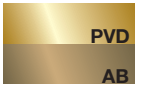
**M8773 G1**



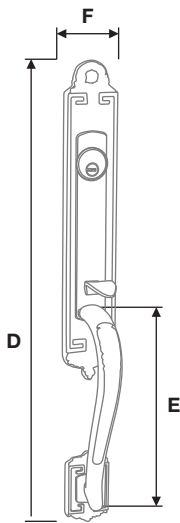
**M8773 H1**



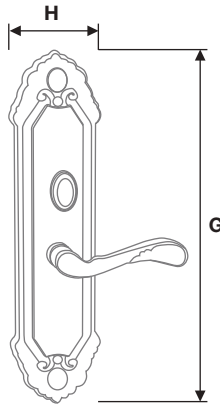
**M8773 H2**



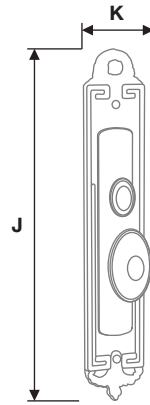
Front Plate Diagram for G1, J1



Front Plate Diagram for H1, H2



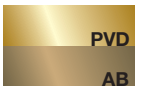
Back Plate Diagram for G1, H1, J1



Back Plate Diagram for H2



**M8773 J1**



| Model | Dimension (mm) |     |    |     |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E   | F  | G   | H  | J   | K  |
| G1    | 493            | 200 | 84 | -   | -   | -  | 330 | 84 | -   | -  |
| H1    | -              | -   | -  | 480 | 225 | 60 | 345 | 60 | -   | -  |
| H2    | -              | -   | -  | 480 | 225 | 60 | -   | -  | 345 | 60 |
| J1    | 538            | 215 | 77 | -   | -   | -  | 308 | 77 | -   | -  |

\*Escutcheon thickness : 13mm (G1) / 10mm (H1 & H2) / 11.5mm (J1)



# Stylish

Putting architectural concepts into hardware designs. All handles and trim designs have been patented in the PR China and in Hong Kong

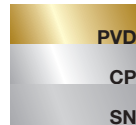
# D Handleset Design



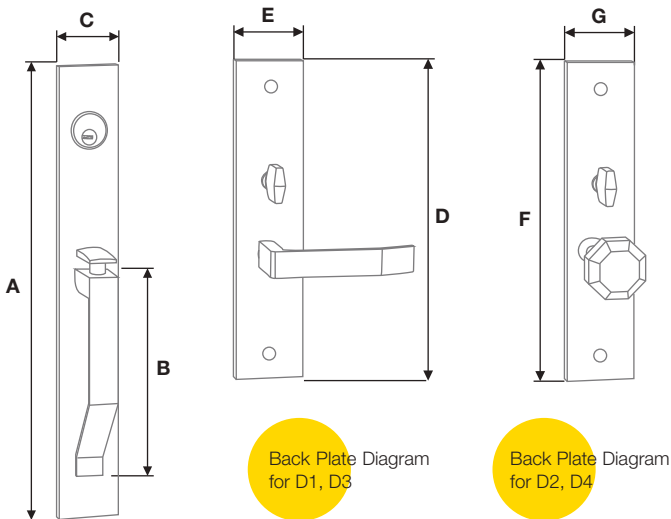
**M8773 D1**



**M8773 D2**



**M8773 D3**



Back Plate Diagram for D1, D3

Back Plate Diagram for D2, D4

Front Plate Diagram for D1, D2, D3, D4



**M8773 D4**

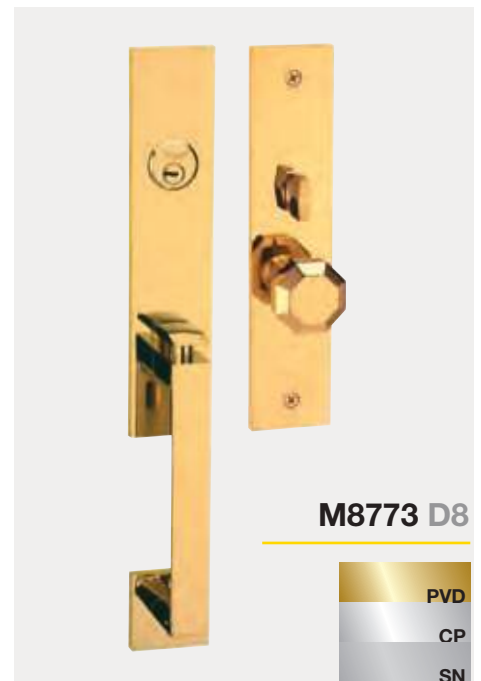
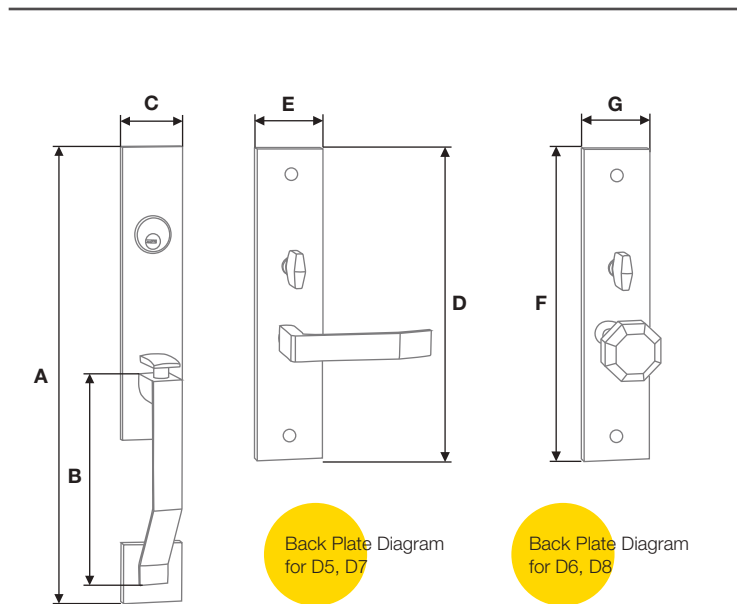
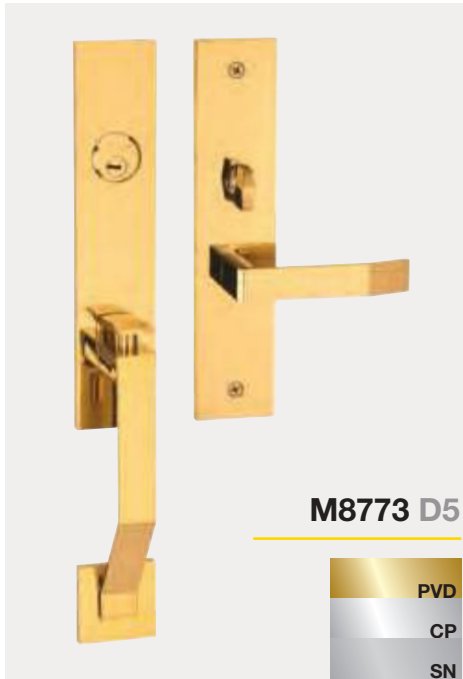


| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| D1    | 430            | 201 | 58 | 270 | 58 | -   | -  |
| D2    | 430            | 201 | 58 | -   | -  | 270 | 58 |
| D3    | 430            | 193 | 58 | 270 | 58 | -   | -  |
| D4    | 430            | 193 | 58 | -   | -  | 270 | 58 |

\*Escutcheon thickness : 10mm

## Design concept for D Handleset design

Inspired by the building, "The Hong Kong and Shanghai Banking Corporation Headquarter" (*Central, Hong Kong*) designed by Norman Foster in 1978, Yale's designers used an "Angular Design" in this series. The angular form handle on the flat panel expresses the high-tech modern feeling



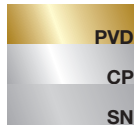
| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| D5    | 427            | 201 | 58 | 270 | 58 | -   | -  |
| D6    | 427            | 201 | 58 | -   | -  | 270 | 58 |
| D7    | 427            | 193 | 58 | 270 | 58 | -   | -  |
| D8    | 427            | 193 | 58 | -   | -  | 270 | 58 |

\*Escutcheon thickness : 10mm

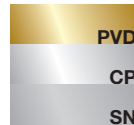
# E Handleset Design



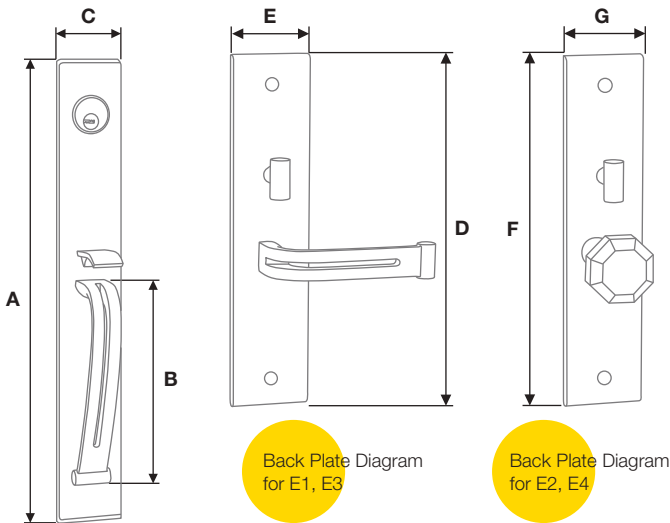
**M8773 E1**



**M8773 E2**



**M8773 E3**



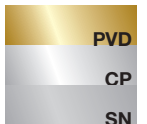
Back Plate Diagram for E1, E3

Back Plate Diagram for E2, E4

Front Plate Diagram for E1, E2, E3, E4



**M8773 E4**

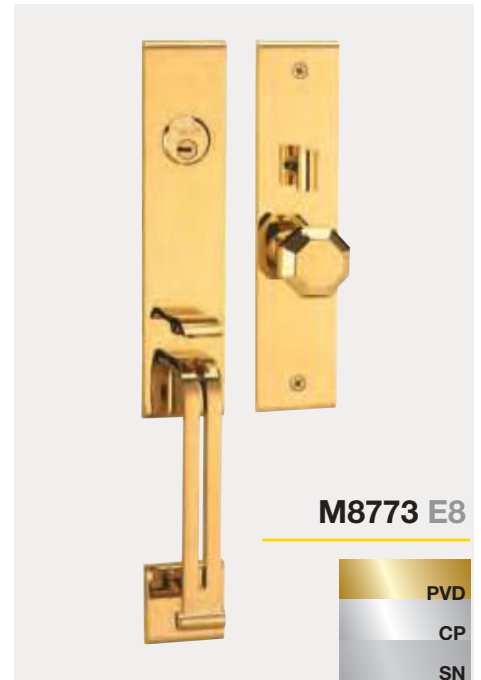
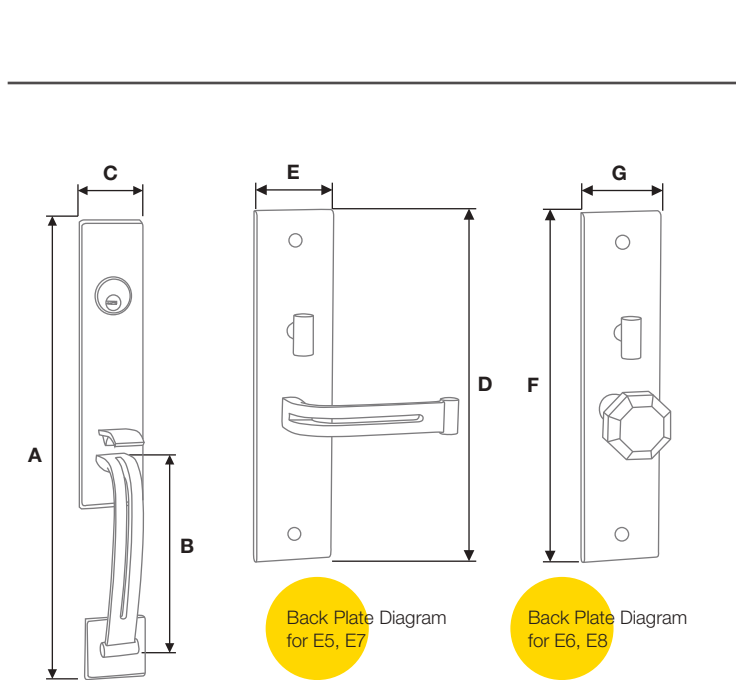
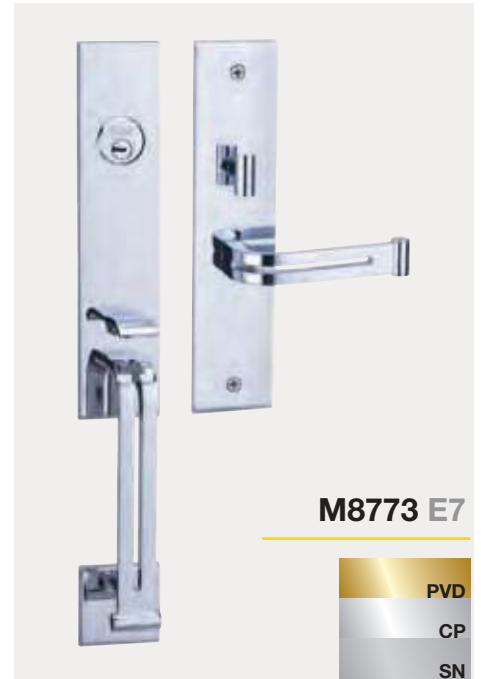
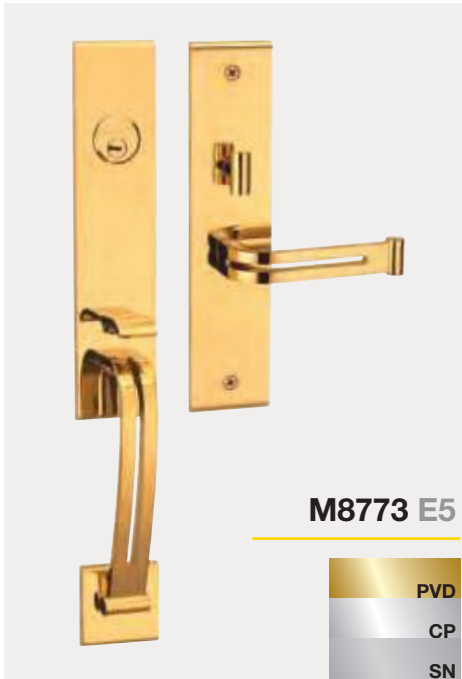


| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| E1    | 430            | 190 | 60 | 270 | 60 | -   | -  |
| E2    | 430            | 190 | 60 | -   | -  | 270 | 60 |
| E3    | 430            | 192 | 60 | 270 | 60 | -   | -  |
| E4    | 430            | 192 | 60 | -   | -  | 270 | 60 |

\*Escutcheon thickness : 10mm

## Design concept for E Handleset design

Yale's designers got the ideas from the building; "Villa Savoye" (Poissy, France) designed by the Architect Le Corbusier in 1928. Designers put the elements of flat window, curve walls, columns of this building into this series. Through the flat and curved surfaces, E design expresses the beauty of simplicity and feeling of space.



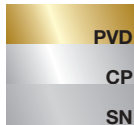
| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| E5    | 437.5          | 190 | 60 | 270 | 60 | -   | -  |
| E6    | 437.5          | 190 | 60 | -   | -  | 270 | 60 |
| E7    | 437.5          | 192 | 60 | 270 | 60 | -   | -  |
| E8    | 437.5          | 192 | 60 | -   | -  | 270 | 60 |

\*Escutcheon thickness : 10mm

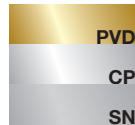
# F Handleset Design



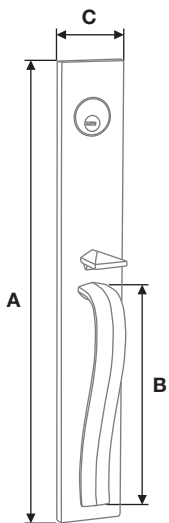
**M8773 F1**



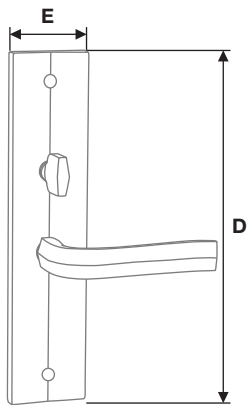
**M8773 F2**



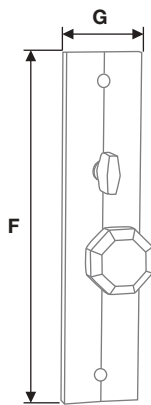
**M8773 F3**



Front Plate Diagram for F1, F2, F3, F4



Back Plate Diagram for F1, F3



Back Plate Diagram for F2, F4



**M8773 F4**

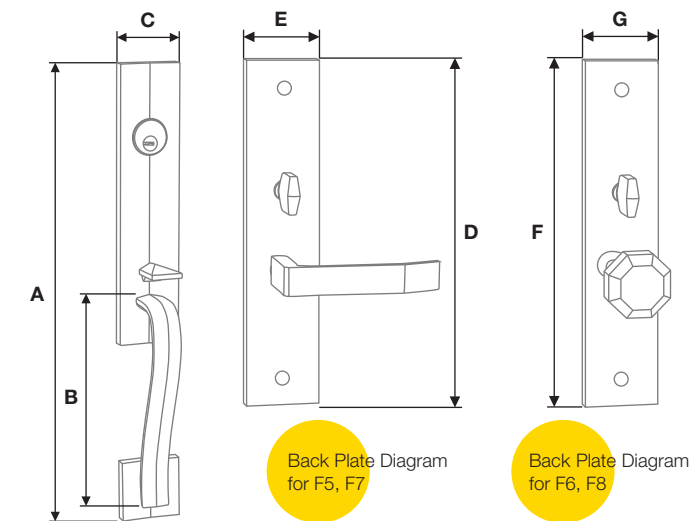
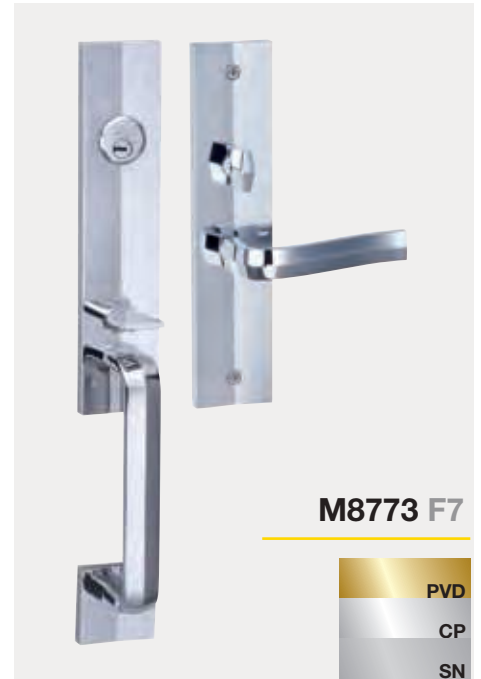
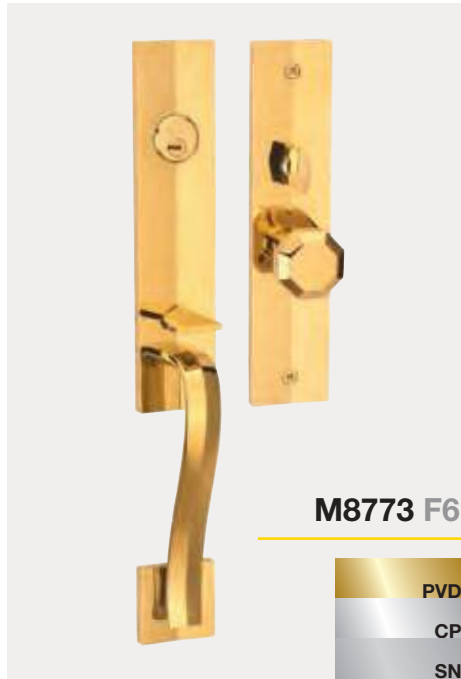


| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| F1    | 430            | 210 | 60 | 270 | 60 | -   | -  |
| F2    | 430            | 210 | 60 | -   | -  | 270 | 60 |
| F3    | 430            | 193 | 60 | 270 | 60 | -   | -  |
| F4    | 430            | 193 | 60 | -   | -  | 270 | 60 |

\*Escutcheon thickness : 12mm

## Design concept for F Handleset design

"Not simply to look at the waterfalls, but to live with them." Yale's designers were inspired by the building, "Falling Water" (Pennsylvania, America), the masterpiece of an American Architect, Frank Lloyd Wright. They designed a Falling-water shaped handle for F Handleset design. The streamlined handle plus the geometric panel create a dramatic effect.



| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| F5    | 446.5          | 210 | 60 | 270 | 60 | -   | -  |
| F6    | 446.5          | 210 | 60 | -   | -  | 270 | 60 |
| F7    | 446.5          | 193 | 60 | 270 | 60 | -   | -  |
| F8    | 446.5          | 193 | 60 | -   | -  | 270 | 60 |

\*Escutcheon thickness : 12mm

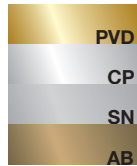


# Legend Design

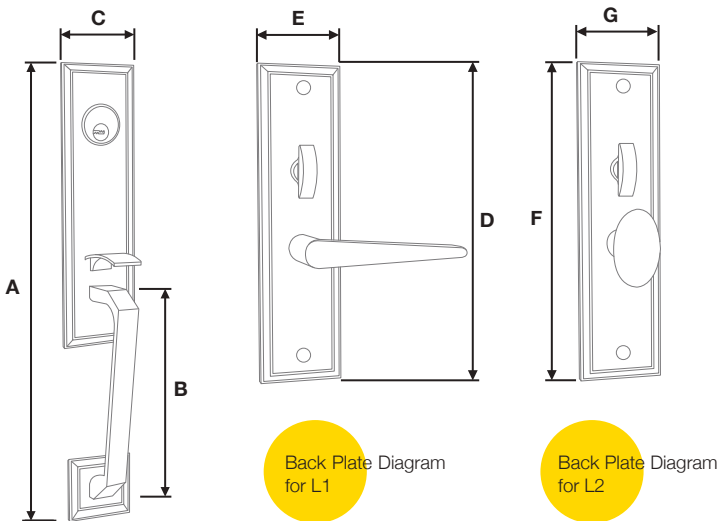
Innovative Legend Design makes the flat panel in harmony with the polygonal grip handle. Intersection of lines and slant of the fold surface reflects the aesthetic of the inclined plane integration.



**M8773 L1**



**M8773 L2**



Front Plate Diagram for L1, L2

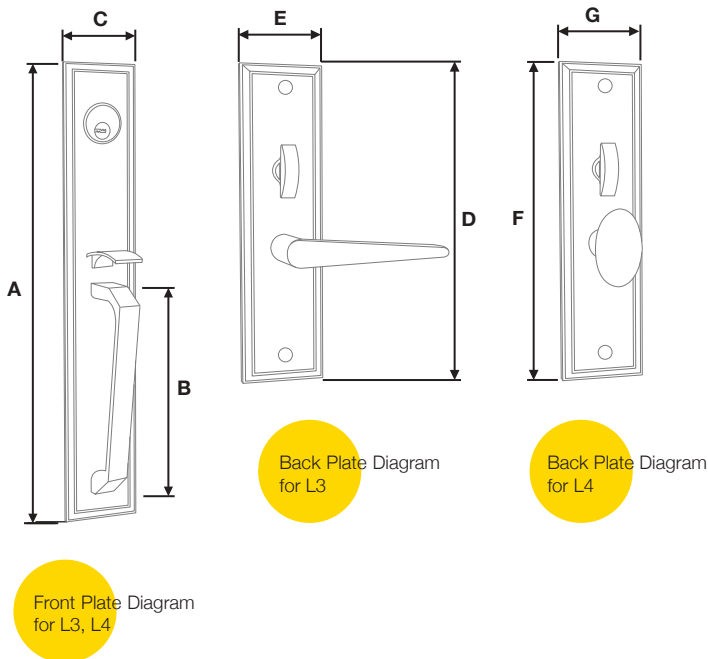
| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| L1    | 425.5          | 200 | 66 | 255 | 66 | -   | -  |
| L2    | 425.5          | 200 | 66 | -   | -  | 255 | 66 |



**M8773 L3**



**M8773 L4**



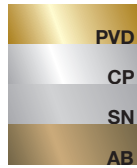
| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| L3    | 425.5          | 200 | 66 | 255 | 66 | -   | -  |
| L4    | 425.5          | 200 | 66 | -   | -  | 255 | 66 |

# Majestic Design

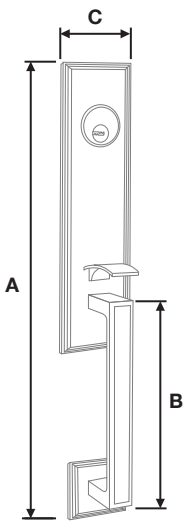
"Stairway" as the principle concept of the Majestic design, with a pyramid-shaped appearance of the quadrangle, the whole panel and handle design gives an magnificent sense.



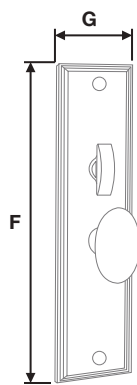
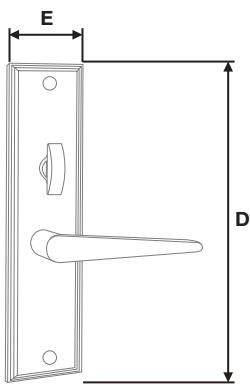
**M8773 M1**



**M8773 M2**



Back Plate Diagram for M1



Back Plate Diagram for M2

Front Plate Diagram for M1, M2

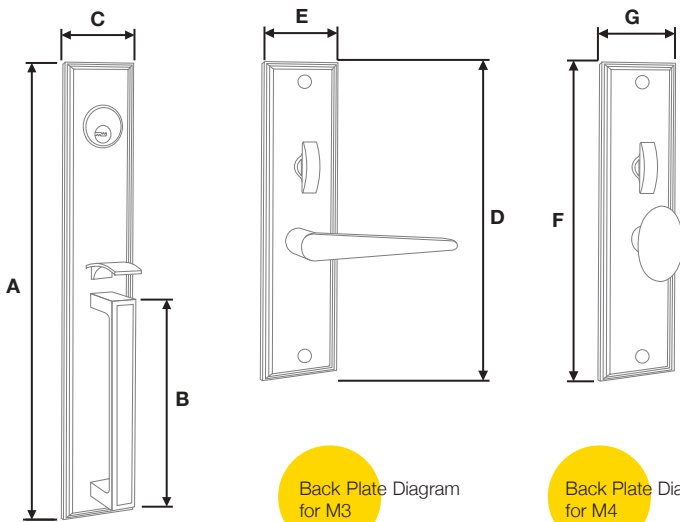
| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| M1    | 437.5          | 200 | 70 | 280 | 70 | -   | -  |
| M2    | 437.5          | 200 | 70 | -   | -  | 280 | 70 |



**M8773 M3**



**M8773 M4**



Back Plate Diagram for M3

Back Plate Diagram for M4

Front Plate Diagram for M3, M4

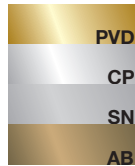
| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| M3    | 437.5          | 200 | 70 | 280 | 70 | -   | -  |
| M4    | 437.5          | 200 | 70 | -   | -  | 280 | 70 |

# Natural Design

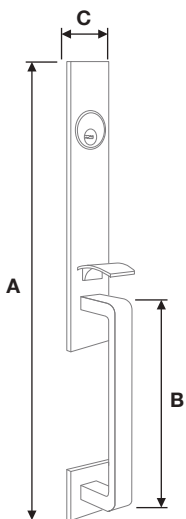
The slim, concise and vogue escutcheon match with streamline handle design, elegant Natural style designed to add a modern touch to home decoration.



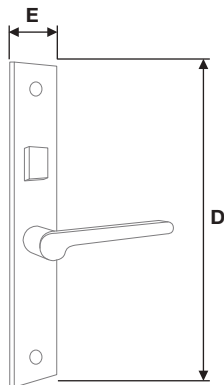
**M8773 N1**



**M8773 N2**



Front Plate Diagram for N1, N2



Back Plate Diagram for N1



Back Plate Diagram for N2

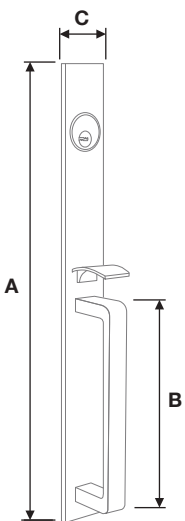
| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| N1    | 435.5          | 200 | 45 | 270 | 45 | -   | -  |
| N2    | 435.5          | 200 | 45 | -   | -  | 270 | 45 |



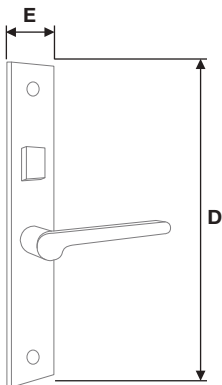
**M8773 N3**



**M8773 N4**



Front Plate Diagram for N3, N4



Back Plate Diagram for N3



Back Plate Diagram for N4

| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| N3    | 430            | 200 | 45 | 270 | 45 | -   | -  |
| N4    | 430            | 200 | 45 | -   | -  | 270 | 45 |

# Orient Design

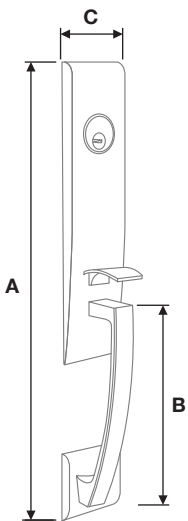
A simple parabolic curvature is the heart of the panel and the handle design. The streamlined design of the Orient style originate a natural beauty of the scenery.



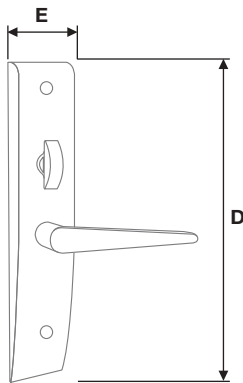
**M8773 O1**



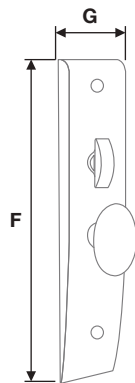
**M8773 O2**



Front Plate Diagram for O1, O2



Back Plate Diagram for O1

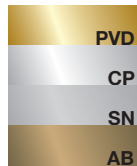


Back Plate Diagram for O2

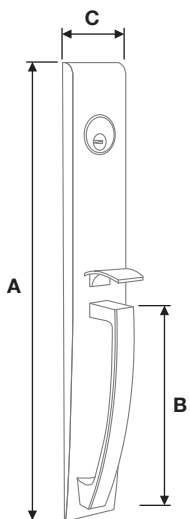
| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| O1    | 430            | 200 | 60 | 280 | 60 | -   | -  |
| O2    | 430            | 200 | 60 | -   | -  | 280 | 60 |



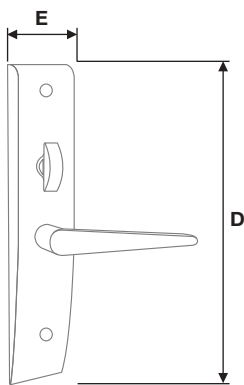
**M8773 O3**



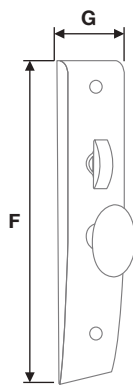
**M8773 O4**



Front Plate Diagram  
for O3, O4



Back Plate Diagram  
for O3



Back Plate Diagram  
for O4

| Model | Dimension (mm) |     |    |     |    |     |    |
|-------|----------------|-----|----|-----|----|-----|----|
|       | A              | B   | C  | D   | E  | F   | G  |
| O3    | 430            | 200 | 60 | 280 | 60 | -   | -  |
| O4    | 430            | 200 | 60 | -   | -  | 280 | 60 |

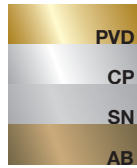


# Polygon Design

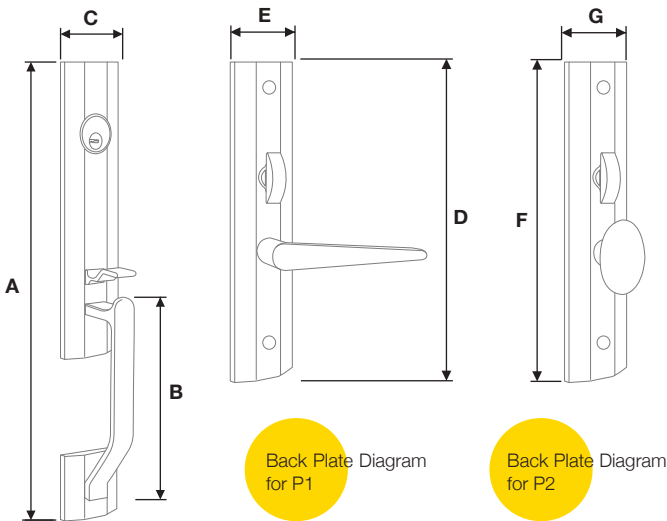
Polygon Design makes use of three-dimensional geometric design to create fashion panel and unique look and feel of handle which is perfectly to cope with today's home design trends.



**M8773 P1**



**M8773 P2**



Back Plate Diagram for P1

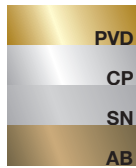
Back Plate Diagram for P2

Front Plate Diagram for P1, P2

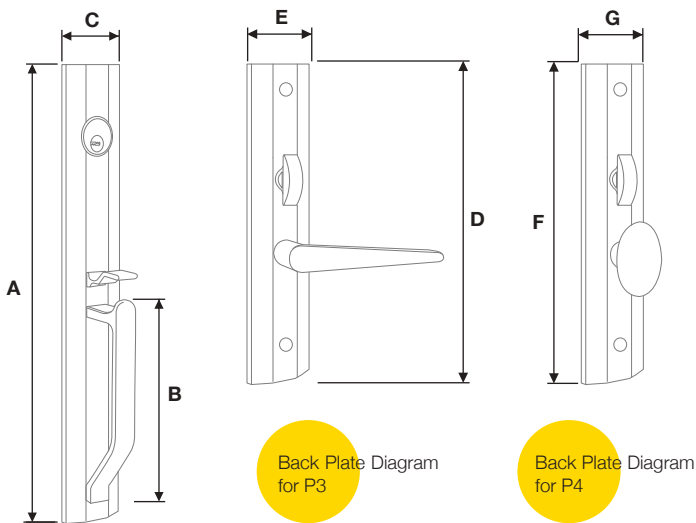
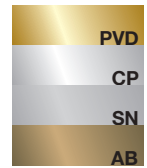
| Model | Dimension (mm) |       |    |     |    |     |    |
|-------|----------------|-------|----|-----|----|-----|----|
|       | A              | B     | C  | D   | E  | F   | G  |
| P1    | 430            | 201.6 | 60 | 280 | 60 | -   | -  |
| P2    | 430            | 201.6 | 60 | -   | -  | 280 | 60 |



**M8773 P3**



**M8773 P4**



Front Plate Diagram for P3, P4

Back Plate Diagram for P3

Back Plate Diagram for P4

| Model | Dimension (mm) |       |    |     |    |     |    |
|-------|----------------|-------|----|-----|----|-----|----|
|       | A              | B     | C  | D   | E  | F   | G  |
| P3    | 430            | 201.6 | 60 | 280 | 60 | -   | -  |
| P4    | 430            | 201.6 | 60 | -   | -  | 280 | 60 |



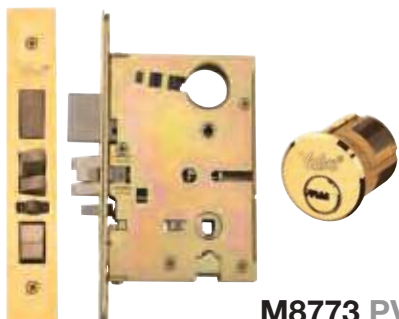
# Mortise Lock Case

# Mortise Lock Case

M8700 series mortise lock cases meet the ANSI standard ANSI/BHMA A 156.13-2005 grade 2 and passed 800,000 testing cycles. Together with Genuine Yale ANSI Cylinder, M8700 mortise locks provide utmost door security.

All M8700 series mortise locks are packed with matching finishes' lock cases and cylinders. 5 pieces of silver nickel brass 6-pin dimple keys will be supplied.

It is ideal for doors with Thickness of 45mm to 55mm (also available on application to suit doors up to 75mm thick upon special request) and standard Backset 70mm (2 3/4").



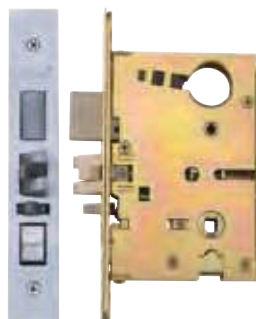
**M8773 PVD**



5 piece of silver nickel brass keys with 6 dimple pins

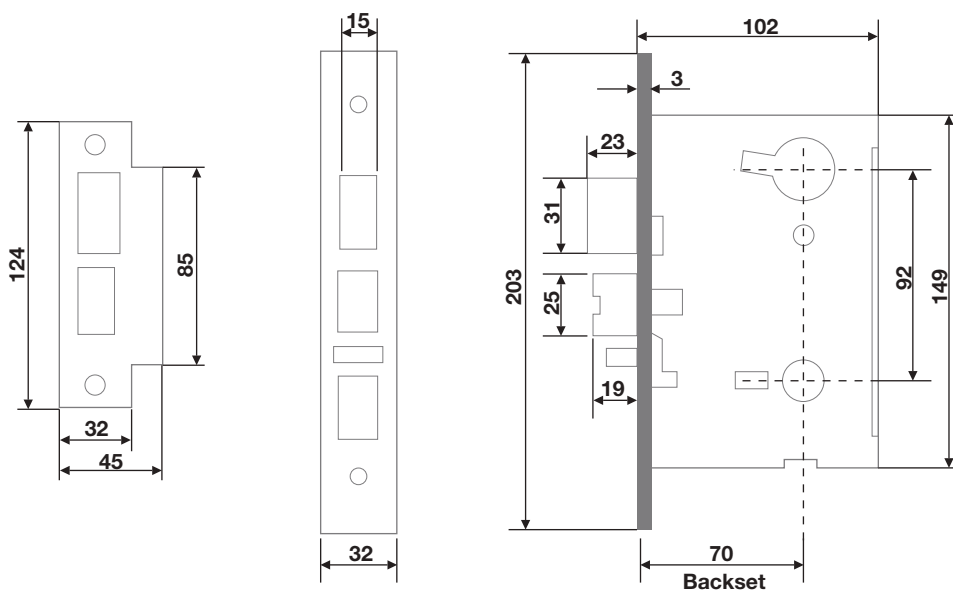


**M8773 CP**



**M8773 SN**

## Lock Case Specification

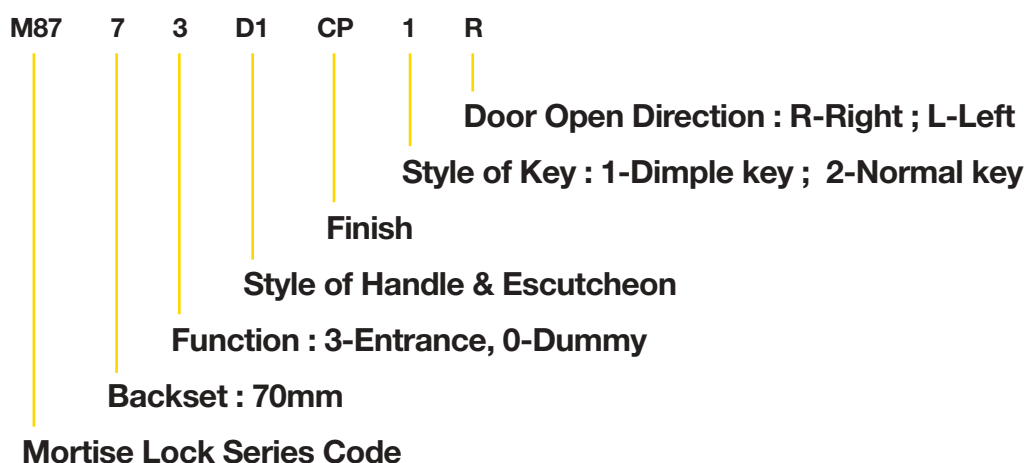


# Product Specification

## M8700 series ANSI Mortise Handleset Specification

- **Standard** : ANSI/BHMA A 156.13-2005 grade 2
- **Testing Cycles** : more than 800,000 cycles tested
- **Lock case** : ANSI grade 2 stainless steel mortise lock case
- **Materials** :
  - Trim & handle - forged solid brass (Class and Elegance Series)
    - solid zamak alloy (Sensation Series)
  - Forend & strike - steel for PVD & AB finishes, stainless steel for other finishes
  - Latch, dead & auxiliary bolt - cast stainless steel
  - Lock case - steel
- **Backset** : 70mm (2 3/4")
- **Door thickness** : 45~55mm standard (available from 40mm to 75mm thick door upon request)
- **Function** : Entrance, Dummy (Optional)
- **Cylinder** : Classic & Elegance Series: Normal key or 6-pin dimple key  
Sensation Series: 6-pin dimple key ( standard offer with construction keys)
- **No. of Keys** : Classic & Elegance Series: 5 pieces of silver nickel brass keys  
Sensation Series: 2 piece of A Construction keys & 5 piece of B User keys (All in silver nickel brass keys)

## How to Order



\* **Door Open Direction** : Just for models with lever handle. It will be blank for models with knob handle.

# How To Order

In the How to order table, please refer to the series name first and then determine the specific item number that you require. By choosing your desired Function, Handle and Escutcheon Style and Finish, you can easily determine the Handleset to meet your needs.

## Classic Series

| M87                      | 7                         | 3             | AA                           | CP                                                                       | 1            | R                   |
|--------------------------|---------------------------|---------------|------------------------------|--------------------------------------------------------------------------|--------------|---------------------|
| Mortise Lock Series Code | Backset                   | Function Code | Style of Handle & Escutcheon | Finish                                                                   | Style of Key | Door Open Direction |
| M87                      | 7 Standard Backset (70mm) | 3 Entrance    | AA                           | AB Antique Brass<br>(Only available for G1 H1 H2 J1 Handle & Escutcheon) | 1 Dimple Key | R Right             |
|                          |                           | 0 Dummy       | BB                           | CP Chrome Plated<br>(Only available for AA BB BC Handle & Escutcheon)    | 2 Normal Key | L Left              |
|                          |                           |               | BC                           | SN Satin Nickel<br>(Only available for AA BB BC Handle & Escutcheon)     |              |                     |
|                          |                           |               | G1                           | PVD Physical Vapor Deposition                                            |              |                     |
|                          |                           |               | H1                           |                                                                          |              |                     |
|                          |                           |               | H2                           |                                                                          |              |                     |
|                          |                           |               | J1                           |                                                                          |              |                     |

## Elegance Series

| M87                      | 7                         | 3             | D1                           | CP                            | 1            | R                   |
|--------------------------|---------------------------|---------------|------------------------------|-------------------------------|--------------|---------------------|
| Mortise Lock Series Code | Backset                   | Function Code | Style of Handle & Escutcheon | Finish                        | Style of Key | Door Open Direction |
| M87                      | 7 Standard Backset (70mm) | 3 Entrance    | D1 to D8                     | CP Chrome Plated              | 1 Dimple Key | R Right             |
|                          |                           | 0 Dummy       | E1 to E8                     | SN Satin Nickel               | 2 Normal Key | L Left              |
|                          |                           |               | F1 to F8                     | PVD Physical Vapor Deposition |              |                     |

## Sensation Series

| M87                      | 7                         | 3             | D1                           | CP                            | 1             | R                   |
|--------------------------|---------------------------|---------------|------------------------------|-------------------------------|---------------|---------------------|
| Mortise Lock Series Code | Backset                   | Function Code | Style of Handle & Escutcheon | Finish                        | Style of Key  | Door Open Direction |
| M87                      | 7 Standard Backset (70mm) | 3 Entrance    | L1 to L4                     | AB Antique Brass              | 1 Dimple Key* | R Right             |
|                          |                           | 0 Dummy       | M1 to M4                     | CP Chrome Plated              |               | L Left              |
|                          |                           |               | N1 to N4                     | SN Satin Nickel               |               |                     |
|                          |                           |               | O1 to O4                     | PVD Physical Vapor Deposition |               |                     |
|                          |                           |               | P1 to P4                     |                               |               |                     |

\* 2pc A Construction keys & 5pc B User keys as standard offer.

\*\* The product finishes shown on this brochure may differ from the actual products. Please take the actual product finishes as the standard.





# 8800 Series

Grade 1 Mortise Locks





## never compromise

The value of any product is equal to the quality of the labor and materials put into making it. And the Yale® 8800 series mortise lock is a perfect example that true quality doesn't just happen. Meticulous design and engineering have gone into manufacturing a mortise lock that brings you versatility as well as uncompromising strength and durability.

With quick lever handing and a quick reversible latchbolt, lockset handing takes only seconds. Add a standard non-handed curved lip strike, and you have a no-hassle mortise lock that's quick and easy to install.

When it comes to strength, the Yale® 8800 series brings a new measure of security to the door. Its 1" throw stainless steel deadbolt extends further back into the reinforced steel case when in the locked position, providing added stability and resistance to abuse. Solid trim packages also provide deterrence to vandalism, making the 8800 series a prime player in your total opening security package.

For over 160 years, Yale Locks and Hardware has built a reputation on manufacturing products that exceed expectations of quality and reliability. The Yale 8800 series mortise lock is no exception, and to demonstrate that quality proves itself, we back it with a 10-year mechanical warranty.

We won't compromise, and neither should you.

### 8800

The Yale 8800 series mortise lock is an industry standard product. Suitable for installation on doors 1-3/4" to 3-1/4" thick with standard trims, these products have a 1" throw stainless steel deadbolt. The anti-friction one-piece latchbolt is stainless steel and has a 3/4" throw.

### finishes

The Yale 8800 series mortise lock is available in the trim finishes as listed. All knobs, lever handles, roses, escutcheons, cylinder collars and other exposed parts are fabricated of either brass, bronze, stainless steel or zinc and will be compatible with the finish ordered. When ordering, specify the finish required by the ANSI/BHMA Code Number only. When locksets are ordered with different trim finishes on each side, specify the outside finish first, i.e. COR8817-2 x 612 x 625. The front and strike finish will match the inside finish unless specified otherwise.

### camden escutcheon

8800 series locks with escutcheon trim are provided standard with the Camden (CN) escutcheon. This zinc die cast escutcheon features one-piece casting for superior strength. Locks with this escutcheon are ANSI/BHMA certified operational and security Grade 1 and will retrofit to existing Yale escutcheon preps. The aesthetics of the CN escutcheon provide a design continuum with Yale exit device trim for a consistent look throughout the facility.

### windstorm

Certified (refer to local codes).



Hurricane

### warranty

Yale 8800 series mechanical mortise locks carry a ten (10) year warranty and 8800 series electrified mortise locks carry a two (2) year warranty.

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| ANSI/BHMA Code | Finish Description                                           |
|----------------|--------------------------------------------------------------|
| 605            | Bright Brass, Clear Coated                                   |
| 606            | Satin Brass, Clear Coated                                    |
| 609            | Satin Brass, Blackened, Satin Relieved, Clear Coated         |
| 611            | Bright Bronze, Clear Coated                                  |
| 612            | Satin Bronze, Clear Coated                                   |
| 613            | Dark Oxidized Satin Bronze, Oil Rubbed <sup>1</sup>          |
| 613E           | Dark Oxidized Satin Bronze - equivalent                      |
| 616            | Satin Bronze, Blackened, and Satin Relieved, Clear Coated    |
| 618            | Bright Nickel Plated, Clear Coated                           |
| 619            | Satin Nickel Plated, Clear Coated                            |
| 620            | Satin Nickel Plated, Blackened, Satin Relieved, Clear Coated |
| 625            | Bright Chrome Plated                                         |
| 626            | Satin Chrome Plated                                          |
| 629            | Bright Stainless Steel                                       |
| 630            | Satin Stainless Steel                                        |
| 693            | Black Painted                                                |
| 722            | Black Oxidized Bronze, Oil Rubbed <sup>2</sup>               |

1. New May 1, 2010  
 2. Formerly 613 prior to May 1, 2010

**Finish available with MicroShield® antimicrobial coating, additional finishes by special application. Consult factory for availability.**

## features

### A.D.A.

The 8800FL meets accessibility guidelines of the Americans with Disabilities Act and the requirements of the Uniform Federal Accessibility standards and ANSI 117.1, all requiring ease of accessibility for the handicapped.

### ANSI/BHMA

Certified ANSI/BHMA A156.13, Series 1000, Operational Grade 1 (8800FL with CN escutcheon & SL8800 meet Security Grade 1).



### bevel front

Yale 8800 series fronts are free-floating to adjust from flat to the standard bevel of 1/8" in 2".

### door thickness

8800 series mortise locks are supplied as standard for 1-3/4" thick doors. For other than standard, specify the door thickness on the order: (i.e. 2", 2-1/4", etc.)

### installations

8800 series mortise locks conform to ANSI/BHMA Specifications A156.115 which cover hardware preparations for steel doors and steel frames and A156.115-W which cover hardware preparations for wood doors with wood or steel frames.

### microshield®

8800 series locks are available with MicroShield® antimicrobial coating. *MicroShield* is a revolutionary hardware finish coating, using a silver ion based technology, which inhibits the growth of bacteria, algae, yeast, fungus, mold and mildew. *MicroShield* is non-toxic and lasts for the lifetime of the finish to which it is applied. To order, suffix option code "YMS".



Note: *MicroShield*® coating may vary finish color from architectural standards. *MicroShield* is not intended as a substitute for traditional infection control programs such as hand hygiene or use of disinfectants. Coated product must still be cleaned to insure the surfaces will be free of destructive microbes. Yale Locks & Hardware makes no representations or warranties, express or implied, as to the efficacy of the *MicroShield* antimicrobial.

### ISO 9001

Designed and manufactured under a certified ISO 9001 quality system.

### knurled designs

Where required by the local authority, trim can be knurled to be identifiable to the touch for blind persons. All knob designs except CA may be ordered knurled; all lever designs except designer trim and Reflections® trim (pages 9 & 11) may be ordered knurled.

Only the outside knob or lever will be knurled or abrasive coated unless specified otherwise. To order a complete lockset knurled or abrasive coated, suffix the lockset model number with "Knurled" or "Abrasive Coated," i.e. LF x CN8807 x "Knurled," LF x CN8817-2 x "Knurled Inside Only," AU x CN8828FL "Abrasive Coated."

### lead shielding

All Yale 8800 series mortise locks are available with a lead shield for installation in lead-lined doors. To order, suffix the lockset model number with "lead-lined."

### quick reversibility

Yale mortise locks with the same trim on both sides (knob x knob or lever x lever) are field reversible. These locks can be converted to accommodate the hand of the door. However, to reduce installation costs, it is recommended that the hand of the door be specified for each lockset ordered. If the hand of the door is not specified, RH will be furnished.

### underwriters laboratories (UL - cUL)

Yale 8800 series mortise locks have been listed by Underwriters Laboratories Inc. for use on fire doors having a rating up to and including 3 hours and for use on 20 minute wood doors. This pertains to single swing doors not exceeding 4 feet in width and 8 feet in height and in doors mounted in pairs not exceeding 8 feet in either direction (unless otherwise noted in the individual listings.)

In general, single-point mortise locks or latches with 3/4" minimum latch throw are intended for the active leaf of doors mounted in pairs, with the inactive leaf provided with top and bottom flush or surface bolts of the manual, automatic, or self-latching type. The door Classification Marking specifies the minimum latch throw required for the individual door.

Yale 8800 series mortise locks with 3/4" throw latchbolts may also be used on single swing doors rated 1-1/2 hours or less, up to 4 feet in width and 9 feet in height. This is in addition to the rating mentioned above. All Yale 8800 Series Mortise Locks with Lever Handle Trim are UL listed for fire door applications. Underwriters Laboratories does not list locks with rabbeted fronts, locks with deadbolt only, or locks with hold-back feature on the latchbolt.

Note: Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Yale Locks & Hardware makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

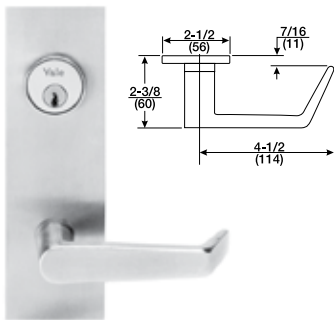


# SL8800

Specifications for all levers below:

|                                                                                              |
|----------------------------------------------------------------------------------------------|
| <b>SL Escutcheon:</b> 8" x 2-1/2"                                                            |
| <b>Cylinder Collar:</b> See pages 34-37                                                      |
| <b>Material:</b> Stainless steel escutcheon;<br>Cast lever (plated to match stainless steel) |

## Augusta - AUSL



- The SL8800 series mortise lock features heavy-duty lever escutcheon trim and is designed primarily for applications in schools and other institutions where excessive abuse and vandalism may occur. It is also recommended for use in minimum security prisons and office buildings or apartment buildings located in "high crime" areas.
- Yale® SL8800 series lever escutcheon trims feature through-bolted installation with security head screws.
- Outside trim is held in place by threaded posts. Posts fit through holes in the door, above and below the lock case, and are secured by through-bolts from the inside trim.
- Levers are attached to the escutcheon for added security.
- Yale outside escutcheon trims have no visible screws – a great deterrent to vandalism.
- Each mortise lock ordered with lever trim features an internal heavy-duty spring cartridge which prevents lever sag.
- All Yale mortise lock trims are UL listed for fire door applications.
- SL8800's are offered with Augusta, Arcadia\*, Carmel, Jefferson, Monroe, Pacific Beach and Virginia lever handle escutcheon trims. *\*Handed lever.*
- SL8800 series mortise locks are available in most lock functions. (See pages 14-23.)

## Arcadia - ARSL



## Carmel - CRSL



## Jefferson - JNSL



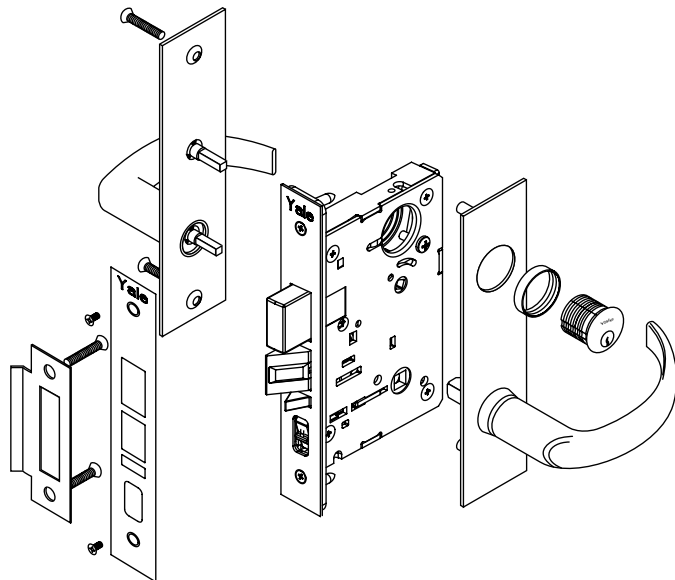
## Monroe - MOSL



## Pacific Beach - PBSL

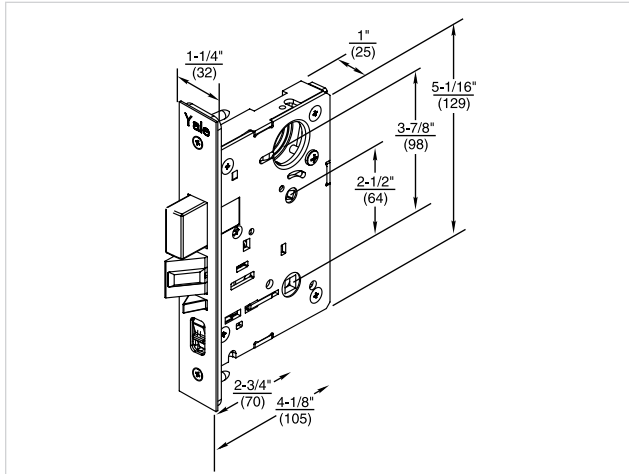


## Virginia - VISL



## facts and figures

### 8800/SL8800 series



**Armor Front** - 8" x 1-1/4"

**Door Thickness** - 1-3/4" standard, to 3-1/4" thick doors to order.

**Deadbolt** - 1" throw, solid investment cast stainless steel.

**Latchbolt** - 3/4" throw, stainless steel one-piece anti-friction.

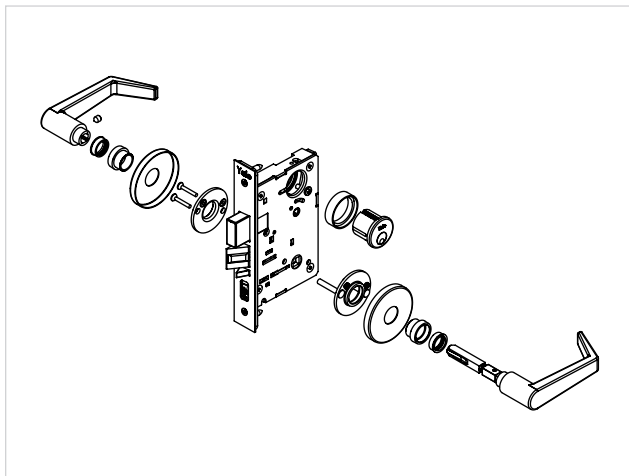
**UL Listed** - for application on labeled fire doors.

**Backset** - 2-3/4" only.

**Case** - wrought steel, zinc dichromated.

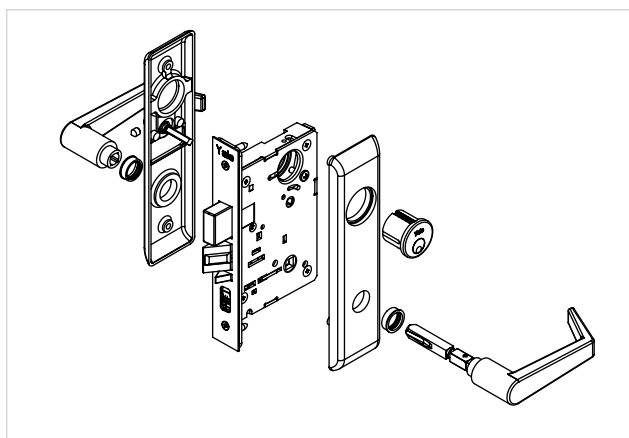
**Hubs** - 3/8" solid steel, fine-blanked and heat treated for additional strength.

### sectional lever installation



- All Yale® 8800FL series sectional lever trims feature through-bolted installation. This ensures positive alignment of the trim with the lock case and offers an attractive appearance.
- Outside trim is held in place by threaded posts. The posts fit through holes in the lock case and are secured by through-bolts from the inside trim.
- Since self-aligning trim is easy to install, on-the-job labor costs may be reduced.
- Each mortise lock ordered with lever trim features an internal heavy-duty spring cartridge which prevents lever sag.
- All Yale mortise lock trims are UL listed for fire door applications.
- A variety of sectional lever designs are available as shown on pages 6-11.

### escutcheon lever installation



- All Yale 8800FL series escutcheon lever trims feature through-bolted installation.
- Outside trim is held in place by threaded posts. The posts fit through the door and are secured by through-bolts from the inside trim.
- Yale outside escutcheon trims have no visible screws – a great deterrent to vandalism.
- Each mortise lock ordered with lever trim features an internal heavy-duty spring cartridge which prevents lever sag.
- All Yale mortise lock trims are UL listed for fire door applications.
- A variety of escutcheon lever designs are available as shown on pages 6-11.



## standard lever trim

### Arcadia - ARR

|                                |                 |
|--------------------------------|-----------------|
| AR Lever Handle <sup>3</sup> : | Cast            |
| CO Rose <sup>1</sup> :         | Stamped         |
| Cylinder Collar:               | See pages 32-33 |

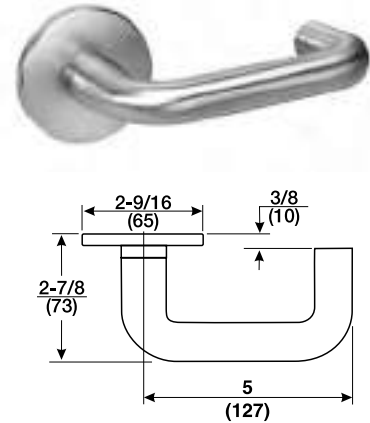
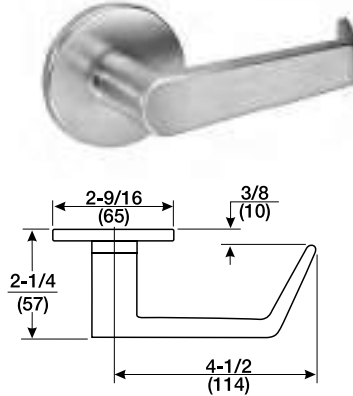
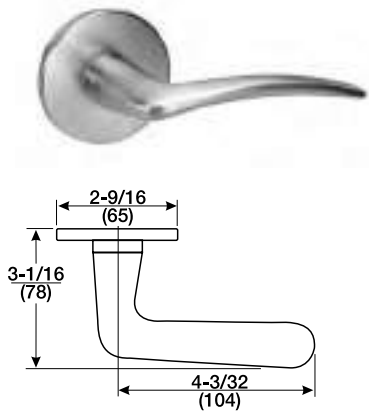
### Augusta - AUR

|                        |                 |
|------------------------|-----------------|
| AU Lever Handle:       | Cast            |
| CO Rose <sup>1</sup> : | Stamped         |
| Cylinder Collar:       | See pages 32-33 |

### Carmel - CRR

|                        |                 |
|------------------------|-----------------|
| CR Lever Handle:       | Cast            |
| CO Rose <sup>1</sup> : | Stamped         |
| Cylinder Collar:       | See pages 32-33 |

1. Available with Reflections® roses. See page 11 for options.



### Arcadia - AR x CN

|                                |                 |
|--------------------------------|-----------------|
| AR Lever Handle <sup>3</sup> : | Cast            |
| CN Escutcheon <sup>2</sup> :   | Cast            |
| Cylinder Collar:               | See pages 34-37 |

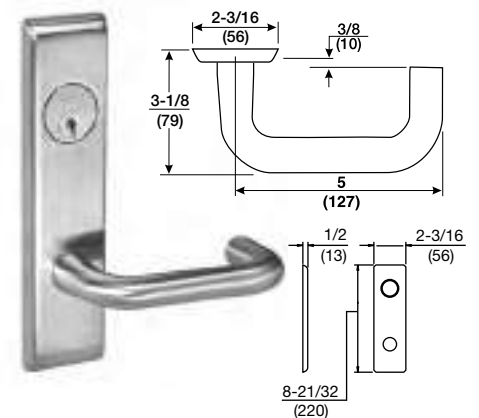
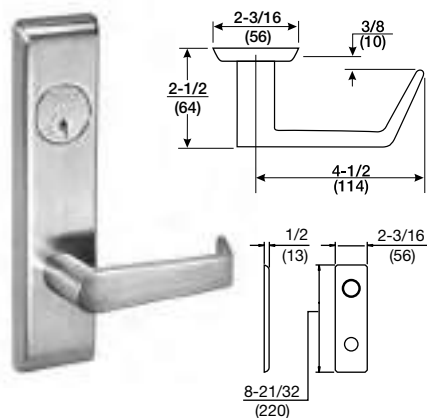
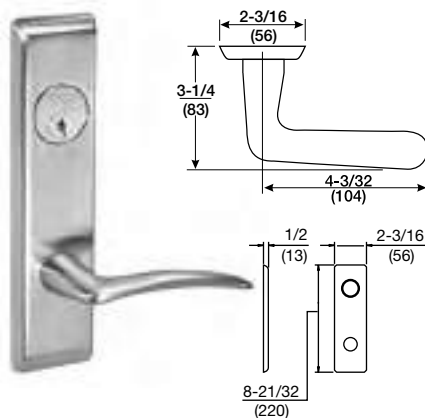
### Augusta - AU x CN

|                              |                 |
|------------------------------|-----------------|
| AU Lever Handle:             | Cast            |
| CN Escutcheon <sup>2</sup> : | Cast            |
| Cylinder Collar:             | See pages 34-37 |

### Carmel - CR x CN

|                              |                 |
|------------------------------|-----------------|
| CR Lever Handle:             | Cast            |
| CN Escutcheon <sup>2</sup> : | Cast            |
| Cylinder Collar:             | See pages 34-37 |

2. Available with Reflections® escutcheons. See page 11 for options.  
3. Indicates levers that are handed.

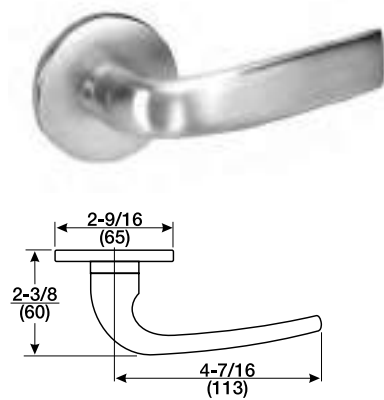


## standard lever trim

### Jefferson - JNR

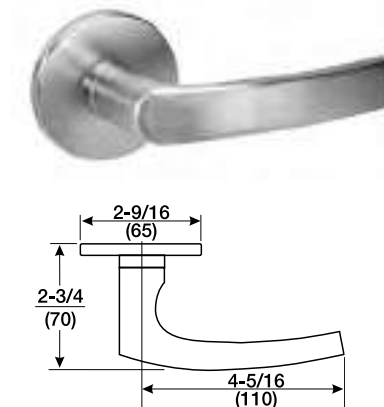
|                        |                 |
|------------------------|-----------------|
| JN Lever Handle:       | Cast            |
| CO Rose <sup>1</sup> : | Stamped         |
| Cylinder Collar:       | See pages 32-33 |

1. Available with Reflections® roses. See page 11 for options.



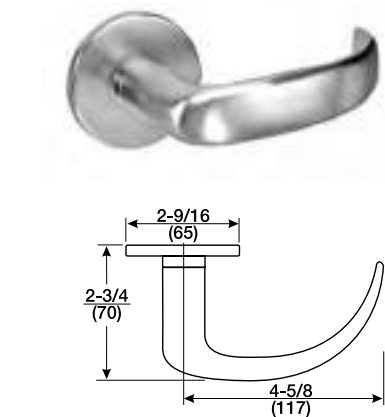
### Monroe - MOR

|                        |                 |
|------------------------|-----------------|
| MO Lever Handle:       | Cast            |
| CO Rose <sup>1</sup> : | Stamped         |
| Cylinder Collar:       | See pages 32-33 |



### Pacific Beach - PBR

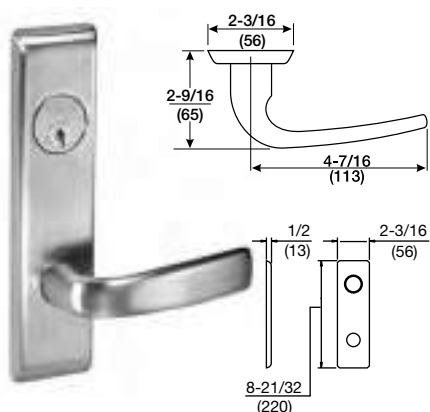
|                        |                 |
|------------------------|-----------------|
| PB Lever Handle:       | Cast            |
| CO Rose <sup>1</sup> : | Stamped         |
| Cylinder Collar:       | See pages 32-33 |



### Jefferson - JN x CN

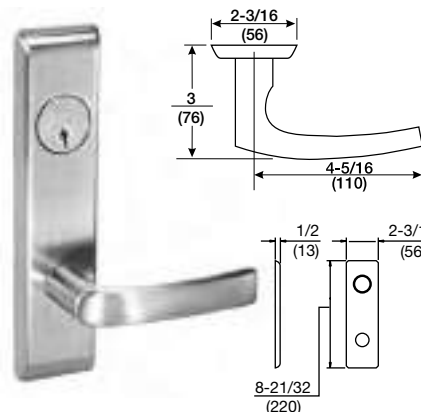
|                              |                 |
|------------------------------|-----------------|
| JN Lever Handle:             | Cast            |
| CN Escutcheon <sup>2</sup> : | Cast            |
| Cylinder Collar:             | See pages 34-37 |

2. Available with Reflections® escutcheons. See page 11 for options.



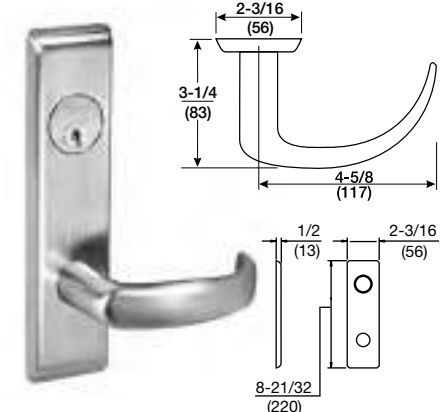
### Monroe - MO x CN

|                              |                 |
|------------------------------|-----------------|
| MO Lever Handle:             | Cast            |
| CN Escutcheon <sup>2</sup> : | Cast            |
| Cylinder Collar:             | See pages 34-37 |



### Pacific Beach - PB x CN

|                              |                 |
|------------------------------|-----------------|
| PB Lever Handle:             | Cast            |
| CN Escutcheon <sup>2</sup> : | Cast            |
| Cylinder Collar:             | See pages 34-37 |





## 8800RL Reflections® decorative trim


### introduction

Yale® 8800RL mortise locks are available with *Reflections* lever trim, a comprehensive line of highly stylized lever handles. *Reflections* lever handles are made from solid brass or stainless steel and can withstand years of abuse. Available in a multitude of finishes, the levers complement any wood grain or other door exterior. Each lever is hand-polished and specially designed for ergonomics and style.

### features

- All 8800RL series lever trims feature through-bolted installation. For sectional trims, this ensures positive alignment of the trim with the lock case.
- All outside trim is held in place by threaded posts. For sectional trims, the posts fit through holes in the lock case and are secured by through-bolts from the inside trim. For escutcheon trims, the posts fit through the door and are secured by through-bolts from the inside trim.
- Outside escutcheon trims have no visible screws - a great deterrent to vandalism.
- 8800RL mortise locks feature an internal heavy-duty spring cartridge which prevents lever sag.
- All 8800RL trims are UL listed for fire door applications.
- Available for 1-3/4" to 3-1/4" thick doors.
- Lever, rose, and escutcheon designs are available as shown on page 11. Levers are also available for use with standard CO rose\* and/or CN escutcheon as shown on pages 6-8.

### finishes

| ANSI/BHMA Code | Finish Description                                                                                          | US Code |
|----------------|-------------------------------------------------------------------------------------------------------------|---------|
| 605            | Bright Brass, Clear Coated                                                                                  | US3     |
| 606            | Satin Brass, Clear Coated                                                                                   | US4     |
| 611            | Bright Bronze, Clear Coated                                                                                 | US9     |
| 612            | Satin Bronze, Clear Coated                                                                                  | US10    |
| 613            | Dark Oxidized Satin Bronze, Oil Rubbed <sup>2</sup>                                                         | US10B   |
| 613E           | Dark Oxidized Satin Bronze - equivalent                                                                     | US10BE  |
| N/A            | Dark Oxidized Satin Bronze, Clear Coated <sup>1</sup>                                                       | US10BL  |
| N/A            | Statuary Dark Bronze, Clear Coated <sup>1</sup>                                                             | US20D   |
| 618            | Bright Nickel Plated, Clear Coated                                                                          | US14    |
| 619            | Satin Nickel Plated, Clear Coated                                                                           | US15    |
| 625            | Bright Chrome Plated                                                                                        | US26    |
| 626            | Satin Chrome Plated    | US26D   |
| 629            | Bright Stainless Steel                                                                                      | US32    |
| 630            | Satin Stainless Steel  | US32D   |
| 722            | Black Oxidized Bronze, Oil Rubbed <sup>3</sup>                                                              |         |

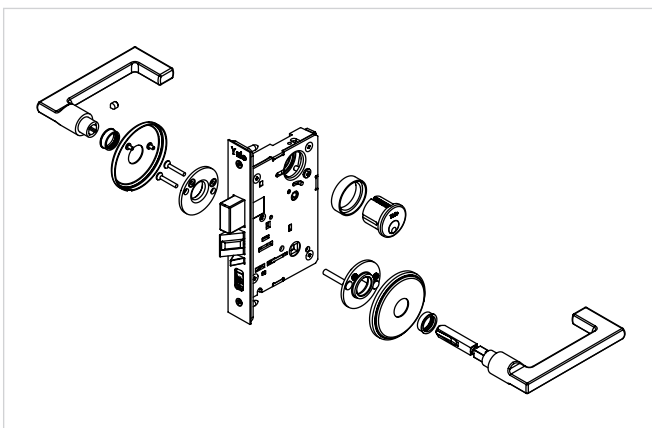
1. Yale finishes are designated by ANSI/BHMA codes. There is no equivalent designation and request will be processed by special order.

2. New May 1, 2010

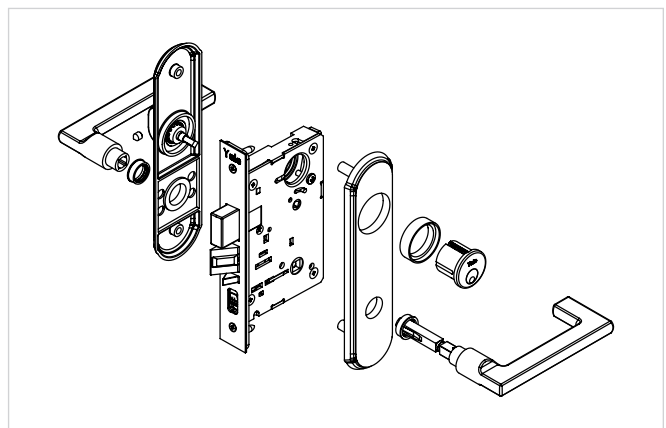
3. Formerly 613 prior to May 1, 2010

 **MicroShield® antimicrobial coating available as special application. Contact factory for availability.**

### sectional lever installation

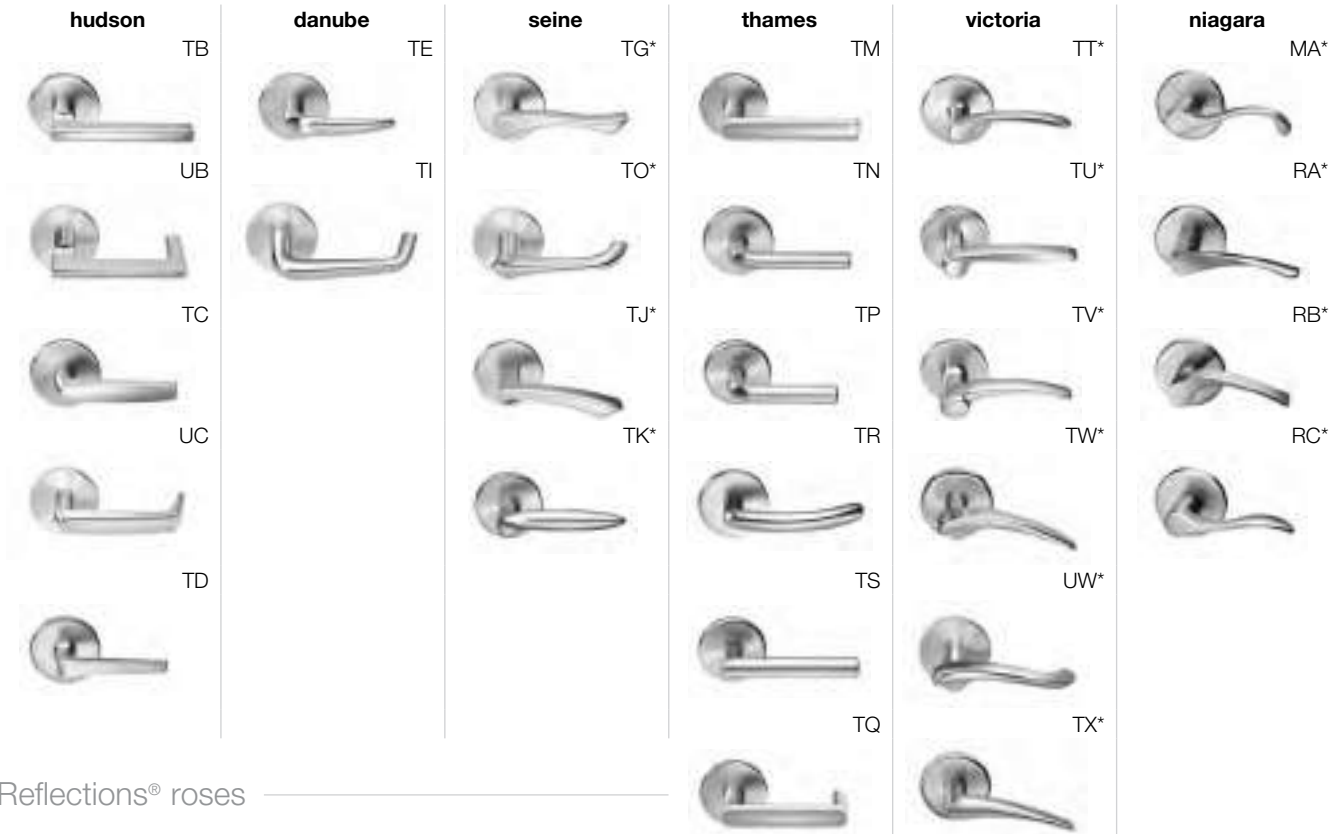


### escutcheon lever installation

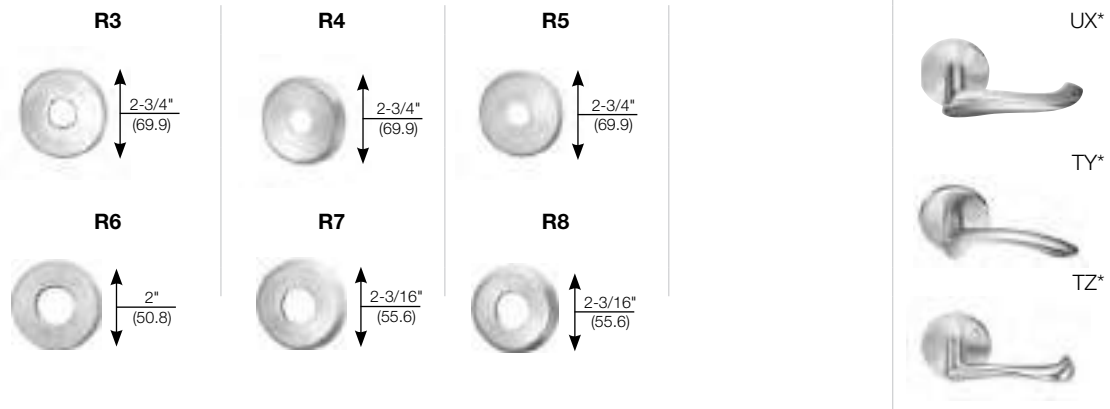


\*When using *Reflections* Levers with the CO rose, the rose adaptor is not used. Levers will not install and/or properly operate if rose adaptor is included.

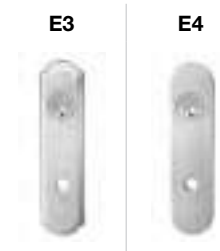
Reflections® trim



Reflections® roses



Reflections® escutcheons



\*Indicates levers that are handed.

Note: Reflections levers are also available for use with CO rose and/or CN escutcheon.



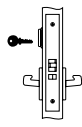
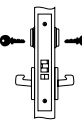
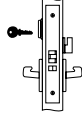
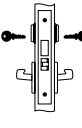


## mechanical functions and descriptions

| Mechanical Functions (ANSI)                        | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Armor Front Part Number | *Cylinder     | *Cam      | Escutcheon Plate Spacing Numbers |                 | Spindles |               | Illustration |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------|-----------|----------------------------------|-----------------|----------|---------------|--------------|----------|----------|------|--------|----------|------|--------------|---|----------|------|------------------|--------------|------|--------|------|-------|------------------|---|---|--------------------------------------|-----|-------|-------|--|
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |               |           | Outside                          | Inside          | Knobs    | Levers (Std.) |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| <b>8801</b><br>Passage or closet latch (F01)       | <ul style="list-style-type: none"> <li>For doors that do not require locking.</li> <li>Latchbolt retracted by knob/lever either side at all times.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8801</td> <td>8801FL</td> <td>3/4"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8801FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8801RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                 | Trim                    | Model Numbers |           | Latchbolt Throw                  | Knobs           | Levers   | Standard      | 8801         | 8801FL   | 3/4"     | SL   | —      | SL8801FL | 3/4" | Reflections® | — | 8801RL   | 3/4" | 50-8801-x219-FIN | —            | —    | 201    | 201  | 1178L | 1178L            |   |   |                                      |     |       |       |  |
|                                                    | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         | Model Numbers |           |                                  | Latchbolt Throw |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Knobs                   | Levers        |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|                                                    | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8801                    | 8801FL        | 3/4"      |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| SL                                                 | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SL8801FL                | 3/4"          |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| Reflections®                                       | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8801RL                  | 3/4"          |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| <b>8802</b><br>Privacy, bedroom or bath lock (F19) | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side.</li> <li>Deadbolt operated by thumbturn inside.</li> <li>When the deadbolt is projected, outside knob/lever is automatically locked.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously, automatically unlocking outside knob/lever.</li> <li>In emergency, deadbolt may be unlocked from outside by E203 emergency key, supplied.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8802</td> <td>8802FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8802FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8802RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table> | Trim                    | Model Numbers |           | Throw                            |                 | Knobs    | Levers        | Latchbolt    | Deadbolt | Standard | 8802 | 8802FL | 3/4"     | 1"   | SL           | — | SL8802FL | 3/4" | 1"               | Reflections® | —    | 8802RL | 3/4" | 1"    | 50-8802-x219-FIN | — | — | 211<br>(261 for Occupancy Indicator) | 211 | 1178L | 1178L |  |
|                                                    | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         | Model Numbers |           | Throw                            |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Knobs                   | Levers        | Latchbolt | Deadbolt                         |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|                                                    | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8802                    | 8802FL        | 3/4"      | 1"                               |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| SL                                                 | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SL8802FL                | 3/4"          | 1"        |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| Reflections®                                       | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8802RL                  | 3/4"          | 1"        |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| <b>8805</b><br>Storeroom or closet lock (F07)      | <ul style="list-style-type: none"> <li>For use on storeroom, utility, exit doors.</li> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>Outside knob/lever rigid at all times.</li> <li>Inside knob/lever always active.</li> <li>Deadlocking latchbolt.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8805</td> <td>8805FL</td> <td>3/4"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8805FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8805RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                        | Trim                    | Model Numbers |           | Latchbolt Throw                  | Knobs           | Levers   | Standard      | 8805         | 8805FL   | 3/4"     | SL   | —      | SL8805FL | 3/4" | Reflections® | — | 8805RL   | 3/4" | 50-8805-x219-FIN | 2153         | 2160 | 208    | 201  | 1178L | 1178L            |   |   |                                      |     |       |       |  |
|                                                    | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         | Model Numbers |           |                                  | Latchbolt Throw |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Knobs                   | Levers        |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|                                                    | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8805                    | 8805FL        | 3/4"      |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| SL                                                 | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SL8805FL                | 3/4"          |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| Reflections®                                       | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8805RL                  | 3/4"          |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| <b>8807</b><br>Entry lock (F04)                    | <ul style="list-style-type: none"> <li>For office doors where locking is required.</li> <li>Latchbolt retracted by knob/lever either side, except when outside knob/lever is locked by stopwork activator.</li> <li>When outside knob/lever is locked, latchbolt is operated by key outside and knob/lever inside.</li> <li>Deadlocking latchbolt.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8807</td> <td>8807FL</td> <td>3/4"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8807FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8807RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                                                                                                                                                 | Trim                    | Model Numbers |           | Latchbolt Throw                  | Knobs           | Levers   | Standard      | 8807         | 8807FL   | 3/4"     | SL   | —      | SL8807FL | 3/4" | Reflections® | — | 8807RL   | 3/4" | 50-8807-x219-FIN | 2153         | 2160 | 208    | 201  | 1178L | 1178L            |   |   |                                      |     |       |       |  |
|                                                    | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         | Model Numbers |           |                                  | Latchbolt Throw |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Knobs                   | Levers        |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
|                                                    | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8807                    | 8807FL        | 3/4"      |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| SL                                                 | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SL8807FL                | 3/4"          |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |
| Reflections®                                       | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8807RL                  | 3/4"          |           |                                  |                 |          |               |              |          |          |      |        |          |      |              |   |          |      |                  |              |      |        |      |       |                  |   |   |                                      |     |       |       |  |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

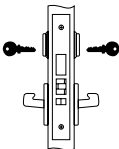
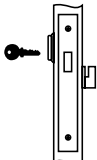
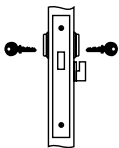
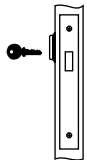
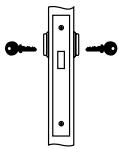
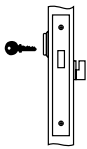
## mechanical functions and descriptions

| Mechanical Functions (ANSI)                    | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Armor Front Part Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | *Cylinder | *Cam          | Escutcheon Plate Spacing Numbers |                 | Spindles        |               | Illustration |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|----------------------------------|-----------------|-----------------|---------------|--------------|-----------|----------|----------|--------|----------|------------|------|--------------|---|------------|------|------------------|-------------------|------|----------|------|-------|------------------|---------------------------------------------------------------------------------------|------|-----|-----|-------|-------|---------------------------------------------------------------------------------------|
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |               | Outside                          | Inside          | Knobs           | Levers (Std.) |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| <b>8808</b><br>Classroom lock (F05)            | <ul style="list-style-type: none"> <li>For classroom, office, or utility room doors.</li> <li>Latchbolt retracted by knob/lever either side, except when outside knob/lever is locked by key outside.</li> <li>Inside knob/lever always active.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                                             | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8808</td> <td>8808FL</td> <td>3/4"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8808FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8808RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                        | Trim      | Model Numbers |                                  | Latchbolt Throw | Knobs           | Levers        | Standard     | 8808      | 8808FL   | 3/4"     | SL     | —        | SL8808FL   | 3/4" | Reflections® | — | 8808RL     | 3/4" | 50-8805-x219-FIN | 2153              | 2160 | 208      | 201  | 1178L | 1178L            |    |      |     |     |       |       |                                                                                       |
|                                                | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  |                 | Latchbolt Throw |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
|                                                | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8808      | 8808FL        | 3/4"                             |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| SL                                             | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SL8808FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      |               |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| Reflections®                                   | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8808RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      |               |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| <b>8808-2</b><br>Intruder latchbolt lock (F32) | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side unless outside knob/lever is locked by key.</li> <li>Either cylinder locks or unlocks outside knob/lever.</li> <li>Latchbolt can be retracted by key when outside knob/lever is locked.</li> <li>Operating inside knob/lever retracts latchbolt, but outside knob/lever remains locked.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8808-2</td> <td>8808-2FL</td> <td>3/4"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8808-2FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8808-2RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                | Trim      | Model Numbers |                                  | Latchbolt Throw | Knobs           | Levers        | Standard     | 8808-2    | 8808-2FL | 3/4"     | SL     | —        | SL8808-2FL | 3/4" | Reflections® | — | 8808-2RL   | 3/4" | 50-8805-x219-FIN | 2153 (both sides) | 2160 | 208      | 208  | 1178L | 1178L            |   |      |     |     |       |       |                                                                                       |
|                                                | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  |                 | Latchbolt Throw |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| Standard                                       | 8808-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8808-2FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      |               |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| SL                                             | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SL8808-2FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3/4"      |               |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| Reflections®                                   | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8808-2RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      |               |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| <b>8809</b><br>Classroom or office lock        | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side unless outside knob/lever is locked by key outside or thumbturn inside.</li> <li>Latchbolt retracted by thumbturn inside or key outside.</li> <li>Inside knob/lever always active.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                     | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8809</td> <td>8809FL</td> <td>3/4"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8809FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8809RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                        | Trim      | Model Numbers |                                  | Latchbolt Throw | Knobs           | Levers        | Standard     | 8809      | 8809FL   | 3/4"     | SL     | —        | SL8809FL   | 3/4" | Reflections® | — | 8809RL     | 3/4" | 50-8805-x219-FIN | 2153              | 2160 | 208      | 211  | 1178L | 1178L            |  |      |     |     |       |       |                                                                                       |
|                                                | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  |                 | Latchbolt Throw |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| Standard                                       | 8809                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 8809FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      |               |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| SL                                             | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SL8809FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      |               |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| Reflections®                                   | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8809RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      |               |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| <b>8811-2</b><br>Intruder deadbolt lock (F33)  | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side unless outside knob/lever is locked by key.</li> <li>Deadbolt operated by key either side.</li> <li>When deadbolt is projected, outside knob/lever is automatically locked.</li> <li>Key retraction of deadbolt unlocks outside knob/lever.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously, automatically unlocking outside knob/lever.</li> </ul> | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8811-2</td> <td>8811-2FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8811-2FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8811-2RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table> | Trim      | Model Numbers |                                  | Throw           |                 | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8811-2 | 8811-2FL | 3/4"       | 1"   | SL           | — | SL8811-2FL | 3/4" | 1"               | Reflections®      | —    | 8811-2RL | 3/4" | 1"    | 50-8802-x219-FIN | 2153 (both sides)                                                                     | 2160 | 208 | 208 | 1178L | 1178L |  |
|                                                | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw           |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt        |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| Standard                                       | 8811-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8811-2FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| SL                                             | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SL8811-2FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3/4"      | 1"            |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |
| Reflections®                                   | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8811-2RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |                 |                 |               |              |           |          |          |        |          |            |      |              |   |            |      |                  |                   |      |          |      |       |                  |                                                                                       |      |     |     |       |       |                                                                                       |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

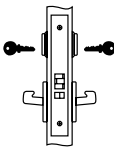
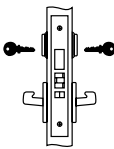
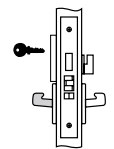
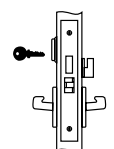


## mechanical functions and descriptions

| Mechanical Functions (ANSI)                   | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Armor Front Part Number | *Cylinder         | *Cam | Escutcheon Plate Spacing Numbers |        | Spindles |               | Illustration                                                                          |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|------|----------------------------------|--------|----------|---------------|---------------------------------------------------------------------------------------|--------------|----------------|-----------|----------|--|-------|--------|-----------|----------|----------|--------|----------|------|----|----|---|------------|------|----|--------------|---|----------|------|----|
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                   |      | Outside                          | Inside | Knobs    | Levers (Std.) |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8812-2</b><br>Intruder deadbolt lock (F34) | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side unless outside knob/lever is locked by key.</li> <li>Deadbolt operated by key either side.</li> <li>When deadbolt is projected, outside knob/lever is automatically locked.</li> <li>Key retraction of deadbolt unlocks outside knob/lever.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously, automatically unlocking outside knob/lever.</li> <li>Deadlocking latchbolt.</li> </ul> | 50-8820-x219-FIN        | 2153 (both sides) | 2160 | 208                              | 208    | 1178L    | 1178L         |    |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                               | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8812-2</td> <td>8812-2FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8812-2FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8812-2RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>                       |                         |                   |      |                                  |        |          |               |                                                                                       | Trim         | Model Numbers  |           | Throw    |  | Knobs | Levers | Latchbolt | Deadbolt | Standard | 8812-2 | 8812-2FL | 3/4" | 1" | SL | — | SL8812-2FL | 3/4" | 1" | Reflections® | — | 8812-2RL | 3/4" | 1" |
|                                               | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |                   |      |                                  |        |          |               |                                                                                       |              | Model Numbers  |           | Throw    |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                   |      |                                  |        |          |               |                                                                                       | Knobs        | Levers         | Latchbolt | Deadbolt |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Standard                                      | 8812-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8812-2FL                | 3/4"              | 1"   |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| SL                                            | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SL8812-2FL              | 3/4"              | 1"   |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Reflections®                                  | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8812-2RL                | 3/4"              | 1"   |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8813ST</b><br>Classroom deadlock (F29)     | <ul style="list-style-type: none"> <li>Deadbolt operated by key outside, thumbturn inside.</li> <li>Thumbturn inside will retract the deadbolt but will not project it.</li> <li>NOT UL listed.</li> </ul>                                                                                                                                                                                                                                                                                                                             | 50-8813-x219-FIN        | 2153              | 2160 | 250                              | 251    | —        | —             |   |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                               | <table border="1"> <thead> <tr> <th>Model Number</th> <th>Deadbolt Throw</th> </tr> </thead> <tbody> <tr> <td>8813ST</td> <td>1"</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                          |                         |                   |      |                                  |        |          |               |                                                                                       | Model Number | Deadbolt Throw | 8813ST    | 1"       |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Model Number                                  | Deadbolt Throw                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| 8813ST                                        | 1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8813ST-2</b><br>Classroom deadlock         | <ul style="list-style-type: none"> <li>Deadbolt operated by key either side.</li> <li>Thumbturn inside will retract the deadbolt but will not project it.</li> <li>NOT UL listed.</li> </ul>                                                                                                                                                                                                                                                                                                                                           | 50-8813-x219-FIN        | 2153 (both sides) | 2160 | 250                              | 252    | —        | —             |  |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                               | <table border="1"> <thead> <tr> <th>Model Number</th> <th>Deadbolt Throw</th> </tr> </thead> <tbody> <tr> <td>8813ST-2</td> <td>1"</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                        |                         |                   |      |                                  |        |          |               |                                                                                       | Model Number | Deadbolt Throw | 8813ST-2  | 1"       |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Model Number                                  | Deadbolt Throw                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| 8813ST-2                                      | 1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8814</b><br>Deadlock (F18)                 | <ul style="list-style-type: none"> <li>Deadbolt operated by key outside only.</li> <li>No inside operation.</li> <li>NOT UL listed.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                         | 50-8813-x219-FIN        | 2153              | 2160 | 250                              | —      | —        | —             |  |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                               | <table border="1"> <thead> <tr> <th>Model Number</th> <th>Deadbolt Throw</th> </tr> </thead> <tbody> <tr> <td>8814</td> <td>1"</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |      |                                  |        |          |               |                                                                                       | Model Number | Deadbolt Throw | 8814      | 1"       |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Model Number                                  | Deadbolt Throw                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| 8814                                          | 1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8814-2</b><br>Deadlock (F16)               | <ul style="list-style-type: none"> <li>Deadbolt operated by key either side.</li> <li>NOT UL listed.</li> </ul> Note: Use only on rooms with more than one exit.                                                                                                                                                                                                                                                                                                                                                                       | 50-8813-x219-FIN        | 2153 (both sides) | 2160 | 250                              | 250    | —        | —             |  |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
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| Model Number                                  | Deadbolt Throw                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| 8814-2                                        | 1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8815</b><br>Deadlock (F17)                 | <ul style="list-style-type: none"> <li>Deadbolt operated by key outside, thumbturn inside.</li> <li>NOT UL listed.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                          | 50-8813-x219-FIN        | 2153              | 2160 | 250                              | 251    | —        | —             |  |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
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| Model Number                                  | Deadbolt Throw                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| 8815                                          | 1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                   |      |                                  |        |          |               |                                                                                       |              |                |           |          |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

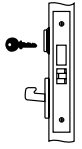
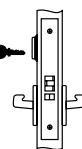
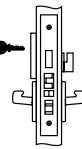
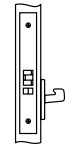
## mechanical functions and descriptions

| Mechanical Functions (ANSI)                                  | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Armor Front Part Number | *Cylinder         |        | *Cam    |        | Escutcheon Plate Spacing Numbers |        | Spindles |               | Illustration                                                                          |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------|---------|--------|----------------------------------|--------|----------|---------------|---------------------------------------------------------------------------------------|-------|---------------|-----------|-----------------|--|-------|--------|-----------|----------|----------|--------|----------|------|----|----|---|------------|------|----|--------------|---|----------|------|----|
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         | Outside           | Inside | Outside | Inside | Outside                          | Inside | Knobs    | Levers (Std.) |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8817-2</b><br>Apartment, exit or public toilet lock (F09) | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side, except when outside knob/lever is locked by key inside.</li> <li>When outside knob/lever is locked, latchbolt is operated by key outside and knob/lever inside.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                           | 50-8805-x219-FIN        | 2153              | 2153S  | 2160    | 2130   | 208                              | 208    | 1178L    | 1178L         |    |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Throw</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8817-2</td> <td>8817-2FL</td> <td>3/4"</td> <td></td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8817-2FL</td> <td>3/4"</td> <td></td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8817-2RL</td> <td>3/4"</td> <td></td> </tr> </tbody> </table>                                                                                                                                                                                                                          |                         |                   |        |         |        |                                  |        |          |               |                                                                                       | Trim  | Model Numbers |           | Latchbolt Throw |  | Knobs | Levers | Latchbolt | Throw    | Standard | 8817-2 | 8817-2FL | 3/4" |    | SL | — | SL8817-2FL | 3/4" |    | Reflections® | — | 8817-2RL | 3/4" |    |
|                                                              | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       | Model Numbers |           | Latchbolt Throw |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       | Knobs | Levers        | Latchbolt | Throw           |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Standard                                                     | 8817-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8817-2FL                | 3/4"              |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| SL                                                           | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SL8817-2FL              | 3/4"              |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Reflections®                                                 | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 8817-2RL                | 3/4"              |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8818-2</b><br>Classroom security intruder lock            | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever unless outside knob/lever is locked by key.</li> <li>Deadbolt operated by key either side.</li> <li>When deadbolt is projected, outside knob/lever is automatically locked.</li> <li>Key retraction of latchbolt by either side unlocks outside knob/lever.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously, with outside knob/lever remaining locked.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                                   | 50-8820-x219-FIN        | 2153 (both sides) |        | 2160    |        | 208                              | 208    | 1178L    | 1178L         |   |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
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|                                                              | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       | Model Numbers |           | Throw           |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       | Knobs | Levers        | Latchbolt | Deadbolt        |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Standard                                                     | 8818-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8818-2FL                | 3/4"              | 1"     |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| SL                                                           | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SL8818-2FL              | 3/4"              | 1"     |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Reflections®                                                 | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 8818-2RL                | 3/4"              | 1"     |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8820</b><br>Hotel guest lock (F15)                        | <ul style="list-style-type: none"> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>Latchbolt retracted by master keys and change keys only when deadbolt is NOT projected.</li> <li>Deadbolt operated by emergency/shut-out or display key outside and thumbturn inside.</li> <li>When deadbolt is projected, the occupancy indicator shows "OCC" (indicating room is occupied). Access from outside can be gained only with an emergency/shut-out or display key.</li> <li>Outside knob/lever rigid at all times.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously.</li> <li>Deadlocking latchbolt.</li> <li>Master key system must be 7-pin.</li> </ul> | 50-8820-x219-FIN        | 2719              |        | 2160    |        | 260                              | 211    | 1178L    | 1178L         |  |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
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|                                                              | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       | Model Numbers |           | Latchbolt Throw |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       | Knobs | Levers        | Latchbolt | Throw           |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Standard                                                     | 8820                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8820FL                  | 3/4"              |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| SL                                                           | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SL8820FL                | 3/4"              |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Reflections®                                                 | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 8820RL                  | 3/4"              |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| <b>8822</b><br>Dormitory or exit lock (F13)                  | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side.</li> <li>Deadbolt operated by key outside and thumbturn inside.</li> <li>When the deadbolt is projected, outside knob/lever is automatically locked.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously, automatically unlocking outside knob/lever.</li> </ul>                                                                                                                                                                                                                                                                                                                           | 50-8802-x219-FIN        | 2153              |        | 2160    |        | 208                              | 211    | 1178L    | 1178L         |  |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
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|                                                              | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       | Model Numbers |           | Throw           |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       | Knobs | Levers        | Latchbolt | Deadbolt        |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Standard                                                     | 8822                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8822FL                  | 3/4"              | 1"     |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| SL                                                           | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SL8822FL                | 3/4"              | 1"     |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
| Reflections®                                                 | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 8822RL                  | 3/4"              | 1"     |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |
|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                   |        |         |        |                                  |        |          |               |                                                                                       |       |               |           |                 |  |       |        |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

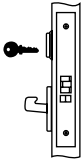
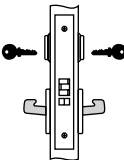
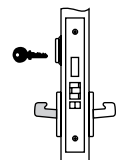
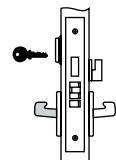


## mechanical functions and descriptions

| Mechanical Functions (ANSI)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Armor Front Part Number | *Cylinder | *Cam               | Escutcheon Plate Spacing Numbers |        | Spindles |               | Illustration                                                                          |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------|--------------------|----------------------------------|--------|----------|---------------|---------------------------------------------------------------------------------------|----------|---------------|-----------|--------------------|----|-------|--------|-----------|----------|----------|--------------|--------|--------|------|----|---|----------|------|----|--------------|---|--------|------|----|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                    | Outside                          | Inside | Knobs    | Levers (Std.) |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                    | Model Numbers                    |        | Throw    |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| <b>8823</b><br>Storeroom lock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever outside.</li> <li>Deadbolt operated by key outside.</li> <li>When deadbolt is projected, outside knob/lever is automatically locked.</li> <li>No inside knob/lever or cylinder.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 50-8802-x219-FIN        | 2153      | 2160               | 208                              | —      | F1198    | F1198         |    |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8823</td> <td>8823FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8823FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8823RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |           |                    |                                  |        |          |               |                                                                                       | Trim     | Model Numbers |           | Throw              |    | Knobs | Levers | Latchbolt | Deadbolt | Standard | 8823         | 8823FL | 3/4"   | 1"   | SL | — | SL8823FL | 3/4" | 1" | Reflections® | — | 8823RL | 3/4" | 1" |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |           |                    |                                  |        |          |               |                                                                                       |          | Model Numbers |           | Throw              |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                    |                                  |        |          |               |                                                                                       | Knobs    | Levers        | Latchbolt | Deadbolt           |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8823                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8823FL                  | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8823FL                | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8823RL                  | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           | Latchbolt Throw    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  | Latchbolt | Throw              |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8824                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8824FL                  | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8824FL                | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8824RL                  | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| <b>8824</b><br>Holdback lock (F06)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>For classroom, office, or utility room doors.</li> <li>Latchbolt retracted by knob/lever either side, except when outside knob/lever is locked by key outside.</li> <li>Latchbolt can be held in retracted position by outside cylinder.</li> <li>Inside knob/lever always active.</li> <li>Deadlocking latchbolt.</li> <li>NOT UL listed.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 50-8805-x219-FIN        | 2153      | 2160               | 208                              | 211    | 1178L    | 1178L         |   |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Throw</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8824</td> <td>8824FL</td> <td>3/4"</td> <td></td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8824FL</td> <td>3/4"</td> <td></td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8824RL</td> <td>3/4"</td> <td></td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                |                         |           |                    |                                  |        |          |               |                                                                                       | Trim     | Model Numbers |           | Latchbolt Throw    |    | Knobs | Levers | Latchbolt | Throw    | Standard | 8824         | 8824FL | 3/4"   |      | SL | — | SL8824FL | 3/4" |    | Reflections® | — | 8824RL | 3/4" |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |           |                    |                                  |        |          |               |                                                                                       |          | Model Numbers |           | Latchbolt Throw    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                    |                                  |        |          |               |                                                                                       | Knobs    | Levers        | Latchbolt | Throw              |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8824                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8824FL                  | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8824FL                | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8824RL                  | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           | Latchbolt Deadbolt |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  | Latchbolt | Deadbolt           |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8827                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8827FL                  | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8827FL                | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8827RL                  | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| <b>8827</b><br>Hotel/motel lock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side, except when outside knob/lever is independently locked by stopwork activator or automatically locked when the deadbolt is projected.</li> <li>Latchbolt retracted by master keys and change keys only when deadbolt is NOT projected.</li> <li>Deadbolt operated by emergency/shut-out or display key outside and thumbturn inside.</li> <li>When deadbolt is projected, the occupancy indicator shows "OCC" (indicating room is occupied). Access from outside can be gained only with an emergency/shut-out or display key.</li> <li>Anti-panic operation. Operating inside knob/lever automatically retracts latchbolt and deadbolt with outside knob/lever remaining locked.</li> <li>Deadlocking latchbolt.</li> <li>Master key system must be 7-pin.</li> <li>Function only available with CO, R6, R7, R8 roses or CN escutcheon.</li> </ul> | 50-8847-x219-FIN        | 2719      | 2160               | 260                              | 211    | 1178L    | 1178L         |  |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Latchbolt Deadbolt</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8827</td> <td>8827FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8827FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8827RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |           |                    |                                  |        |          |               |                                                                                       | Trim     | Model Numbers |           | Latchbolt Deadbolt |    | Knobs | Levers | Latchbolt | Deadbolt | Standard | 8827         | 8827FL | 3/4"   | 1"   | SL | — | SL8827FL | 3/4" | 1" | Reflections® | — | 8827RL | 3/4" | 1" |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |           |                    |                                  |        |          |               |                                                                                       |          | Model Numbers |           | Latchbolt Deadbolt |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                    |                                  |        |          |               |                                                                                       | Knobs    | Levers        | Latchbolt | Deadbolt           |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8827                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8827FL                  | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8827FL                | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8827RL                  | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Throw</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8828</td> <td>8828FL</td> <td>3/4"</td> <td></td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8828FL</td> <td>3/4"</td> <td></td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8828RL</td> <td>3/4"</td> <td></td> </tr> </tbody> </table>             | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Model Numbers           |           | Latchbolt Throw    |                                  | Knobs  | Levers   | Latchbolt     | Throw                                                                                 | Standard | 8828          | 8828FL    | 3/4"               |    | SL    | —      | SL8828FL  | 3/4"     |          | Reflections® | —      | 8828RL | 3/4" |    |   |          |      |    |              |   |        |      |    |
| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           | Latchbolt Throw    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  | Latchbolt | Throw              |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8828                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8828FL                  | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8828FL                | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8828RL                  | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| <b>8828</b><br>Exit or communicating lock (F31)                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>For twin communicating or exit doors where one-sided operation is required.</li> <li>Latchbolt retracted by knob/lever inside at all times.</li> <li>No outside operations.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 50-8805-x219-FIN        | —         | —                  | —                                | 201    | F1198    | F1198         |  |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Throw</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8828</td> <td>8828FL</td> <td>3/4"</td> <td></td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8828FL</td> <td>3/4"</td> <td></td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8828RL</td> <td>3/4"</td> <td></td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                |                         |           |                    |                                  |        |          |               |                                                                                       | Trim     | Model Numbers |           | Latchbolt Throw    |    | Knobs | Levers | Latchbolt | Throw    | Standard | 8828         | 8828FL | 3/4"   |      | SL | — | SL8828FL | 3/4" |    | Reflections® | — | 8828RL | 3/4" |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |           |                    |                                  |        |          |               |                                                                                       |          | Model Numbers |           | Latchbolt Throw    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                    |                                  |        |          |               |                                                                                       | Knobs    | Levers        | Latchbolt | Throw              |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8828                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8828FL                  | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8828FL                | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8828RL                  | 3/4"      |                    |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Latchbolt Deadbolt</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8827</td> <td>8827FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8827FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8827RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table> | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Model Numbers           |           | Latchbolt Deadbolt |                                  | Knobs  | Levers   | Latchbolt     | Deadbolt                                                                              | Standard | 8827          | 8827FL    | 3/4"               | 1" | SL    | —      | SL8827FL  | 3/4"     | 1"       | Reflections® | —      | 8827RL | 3/4" | 1" |   |          |      |    |              |   |        |      |    |
| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           | Latchbolt Deadbolt |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  | Latchbolt | Deadbolt           |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8827                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8827FL                  | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8827FL                | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8827RL                  | 3/4"      | 1"                 |                                  |        |          |               |                                                                                       |          |               |           |                    |    |       |        |           |          |          |              |        |        |      |    |   |          |      |    |              |   |        |      |    |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

## mechanical functions and descriptions

| Mechanical Functions (ANSI)                         | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Armor Front Part Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | *Cylinder | *Cam          | Escutcheon Plate Spacing Numbers |                 | Spindles |               | Illustration |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|----------------------------------|-----------------|----------|---------------|--------------|-----------|----------|----------|--------|----------|------|----------|------|--------------|------------|--------|------|------------------|------|----------|------|-----|------------------|-------------------|---------------------------------------------------------------------------------------|-----|-----|-------|-------|---------------------------------------------------------------------------------------|
|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |               | Outside                          | Inside          | Knobs    | Levers (Std.) |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| <b>8829</b><br>Closet lock                          | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever outside.</li> <li>Outside cylinder locks or unlocks outside knob/lever.</li> <li>No inside knob/lever or cylinder.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                                                                                                                                                                                          | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th>Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th></th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8829</td> <td>8829FL</td> <td>3/4"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8829FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8829RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                          | Trim      | Model Numbers |                                  | Latchbolt Throw | Knobs    | Levers        |              | Standard  | 8829     | 8829FL   | 3/4"   | SL       | —    | SL8829FL | 3/4" | Reflections® | —          | 8829RL | 3/4" | 50-8805-x219-FIN | 2153 | 2160     | 208  | —   | F1198            | F1198             |    |     |     |       |       |                                                                                       |
|                                                     | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Latchbolt Throw |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        |                                  |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|                                                     | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8829      | 8829FL        | 3/4"                             |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| SL                                                  | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SL8829FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      |               |                                  |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| Reflections®                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8829RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      |               |                                  |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| <b>8830-2</b><br>Asylum or institutional lock (F30) | <ul style="list-style-type: none"> <li>Latchbolt retracted by key both sides.</li> <li>Rigid knob/lever both sides for use as pulls only.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                            | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8830-2</td> <td>8830-2FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8830-2FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8830-2RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table> | Trim      | Model Numbers |                                  | Throw           |          | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8830-2 | 8830-2FL | 3/4" | 1"       | SL   | —            | SL8830-2FL | 3/4"   | 1"   | Reflections®     | —    | 8830-2RL | 3/4" | 1"  | 50-8805-x219-FIN | 2153 (both sides) | 2160                                                                                  | 208 | 208 | 1173L | 1173L |    |
|                                                     | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw           |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt        |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|                                                     | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8830-2    | 8830-2FL      | 3/4"                             | 1"              |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| SL                                                  | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SL8830-2FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3/4"      | 1"            |                                  |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| Reflections®                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8830-2RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| <b>8831</b><br>Detention lock                       | <ul style="list-style-type: none"> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>Latchbolt retracted by master keys and change keys only when deadbolt is NOT projected.</li> <li>Deadbolt operated by emergency (guards) key only outside.</li> <li>Inside knob/lever only opens door when deadbolt is in retracted position.</li> <li>Outside knob/lever rigid at all times.</li> <li>Deadlocking latchbolt.</li> <li>Trim mounted with fasteners outside.</li> <li>Furnished standard with TORX® security screws.</li> <li>Master key system must be 7-pin.</li> </ul> | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8831</td> <td>—</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8831FL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>                                                                                                    | Trim      | Model Numbers |                                  | Throw           |          | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8831   | —        | 3/4" | 1"       | SL   | —            | SL8831FL   | 3/4"   | 1"   | 50-8820-x219-FIN | 2719 | 2160     | 201  | 208 | 1178L            | 1178L             |  |     |     |       |       |                                                                                       |
|                                                     | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw           |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt        |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|                                                     | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8831      | —             | 3/4"                             | 1"              |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| SL                                                  | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SL8831FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| <b>8832</b><br>Hotel/motel lock                     | <ul style="list-style-type: none"> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>Latchbolt retracted by master keys and change keys only when deadbolt is NOT projected.</li> <li>Deadbolt operated by emergency/shut-out or display key only outside and thumbturn inside.</li> <li>Outside knob/lever rigid at all times.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously.</li> <li>Deadlocking latchbolt.</li> <li>Master key system must be 7-pin.</li> </ul>                                           | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8832</td> <td>8832FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8832FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8832RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>         | Trim      | Model Numbers |                                  | Throw           |          | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8832   | 8832FL   | 3/4" | 1"       | SL   | —            | SL8832FL   | 3/4"   | 1"   | Reflections®     | —    | 8832RL   | 3/4" | 1"  | 50-8820-x219-FIN | 2719              | 2160                                                                                  | 208 | 211 | 1178L | 1178L |  |
|                                                     | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw           |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt        |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
|                                                     | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8832      | 8832FL        | 3/4"                             | 1"              |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| SL                                                  | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SL8832FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |
| Reflections®                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8832RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      | 1"            |                                  |                 |          |               |              |           |          |          |        |          |      |          |      |              |            |        |      |                  |      |          |      |     |                  |                   |                                                                                       |     |     |       |       |                                                                                       |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

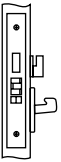
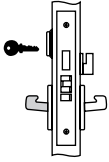
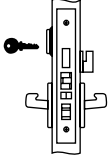
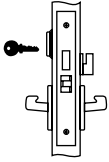
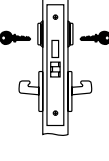


## mechanical functions and descriptions

| Mechanical Functions (ANSI)       | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Armor Front Part Number | *Cylinder       |        | *Cam            |                  | Escutcheon Plate Spacing Numbers |                      | Spindles |               | Illustration |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------|--------|-----------------|------------------|----------------------------------|----------------------|----------|---------------|--------------|--------------|-----|----------|------|------------------|------|--------|------|------|-----|-----|-------|-------|-------|--|
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                         | Outside         | Inside | Outside         | Inside           | Outside                          | Inside               | Knobs    | Levers (Std.) |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| <b>8833</b><br>Exit lock          | <ul style="list-style-type: none"> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>No knob/lever outside.</li> <li>Deadlocking latchbolt.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8833</td> <td>8833FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8833RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                                                                                                               | Trim                    | Model Numbers   |        | Latchbolt Throw | Knobs            | Levers                           | Standard             | 8833     | 8833FL        | 3/4"         | Reflections® | —   | 8833RL   | 3/4" | 50-8805-x219-FIN |      | 2153   |      | 2160 |     | 250 | 201   | F1198 | F1198 |  |
|                                   | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         | Model Numbers   |        |                 | Latchbolt Throw  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Knobs                   | Levers          |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| Standard                          | 8833                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8833FL                  | 3/4"            |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| Reflections®                      | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8833RL                  | 3/4"            |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| <b>8833-2</b><br>All-purpose lock | <ul style="list-style-type: none"> <li>Latchbolt retracted by key both sides.</li> <li>No knob/lever either side.</li> <li>Deadlocking latchbolt.</li> </ul> <table border="1"> <thead> <tr> <th>Model Number</th> <th>Latchbolt Throw</th> </tr> </thead> <tbody> <tr> <td>8833-2</td> <td>3/4"</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                  | Model Number            | Latchbolt Throw | 8833-2 | 3/4"            | 50-8805-x219-FIN |                                  | 2153<br>(both sides) |          | 2160          |              | 250          | 250 | —        | —    |                  |      |        |      |      |     |     |       |       |       |  |
|                                   | Model Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Latchbolt Throw         |                 |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| 8833-2                            | 3/4"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |                 |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| <b>8834</b><br>All purpose lock   | <ul style="list-style-type: none"> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>No knob/lever outside.</li> <li>Latchbolt can be held in retracted position by inside thumbturn cylinder.</li> <li>Deadlocking latchbolt.</li> <li>NOT UL listed.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8834</td> <td>8834FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8834RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                    | Trim                    | Model Numbers   |        | Latchbolt Throw | Knobs            | Levers                           | Standard             | 8834     | 8834FL        | 3/4"         | Reflections® | —   | 8834RL   | 3/4" | 50-8805-x219-FIN | 2153 | S2053S | 2160 | 2130 | 250 | 208 | F1198 | F1198 |       |  |
|                                   | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         | Model Numbers   |        |                 | Latchbolt Throw  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Knobs                   | Levers          |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| Standard                          | 8834                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8834FL                  | 3/4"            |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| Reflections®                      | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8834RL                  | 3/4"            |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| <b>8834-2</b><br>All purpose lock | <ul style="list-style-type: none"> <li>For classroom, office, or utility room doors.</li> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>No knob/lever outside.</li> <li>Latchbolt can be held in retracted position by inside cylinder.</li> <li>Deadlocking latchbolt.</li> <li>NOT UL listed.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8834-2</td> <td>8834-2FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8834-2RL</td> <td>3/4"</td> </tr> </tbody> </table> | Trim                    | Model Numbers   |        | Latchbolt Throw | Knobs            | Levers                           | Standard             | 8834-2   | 8834-2FL      | 3/4"         | Reflections® | —   | 8834-2RL | 3/4" | 50-8805-x219-FIN | 2153 | 2153S  | 2160 | 2130 | 250 | 208 | F1198 | F1198 |       |  |
|                                   | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         | Model Numbers   |        |                 | Latchbolt Throw  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Knobs                   | Levers          |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| Standard                          | 8834-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8834-2FL                | 3/4"            |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |
| Reflections®                      | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8834-2RL                | 3/4"            |        |                 |                  |                                  |                      |          |               |              |              |     |          |      |                  |      |        |      |      |     |     |       |       |       |  |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

## mechanical functions and descriptions

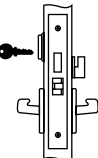
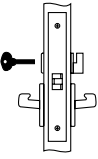
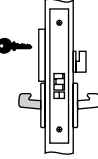
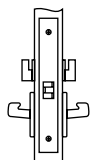
| Mechanical Functions (ANSI)                       | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Armor Front Part Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | *Cylinder | *Cam          | Escutcheon Plate Spacing Numbers |          | Spindles |               | Illustration |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|----------------------------------|----------|----------|---------------|--------------|-----------|----------|----------|--------|----------|------|----|----|---|------------|------|----|--------------|---|----------|------|----|------------------|-------------------|------|-----|-----|-------|-------|---------------------------------------------------------------------------------------|
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |               | Outside                          | Inside   | Knobs    | Levers (Std.) |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| <b>8835</b><br>Exit lock                          | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever inside.</li> <li>Deadbolt operated by thumbturn inside.</li> <li>No outside operations.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                                                                                                        | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8835</td> <td>8835FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8835FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8835RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>         | Trim      | Model Numbers |                                  | Throw    |          | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8835   | 8835FL   | 3/4" | 1" | SL | — | SL8835FL   | 3/4" | 1" | Reflections® | — | 8835RL   | 3/4" | 1" | 50-8820-x219-FIN | —                 | —    | —   | 211 | F1198 | F1198 |    |
|                                                   | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw    |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8835      | 8835FL        | 3/4"                             | 1"       |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| SL                                                | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SL8835FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| Reflections®                                      | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8835RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| <b>8840</b><br>Storeroom Deadbolt                 | <ul style="list-style-type: none"> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>Deadbolt operated by key outside and thumbturn inside.</li> <li>Outside knob/lever rigid at all times.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously.</li> <li>Deadlocking latchbolt.</li> </ul>                                                                                                                                                                                                                           | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8840</td> <td>8840FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8840FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8840RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>         | Trim      | Model Numbers |                                  | Throw    |          | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8840   | 8840FL   | 3/4" | 1" | SL | — | SL8840FL   | 3/4" | 1" | Reflections® | — | 8840RL   | 3/4" | 1" | 50-8820-x219-FIN | 2153              | 2160 | 208 | 211 | 1178L | 1178L |   |
|                                                   | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw    |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8840      | 8840FL        | 3/4"                             | 1"       |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| SL                                                | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SL8840FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| Reflections®                                      | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8840RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| <b>8847</b><br>Apartment corridor door lock (F20) | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side, except when outside knob/lever is locked by stopwork activator.</li> <li>Deadbolt operated by key outside, thumbturn inside.</li> <li>When outside knob/lever is locked, latchbolt and deadbolt are operated by key outside.</li> <li>When deadbolt is projected, outside knob/lever is automatically locked.</li> <li>Anti-panic operation. Operating inside knob/lever automatically retracts latchbolt and deadbolt with outside knob/lever remaining locked.</li> <li>Deadlocking latchbolt.</li> </ul> | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8847</td> <td>8847FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8847FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8847RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>         | Trim      | Model Numbers |                                  | Throw    |          | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8847   | 8847FL   | 3/4" | 1" | SL | — | SL8847FL   | 3/4" | 1" | Reflections® | — | 8847RL   | 3/4" | 1" | 50-8847-x219-FIN | 2153              | 2160 | 208 | 211 | 1178L | 1178L |  |
|                                                   | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw    |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8847      | 8847FL        | 3/4"                             | 1"       |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| SL                                                | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SL8847FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| Reflections®                                      | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8847RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| <b>8860</b><br>Room door lock (F21)               | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side.</li> <li>Deadbolt operated by key outside, thumbturn inside.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                     | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8860</td> <td>8860FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8860FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8860RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table>         | Trim      | Model Numbers |                                  | Throw    |          | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8860   | 8860FL   | 3/4" | 1" | SL | — | SL8860FL   | 3/4" | 1" | Reflections® | — | 8860RL   | 3/4" | 1" | 50-8802-x219-FIN | 2153              | 2160 | 208 | 211 | 1178L | 1178L |  |
|                                                   | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw    |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8860      | 8860FL        | 3/4"                             | 1"       |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| SL                                                | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SL8860FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| Reflections®                                      | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8860RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| <b>8860-2</b><br>Store door lock (F14)            | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side.</li> <li>Deadbolt operated by key both sides.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8860-2</td> <td>8860-2FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8860-2FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8860-2RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table> | Trim      | Model Numbers |                                  | Throw    |          | Knobs         | Levers       | Latchbolt | Deadbolt | Standard | 8860-2 | 8860-2FL | 3/4" | 1" | SL | — | SL8860-2FL | 3/4" | 1" | Reflections® | — | 8860-2RL | 3/4" | 1" | 50-8802-x219-FIN | 2153 (both sides) | 2160 | 208 | 208 | 1178L | 1178L |  |
|                                                   | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           | Model Numbers |                                  | Throw    |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Knobs     | Levers        | Latchbolt                        | Deadbolt |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
|                                                   | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8860-2    | 8860-2FL      | 3/4"                             | 1"       |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| SL                                                | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SL8860-2FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |
| Reflections®                                      | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8860-2RL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3/4"      | 1"            |                                  |          |          |               |              |           |          |          |        |          |      |    |    |   |            |      |    |              |   |          |      |    |                  |                   |      |     |     |       |       |                                                                                       |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.





## mechanical functions and descriptions

| Mechanical Functions (ANSI)                                                                                                                                                                                                                                                                                                                                                                                                               | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Armor Front Part Number | *Cylinder | *Cam            | Escutcheon Plate Spacing Numbers         |        | Spindles |               | Illustration                                                                          |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------|-----------------|------------------------------------------|--------|----------|---------------|---------------------------------------------------------------------------------------|-------|---------------|-----------|-----------------|-----------------|--------------|----------|-----------|----------|----------|--------------|--------|----------|------|--------------|---|----------|------|----|--------------|---|--------|------|----|
|                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                 | Outside                                  | Inside | Knobs    | Levers (Std.) |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| <b>8861</b><br>Dormitory or storeroom lock                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side.</li> <li>Deadbolt operated by key outside, thumbturn inside.</li> <li>When deadbolt is projected, outside knob/lever is automatically locked.</li> <li>When deadbolt is retracted, outside knob/lever is automatically unlocked.</li> </ul>                                                                                                                                                                        | 50-8802-x219-FIN        | 2153      | 2160            | 208                                      | 211    | 1178L    | 1178L         |    |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th colspan="2">Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Latchbolt</th> <th>Deadbolt</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8861</td> <td>8861FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8861FL</td> <td>3/4"</td> <td>1"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8861RL</td> <td>3/4"</td> <td>1"</td> </tr> </tbody> </table> |                         |           |                 |                                          |        |          |               |                                                                                       | Trim  | Model Numbers |           | Throw           |                 | Knobs        | Levers   | Latchbolt | Deadbolt | Standard | 8861         | 8861FL | 3/4"     | 1"   | SL           | — | SL8861FL | 3/4" | 1" | Reflections® | — | 8861RL | 3/4" | 1" |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |           |                 |                                          |        |          |               |                                                                                       |       | Model Numbers |           | Throw           |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                 |                                          |        |          |               |                                                                                       | Knobs | Levers        | Latchbolt | Deadbolt        |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8861                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8861FL                  | 3/4"      | 1"              |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8861FL                | 3/4"      | 1"              |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8861RL                  | 3/4"      | 1"              |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           |                 | Latchbolt Throw                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  |           |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8862                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8862FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8862FL                | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8862RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           |                 | Latchbolt Throw                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  |           |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8864                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8864FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8864RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| <b>8862</b><br>Privacy, bedroom or bath lock (F22)                                                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side except when outside knob/lever is locked by thumbturn.</li> <li>Operating inside knob/lever retracts the latchbolt, automatically unlocking outside knob/lever.</li> <li>Outside emergency release unlocks outside knob/lever. E203 emergency key supplied.</li> <li>Automatically unlocks when door latches.</li> </ul>                                                                                            | 50-8801-x219-FIN        | —         | —               | 211<br><br>(261 for Occupancy Indicator) | 211    | 1178L    | 1178L         |   |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8862</td> <td>8862FL</td> <td>3/4"</td> </tr> <tr> <td>SL</td> <td>—</td> <td>SL8862FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8862RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                |                         |           |                 |                                          |        |          |               |                                                                                       | Trim  | Model Numbers |           | Latchbolt Throw | Knobs           | Levers       | Standard | 8862      | 8862FL   | 3/4"     | SL           | —      | SL8862FL | 3/4" | Reflections® | — | 8862RL   | 3/4" |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |           |                 |                                          |        |          |               |                                                                                       |       | Model Numbers |           |                 | Latchbolt Throw |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                 |                                          |        |          |               |                                                                                       | Knobs | Levers        |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8862                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8862FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8862FL                | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8862RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           |                 | Latchbolt Throw                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  |           |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8864                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8864FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8864RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           |                 | Latchbolt Throw                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  |           |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8865                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8865FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8865FL                | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8865RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| <b>8864</b><br>Bathroom lock with indicator                                                                                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>Latchbolt retracted by key outside, knob/lever inside.</li> <li>Occupancy indicator operated by thumbturn inside, key outside.</li> <li>When occupancy indicator shows OCC, key outside WILL operate occupancy indicator and retract latchbolt.</li> <li>Outside knob/lever rigid at all times.</li> <li>Inside knob/lever always active.</li> <li>Deadlocking latchbolt.</li> <li>Function only available with CO, R6, R7, R8 roses or CN escutcheon.</li> </ul> | 50-8805-x219-FIN        | 2153      | 2160            | 260                                      | 211    | 1178L    | 1178L         |  |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | <table border="1"> <thead> <tr> <th rowspan="2">Trim</th> <th colspan="2">Model Numbers</th> <th rowspan="2">Latchbolt Throw</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>8864</td> <td>8864FL</td> <td>3/4"</td> </tr> <tr> <td>Reflections®</td> <td>—</td> <td>8864RL</td> <td>3/4"</td> </tr> </tbody> </table>                                                                                                                                  |                         |           |                 |                                          |        |          |               |                                                                                       | Trim  | Model Numbers |           | Latchbolt Throw | Knobs           | Levers       | Standard | 8864      | 8864FL   | 3/4"     | Reflections® | —      | 8864RL   | 3/4" |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |           |                 |                                          |        |          |               |                                                                                       |       | Model Numbers |           |                 | Latchbolt Throw |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                 |                                          |        |          |               |                                                                                       | Knobs | Levers        |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8864                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8864FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8864RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           |                 | Latchbolt Throw                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  |           |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8865                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8865FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8865FL                | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8865RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           |                 | Latchbolt Throw                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  |           |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8865                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8865FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8865FL                | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8865RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| <b>8865</b><br>Bathroom lock                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side except when outside knob/lever is locked by thumbturn either side.</li> <li>Outside thumbturn unlocks outside knob/lever.</li> <li>Automatically unlocks when door latches.</li> <li>Operating inside knob/lever retracts the latchbolt, automatically unlocking outside knob/lever.</li> </ul>                                                                                                                     | 50-8801-x219-FIN        | —         | —               | 211                                      | 211    | 1178L    | 1178L         |  |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |           |                 |                                          |        |          |               |                                                                                       |       | Model Numbers |           |                 | Latchbolt Throw |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |           |                 |                                          |        |          |               |                                                                                       | Knobs | Levers        |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8865                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8865FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8865FL                | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8865RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           |                 | Latchbolt Throw                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  |           |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8865                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8865FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8865FL                | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8865RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
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| Trim                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Model Numbers           |           |                 | Latchbolt Throw                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Levers                  |           |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8865                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8865FL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| SL                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SL8865FL                | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |
| Reflections®                                                                                                                                                                                                                                                                                                                                                                                                                              | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8865RL                  | 3/4"      |                 |                                          |        |          |               |                                                                                       |       |               |           |                 |                 |              |          |           |          |          |              |        |          |      |              |   |          |      |    |              |   |        |      |    |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

## 8800 mechanical functions and descriptions

| Mechanical Functions (ANSI)                 | Description / Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Armor Front Part Number | *Cylinder     | *Cam      | Escutcheon Plate Spacing Numbers |        | Spindles |               | Illustration |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------|-----------|----------------------------------|--------|----------|---------------|--------------|-----------|----------|----------|------|--------|------|----|----|---|----------|------|----|--------------|---|--------|------|----|--|--|--|--|--|
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |               |           | Outside                          | Inside | Knobs    | Levers (Std.) |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
| <b>8867</b><br>Dormitory or exit lock (F12) | <ul style="list-style-type: none"> <li>Latchbolt retracted by knob/lever either side, except when outside knob/lever is locked by stopwork activator or automatically locked when deadbolt is projected.</li> <li>Deadbolt operated by key outside, thumbturn inside.</li> <li>When outside knob/lever is locked, operating key outside retracts both latchbolt and deadbolt.</li> <li>Anti-panic operation. Operating inside knob/lever retracts the latchbolt and deadbolt simultaneously, with outside knob/lever remaining locked.</li> </ul> | 50-8867-x219-FIN        | 2153          | 2160      | 208                              | 211    | 1178L    | 1178L         |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
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|                                             | Trim                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         | Model Numbers |           | Throw                            |        |          |               |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Knobs                   | Levers        | Latchbolt | Deadbolt                         |        |          |               |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
| Standard                                    | 8867                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8867FL                  | 3/4"          | 1"        |                                  |        |          |               |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
| SL                                          | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SL8867FL                | 3/4"          | 1"        |                                  |        |          |               |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
| Reflections®                                | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8867RL                  | 3/4"          | 1"        |                                  |        |          |               |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |               |           |                                  |        |          |               |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |               |           |                                  |        |          |               |              |           |          |          |      |        |      |    |    |   |          |      |    |              |   |        |      |    |  |  |  |  |  |

| Mechanical Functions (ANSI)  | Description                                                                                                                                                                                                                                                                                                                              | Model Numbers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                  | Armor Front Part Number                        | Illustration             | Spindles     |               |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------|--------------------------|--------------|---------------|--------------------------|--------------|-------|--------|--------------|--------|----------|----------|-------|------------------|--|--------|----------|----------|----------------|------------------------------------------------|--------|----------|----------|-------------------------|------------------------------------------------|--|--|--|--|
|                              |                                                                                                                                                                                                                                                                                                                                          | Knobs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Levers                                                           |                                                |                          | Knobs        | Levers (Std.) |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
| <b>Dummy trim both sides</b> | <ul style="list-style-type: none"> <li>Push and pull only.</li> <li>Knob/lever both sides.</li> <li>Both knob/lever non-operational and rigid at all times.</li> <li>Plain rectangular front used with spindle-bar stabilizer.</li> <li>Available in all sectional and escutcheon trim.</li> </ul>                                       | 836A prefixed by design symbol (i.e. LFR836A, CO x CN836A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 838AFL prefixed by design symbol (i.e. JNR838AFL, JN x CN838AFL) | 50-0836-2002-FIN                               |                          | —            | —             |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
| <b>Dummy trim both sides</b> | <ul style="list-style-type: none"> <li>Push or pull only.</li> <li>Knob/lever both sides of inactive leaf of a pair of doors.</li> <li>Both knob/lever non-operational and rigid at all times.</li> <li>Available in all sectional and escutcheon trim.</li> <li>2815 Strike available upon request.</li> </ul>                          | 836B prefixed by design symbol (i.e. COR836B, LF x CN836B)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 838BFL prefixed by design symbol (i.e. JNR838BFL, JN x CN838BFL) | —                                              |                          | —            | —             |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
| <b>Dummy trim one side</b>   | <ul style="list-style-type: none"> <li>Push or pull only.</li> <li>Knob/lever one side.</li> <li>Knob/lever non-operational and rigid at all times.</li> <li>Available in all sectional and escutcheon trim.</li> </ul>                                                                                                                  | 855 prefixed by design symbol (i.e. COR855)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 855FL prefixed by design symbol (i.e. CR x CN855FL)              | —                                              |                          | —            | —             |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
| <b>Active dummy trim</b>     | <ul style="list-style-type: none"> <li>Knob/lever both sides.</li> <li>Push or pull only.</li> <li>Primarily for lever handle trim.</li> <li>Knob/lever active to prevent damage.</li> </ul> 8871DT – Armor front acts as strike for latchbolt only functions.<br>8872DT – Armor front acts as strike for latchbolt x deadbolt functions | <table border="1"> <thead> <tr> <th colspan="3">Model Numbers</th> <th rowspan="2">Armor Front</th> <th rowspan="2">Armor Front Part Numbers</th> <th rowspan="2">Illustration</th> </tr> <tr> <th>Knobs</th> <th>Levers</th> <th>Reflections®</th> </tr> </thead> <tbody> <tr> <td>8870DT</td> <td>8870FLDT</td> <td>8870RLDT</td> <td>Plain</td> <td>50-8870-7020-FIN</td> <td rowspan="3"> </td> </tr> <tr> <td>8871DT</td> <td>8871FLDT</td> <td>8871RLDT</td> <td>Latchbolt Hole</td> <td>RH = 50-8871-7020-FIN<br/>LH = 50-8871-7021-FIN</td> </tr> <tr> <td>8872DT</td> <td>8872FLDT</td> <td>8872RLDT</td> <td>Latchbolt/Deadbolt Hole</td> <td>RH = 50-8872-7020-FIN<br/>LH = 50-8872-7021-FIN</td> </tr> </tbody> </table> |                                                                  | Model Numbers                                  |                          |              | Armor Front   | Armor Front Part Numbers | Illustration | Knobs | Levers | Reflections® | 8870DT | 8870FLDT | 8870RLDT | Plain | 50-8870-7020-FIN |  | 8871DT | 8871FLDT | 8871RLDT | Latchbolt Hole | RH = 50-8871-7020-FIN<br>LH = 50-8871-7021-FIN | 8872DT | 8872FLDT | 8872RLDT | Latchbolt/Deadbolt Hole | RH = 50-8872-7020-FIN<br>LH = 50-8872-7021-FIN |  |  |  |  |
|                              | Model Numbers                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                  | Armor Front                                    | Armor Front Part Numbers | Illustration |               |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
|                              | Knobs                                                                                                                                                                                                                                                                                                                                    | Levers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Reflections®                                                     |                                                |                          |              |               |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
|                              | 8870DT                                                                                                                                                                                                                                                                                                                                   | 8870FLDT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 8870RLDT                                                         | Plain                                          | 50-8870-7020-FIN         |              |               |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
| 8871DT                       | 8871FLDT                                                                                                                                                                                                                                                                                                                                 | 8871RLDT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Latchbolt Hole                                                   | RH = 50-8871-7020-FIN<br>LH = 50-8871-7021-FIN |                          |              |               |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
| 8872DT                       | 8872FLDT                                                                                                                                                                                                                                                                                                                                 | 8872RLDT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Latchbolt/Deadbolt Hole                                          | RH = 50-8872-7020-FIN<br>LH = 50-8872-7021-FIN |                          |              |               |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
|                              |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                  |                                                |                          |              |               |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |
|                              |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                  |                                                |                          |              |               |                          |              |       |        |              |        |          |          |       |                  |  |        |          |          |                |                                                |        |          |          |                         |                                                |  |  |  |  |

Handing must be specified when ordering.

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.



## securex® electrified mortise lockset

### applications

Stair tower doors, office doors, classrooms, interlocks, elevator lobby doors, laboratories, computer rooms, cashier stations, hospital equipment rooms and pharmaceutical storage rooms. For narrow frame profiles, consult factory.

### trim designs

8800 electrified mortise locksets are available with all knob, lever, SL and Reflections® trims.

### ANSI/BHMA

Certified ANSI/BHMA A156.13, Series 1000, Operational Grade 1 (8800FL with CN escutcheon & SL8800 meet Security Grade 1).



### electrical specifications

Fail Safe/Fail Secure  
Voltage: 12VDC or 24VDC Regulated  
Current Draw:  
.25A at 24VDC  
.5A at 12VDC  
Operating Temp.:  
Max. 151°F (66°C)  
Min. -31°F (-35°C)

All monitoring switches rated at:  
2 Amp @ 30 VDC  
3 Amp @ 125 VAC

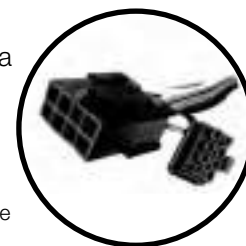
### monitoring options

| Model Number | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REX          | Request to Exit - An SPDT switch that monitors activation of the free lever (not available with knob trim). REX is available for all mechanical and electrified functions and can be supplied alone or with either LBM or DBM.                                                                                                                                                                                                                                                                         |
| LBM          | Latchbolt Monitor - An SPDT switch that monitors full retraction of the latchbolt. LBM is available for all electrified functions and can be supplied alone or with REX.                                                                                                                                                                                                                                                                                                                               |
| DBM          | Deadbolt Monitor - An SPDT switch that monitors full retraction of the deadbolt. DBM is available for all mechanical and electrified functions with a deadbolt and can be supplied alone or with REX.                                                                                                                                                                                                                                                                                                  |
| ITS          | Integrated Total Security - Enhanced security reporting allows facility supervisors to tailor decisions with greater certainty. Monitoring includes Request to Exit (REX), Lock Performance Monitoring (LPM), Concealed Door Position Status (DPS) and Cylinder Monitoring (CX). This monitoring option is available with 8890FL/8891FL or 8890RL/8891RL functions only. Locksets ordered with ITS option must be provided with Yale cylinder. Not available less cylinder. Handing must be specified. |

### electrolynx®



Yale® electrified 8800 locks are equipped with *ElectroLynx* connectors. As a standard feature, these connectors link power from the incoming source to electrified locking products, including hinges, locks, exit devices, magnetic holders and strikes.



Note: Electrified door hardware with *ElectroLynx* connectors require a compatible number of lead wires attached to the door hinge.

## securex® functions and descriptions

### fail safe

The following functions are locked when power is on and unlocked when power is off.

| Function | # of Cyls | Description                                                                                                                                                                                                                                                                                                                                                             | Armor Front Part Number | Cylinders* |        | Cam(s) | Esc Plate Spacing Number |        | Spindles |        |
|----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------|--------|--------|--------------------------|--------|----------|--------|
|          |           |                                                                                                                                                                                                                                                                                                                                                                         |                         | Outside    | Inside |        | Outside                  | Inside | Knobs    | Levers |
| 8880     | 0         | <ul style="list-style-type: none"> <li>• Power off – outside lever active</li> <li>• Power on – outside lever locked</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Inside lever always free</li> <li>• No key override</li> </ul>                                                                                                                           | 50-8805-x219-FIN        | N/A        | N/A    | N/A    | 201                      | 201    | 1178L    | 1178L  |
| 8884     | 0         | <ul style="list-style-type: none"> <li>• Power off – both levers active</li> <li>• Power on – both levers locked</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• No key override</li> </ul>                                                                                                                                                                   | 50-8805-x219-FIN        | N/A        | N/A    | N/A    | 201                      | 201    | 1178L    | 1178L  |
| 8890     | 1         | <ul style="list-style-type: none"> <li>• Power off – outside lever active</li> <li>• Power on – outside lever locked</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Inside lever always free</li> <li>• Mechanical key override by outside when locked</li> </ul>                                                                                            | 50-8805-x219-FIN        | 2153       | N/A    | 2160   | 208                      | 201    | 1178L    | 1178L  |
| 8894-2   | 2         | <ul style="list-style-type: none"> <li>• Power off – both levers active</li> <li>• Power on – both levers locked</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Mechanical key override by both sides when locked</li> </ul>                                                                                                                                 | 50-8805-x219-FIN        | 2153       | 2153   | 2160   | 208                      | 208    | 1178L    | 1178L  |
| 8896     | 1         | <ul style="list-style-type: none"> <li>• Power off – outside lever active (even when deadbolt thrown)</li> <li>• Power on – outside lever locked</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Deadbolt projected by key outside, thumbturn inside</li> <li>• Inside lever always free</li> <li>• Mechanical key override by outside when locked</li> </ul> | 50-8820-x219-FIN        | 2153       | N/A    | 2160   | 208                      | 211    | 1178L    | 1178L  |
| 8896-2   | 2         | <ul style="list-style-type: none"> <li>• Power off – outside lever active (even when deadbolt thrown)</li> <li>• Power on – outside lever locked</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Deadbolt projected by key both sides</li> <li>• Inside lever always free</li> <li>• Mechanical key override by both sides when locked</li> </ul>             | 50-8820-x219-FIN        | 2153       | 2153   | 2160   | 208                      | 208    | 1178L    | 1178L  |
| 8898     | 1         | <ul style="list-style-type: none"> <li>• Power off – both levers active (even when deadbolt thrown)</li> <li>• Power on – both levers locked</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Deadbolt projected by key outside, thumbturn inside</li> <li>• Mechanical key override by outside when locked</li> </ul>                                         | 50-8820-x219-FIN        | 2153       | N/A    | 2160   | 208                      | 211    | 1178L    | 1178L  |
| 8898-2   | 2         | <ul style="list-style-type: none"> <li>• Power off – both levers active (even when deadbolt thrown)</li> <li>• Power on – both levers locked</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Deadbolt projected by key both sides</li> <li>• Mechanical key override by both sides when locked</li> </ul>                                                     | 50-8820-x219-FIN        | 2153       | 2153   | 2160   | 208                      | 208    | 1178L    | 1178L  |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.



## securex<sup>®</sup> functions and descriptions

### fail secure

The following functions are unlocked when the power is on and locked when power is off.

| Function | # of Cyls | Description                                                                                                                                                                                                                                                                                                                                                             | Armor Front Part Number | Cylinders* |        | Cam(s) | Esc Plate Spacing Number |        | Spindles |        |
|----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------|--------|--------|--------------------------|--------|----------|--------|
|          |           |                                                                                                                                                                                                                                                                                                                                                                         |                         | Outside    | Inside |        | Outside                  | Inside | Knobs    | Levers |
| 8881     | 0         | <ul style="list-style-type: none"> <li>• Power off – outside lever locked</li> <li>• Power on – outside lever active</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Inside lever always free</li> <li>• No key override</li> </ul>                                                                                                                           | 50-8805-x219-FIN        | N/A        | N/A    | N/A    | 201                      | 201    | 1178L    | 1178L  |
| 8885     | 0         | <ul style="list-style-type: none"> <li>• Power off – both levers locked</li> <li>• Power on – both levers active</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• No key override</li> </ul>                                                                                                                                                                   | 50-8805-x219-FIN        | N/A        | N/A    | N/A    | 201                      | 201    | 1178L    | 1178L  |
| 8891     | 1         | <ul style="list-style-type: none"> <li>• Power off – outside lever locked</li> <li>• Power on – outside lever active</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Inside lever always free</li> <li>• Mechanical key override by outside when locked</li> </ul>                                                                                            | 50-8805-x219-FIN        | 2153       | N/A    | 2160   | 208                      | 201    | 1178L    | 1178L  |
| 8895-2   | 2         | <ul style="list-style-type: none"> <li>• Power off – both levers locked</li> <li>• Power on – both levers active</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Mechanical key override by both sides when locked</li> </ul>                                                                                                                                 | 50-8805-x219-FIN        | 2153       | 2153   | 2160   | 208                      | 208    | 1178L    | 1178L  |
| 8897     | 1         | <ul style="list-style-type: none"> <li>• Power off – outside lever locked</li> <li>• Power on – outside lever active (even when deadbolt thrown)</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Deadbolt projected by key outside, thumbturn inside</li> <li>• Inside lever always free</li> <li>• Mechanical key override by outside when locked</li> </ul> | 50-8820-x219-FIN        | 2153       | N/A    | 2160   | 208                      | 211    | 1178L    | 1178L  |
| 8897-2   | 2         | <ul style="list-style-type: none"> <li>• Power off – outside lever locked</li> <li>• Power on – outside lever active (even when deadbolt thrown)</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Deadbolt projected by key both sides</li> <li>• Inside lever always free</li> <li>• Mechanical key override by both sides when locked</li> </ul>             | 50-8820-x219-FIN        | 2153       | 2153   | 2160   | 208                      | 208    | 1178L    | 1178L  |
| 8899     | 1         | <ul style="list-style-type: none"> <li>• Power off – both levers locked</li> <li>• Power on – both levers active (even when deadbolt thrown)</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Deadbolt projected by key outside, thumbturn inside</li> <li>• Mechanical key override by outside when locked</li> </ul>                                         | 50-8820-x219-FIN        | 2153       | N/A    | 2160   | 208                      | 211    | 1178L    | 1178L  |
| 8899-2   | 2         | <ul style="list-style-type: none"> <li>• Power off – both levers locked</li> <li>• Power on – both levers active (even when deadbolt thrown)</li> <li>• Auxiliary latch deadlocks latchbolt</li> <li>• Deadbolt projected by key both sides</li> <li>• Mechanical key override by both sides when locked</li> </ul>                                                     | 50-8820-x219-FIN        | 2153       | 2153   | 2160   | 208                      | 208    | 1178L    | 1178L  |

\*Standard cylinder and cam indicated. For optional cylinders, see pages 28-30.

**SARGENT®**

**ASSA ABLOY**

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# 7800/8200

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Series Mortise Lock



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## 8200/R8200/7800 Mortise Locks

# SARGENT®

# ASSA ABLOY

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### Hardwiring Made Easy®



As part of their promise to provide innovative, fast and effective high security solutions to their customers, certain ASSA ABLOY Group brands offer ElectroLynx®, a universal quick-connect system that simplifies the electrification of the door opening.

ElectroLynx® is a registered trademark of ASSA ABLOY Inc.



### MicroShield®

As part of their promise to provide innovative solutions to their customers, certain ASSA ABLOY Group brands offer the MicroShield® technology, a silver-based antimicrobial coating designed to inhibit the growth of bacteria.

MicroShield® is a registered trademark of Yale Security Inc., an ASSA ABLOY Group company.

### MicroShield® Coating

- Revolutionary finish coating available on all SARGENT product lines, utilizes a silver-based antimicrobial compound from Agion Technologies
- As an integral part of the finish coating, MicroShield® lasts for the life of the hardware
- MicroShield® coating permanently suppresses the growth of bacteria, algae, fungus, mold and mildew. It is effective against a broad spectrum of bacteria.
- Non-toxic and completely safe. The Agion antimicrobial compound is EPA and NSF approved and FDA listed for use in medical and food preparation equipment.
- Applications: Anywhere there is need for a clean environment (hospitals, laboratories, schools, medical centers, daycare, food processing etc.)



### Agion has achieved:



Agion's silver antimicrobial has been certified for its material content, recyclability, and manufacturing characteristics. Cradle To Cradle Certified<sup>CM</sup> products meet established standards for human health, environmental health and recyclability.

Cradle To Cradle Certified<sup>CM</sup> is a certification mark of MBDC.

### SARGuide™ SARGuide

- The SARGuide illuminated mortise lock increases visibility of exit locations in dark or smoke-filled passages, supplementing existing codes for egress lighting
- SARGuide utilizes state-of-the-art FLATLITE electroluminescent lighting from E-Lite Technologies Inc.
- Green-blue electroluminescent light provides unsurpassed visibility in low light conditions
- SARGuide can be wired for continuous operation or activation by fire alarm system
- Mortise lock are placed low enough on a door to provide an extended window of opportunity for safe emergency egress
- Supplements building exit signs required by code
- Intuitive operation. Integral "EXIT" signage guides users directly to the means of egress
- SARGuide can be ordered by adding the TL option to any 8200 series mortise lock with WT Trim, which allows free egress
- Additional TL- Information available page 10

### LiteGuide™

As part of their promise to provide innovative solutions to their customers, certain ASSA ABLOY Group brands offer the LiteGuide™ system, a luminescent egress marking system. LiteGuide™ installation is facilitated by ASSA ABLOY's ElectroLynx®, a universal quick-connect system that simplifies the electrification of the door.

LiteGuide™ is a registered trademark of ASSA ABLOY Inc.



8200 Mortise SARGuide

### On The Cover

- 8237 Multi-function Lock LNJ LHRB

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# Specifications & Certifications

## 8200/R8200/7800 Mortise Locks

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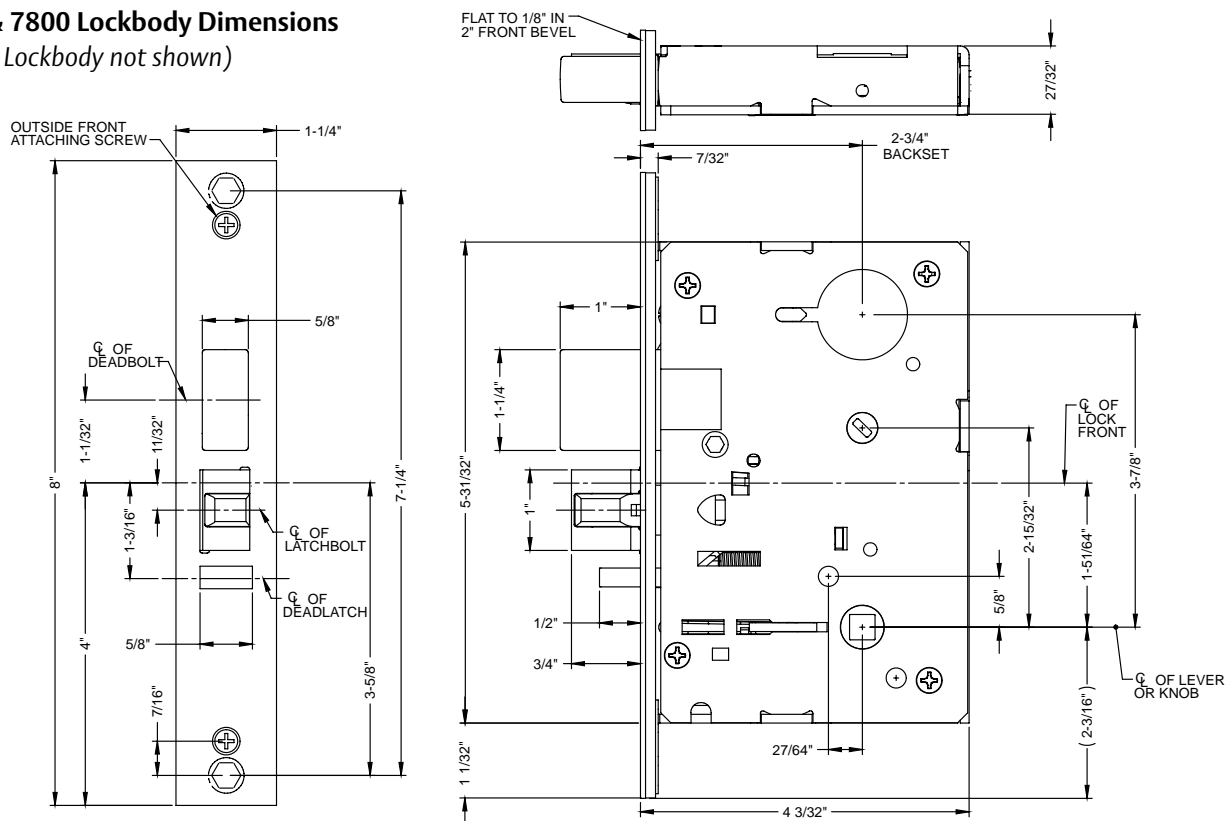
### Certification Compliance

|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANSI/BHMA                                                                             | Certified to ANSI/BHMA A156.13 Series 1000 Operational Grade 1 and Security Grade 1 with all standard trims. ANSI/ASTM F476-84 Grade 40 with concealed mortise cylinder. Meets or exceeds ASTM F1577-95b paragraph 6.2 detention impact level 1 for deadbolt functions, level 3 for latchbolt only functions.<br><b>Note:</b> LFIC (Removable) Cylinders and SFIC Cylinders do not meet Security Grade 1 requirements. |
| ADA  | Meets A117.1 Accessibility Code.<br>Meets BOMA International 4.13.8 Complies with American Disability Act; Consult local authorities                                                                                                                                                                                                                                                                                   |
| UL-cUL                                                                                | UL and UL Listed to Canadian safety standards for A label 4 x 10 single and 8 x 10 double (3 hour fire door) and lesser class doors, stamped letter F and UL symbol on armored front indicate listing                                                                                                                                                                                                                  |
| Positive Pressure                                                                     | Meets positive pressure requirements UL 10C and UBC 7-2 (1997)                                                                                                                                                                                                                                                                                                                                                         |
| California                                                                            | California State Reference Code (Formerly Title 19, California State Fire Marshal Standard)<br>All levers with returns comply; levers return to within 1/2" (13mm) of door face                                                                                                                                                                                                                                        |
| Tornado and Hurricane Codes                                                           | See pages 33-34                                                                                                                                                                                                                                                                                                                                                                                                        |

Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Sargent Manufacturing Company makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

### 8200 & 7800 Lockbody Dimensions

(R8200 Lockbody not shown)



**Note:** R8200 and 8200 lockbodies are dimensionally the same except for the through-bolt locations

### Explanation of the 8200/7800 Lockbody types:

| Lockbody Type <sup>1</sup> | Trim Available x Lockbody type | Standard 8200 Door Prep | Through Bolted Trim | Multi-function lockbody available | How to order lockbody only               |
|----------------------------|--------------------------------|-------------------------|---------------------|-----------------------------------|------------------------------------------|
| 8200                       | Lever x Rose/Escutcheon        | Yes                     | Yes                 | Yes                               | 82 x Function x Finish <sup>3</sup>      |
| 7800                       | Knob x Rose/Escutcheon         | Yes                     | Yes                 | Yes                               | 78 x Function x Finish <sup>3</sup>      |
| R8200                      | Simpli™ roseless trim          | No                      | Yes <sup>2</sup>    | Yes                               | R82 x Function x Finish <sup>3</sup>     |
| 8200 for ALP               | ALP Push/Pull Trim             | Yes                     | Yes                 | Yes                               | Six Digit Part # determined by function* |
| 7800 PT                    | PT Push/Pull Trim              | Yes                     | Yes                 | Yes                               | Six Digit Part # determined by function* |

<sup>1</sup> Lockbodies can only be used with the specified trim

<sup>2</sup> Through Bolt locations are different from standard trim, special door prep required

<sup>3</sup> **Note:** Cylinder and trim not included. Outside front, strike and screw pack are included

\* See Price book; **Note:** Outside Fronts, Strikes, Cylinders and Trim are NOT included



# Windstorm Certifications

## 8200/R8200/7800 Mortise Locks

**SARGENT®**

**ASSA ABLOY**

### Windstorm Certifications: Florida Building Codes & UL Listings

SARGENT Manufacturing's products meet building codes that require hurricane, windstorm and FEMA certifications, including some of the most stringent building codes as specified in the Florida Building Code, Miami Dade Code and the International Building Code. Listed below are certifications and standards met by the 7800/8200 lock.

#### Florida Building Code: FL2998

#### UL Certification Directory: ZHEM.R21744 – Latching Hardware

|                       |                                                                                                                                                                                     |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANSI/SDI-BHMA A250.13 | "Testing and Rating of Severe Windstorm Resistant Components for Swinging Door Assemblies"                                                                                          |
| ANSI/ASTM E330        | "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference"                                 |
| ANSI/ASTM E1886       | "Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials" |
| ASTM E1996            | "Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes"                         |
| (TAS) 201             | "Impact Test Procedures"*                                                                                                                                                           |
| (TAS) 202             | "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference"                                 |
| (TAS) 203             | "Criteria for Testing Products Subject to Cyclic Wind Pressure Loading"*                                                                                                            |

\* Published in the "Florida Building Code"

#### UL Certification Directory: ZHLL.R21744 – Products for Use in Windstorm-rated Assemblies

Certifications to meet assembly requirements are done in conjunction with doors from ASSA ABLOY Group companies CECO DOOR and CURRIES.

|                              |                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ASTM E330                    | "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference"                                                                                                                                                                                                        |
| ANSI/ASTM E1886              | "Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials"                                                                                                                                                                        |
| ASTM E1996                   | "Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes"                                                                                                                                                                                                |
| AAMA/WDMA/CSA 101/I.S.2/A440 | "Standard/Specification for Windows, Doors, and Unit Skylights"                                                                                                                                                                                                                                                                                            |
| FEMA Publication 320         | "Taking Shelter From the Storm: Building a Safe Room for Your Home or Small Business", investigated with respect to impact and pressure requirements only.                                                                                                                                                                                                 |
| FEMA Publication 361         | "Design and Construction Guidance for Community Safe Rooms", investigated with respect to impact and pressure requirements only.                                                                                                                                                                                                                           |
| ICC 500                      | "ICC/NSSA Standard for the Design and Construction of Storm Shelters", investigated with respect to impact and pressure testing. Minimum missile impact speeds vary with the design wind speed desired for a particular product. The information below correlates design wind speed to the minimum missile speeds as discussed in Table 305.1.1 of ICC 500 |

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# Features

## 8200/R8200/7800 Mortise Locks

# SARGENT®

# ASSA ABLOY

The patented\* SARGENT Mortise Locks are designed and constructed with high quality components to provide maximum security, performance and durability. These locks represent over a century of innovation and experience in manufacturing hardware and are the industry's benchmark for mortise locks: strong, durable, flexible, innovative and secure.

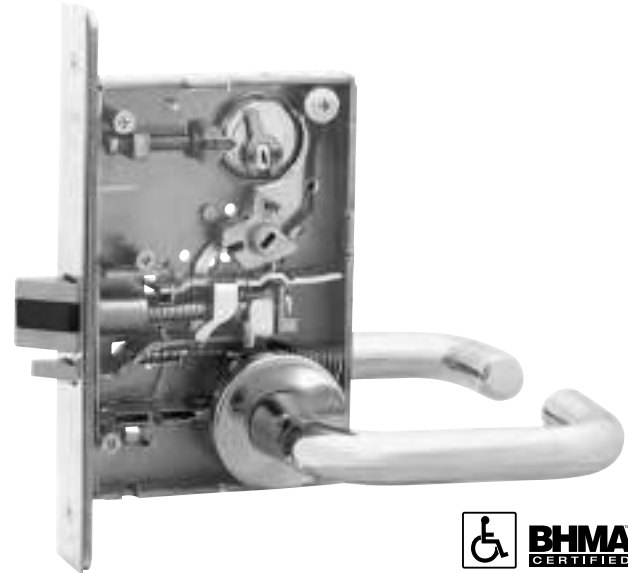
### Specifications

- For Doors 1-3/4" (44mm) thick standard
- Backset 2-3/4" (70mm) only
- Outside Front Plate Brass, bronze or stainless steel.  
8" (203mm) x 1-1/4" (31mm), ANSI Standard A115.1
- Front adjustable at any angle from flat to beveled 1/8" (3mm) in 2" (51mm)
- Hubs for Knobs/Levers
  - 7800: sintered iron copper infiltrated
  - 8200: cold forged steel
  - R8200: investment cast steel
- Auxiliary Deadlatch is stainless steel and non-handed
- Specify hand on order; easily field reversible (if no hand is specified RH will be provided)
- Strike: Brass, bronze or stainless steel; ANSI Standard; curved lip, non-handed (strike box optional)
- Keys: Two, nickel silver (control key or emergency key must be ordered when required)
- Cylinder: Brass, size #41 (1-1/8") standard (except for Freewheeling, size #46 (1-3/4"))
- Can be masterkeyed or grand masterkeyed.  
Construction keying available. LA standard keyway
- Stile: 4-1/2" (114mm) minimum stile for 7800/8200/R8200, 4-3/4" (121mm) minimum stile for electrical function locks
- Door Prep: ANSI/BHMA A156.115 or A156.115W modified per template (see template)
- Warranty: 10 year limited warranty, 2 year limited warranty on electrified locks. Warranty limited to replacement of lockbody and/or components

### Maximum Strength & Durability

- Certified to and exceeds ANSI/BHMA A156.13, Series 1000, Operational Grade 1 and Security Grade 1 with all standard trims
- Meets and exceeds ASTM F1577-95b paragraph 6.2 detention impact level 1 for deadbolt functions, level 3 for latchbolt only functions
- Exceeds cycle testing requirements by 14 times the ANSI/BHMA A156.13 Grade 1 standard
- Case: 12 gauge heavy duty wrought steel, zinc dichromate plated. Thickness 7/64" (3mm) (.109")
- 1/8" (.125) cold-rolled steel inside front holds lock securely in door
- Heavy duty wrought steel hubs and high carbon steel spring cartridge provide superior strength and cycle life for 8200 locks
- Latchbolt is stainless steel with 3/4" (19mm) projection one-piece, anti-friction reversible latch
- Deadbolt is one-piece hardened stainless steel with 1" (25mm) projection
- Optional 8200 stainless steel hubs for Institutional setting (specify 3- option)

\* U.S. Patent Numbers: 5,678,870; 5,992,195; 6,178,794; 7,188,870 & 7,452,012



### Maximum Flexibility

- Fast and easy installation. Lock is easily re-handed without removing parts or opening the lock case
- Aesthetic design. Many escutcheon and lever styles available to match a wide range of styles
- Many standard architectural grade finishes, including Polished Nickel (14) & Satin Nickel (15) finishes
- 53 functions including 4 electrical functions. The most in the industry for a broad range of applications
- Versatile. Offered for door thicknesses ranging from 1-3/8" (35mm) to 6" (152mm)
- Available with vandalism deterrent trim and/or secure fastener options Torx® and spanner screws for high abuse conditions
- Available with push/pull trim, perfect for hospital applications

### Innovation

- First in the industry to offer a multi-functional lockbody that embodies 8 functions in 1 lockbody
- Easy operation. Only 30° of lever rotation required to retract latchbolt
- Lever springs contained inside of the lock case for easier installation
- SARGENT's revolutionary MicroShield® available. This antimicrobial silver-based finish coating permanently suppresses the growth of bacteria, algae, fungus, mold and mildew. EPA and NSF approved and FDA listed
- Broad offering of electro-mechanical configurations offer higher security for the most demanding access/egress control applications featuring ElectroLynx® quick connectors

### Security

- Multiple security trim options available: free-wheeling, security escutcheon and anti-vandal pull trim (patent pending)
- Security key systems available (Degree, Signature, Keso, Keso F1, & XC)

# Simpli™ Roseless Trim & R8200 Mortise Locks

## Information

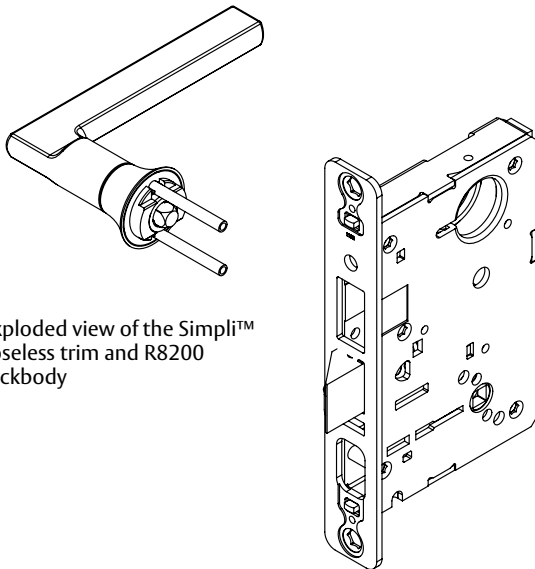
**SARGENT®**

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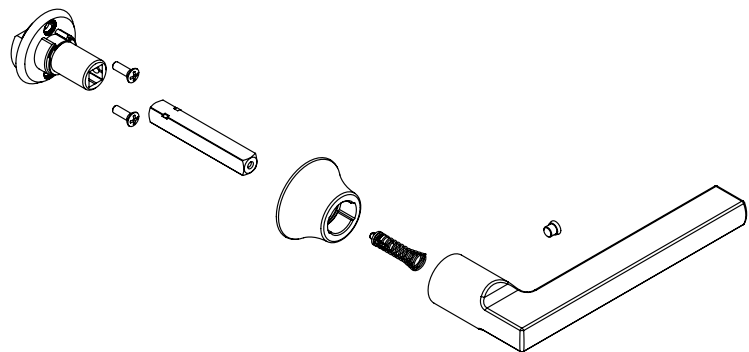
This elegant trim by SARGENT seamlessly unifies the lever and the door. Compatible with most Studio Collection and Coastal Series decorative levers, Simpli creates a flawless aesthetic vision on any door opening.

Simpli is offered on the R8200 Series mortise lock, which was specially designed to accept the roseless trim. In addition to the R8200 Series, Simpli is also available with the RDL Series tubular locks and Harmony R8200 Series mortise locks.

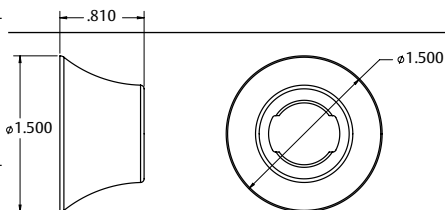
- Certified to and exceeds ANSI/BHMA A156.13, Series 1000, Operational Grade 1 and Security Grade 1
- Offered with most 8200 functions
- Available with Coastal Series (except C) and Studio Collection levers (except MC, MK, ML, MN, MP, MT and Gramercy Series)
- Selected levers return within ½" of the door face
- Simpli roseless trim is not compatible with the 8200 lockbody; can only be used with R8200 locks
- All standard cylinder options are available



Exploded view of the Simpli™ roseless trim and R8200 lockbody



### Simpli™ Collar



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# Studio Collection Levers

8200/R8200 Mortise Locks

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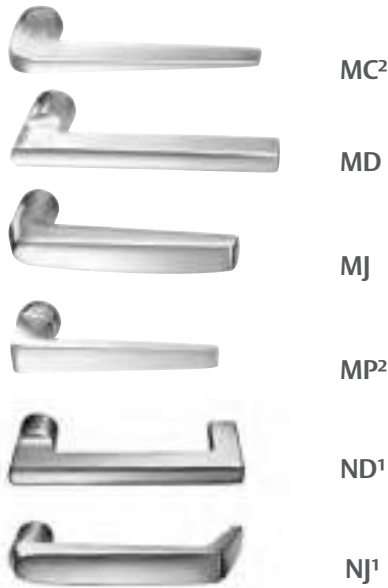
**ASSA ABLOY**

## Studio collection™

Studio Collection trim is available in a broad array of designs and finishes. It allows for uniformity throughout a facility using the 8200, R8200 and 7900 Series Mortise Locks, Access Control Products, 80 Series Exit Devices, DL and RDL Series Tubular Locks.

All levers meet ADA compliance for national codes. Visit the online Decorative Hardware Product Selector at [selector.sargentlock.com](http://selector.sargentlock.com) to mix and match styles and finishes.

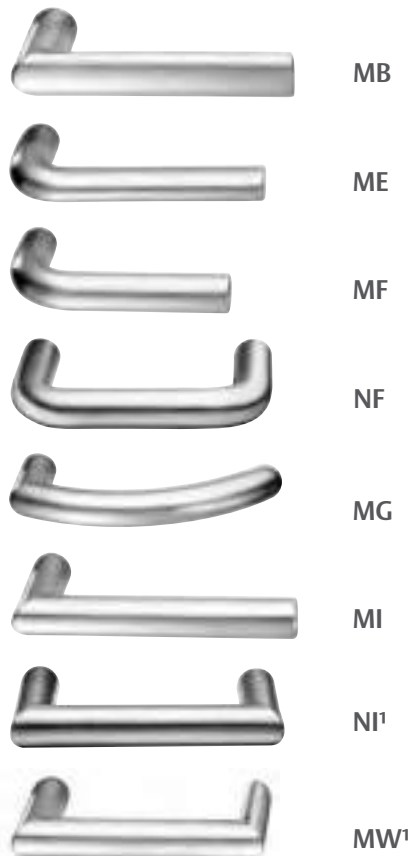
### Centro Series



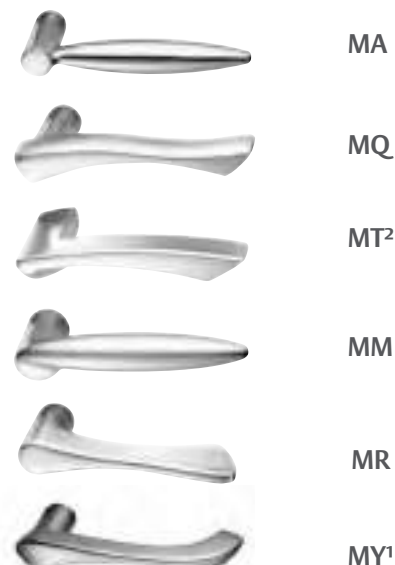
### Rialto Series (MZ Lever is Handed)



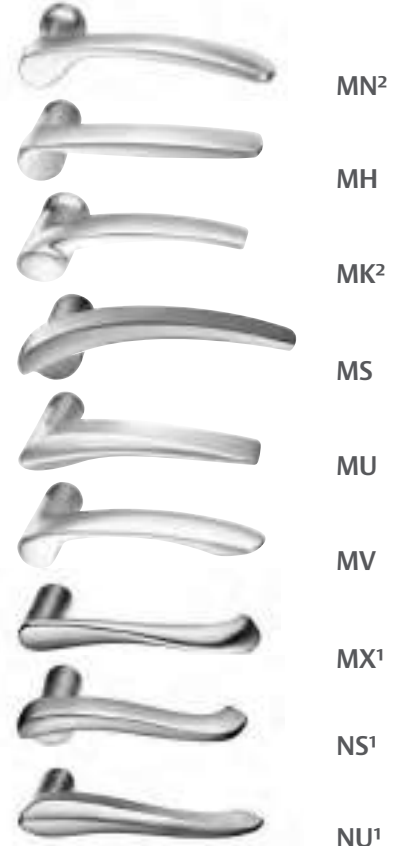
### Aventura Series



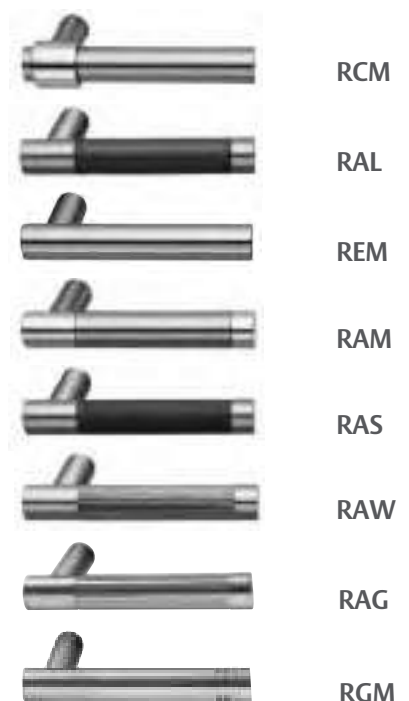
### Notting Hill Series (Handed Levers)



### Odéon Series (Handed Levers)



### Gramercy Series<sup>2/3</sup>



<sup>1</sup> Lever returns within 1/2" (13mm) of door face

<sup>2</sup> Levers are not available with Simpli™ Roseless trim

<sup>3</sup> Gramercy levers are customized. See page 32 for ordering information

# Studio Collection Trim

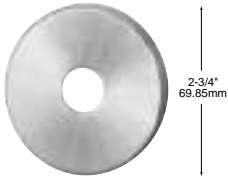
## 8200/R8200 Mortise Locks

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### Roses (8200 Series)

O Rose



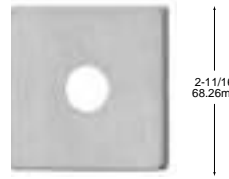
CO Rose



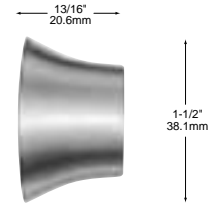
TO Rose



E2 Rose<sup>1</sup>



### Simpli™ Roseless Collar (R8200 Series)



LN Rose



CR Rose



TR Rose



E3 Rose<sup>1</sup>

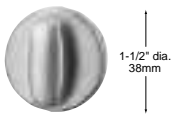


### Thumbturns

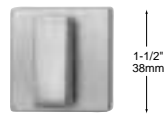
(8200 & R8200 Series)

Thumbturn backplate will match rose design chosen. See page 9 for more information.

T1 Turn



T2 Turn



T3 Turn



### Escutcheons

(8200 Series)

LE1 Escutcheon



CE Escutcheon



TE Escutcheon



<sup>1</sup> 1KA square cylinder collar and 130KA square backplate automatically supplied with E2 and E3 roses.

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# Coastal Series™ & Standard Levers

## 8200 Mortise Locks

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### Coastal Series (8200 & R8200 Series)

#### Features

- All levers meet ADA compliance for national codes
- Coronado lever returns within 1/2" (13mm) or less of door face and meets California State Reference Fire Code
- Not available with CO and TO roses
- Levers are solid cast brass
- Finishes available – 3, 4, 9, 10, 10B, 10BE, 10BL, 14, 15, 20D, 26, 26D
- All lever height (+/- 1/16") measurements represent total distance from door face

|                                                                   |  |  |                                   |  |  |
|-------------------------------------------------------------------|--|--|-----------------------------------|--|--|
| <p>C - Coronado™<br/>Not available with Simpli™ roseless trim</p> |  |  | <p>S - Sanibel™<br/>(Handed)</p>  |  |  |
| <p>G - Gulfport™<br/>(Handed)</p>                                 |  |  | <p>Y - Yarmouth™<br/>(Handed)</p> |  |  |
| <p>R - Rockport™</p>                                              |  |  |                                   |  |  |

### Standard Levers (8200 Series Only)

#### Features

- All levers meet ADA compliance for national codes
- Solid forged or cast
- Lever designs C, J, L and P have lever returns within 1/2" (13mm) or less of door face and meet California State Reference Fire Code
- All lever height (+/- 1/16") measurements represent total distance from door face

|                       |  |  |          |  |  |
|-----------------------|--|--|----------|--|--|
| <p>A<br/>(Handed)</p> |  |  | <p>J</p> |  |  |
| <p>B</p>              |  |  | <p>L</p> |  |  |
| <p>E</p>              |  |  | <p>P</p> |  |  |
| <p>F</p>              |  |  | <p>W</p> |  |  |

# Coastal Series™ & Standard Trim

## 8200 Mortise Locks

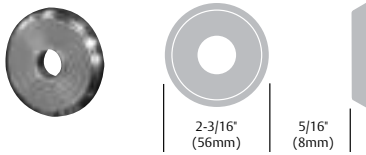
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### Coastal Series Roses & Escutcheons

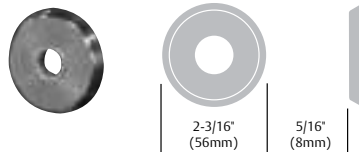
#### TR Traditional Rose

- Dual radii edge



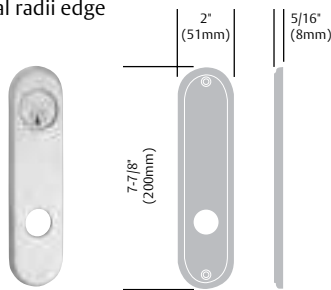
#### CR Contemporary Rose

- Beveled edge



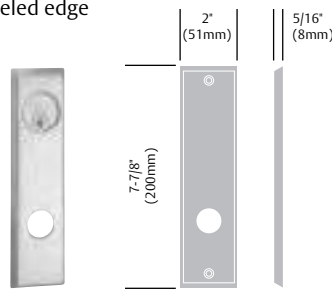
#### TE Traditional Escutcheon

- Dual radii edge



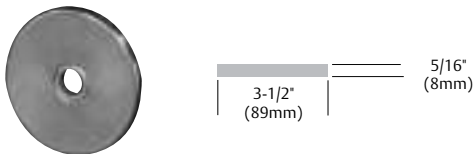
#### CE Contemporary Escutcheon

- Beveled edge

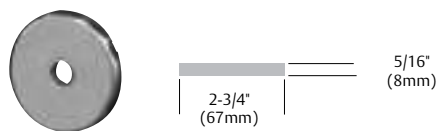


### Standard Roses

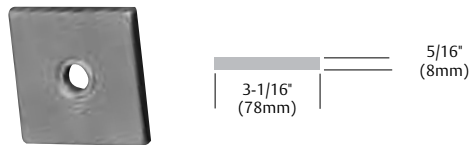
#### L Rose



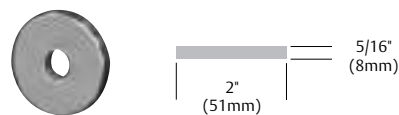
#### O Rose



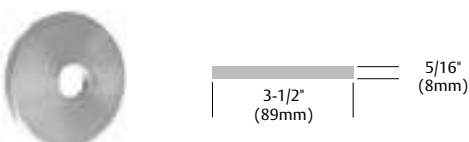
#### E Rose



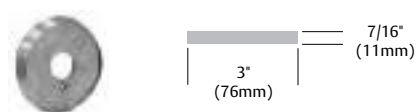
#### LN Rose



#### SL Rose



#### BH Rose



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90115: P 6/15/14

# Thumbturn Designs

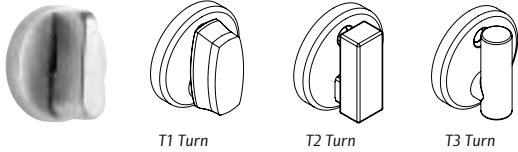
## 8200/R8200/7800 Mortise Locks

**SARGENT®**

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### 130KB Round Backplate

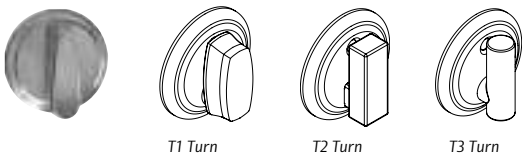
(Shown with Standard Turn)



- Round backplate supplied standard with L, O, LN roses and R8200 roseless trim
- Standard turn automatically supplied with sectional trim for R8200 & 8200 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-1/2" (38mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

### 130KT Traditional Backplate

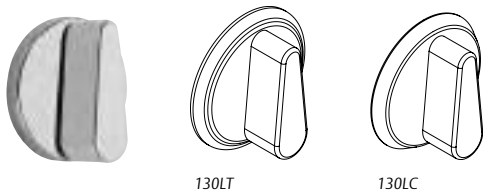
(Shown with Standard Turn)



- Dual radii edge backplate supplied standard with TO and TR roses
- Standard turn automatically supplied with sectional trim for R8200 & 8200 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-3/4" (44mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

### 130LB Large Round Backplate

(Shown with Large ADA Turn)



- Available with R8200 & 8200 with sectional trim
- 40% larger than standard thumbturn
- Specify LB as an option for ADA turn
- 2" (51mm) round brass, bronze, or stainless steel plate & turn
- 130LT - Traditional backplate, 130LC — Contemporary backplate
- Meets ADA Requirements

### 126 T-Turn

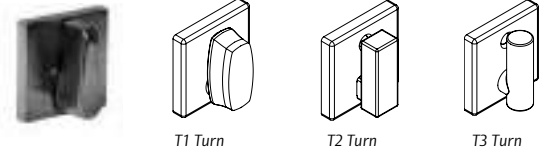
(7892 function only)



- 2-3/16" (56mm) round backplate
- 2-3/8" (61mm) tall thumbturn
- Available in brass or bronze finishes only
- Surface mounted with three screws
- Order as "SST" trim with 7892 function

### 130KA Square Backplate

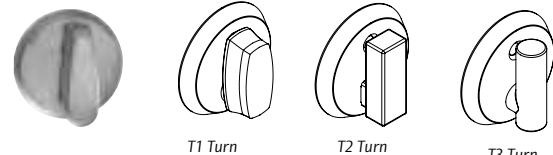
(Shown with Standard Turn)



- Square backplate supplied standard with E, E2 or E3 roses
- Standard turn automatically supplied with sectional trim for R8200 & 8200 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-1/2" (38mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

### 130KC Contemporary Backplate

(Shown with Standard Turn)



- Beveled edge backplate supplied standard with CO and CR roses
- Standard turn automatically supplied with sectional trim for R8200 & 8200 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-3/4" (44mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

### 130KBH Turn for use with BHL Trim



- 1-1/2" (38mm) round brass or stainless steel plate
- Only available with BHL trim

### 130KALP Turn for use with 8200 Mortise ALP Trim



- 2-3/4" x 1-13/16" rectangular shape
- Brass or stainless steel housing
- Only available with ALP trim
- Meets ADA Requirements

### 130W Round Backplate

(Shown with Standard Turn)



- Used with 7800 with sectional trim
- 1-1/2" (38mm) round brass, bronze or stainless steel plate

### 130KBHW Turn for use with 8200 BHW Trim



- 2-1/4" round
- Stainless steel
- Only available with BHW trim
- Meets ADA Requirements



# Emergency Releases, Indicators & Accessories

8200/R8200/7800 Mortise Locks

**SARGENT®**

**ASSA ABLOY**

## Emergency Releases

### 184KB Emergency Release (used with R8200 & 8200 with sectional trim)



- 1-1/2" (38mm) round brass, bronze or stainless steel plate

- For 65, 66 and 68 functions only

#### Studio Collection Emergency Release

- 184KC Emergency Release Contemporary
- 184KT Emergency Release – Traditional

### 184W Emergency Release (used with 7800 with sectional trim)



- 1-1/2" (38mm) round brass, bronze or stainless steel plate

- For 65, 66 and 68 functions only

### 184KA Emergency Release (used with E rose)



- 1-1/2" (38mm) square brass, bronze or stainless steel plate

- For 65, 66 and 68 functions only

### Emergency Key 14-0057



- Carbon steel
- For 65, 66 and 68 functions only
- Must be ordered separately

## Indicators

### 49- Option Visual Status Indicator for Non Secure Applications

- Designed to work with Classroom Security functions
- Red/White indicator plate standard, field replaceable OCC/VAC plate included
- Mounts on inside of door
- Not available with escutcheon trim
- Functions and Roses available:
  - 30 & 37 Functions with R8200 locks, CR, L, LN, TR, E & O Roses
  - 26, 29, 38, 39, 40 and 41 Functions with R8200 locks & LN Roses Only
- As retrofit, order 185C x finish

Inside Only



185C

### 49- Option Occupancy Indicator with Emergency Release

- Ideal for restrooms or conference rooms where easy determination of use needs to be made
- OCC/VAC indicator plate standard, field replaceable Red/White plate included
- Mounts on outside of door
- Not available with escutcheon trim
- Emergency coin operated release standard
- As retrofit, order 185P x finish
- Functions and Roses available:
  - 65, 66, 68 Functions with R8200 locks, CR, E, L, LN, O & TR Roses



185P

### 50- Option Secured Indicator Rose

- Non-handed with lever and mounting posts field reversible
- VAC/OCC indicator plate standard, field replaceable Red/White plate included
- Mounts on outside of door
- Not available with escutcheon trim
- Available for the following functions: 24, 25, 26, 28, 29, 30, 36, 37, 38, 39, 40, 41, 43, 45, 50, 51, 52, 67 - with Rose Trim only
- Patent pending design
- Not available with Roseless trim (R8200)
- For retrofit, order 185S x suffix x finish:



| Suffix | Door Thickness |
|--------|----------------|
| -1     | 1-3/8" (35mm)  |
| -2     | 1-3/4" (44mm)  |
| -3     | 2" (51mm)      |
| -4     | 2-1/4" (57mm)  |

**Note:** For 49- and 50- Options, key will not retract latch when used with 37 and 38 functions

## Accessories

### 130KBCVR Cap



- Thumbturn plate
- Covers hole in door when thumb turn is no longer needed

### 82-4023 Cap



- 2" round
- Covers hole for levers and roses

| Door Thickness | Part Number |
|----------------|-------------|
| 1-3/8"         | 82-4022     |
| 1-3/4"         | 82-4023     |
| 2"             | 82-4024     |
| 2-1/4"         | 82-4025     |

### Trim One Side Kit

Refer to page 33 for a complete list of kits

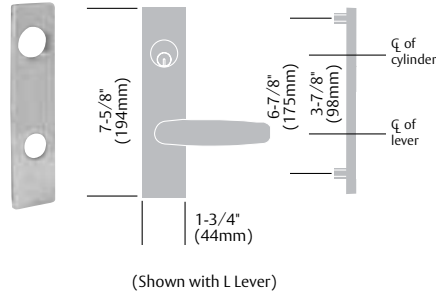
# Escutcheon Designs

## 8200 Mortise Locks

Cylinders will protrude from escutcheon face on double cylinder functions only.

### LE1/LE2 Escutcheon Design

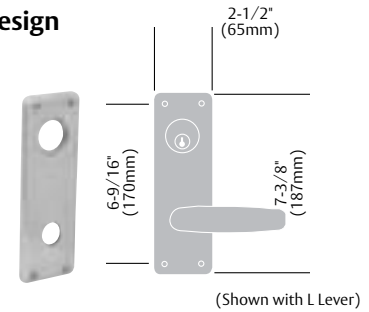
- Escutcheon: LE-Cast
- LE1- (2) Exposed screws inside
- LE2- (2) Concealed screws inside
- LE1 is available with standard, Coastal & Studio Levers
- LE2 is available with standard levers only



(Shown with L Lever)

### WT Escutcheon Design

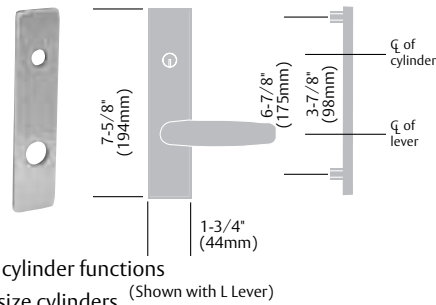
- Escutcheon: WT-Heavy wrought
- Surface mounted both inside and outside
- (4) Exposed screws both inside and outside
- WT is available with standard levers only



(Shown with L Lever)

### LE3/LE4 Escutcheon Design

- Concealed Cylinder designed Escutcheon, Exposed Barrel Only
- Escutcheon: LE-Cast
- LE3- (2) Exposed screws inside
- LE4- (2) Concealed screws inside
- Not available on double cylinder functions
- Only available with #41 size cylinders - limited keyway and key system offerings – see cylinders section
- If cylinder is ordered separately: specify 78- for concealed cylinder
- LE3 & LE4 are available with standard levers only
- UL437 not available



(Shown with L Lever)

### SARGuide™ 8200 Mortise Lock (TL- Option)

- Escutcheon: TL-WT Heavy wrought
- Surface mounted both inside and outside
- (4) Exposed screws both inside and outside
- SARGuide opening 2" x 3/4"
- TL-WT is available with standard levers only



**Note:** SARGuide is only available with TL- WT Escutcheon.

SARGuide™, with integrated electroluminescent “EXIT” signage, addresses the increasing concern about safe public egress, particularly in low-visibility conditions. SARGuide™ can be wired for continuous operation or for operation only when an emergency alarm is activated.

#### Mortise Features

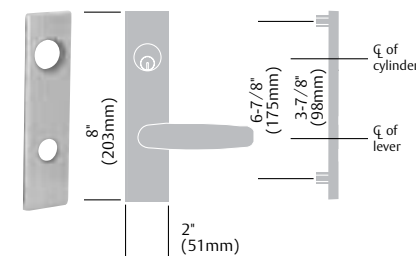
- Lamp can be used on internal trim (for external trim, consult factory)
- Includes all features of the 8200 Mortise Lock
- Available with WT escutcheon design only and all standard lever designs. Must specify TL- Option when ordering

#### SARGuide™ Features

- Illuminated utilizing the patented FLATLITE® electroluminescent lamp embedded within the mortise lock escutcheon
- Dual voltage: 24VAC or VDC input with battery back-up
- Lamp replacement kit available

### LW1 Escutcheon Design

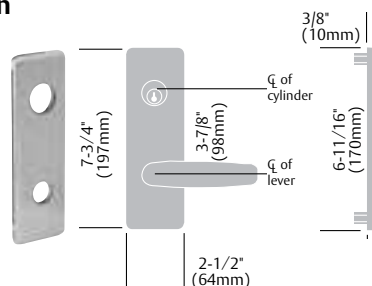
- Escutcheon: LW1- Wrought
- (2) Exposed screws inside
- LW1 is available with standard levers only



(Shown with L Lever)

### LS Escutcheon Design

- Escutcheon: LS-Forged
- Security Trim: Cylinder is protected by the Escutcheon
- (4) Spanner security screws are exposed on inside trim standard
- LS is available with standard levers only



**Note:** The LS Escutcheon is not available with cylinder options: 10-63-, 11-60-, 11-63-, 11-64-, 60-, 63-, 64-, 70-, 72-, 73-, 65-73-, 65-73-7P-, 73-7P-, 81-, 82-, 83-, 84-, F1-82-, F1-82- & F1-83-. Also not available with electrified functions: 70, 71, 72, 73

# Freewheeling (FE) Trim Design ADA and Handicap Warning

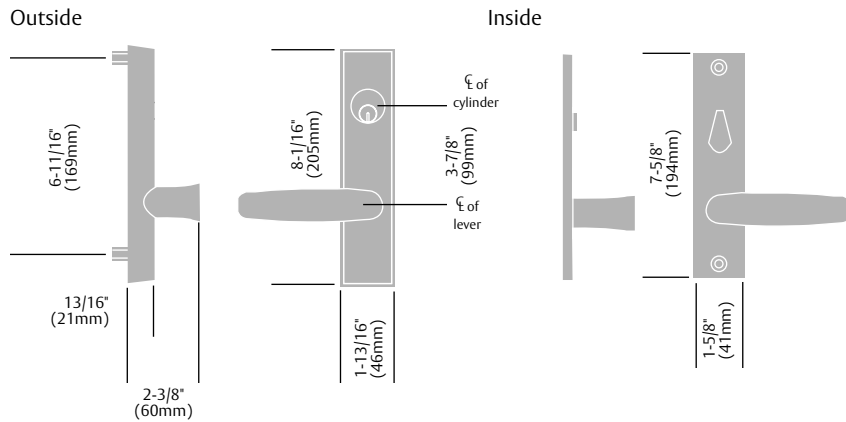
## 8200 Mortise Locks

**SARGENT®**

**ASSA ABLOY**



8225 FEL shown



### Vandal Resistant Freewheeling Lever

Maximum projection varies by lever design. Largest projection is "A" lever – 3-9/16" (90mm)

## Features

The Freewheeling Mortise Trim is designed for areas that are susceptible to vandalism including schools, universities, public buildings, back doors of businesses and any exterior doors where excessive or abusive force might be applied to the lever handle trim.

This design allows the outside lever handle to swing freely, down to 70°, in the "locked" mode. This eliminates resetting the trim after vandalism attempts because the lever automatically returns to its original position.

- For 1-3/4" (44mm) doors standard. For 2" (51mm) and 2-1/4" (57mm) thick doors, must specify door thickness on order
- **Vandal resistant trim**

- Meets or exceeds ANSI/BHMA A156.13 Series 1000 Operational Grade 1 and Security Grade 1. LFIC (Removable) and SFIC cylinders do not meet Security Grade 1
- Forged brass outside escutcheon trim provides added protection against vandalism
- Stainless steel lever bushing protects against wear
- Stainless steel lugs and through-bolted trim design for proper alignment and increased security
- Functions available — 04, 05, 16, 24, 25, 26, 31, 35, 36, 37, 38, 39, 40, 50, 51, 65, 66
- Levers A, B, E, F, J, L, P, W available

- Lever designs J, L and P have lever returns within 1/2" (13mm)
- Cylinder will protrude from escutcheon face on double cylinder functions only
- Cylinder sizes #46 (1-3/4") outside, #41 (1-1/8") inside standard on 1-3/4" (44mm) doors
- Specify hand. Easily field rehanded
- Patented design — U.S. Patent No. 5,992,195
- Options available: 3-, 10-, 10-UL-, 11-, 11-60-\*, 11-63-\*, 11-64-\*, 11-70-7P-\*, 11-72-7P-\*, 11-73-7P-\*, 11-65-73-7P-\*, 21-, 23-, 36-, 37-, 60-\*, 63-\*, 64-\*, 70-\*, 72-\*, 73-\*, 65-73-\*, 65-73-7P-\*, 73-7P-\*, 74-, 75-, 76-, 77-, 82-, SG- & WBS-

\* Can not be used as the inside cylinder with freewheeling trim (#41 cylinder required)

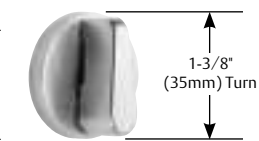
## ADA and Handicap Warning

### Lever Return to Door



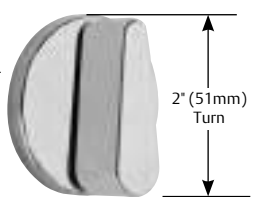
- Lever designs J, L and P
- Lever returns within 1/2" (13mm) of door face or less
- Meets ADA Compliance for national codes

### Standard Thumbturn



- Meets ADA Compliance for national codes
  - Order as: 130KB, 130KC, 130KT, 130W or 130KA x finish
- See page 9 for design

### LB - Thumbturn



- Meets the tougher local ADA requirements
  - 40% larger than standard thumb turn
  - Order as: 130LB, 130LC or 130 LT x finish
- See page 9 for design

### Tactile Handicapped Warning



- Abrasive Coating: Options 85-, 86- & 87-
- Milled 1/16" Grooves: Options 75-, 76- & 77-  
– B, E, J, L, P and W Levers — Grooves on backside surface of lever  
– F Lever — Grooves on top and bottom surface of lever

### Tactile Handicapped Warning



- Knurled B & C Knobs available
- Knobs are NOT ADA compliant

### Keys

- Large key bows are available
- Standard key bows can have attachments added to increase the grip area
- Keys are NOT ADA compliant

# Functions & Descriptions

## 8200/R8200/7800 Mortise Locks

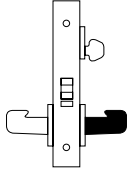
**SARGENT®**

**ASSA ABLOY**

### Single Cylinder without Deadbolt

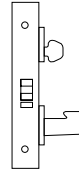
#### \*‡04 Storeroom or Closet

- 8200, R8200 & 7800**
- Key outside retracts latchbolt
  - Trim outside locked at all times
  - Trim inside always retracts latchbolt
  - Auxiliary deadlatch
  - A Multi-Function 8200/R8200/7800 Lockbody
  - **ANSI F07**



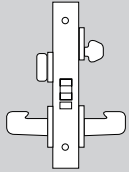
#### \*↕36 Closet

- 8200, R8200 & 7800**
- Key locks and unlocks trim
  - No inside trim or cylinder
  - A Multi-Function 8200/R8200/7800 Lockbody
  - Auxiliary dead latch



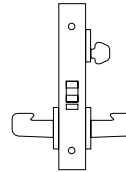
#### \*05 Office or Entry

- 8200, R8200 & 7800**
- Key outside retracts latchbolt, also locks & unlocks outside trim
  - Trim inside always retracts latchbolt, trim outside remains locked
  - Thumbturn inside locks & unlocks outside trim
  - Auxiliary deadlatch
  - A Multi-Function 8200/R8200/7800 Lockbody
  - **ANSI F04**



#### \*‡37 Classroom

- 8200, R8200 & 7800**
- Key outside retracts latchbolt, also locks & unlocks outside trim
  - Trim inside always retracts latchbolt
  - Auxiliary deadlatch
  - A Multi-Function 8200/R8200/7800 Lockbody
  - **ANSI F05**



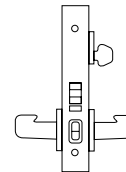
The Multi-Function Advantage with rose trim:

1. Lock will accommodate 04, 05, 15 & 37 functions without additional parts.
2. By adding an additional cylinder, lock will accommodate 38 function.
3. By adding a Trim One Side Kit, lock will accommodate 06, 13, 31 & 36 functions.

**NOTE:** Office/Entry Function with toggle is a 55 function.

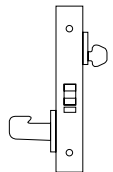
#### 55 Office or Entry

- 8200, R8200 & 7800**
- Key outside retracts latchbolt
  - Trim inside always retracts latchbolt, outside trim remains locked
  - Trim outside is locked & unlocked by the toggle only



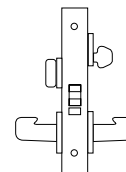
#### 06 Storeroom or Service

- 8200, R8200 & 7800**
- No trim outside, cylinder only
  - Key outside retracts latchbolt
  - Trim inside always retracts latchbolt
  - Auxiliary deadlatch
  - A Multi-Function 8200/R8200/7800 Lockbody
  - Same as 04 Function without trim outside



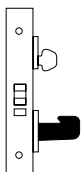
#### 56 Office & Inner Entry Lock

- 8200, R8200 & 7800**
- Key outside retracts latchbolt
  - Trim inside always retracts latchbolt and unlocks outside trim
  - Trim outside is locked by thumbturn or key
  - Auxiliary deadlatch



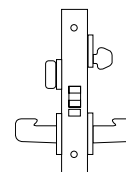
#### ↕\*31 Utility

- 8200, R8200 & 7800**
- Key outside retracts latchbolt
  - Trim outside is always locked
  - No inside trim or cylinder
  - A Multi-Function 8200/R8200/7800 Lockbody
  - Auxiliary deadlatch



#### 67 Institutional Privacy

- 8200, R8200 & 7800**
- Key outside retracts latchbolt, overriding thumbturn when held in locked position
  - Thumbturn inside locks & unlocks outside trim
  - Trim outside unlocks when the door closes or by operating trim inside
  - Trim inside always retracts latchbolt
  - Auxiliary deadlatch
  - **ANSI F26**




**Note:** Key does not lock trim outside, only unlocks it

\*8200 Available with Freewheeling Trim

‡ 7800 Available with Push/Pull Trim

↕ **CAUTION:** Not recommended for use on any door used for Life Safety egress

 If shaded, knob or lever rigid at all times

# Functions & Descriptions

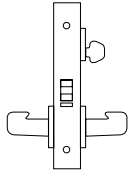
## 8200/R8200/7800 Mortise Locks

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### 89 Holdback

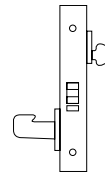
8200



- Key outside retracts latchbolt, also locks & unlocks outside trim
- Trim inside always retracts latchbolt
- Auxiliary deadlatch
- Latch holdback — to set, rotating & hold lever, then rotate key twice toward latchbolt. Lever will remain in rotated position indicating it is unlocked
- **ANSI F06**

### 91 All Purpose Holdback

8200

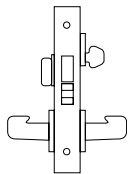


- Key outside retracts latchbolt
- Key outside can lock latchbolt in retracted position
- Trim inside always retracts latchbolt
- No outside trim
- Auxiliary deadlatch
- Latch holdback — set by rotating & holding trim, then rotate key toward latchbolt. Lever will remain in rotated position for unlocked indication

## Single Cylinder with Deadbolt

### ♦\*‡24 Room Door

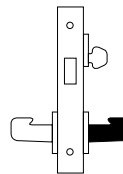
8200, R8200 & 7800



- Key outside or thumbturn inside retracts and projects deadbolt
- Trim either side retracts latchbolt
- Latchbolt & deadbolt operate independently of each other
- **ANSI F21**

### 30 Dummy Trim Deadlock

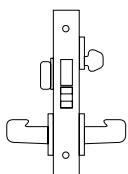
8200, R8200 & 7800



- Deadbolt operation only
- Key outside retracts and projects deadbolt
- Trim inside always retracts deadbolt
- Trim outside is always locked
- Same as 28 Function without a thumbturn

### \*25 Dormitory or Exit

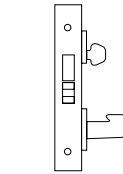
8200, R8200 & 7800



- Key outside or thumbturn inside retracts and projects deadbolt
- Trim from either side retracts latchbolt, when the deadbolt is in the retracted position
- Trim outside is locked, when the deadbolt is projected
- When deadbolt is projected, Trim inside retracts latchbolt and deadbolt simultaneously, unlocking outside trim
- **ANSI F13**

### ♦\*35 Storeroom

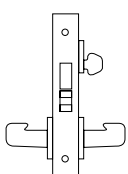
8200, R8200 & 7800



- Key outside retracts and projects deadbolt
- Trim outside retracts latchbolt, except when deadbolt is projected
- No inside trim or cylinder

### +27 Closet or Storeroom

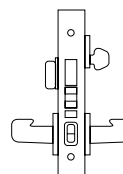
8200, R8200 & 7800



- Key outside retracts and projects deadbolt
- Trim from either side retracts latchbolt
- Same as 24 function without thumbturn
- Latchbolt & deadbolt operate independently of each other

### ‡43 Apartment Corridor Door

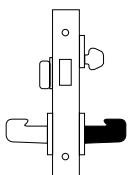
8200, R8200 & 7800



- Key and thumbturn both retract & project the deadbolt
- Trim outside is locked by toggle or projecting deadbolt
- Trim outside is unlocked by toggle only
- Key retracts both latchbolt and deadbolt, trim outside remains locked
- Trim inside always retracts latchbolt (and deadbolt simultaneously), trim outside remains locked
- Auxiliary deadlatch
- **ANSI F20**

### 28 Dummy Trim Deadlock

8200, R8200 & 7800



- Deadbolt operation only
- Key outside retracts and projects deadbolt
- Trim inside always retracts deadbolt
- Trim outside is always locked
- Thumbturn inside retracts and projects deadbolt

\*8200 Available with Freewheeling Trim

‡ 7800 Available with Push/Pull Trim

♦ **CAUTION:** Not recommended for use on any door used for Life Safety egress



If shaded, knob or lever rigid at all times

# Functions & Descriptions

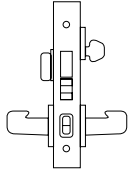
## 8200/R8200/7800 Mortise Locks

**SARGENT®**

**ASSA ABLOY**

### ‡45 Dormitory or Exit

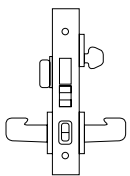
8200, R8200 & 7800



- Key and thumbturn both retract & project deadbolt
- Trim outside is locked by toggle or projecting deadbolt
- Trim outside is unlocked by toggle only
- Key retracts both latchbolt and deadbolt, trim outside remains locked
- Trim inside always retracts latchbolt (and deadbolt simultaneously), trim outside remains locked
- Same as an 8243 without Auxiliary Deadlatch
- **ANSI F12**

### +47 Front Door or Apartment Corridor Door

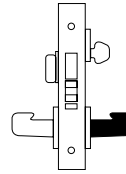
8200, R8200 & 7800



- Key and thumbturn both retract & project deadbolt
- Trim outside is locked by toggle or projecting deadbolt
- Trim outside is unlocked by toggle only
- Key retracts both latchbolt and deadbolt, trim outside remains locked
- Trim inside retracts latchbolt only, deadbolt is retracted manually & trim outside remains locked
- **ANSI F08/F10**

### \*‡ 50 Hotel Guest

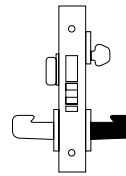
8200, R8200 & 7800



- Hotel Cylinder (50 Function) Required (Standard & Emergency Keys)
- Standard Key retracts latchbolt only, will not retract or project deadbolt
- Emergency Key will retract latchbolt & deadbolt and also project deadbolt
- Thumbturn retracts & projects deadbolt
- Trim inside retracts latchbolt & deadbolt simultaneously
- Trim outside is always locked
- Auxiliary deadlatch
- Available with Conventional, LFIC (60- & 63-) and Keso (82- & F1-82-) key systems
- **ANSI F15**

### \*51 Storeroom Deadbolt

8200, R8200 & 7800

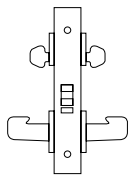


- Key and thumbturn both retract & project the deadbolt
- Key will also retract latchbolt
- Trim inside retracts latchbolt & deadbolt simultaneously
- Trim outside is always locked
- Auxiliary deadlatch
- Same as 50 function with a std. cylinder

## Double Cylinder without Deadbolt

### \*‡16 Apartment, Exit or Public Restroom

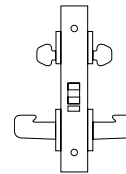
8200, R8200 & 7800



- Key outside retracts latchbolt
- Key inside is required to lock and unlock trim outside
- Trim inside always retracts latchbolt
- Auxiliary deadlatch
- Special -105 cam, required for inside cylinder (supplied)
- **ANSI F09**

### \*38 Classroom Security Intruder Latchbolt

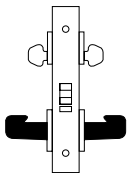
8200, R8200 & 7800



- Key from either side locks & unlocks outside trim
- Key from either side retracts latchbolt
- Trim outside retracts latchbolt, except when locked
- Trim inside always retracts latchbolt
- A Multi-Function 8200/R8200/7800 Lockbody
- Auxiliary deadlatch
- **ANSI F32**

### ‡17 Asylum or Institutional

8200, R8200 & 7800



- Key from either side retracts latchbolt
- Trim on both sides are locked at all times
- Auxiliary deadlatch
- **ANSI F30**

\*8200 Available with Freewheeling Trim

‡ 7800 Available with Push/Pull Trim

⚠ **CAUTION:** Not recommended for use on any door used for Life Safety egress

### \*49-8238 Classroom Security Intruder with Indicator



- 49- Indicator offers visual confirmation that a door is secure or not, allowing for quick response in a crisis
- Trim inside always allows immediate egress
- Key from either side locks & unlocks outside trim
- Key from either side retracts latchbolt
- Trim outside retracts latchbolt, except when locked
- Auxiliary deadlatch
- **ANSI F32**

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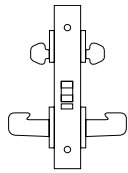
90115: P 6/15/14

## Functions & Descriptions

### 8200/R8200/7800 Mortise Locks

#### †59 Double Locking

8200 & R8200

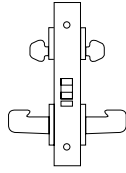


- Key from either side locks & unlocks both the inside & outside trims
- Key from either side retracts latchbolt

- Key from either side can retract latchbolt without unlocking trims
- Auxiliary deadlatch

#### 90 Classroom Security Holdback

8200

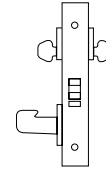


- Key from either side retracts latchbolt, also locks & unlocks outside trim
- Latchbolt can be locked in the retracted position by key from either side
- Trim inside always retracts latchbolt

- Auxiliary deadlatch
- Latch holdback — to set, rotating & hold lever, then rotate key twice toward latchbolt. Lever will remain in rotated position indicating it is unlocked

#### 92 All Purpose Holdback

8200 & 7800



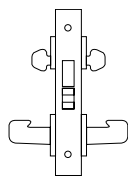
- Key outside retracts latchbolt
- Key inside can lock latchbolt in retracted position when the lever is rotated
- Trim inside always retracts latchbolt
- No outside trim

- Auxiliary deadlatch
- 7892 "T" turn is used in place of knob
- Special -105 cam required for inside cylinder (Supplied Standard)
- Latch holdback — to set, rotating & hold lever, then rotate key twice toward latchbolt. Lever will remain in rotated position indicating it is unlocked

### Double Cylinder with Deadbolt

#### †26 Store Door

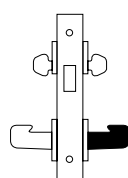
8200, R8200 & 7800



- Key from either side retracts & projects deadbolt
- Trim from either side retracts latchbolt
- Latchbolt and deadbolt are independent of each other
- ANSI F14

#### 29 Dummy Trim Deadlock

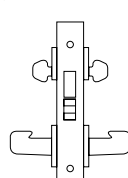
8200, R8200 & 7800



- Deadbolt operation only
- Key on either side retracts & projects deadbolt
- Trim inside retracts deadbolt
- Trim outside is always locked

#### \*39 Classroom Security Intruder Deadbolt

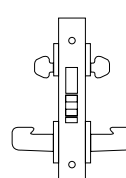
8200, R8200 & 7800



- Key either from side retracts or projects deadbolt which also unlocks or locks outside trim
- Trim outside retracts latchbolt, except when locked
- Trim outside is only locked by projecting the deadbolt
- Trim inside retracts both latchbolt and deadbolt simultaneously, and unlocks outside trim
- ANSI F33

#### \*40 Classroom Security Intruder Deadbolt

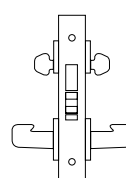
8200, R8200 & 7800



- Key from either side retracts or projects deadbolt which also unlocks or locks outside trim
- Trim outside retracts latchbolt, except when locked
- Trim outside is only locked by projecting the deadbolt
- Trim inside retracts both latchbolt and deadbolt simultaneously, and unlocks outside trim
- Auxiliary deadlatch
- Same as an 8239 with Auxiliary deadlatch
- ANSI F34

#### 41 Classroom Security Intruder Deadbolt

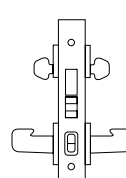
8200, R8200 & 7800



- Key from either side retracts and projects deadbolt
- When deadbolt is projected, 1st key rotation retracts deadbolt, 2nd key rotation unlocks trim outside
- Key retraction of latchbolt from either side unlocks trim outside
- Trim outside retracts latchbolt, except when locked
- Trim inside (when deadbolt is projected) retracts both latchbolt and deadbolt simultaneously and the outside trim remains locked
- Auxiliary deadlatch

#### 46 Dormitory or Exit

8200, R8200 & 7800



- Key from either side retracts and projects deadbolt
- Key from either side retracts both latchbolt and deadbolt, trim outside remains locked
- Trim outside is locked by toggle or projecting deadbolt
- Trim outside is unlocked by toggle only
- Trim inside (when deadbolt is projected) retracts both latchbolt and deadbolt simultaneously and the outside trim remains locked

\*8200 Available with Freewheeling Trim

‡ 7800 Available with Push/Pull Trim

†CAUTION: Not recommended for use on any door used for Life Safety egress



If shaded, knob or lever rigid at all times

# Functions & Descriptions

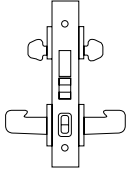
## 8200/R8200/7800 Mortise Locks

**SARGENT®**

**ASSA ABLOY**

### †48 Store Door

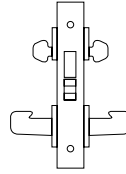
8200, R8200 & 7800



- Key from either side retracts and projects deadbolt
- Key from either side retracts latchbolt
- Trim outside is locked by toggle or projecting deadbolt and unlocked by toggle only
- Trim inside (when deadbolt is projected) retracts latchbolt only, and outside trim remains locked
- **ANSI F25**

### †49 Security Deadbolt

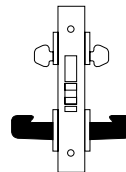
8200 & R8200



- Key from either side retracts and projects deadbolt
- Key from either side retracts latchbolt
- Trim inside & outside are locked only when deadbolt is projected

### †52 Institutional Deadbolt

8200, R8200 & 7800

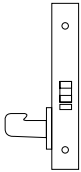


- Key from either side retracts and projects deadbolt
- Key from either side retracts latchbolt
- Trim inside and out are always locked
- Auxiliary deadlatch

## Non-Keyed

### 13 Exit Latch

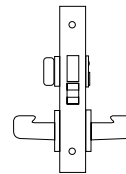
8200, R8200 & 7800



- No outside trim or cylinder
- Trim inside retracts latchbolt
- A Multi-Function 8200/R8200/7800 Lockbody
- Auxiliary deadlatch
- **ANSI F31**

### \*66 Privacy Bath/Bedroom

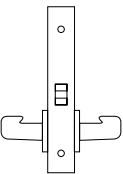
8200, R8200 & 7800



- Trim outside retracts latchbolt except when deadbolt is projected
- Trim inside retracts both latchbolt and deadbolt simultaneously, unlocking the outside trim
- Emergency Release retracts and projects deadbolt — by coin, screw driver or Emergency key (14-0057) ordered separately
- Thumbturn retracts and projects deadbolt
- **ANSI F19**

### ‡15 Passage or Closet

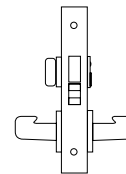
8200, R8200 & 7800



- Trim from either side retracts latchbolt at all times
- **ANSI F01**

### †68 Privacy Bath/Bedroom

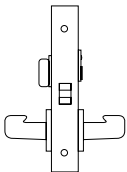
8200, R8200 & 7800



- Trim from either side retracts latchbolt at all times
- Thumbturn retracts and projects deadbolt
- Emergency release retracts and projects deadbolt — by coin, screwdriver or Emergency key (14-0057) ordered separately
- Latchbolt and deadbolt are independent of each other
- **ANSI F02**

### \*‡ 65 Privacy Bath/Bedroom

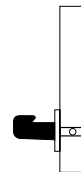
8200, R8200 & 7800



- Trim outside retracts latchbolt except when locked by thumbturn
- Trim inside retracts latchbolt and unlocks outside trim
- Emergency Release locks/unlocks trim outside-by coin, screwdriver or Emergency key (14-0057) ordered separately
- Thumbturn locks and unlocks trim outside
- Closing the door will unlock outside trim
- **ANSI F22**

### 93 Trim Dummy

8200, R8200 & 7800




- Trim on inside of door is always rigid
  - Trim only used as door pull
  - For double door applications, installed on the inactive door, use template #4298 to accept latchbolt from active door
- Note:** Lever is through-bolted

\*8200 Available with Freewheeling Trim

‡ 7800 Available with Push/Pull Trim

† **CAUTION:** Not recommended for use on any door used for Life Safety egress

 If shaded, knob or lever rigid at all times

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# Functions & Descriptions

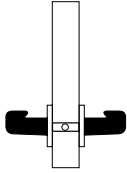
## 8200/R8200/7800 Mortise Locks

**SARGENT®**

**ASSA ABLOY**

### 94 Trim Dummy

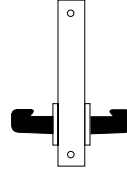
8200, R8200 & 7800



- Trim on both sides are always rigid
- Trim only used as door pull
- Recommended for double door applications on the inactive door, use template #4298, to accept latchbolt from active door
- **Note:** Lever not surface mounted

### 96 Double Trim Dummy

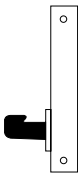
8200, R8200 & 7800



- Trim on both sides of the door
- Both trims are always rigid
- Includes lock case and armor front
- Not recommended on double door applications (will not accept latchbolt from active door)

### 95 Single Trim Dummy

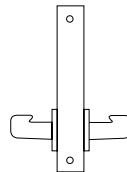
8200, R8200 & 7800



- Trim inside only
- Trim is always rigid
- Includes lock case and armor front
- Not recommended on double door applications (will not accept latchbolt from active door)

### 97 Active Trim Dummy

8200, R8200 & 7800

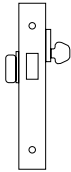


- Trim on both sides are active
- Includes lock case and armor front
- Not recommended on double door applications (will not accept latchbolt from active door)

## Deadbolt Only

### +03 Classroom Deadlock

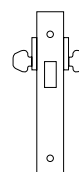
8200



- Deadbolt operation only
- Key outside retracts and projects deadbolt
- Thumbturn inside retracts deadbolt only, will not project it
- **ANSI F29**

### +22 Deadlock

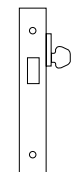
8200



- Deadbolt operation only
- Key outside or inside retracts and projects deadbolt
- **ANSI F16**

### +20 Deadlock

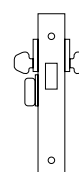
8200



- Deadbolt operation only
- Key outside retracts and projects deadbolt
- No inside operation
- **ANSI F18**

### +23 Classroom Deadlock

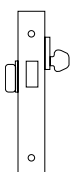
8200



- Deadbolt only operation
- Key outside or inside retracts and projects deadbolt
- Thumbturn inside retracts deadbolt, does not project deadbolt
- Same as 03 function with cylinder inside

### +21 Deadlock

8200



- Deadbolt operation only
- Key outside retracts and projects deadbolt
- Thumbturn inside retracts and projects deadbolt
- **ANSI F17**

\*8200 Available with Freewheeling Trim

‡ 7800 Available with Push/Pull Trim

♦ **CAUTION:** Not recommended for use on any door used for Life Safety egress



If shaded, knob or lever rigid at all times

# Electrical Functions & Monitoring Options

## 8200/R8200 Mortise Locks

**SARGENT®**

**ASSA ABLOY**

SARGENT 8200 Electromechanical Mortise locks are designed to handle single opening, stand alone applications, or can be readily integrated into sophisticated access control systems. They meet ANSI/BHMA A156.13 Grade 1 requirements, are UL listed on fire doors, and satisfy industry standards for operating temperature, shock and fire hazard.

### Featuring Ecoflex™ Technology\*



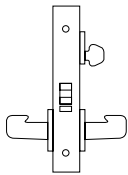
- **Reduces energy consumption up to 96%, as certified by GreenCircle**
  - Lower operating costs
  - Assists with load reduction in optimizing energy performance credit in LEED
  - Reduces number of power supplies required
- **Field configurable to fail-safe or fail-secure**
- **Operates from 12-24VDC, offering greater flexibility in system design**
- **Innovative actuator design provides superior reliability**
  - Higher performance and reduced maintenance
  - Ability to have longer cable runs without negatively impacting lock function
  - Reduces risk of voltage drops and eliminates inductive kickback
  - Lower total cost of ownership

\*Patent pending

### Electromechanical Functions

#### 70 Electrical (Fail Safe) 71 Electrical (Fail Secure)

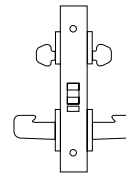
##### 8200 & R8200



- 70 function — Power ON, locks outside lever
- 71 function — Power ON, unlocks outside lever
- Specify voltage: 12VDC or 24VDC (operates from 12-24VDC)
- Key outside retracts latchbolt
- Lever outside retracts latchbolt, except when locked
- Lever outside can only be locked electronically
- Lever inside always retracts latchbolt
- Auxiliary deadlatch

#### 72 Electrical (Fail Safe) 73 Electrical (Fail Secure)

##### 8200 & R8200



- 72 function — Power ON, locks both levers
- 73 function — Power ON, unlocks both levers
- Specify voltage: 12VDC or 24VDC (operates from 12-24VDC)
- Key on either side retracts latchbolt
- Lever from either side retracts latchbolt, except when levers are locked
- Both Levers can only be locked & unlocked electronically
- Levers can not be locked separately, only together
- Auxiliary deadlatch

### Electrical Requirements for electromechanical functions:

Voltage: Operates from 12-24VDC Regulated. Full wave rectification installed inside the lockbody.

Current:

- Actuator draw = .015 Amp continuous
- Maximum (2) locks per 1 Amp power supply (1/2 Amp peak current draw)

Operating Temp.: Max. 151°F (66°C), Min -31°F (-35°C)

UL and CUL listed for use on Fire Doors

**Note:** Repeated operation at voltage exceeding +/- 10% is not recommended

### Warning:

- **Do not** connect locks to a circuit sharing an additional electromagnetic device as the lock may be damaged
- Transient voltage must be suppressed at the source or before connecting with the lock
- Varistor rated at 35 volts (peak) may be used for transient voltage protection

**Note:** Opening the lockbody or the actuator replacement in the field by non-authorized personnel voids UL label and lock warranty

### Monitoring Options offered for 8200 & R8200 Series Mortise Lock

- Single Pole Double Throw (SPDT) type C switches
- **RX- option — Request-to-Exit or Enter Signaling Switch**
  - Two switches mounted internally in lockbody that provide independent monitoring of inside and outside lever rotation
  - Available in all functions with non rigid levers
  - Not available for the following options: 1-, 3P, 74
  - Not available for the following trims: LS or FE
- **LX- option — Latchbolt Monitor**
  - Single switch mounted within lockbody signaling latchbolt position
  - Available for all non deadbolt functions
  - Not available with DX



Hardwiring Made Easy™



⚠️ **CAUTION:** Not recommended for use on any door used for Life Safety egress



# Mortice lock



## Applications

High frequency of use by people with little incentive to care: Grade 3 – Category of use - EN 12209  
Residential & Commercial buildings -Public Doors  
Suitable for timber and metal doors.

## Technical datas



Slim lock body, 15 mm thick, for minimum mortise clearance  
Galvanized steel lock body for superior corrosion resistance  
Sealed lock body for minimized dust penetration  
Oval shape deadbolt, 20 mm projection, double throw. Side load resistance > 1,350 daN.  
Reversible latch bolt, curved shape « easy latch »  
Key to latch  
Heavy duty follower spring suitable for non spring loaded lever furniture.  
Passage holes for bolt-through fixing lever furniture.  
Supplied with striker plates in compliance with EN 12209.  
D450 Series complies in full with the highest requirements of NF EN 12209.  
Emergency functions comply with EN 179\*  
Suitable for use on fire/smoke doors assemblies (except otherwise stated)

### Backsets:

50 and 60 (65 for limited functions)  
40 and 55 on special request

### Finishes:

Brushed Stainless Steel (X)  
Polyester Powder Coated Black (V)

#### On special Request

Nickel Plated (N)  
Solid Brass (D)  
Polished Stainless Steel (XP)

### Front plates:

Rounded ends in 20 mm  
Square ends in 24 mm

## Special features

- Curved latch bolt for easier latching
- Edge-cut latch bolt for smoother opening
- Profiled deadbolt for extra side load resistance
- Reversibility possible without dismantling the lock out of the door.
- Heavy duty follower spring suitable for non-sprung lever furniture.
- D 450 Series is manufactured in France by Vachette.
- Vachette is an ISO 9001 certified factory company
- Ten years mechanical warranty



\*In order to keep the EN 179 certification, emergency locks **MUST** be equipped with their respective striker plates and with the certified handles that have been tested with the lock: (See certified products in the Vachette Lever handles catalogue)



### D455 SASH LOCK

Entrance lock for Euro-profile cylinder. Key to latch. Deadbolt 20 mm projection, double throw.



### D452 LATCH LOCK

Passage lock



### D457 CLASSROOM LOCK

Classroom or office lock for Euro-profile cylinder. Equipped with ant-thrust bolt. Key to latch. Outside handle made inoperative when locked. Exit always free



### D453 PRIVACY LOCK

Toilet lock. Key to latch. Deadbolt 20 mm projection, double throw



### D4522 NIGHT LATCH

Night latch for euro-profile cylinder. Key to latch. Exit always free



### D458 EMERGENCY SASH LOCK

Entrance lock for Euro-profile cylinder. Key to latch. Deabolt 20 mm projection, double throw. Exit always free Inside handle retracts both latch and dead bolt.



### D454 DEAD LOCK

Deadlock for Euro-profile cylinder. Deabolt 20 mm projection, double throw.



### D456 STOREROOM LOCK

Storeroom or nighth latch lock for Euro-profile cylinder. Equipped with Anti-thrust bolt. Key to latch Exit always free



### D459 EMERGENCY SASH LOCK SAF

Same as D548 with snib on front plate that prevents from projecting the deabolt when the door is not shut. **NO RISK OF PREVENTING FIRE DOOR TO SHUT**

*One lock body – Nine functions – fully reversible right/left*



# MS1850S Series MS® Deadlock



ALUMINUM

GRADE 1  
E8211

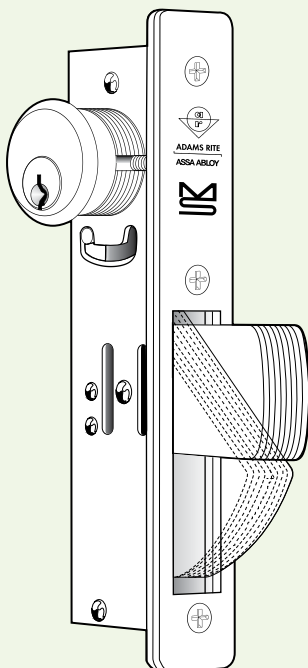
The MS1850S Deadlock utilizes a laminated stainless steel bolt, activated by a pivot mechanism to provide maximum security for a single leaf narrow stile door.

## Function

A huge bolt of laminated stainless steel, nearly three inches long, activated by an uncomplicated pivot mechanism, has made this basic MS® Deadlock the standard of the narrow stile door industry. The length of this bolt provides maximum security for a single leaf door, even a very tall and flexible one or an installation where the gap between the door and jamb is greater than it should be.

## Operation

360° turn of key or thumbturn throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32" diameter mortise cylinder or thumbturn from either or both sides. Cylinder must have MS® dimensioned cam.



## Specifications

### CYLINDER BACKSET

- 7/8", 31/32", 1-1/8", or 1-1/2" only.

### CASE

- Steel with corrosion-resistant plating, measures 1" x 6" x depth. Depth varies by backset (see table on back of page).

### BOLT

- 5/8" x 1-3/8" x 2-7/8" with 1-3/8" throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type "super" hacksaws.

### FACEPLATE

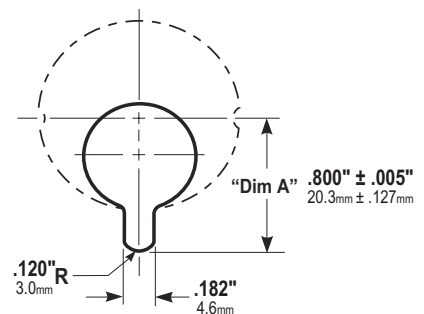
- Measures 1" x 6-7/8"

### STRIKE

- See back of page for dimensions of strike slot which can be cut in metal jamb. Trim plate, box strike, and armored strike are available separately.

### CYLINDER CAM

- MS1850S Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.



### OPTIONS

- For jambs too narrow to accept the long bolt, the MS1850S-050 offers a shorter bolt with hook shape to provide equal security against door-prying attempts. 1850S-020 short throw without hook is also available. Second and third point locking bolts are available for pairs of doors. All use any make standard mortise cylinder and thus can be keyed into systems with other types of doors. "SCHOOLHOUSE" version, also available, is modified so that operation from inside is "unlock only". This lock is handed and must be specified LH or RH. Specify Series SCH1850S. Same faceplate and backset options as Series MS1850S. Operation from inside, with standard Adams Rite 4066 Turn or with 4550 Deadlock Lever. For wood or hollow metal, see MS1850SN.

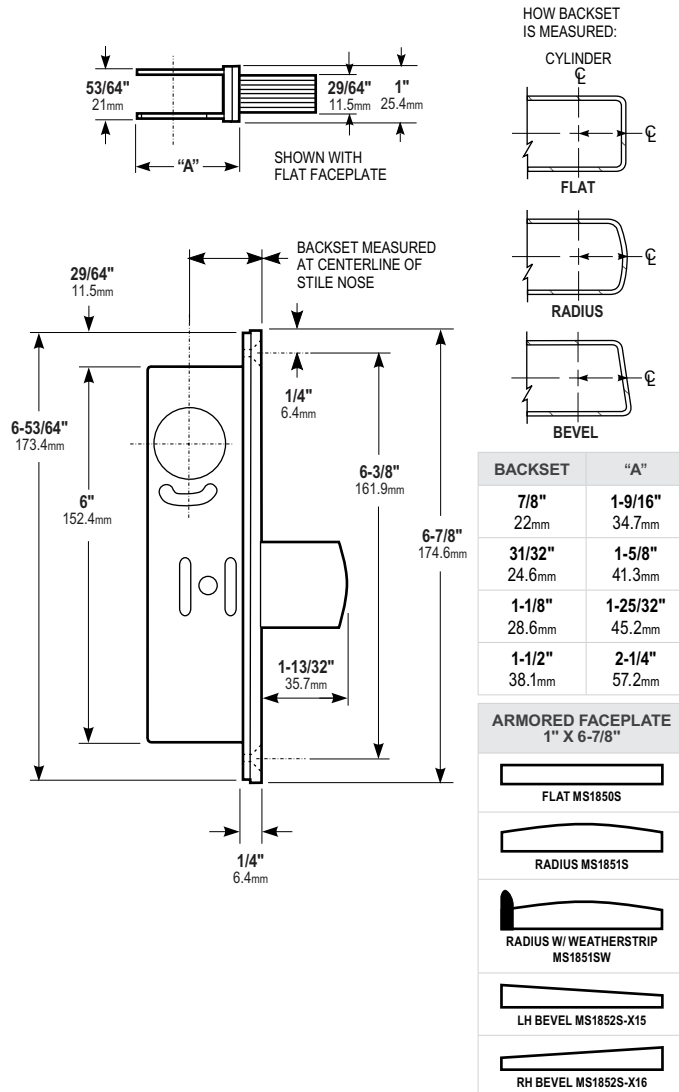
### STANDARD PACKAGE

- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1-1/2 lbs.

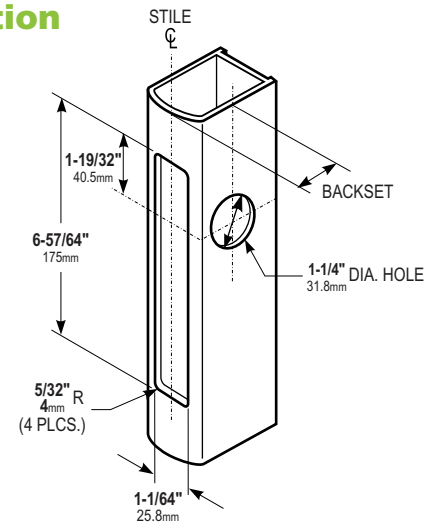


All measurements are approximate and are provided for informational purposes only. Refer to the product Installation Instructions.

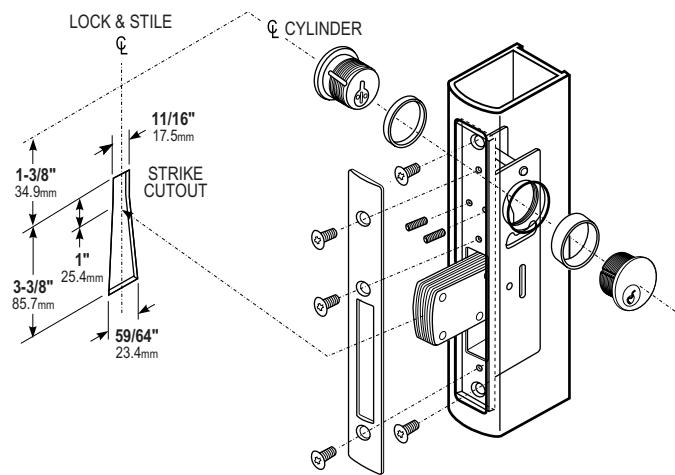
## Dimensions



## Stile Preparation



## Lock & Cylinder Installation



## HOW TO ORDER MS1850S SERIES MS® DEADLOCK

Specify quantity and the following information. Order related products separately.

| PRODUCT NO.  | FACEPLATE                    | BACKSET    | HANDING        | FINISH                   |
|--------------|------------------------------|------------|----------------|--------------------------|
| <b>MS185</b> | <b>OS</b>                    | <b>- 2</b> | <b>- 10</b>    | <b>- 628</b>             |
|              | 0S Flat                      | 1 7/8"     | 15 LH or RHR   | 313 Dark Bronze Anodized |
|              | 1S Radius                    | 2 31/32"   | 16 RH or LHR   | 335 Black Anodized       |
|              | 1SW Radius with weatherstrip | 3 1-1/8"   | 10 Non-Handed* | 628 Clear Anodized       |
|              | 2S Bevel                     | 4 1-1/2"   |                |                          |

\*Any flat or radius faceplate, except Schoolhouse.

**RELATED PRODUCTS** When purchasing this product, please consider the following related products, available separately:

### Accessories

4015 Threshold Bolt or 4016 Header Bolt for multi-point locking.

4085 Header Bolt for pairs of doors.

4000, 4001, MS4002 Deadlock Strikes.

Lock mounting accessories and options.

### Cylinders

MS1850S Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

### Trim

Deadlock lever trim and keyless entry trim.

Exit indicators.

### Special Order Options

Schoolhouse function available as special order.

# MS1850S-050 Series MS® Deadlock



ALUMINUM

GRADE 1  
E8281/E8291

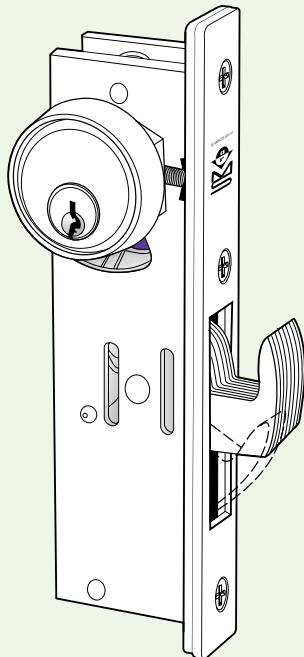
The MS1850S-050 Deadlock utilizes a laminated stainless steel hookbolt, activated by a pivot mechanism to provide maximum security for a sliding narrow stile door.

## Function

The MS1850S-050 Deadlock answers the security need of sliding glass doors in commercial, industrial, and institutional buildings. The mechanism is identical to the widely used Maximum Security swinging door lock, except that the massive laminated bolt is provided in a hook shape to resist the parting motion of sliding door and jamb. The over-center MS locking action assures that forced entry attempts to pry the door in any direction, up, down, or sideways will be defeated.

## Operation

360° turn of key or thumbturn throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32" diameter mortise cylinder or thumbturn from either or both sides. Cylinder must have MS® dimensioned cam.



## Specifications

### CYLINDER BACKSET

- 7/8", 31/32", 1-1/8", or 1-1/2" only.

### CASE

- Steel with corrosion-resistant plating, measures 1" x 6" x depth. Depth varies by backset (see table on back of page).

### BOLT

- 5/8" x 1-3/8" with 13/16" throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type "super" hacksaws, while hook shape repels pry bar attempts to "spread" the door from its jamb or lift it off its track.

### FACEPLATE

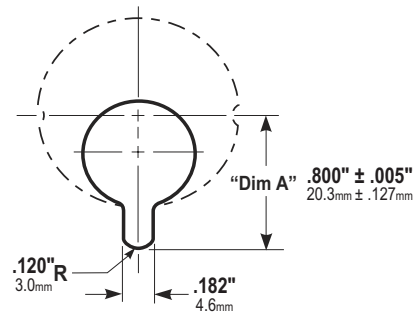
- Measures 1" x 6-7/8".

### STRIKE

- See back of page for dimensions of strike slot which can be cut in metal jamb. Trim plate, box strike, and armored strike are available separately.

### CYLINDER CAM

- MS1850S-050 Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.



### OPTIONS

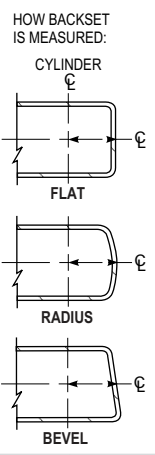
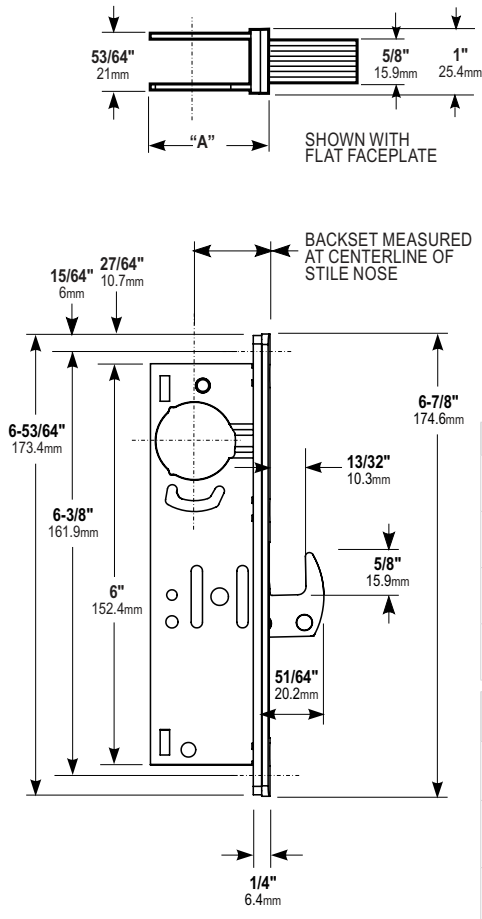
- Cylinder backset and faceplate finish and shape (radiused, flat or bevel cross-section to match door nose) must be specified. "SCHOOLHOUSE" version, also available, is modified so that operation from inside is "unlock only". This lock is handed and must be specified LH or RH. Specify Series SCH1850S-050. Same faceplate and backset options as Series MS1850S-050. Operation from inside, with standard Adams Rite 4066 Trim or with 4550 Deadlock Lever. For wood or hollow metal, see MS1850SN.

### STANDARD PACKAGE

- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1-1/2 lbs.

All measurements are approximate and are provided for informational purposes only. Refer to the product Installation Instructions.

### Dimensions

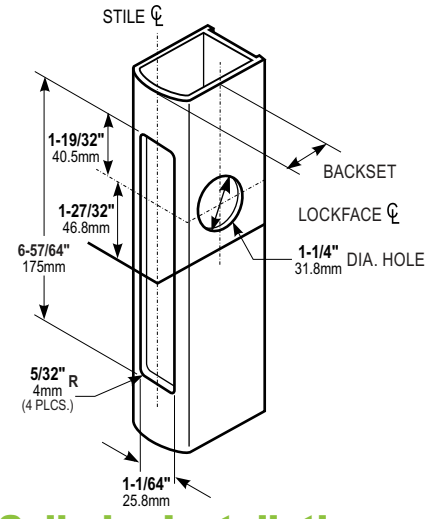


| BACKSET          | "A"                |
|------------------|--------------------|
| 7/8"<br>22.2mm   | 1-9/16"<br>39.7mm  |
| 31/32"<br>24.6mm | 1-5/8"<br>41.3mm   |
| 1-1/8"<br>28.6mm | 1-25/32"<br>44.5mm |
| 1-1/2"<br>38.1mm | 2-1/4"<br>57.2mm   |

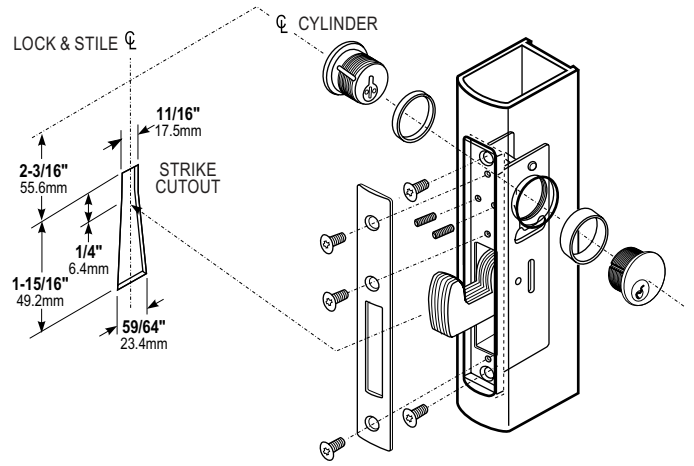
ARMORED FACEPLATE  
1" X 6-7/8"

|                                     |
|-------------------------------------|
| FLAT MS1850S-050                    |
| RADIUS MS1851S-050                  |
| RADIUS W/ WEATHERSTRIP MS1851SW-050 |
| LH BEVEL MS1852S-055                |
| RH BEVEL MS1852S-056                |

### Stile Preparation



### Lock & Cylinder Installation



### HOW TO ORDER MS1850S-050 SERIES MS® DEADLOCK

Specify quantity and the following information. Order related products separately.

| PRODUCT NO.  | FACEPLATE                    | BACKSET   | HANDING        | FINISH                   |
|--------------|------------------------------|-----------|----------------|--------------------------|
| <b>MS185</b> | <b>OS</b>                    | <b>-2</b> | <b>50</b>      | <b>-628</b>              |
|              | 0S Flat                      | 1 7/8"    | 55 LH or RHR   | 313 Dark Bronze Anodized |
|              | 1S Radius                    | 2 31/32"  | 56 RH or LHR   | 335 Black Anodized       |
|              | 1SW Radius with weatherstrip | 3 1-1/8"  | 50 Non-Handed* | 628 Clear Anodized       |
|              | 2S Bevel                     | 4 1-1/2"  |                |                          |

\*Any flat or radius faceplate.

### RELATED PRODUCTS

When purchasing this product, please consider the following related products, available separately:

#### Accessories

- 4015 Threshold Bolt or 4016 Header Bolt for multi-point locking.
- 4085 Header Bolt for pairs of doors.
- Deadlock Strikes.
- Lock mounting accessories and options.

#### Cylinders

MS1850S-050 Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

#### Trim

- Deadlock lever trim and keyless entry trim.
- Exit indicators.

#### Special Order Options

Schoolhouse function available as special order.

# Electromechanical Lock

**ASSA ABLOY**

The global leader in  
door opening solutions





# Electric Strikes



|                                            |    |
|--------------------------------------------|----|
| EL110 Electric Cabinet Lock                | 4  |
| ES100 Series Electric Strike               | 6  |
| ES110 Series Electric Strike               | 8  |
| ES150 Surface Mounted Electric Strike      | 12 |
| ES200 Series Non Monitored Electric Strike | 14 |
| ES2000 Series Monitored Electric Strike    | 16 |
| ES2100 Series Monitored Electric Strike    | 18 |
| ES2600 Series Monitored Electric Strike    | 20 |
| ES300 Series Electric Strike               | 22 |
| ES3000 Series Monitored Electric Strike    | 24 |
| ES9000 Pre-Load Strike                     | 26 |
| MT112 Monitored Detention Strike           | 28 |

# ES110 Series Electric Strike

## General Description

The ES110 is a cost efficient robust electric strike with a solid construction of one-piece cast aluminium body and stainless steel striker. Having a deeper than normal strike-keeper area, ES110 is designed to work with an extensive range of locks and offers the same level of security and reliability usually provided by more expensive electric locking solutions.

Extension lips are available to accommodate the installation of electric strikes on door frames with different thickness. The ES110 product range of patented electric strikes are suitable for use with all access control installations where flexibility, security and lower cost are required.

## Key Features

- Fail safe/fail secure changeable on site
- Stainless steel striker for extra strength and durability
- Stainless steel locking pins
- Available in 12 or 24Vdc
- Optional mounting kit
- Installation template
- IP56 weather resistant version available
- Suitable For 18mm latch with a 3mm door gap
- **TRICARE**® 5 Year Warranty

## Applications

- Exposed areas (weather resistant models)
- High traffic areas
- Open in/open out doors
- Suitable for use with all access control systems



## Standards and Compliance



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005 (Part 1: Fire resistant door sets)



Approved to UL1034 (highest level)



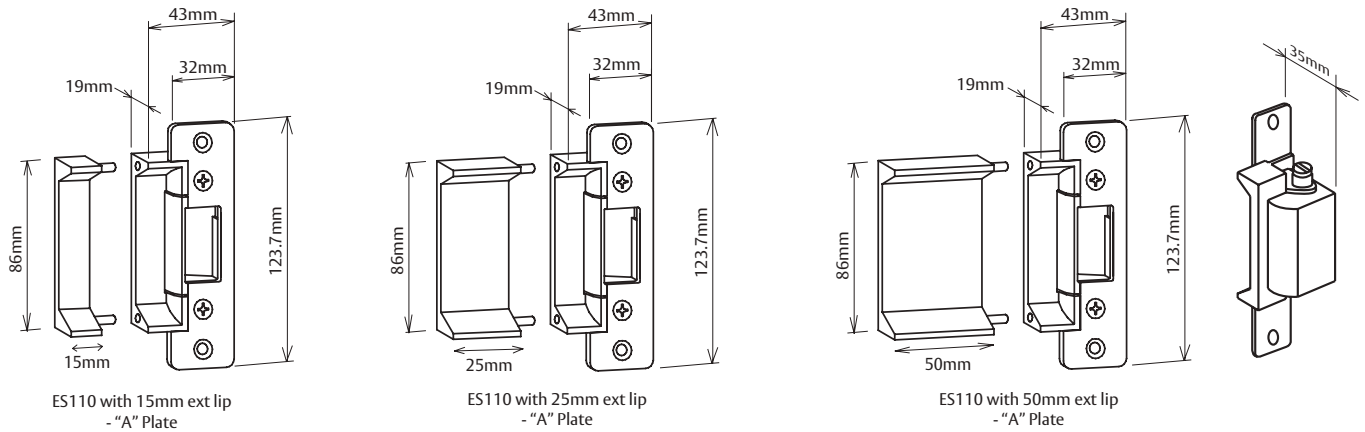
CE Approved



C-Tick Certified

Weather Resistant Version (IP56) available

# ES110 Series Electric Strike



| ES110 Technical Information |                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 12 or 24Vdc                                                                                     |
| <b>Current</b>              | 243 mA @ 12Vdc – 187mA @ 24Vdc                                                                  |
| <b>Solenoid</b>             | Solenoids are rated for continuous use                                                          |
| <b>Monitoring</b>           | None                                                                                            |
| <b>Holding Force</b>        | 680 kg Static Strength Rating                                                                   |
| <b>Endurance</b>            | Cycle tested to 1,000,000 operations                                                            |
| <b>Environment</b>          | Operational temperature range -20°C to +60°C<br>Weather resistant construction available (IP56) |
| <b>Body</b>                 | Cast Aluminium Construction                                                                     |
| <b>Keeper</b>               | Stainless Steel                                                                                 |
| <b>Latch</b>                | Suit 15mm latch bolt with 3 mm door gap                                                         |

## Ordering Information

| Product Description                                                  | Part Number |
|----------------------------------------------------------------------|-------------|
| <b>12V Electric Strike</b>                                           |             |
| 12V Fail Safe Aluminium Face Plate (A)                               | 110111-000  |
| 12V Fail Safe Stainless Steel Face Plate (A)                         | 110111-050  |
| 12V Fail Safe Weather Resistant Stainless Steel Face Plate (A)       | 110111-060  |
| 12V Fail Safe Long Aluminium Faceplate (B)                           | 110111-070  |
| 12V Fail Safe Long Stainless Steel Face plate (B)                    | 110111-100  |
| 12V Fail Safe Weather Resistant Long Stainless Steel Faceplate (B)   | 110111-110  |
| 12V Fail Safe Aluminium Euro Faceplate left hand (D)                 | 110111-180  |
| 12V Fail Secure Aluminium Faceplate (A)                              | 110112-000  |
| 12V Fail Secure Stainless Steel Faceplate (A)                        | 110112-050  |
| 12V Fail Secure Weather Resistant Stainless Steel Faceplate (A)      | 110112-060  |
| 12V Fail Secure Stainless Steel Faceplate right hand UK Sash DIN (G) | 110112-170  |
| 12V Fail Secure Stainless Steel Faceplate left hand UK Sash DIN (F)  | 110112-180  |
| <b>24V Electric Strike</b>                                           |             |
| 24V Fail Safe Aluminium Faceplate (A)                                | 110113-000  |
| 24V Fail Safe Stainless Steel Faceplate (A)                          | 110113-050  |
| 24V Fail Safe Long Stainless Steel Faceplate (B)                     | 110113-100  |
| 24V Fail Secure Aluminium Faceplate (A)                              | 110114-000  |
| 24V Fail Secure Stainless Steel Faceplate (A)                        | 110114-050  |

Note: For additional face plate options see page 10.

## Specification Statement

Where Power to Lock and Power to Open functions may be required in the same building, the strike must be interchangeable from either “Power to Lock” or “Power to Open” on site.

The electric strike should not consume current greater than 243mA @ 12Vdc or 187mA @ 24Vdc and have a solenoid suitable for continuous use. Certifications must include CE, C-tick and 4hr fire rating.

The strike should have a minimum holding force of 680kg, and an endurance rating of 1 million cycles.

## Accessories

| Product Description             | Part Number |
|---------------------------------|-------------|
| 15mm Extension Lip (26mm total) | 220110-502  |
| 25mm Extension Lip (36mm total) | 220110-503  |
| 50mm Extension Lip (61mm total) | 220110-504  |
| Mounting Kit                    | 220200-518  |

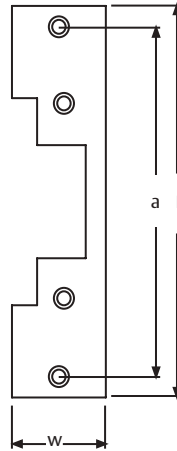


# ES100 / ES110 Faceplate Options

## Faceplates

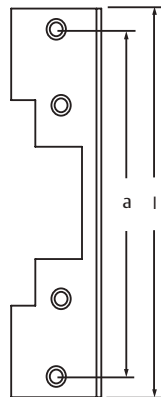
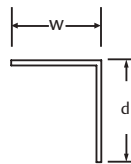
| Faceplate Style     | l     | w    | a     | Part Number |
|---------------------|-------|------|-------|-------------|
| A (ANSI Short) - SS | 123.7 | 31.7 | 104.8 | 200100-544  |
| A (ANSI Short) - AL | 123.7 | 31.7 | 104.8 | 200100-535  |
| B (ANSI Long) - SS  | 201.6 | 36.3 | 185.7 | 210100-530  |
| B (ANSI Long) - AL  | 201.6 | 36.3 | 185.7 | 210100-536  |
| C (Slim) - SS       | 150   | 28.6 | 136.1 | 200100-519  |
| C (Slim) - AL       | 150   | 28.6 | 136.1 | 200100-520  |

Note: SS - Stainless Steel, AL - Aluminium



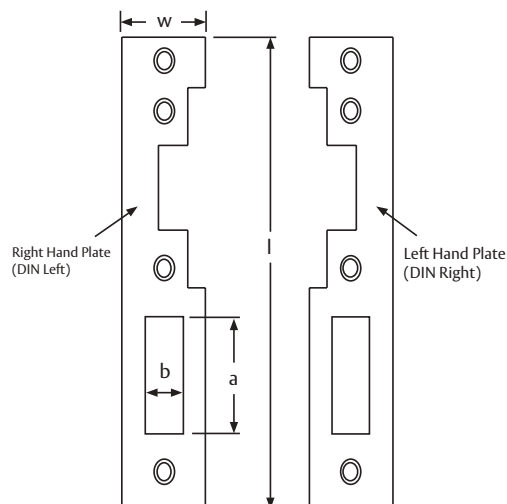
| Faceplate Style | l     | w  | d  | a     | Part Number |
|-----------------|-------|----|----|-------|-------------|
| J - AL          | 201.6 | 32 | 16 | 185.7 | 210100-523  |

Note: AL - Aluminium



| Faceplate Style                       | l   | w    | a    | b    | Part Number |
|---------------------------------------|-----|------|------|------|-------------|
| D (Euro Sash RH)<br>[DIN Left] - SS   | 209 | 31.7 | 60   | 11.7 | 210100-538  |
| E (Euro Sash LH)<br>[DIN Right] - SS  | 209 | 31.7 | 60   | 11.7 | 210100-539  |
| F (UK Sash RH)<br>[DIN Left] - SS     | 251 | 25   | 74   | 12   | 210100-528  |
| G (UK Sash LH)<br>[DIN Right] - SS    | 251 | 25   | 74   | 12   | 210100-527  |
| K (Short Sash LH)<br>[DIN Left] - SS  | 182 | 32   | 36.5 | 14.7 | 210100-549  |
| L (Short Sash RH)<br>[DIN Right] - SS | 182 | 32   | 36.5 | 14.7 | 210100-550  |

Note: SS - Stainless Steel  
All face plates are sold separately



# ES200 Series Electric Strike

## General Description

The ES200 series electric strikes are high security products manufactured from stainless steel and designed for use with all access control systems. The strikes are suitable for use with hinged doors which require either fire or security control as part of a building management system.

These strikes are flexible and can be changed from fail safe to fail secure, mounted on the left or right hand side of the door and are available in 12 or 24Vdc.

They offer a strong, dependable and long-lasting electric strike solution.

## Key Features

- Fail safe/fail secure changeable on site
- High security
- 4 Hour fire rating
- 850kg holding force
- 1 million cycles endurance rating
- Cast stainless steel body
- Stainless steel locking pins
- Low Current consumption – Max 175mA @12Vdc
- Mounting kit supplied as standard
- **TRICARE**® 5 Year Warranty

## Applications

- High traffic areas
- Fire rated door sets
- Open in/open out doors
- Suitable for use with all access control systems



## Standards and Compliance

**S3** (Security) Australian Lock Standard (AS4145.2.1993)

**D3** (Durability) Australian Lock Standard (AS4145.2.1993)



BS 5872 Approved



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1.2005 (Part 1: Fire resistant door sets)



Approved to UL1034 (highest level)

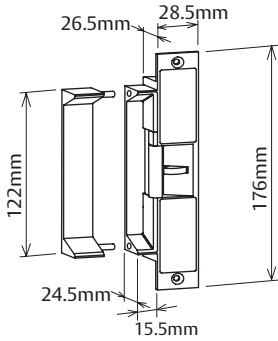


CE Approved

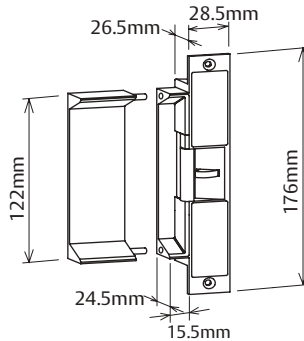


C-Tick Certified

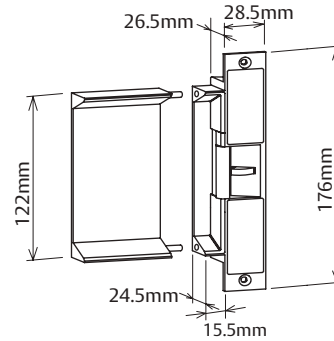
# ES200 Series Electric Strike



ES200 with 25mm Extension Lip



ES200 with 50mm Extension Lip



ES200 with 75mm Extension Lip

## ES200 Technical Information

|                      |                                                |
|----------------------|------------------------------------------------|
| <b>Voltage</b>       | 12 or 24Vdc                                    |
| <b>Current</b>       | 175 mA @ 12Vdc - 88 mA @ 24Vdc                 |
| <b>Solenoids</b>     | Solenoids are rated for continuous use         |
| <b>Monitoring</b>    | None                                           |
| <b>Holding Force</b> | 850kg Static Strength Rating                   |
| <b>Endurance</b>     | Cycle tested to 1,000,000 operations           |
| <b>Latch</b>         | Suitable for 15mm latch bolt with 3mm door gap |
| <b>Environment</b>   | Operational temperature range -20°C to +60°C   |
| <b>Body</b>          | Solid Stainless Steel Construction             |
| <b>Keeper</b>        | Stainless Steel                                |

## Ordering Information

| Product Description                                    | Part Number |
|--------------------------------------------------------|-------------|
| 12V Fail Safe Electric Strike                          | 110201-000  |
| 12V Fail Safe Electric Strike with No Extension Lip    | 110201-010  |
| 12V Fail Safe Electric Strike with Extension Lip Holes | 110201-020  |
| 12V Fail Secure Electric Strike                        | 110202-000  |
| 24V Fail Safe Electric Strike                          | 110203-000  |
| 24V Fail Secure Electric Strike                        | 110204-000  |

## Specification Statement

The strike should be constructed of stainless steel, have a minimum holding force of 850kg and have an endurance rating of 1 million cycles. The one strike must be changeable from fail safe to fail secure on site where required. The strike should not consume current greater than 175mA at 12Vdc and have a solenoid rated for continuous use. Certifications must include CE, C-Tick and 4 hr fire rating.

## Accessories

| Product Description               | Part Number |
|-----------------------------------|-------------|
| 13mm Rebate Plate                 | 210100-541  |
| 25mm Extension Lip (40.5mm total) | 220200-505  |
| 50mm Extension Lip (65.5mm total) | 220200-506  |
| 75mm Extension Lip (90.5mm total) | 220200-507  |
| Mounting Kit                      | 220200-519  |

# ES2100 Series Monitored Electric Strike



## General Description

The ES2100 is the latest product to join the iconic Trimec range of electric strikes. Tested in accordance with Australian standards this strike offers superior strength, and is durability tested to 1.5 million operations.

Standard features include variable voltage, patented field selectable fail safe/fail secure mode change and a unique integrated door position switch.

## Integrated Door Position Switch

The ES2100 now offers a unique new monitoring feature not available in other strikes on the market today. The strike has an integrated reed switch that when combined with a specialised Lockwood mortice lock, provides door position monitoring. The strike is supplied with a standard door magnet for use with cylindrical latches. Lockwood mortice locks and face plate accessories are sold separately.

## Key Features

- Patented field selectable fail safe/fail secure
- Multi voltage 10–30Vdc
- Fully monitored:
  - Integrated door position (reed) switch
  - Solenoid/Locked
  - Latch position

- 1000kg holding force
- 4hr fire rating
- Mounting tabs as supplied standard
- Australian designed and made
- **TRIGARE**® 5 Year Warranty

## Applications

- High traffic areas
- Fire rated door sets
- Open in/open out doors
- Suitable for use with all access control systems
- Doors requiring additional door position monitoring

## Standards and Compliance

**SL8** (Security) Australian Lock Standard (AS4145.2.2008)

**D8** (Durability) Australian Lock Standard (AS4145.2.2008)



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005

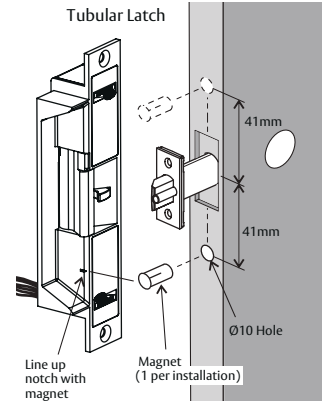
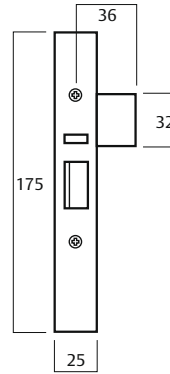
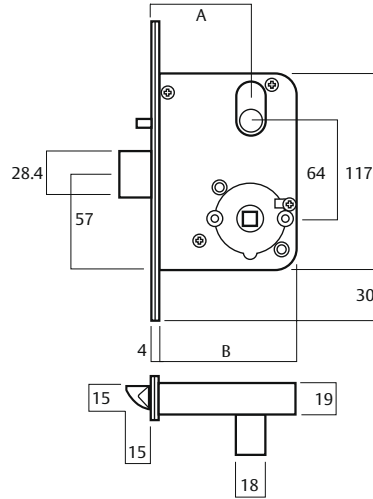
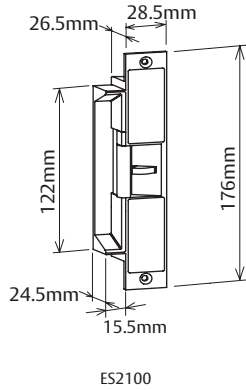


CE Approved



C-Tick Certified

# ES2100 Series Monitored Electric Strike



3570 Series Mortice Lock

| ES2100 Technical Information |                                                       |
|------------------------------|-------------------------------------------------------|
| <b>Voltage</b>               | Variable 10–30Vdc                                     |
| <b>Current</b>               | 200mA @ 12Vdc – 120mA @ 24Vdc                         |
| <b>Solenoids</b>             | Rated for continuous use                              |
| <b>Monitoring</b>            | Latch<br>Strike locked<br>Door position (reed switch) |
| <b>Holding force</b>         | 1000kg static strength rating                         |
| <b>Endurance</b>             | Cycle tested to 1.5 million operations                |
| <b>Latch</b>                 | Suitable for 15mm latch bolt with 3mm door gap        |
| <b>Body</b>                  | Stainless Steel                                       |
| <b>Keeper</b>                | Stainless Steel                                       |
| <b>Environment</b>           | Operational temperature range<br>-20°C to +60°C       |

|                    | STD Backset | Extended Backset |
|--------------------|-------------|------------------|
| <b>Dimension A</b> | 60          | 127              |
| <b>Dimension B</b> | 84          | 151              |

## Specification Statement

The strike should be constructed of solid stainless steel, have a minimum holding force of 1000kg and an endurance rating of 1.5 million cycles. Monitoring must include independent latch and solenoid monitoring. The strike shall have an integrated reed switch for door position monitoring and used in conjunction with Lockwood 3572MAGSC mortice lock or tubular latch with door magnet. Certifications must include CE, C-tick and 4 hr fire rating.

## Ordering Notes:

When using integrated door position switch monitoring:

- Electric strikes are supplied with door magnet for cylindrical locksets only.
- Lockwood Mortice Locks and face plates are sold separately.
- All strikes are factory set to fail safe (PTO) configuration. Lock mode is easily set post purchase to fail secure (PTL) configuration if required.

## Ordering Information

| Product Description                  | Part Number |
|--------------------------------------|-------------|
| ES2100 Multifunction strike 10-30Vdc | 112100-000  |

## Accessories

| Product Description                                         | Part Number    |
|-------------------------------------------------------------|----------------|
| Lockwood 3572 Series Primary lock with magnet face plate    | 3572MAGSC      |
| Magnet face plate – suits Lockwood 3570 series mortice lock | SP3570-2100SSS |

# ES9000 Series Pre-Load Strike

## General Description

The ES9000 has been designed to suit the harshest commercial environments, and has the unique feature of the ability to operate with up to 25kg of pre-load pressure on the keeper. Pre-load is a common condition that caused by pulling on a door before it unlocks, the weight of warped or drooping doors, seals on fire doors or by differential air pressure created when heating and cooling systems are in use.

Standard features include multi voltage 10 - 30Vdc and field changeable settings from fail safe to fail secure.

Built to last, this is a premium locking solution that has been tested in excess of 2 million cycles and boasts unique features like no other available on the market today.

## Key Features

- Operates under pre load up to 25kg
- Easy field selectable fail safe/fail secure
- Multi voltage 10-30Vdc
- 1300kg holding force
- 2.5 million cycles endurance rating
- Latch keeper is significantly quieter in operation
- Weather resistant (IP54)
- Built in protection diode
- Mounting tabs as standard
- Non handed
- **TRICARE**® 5 Year Warranty

## Applications

- High traffic areas
- Doors subjected to side load (pre load)
- Fire rated door sets
- Open in/open out doors
- Suitable for use with all access control systems



## Standards and Compliance

**S3** (Security) Australian Lock Standard (AS4145.2.1993)

**D3** (Durability) Australian Lock Standard (AS4145.2.1993)



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005 (Part 1: Fire resistant door sets)

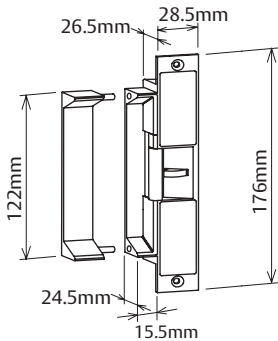


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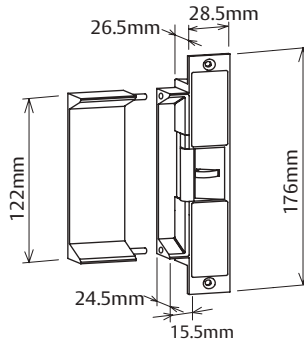


C-Tick Certified

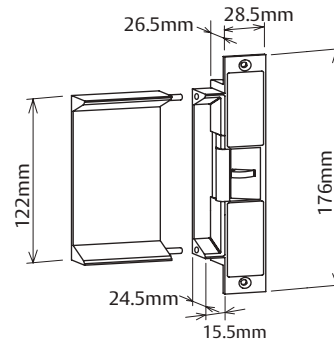
# ES9000 Series Pre-Load Strike



ES9000 with 25mm Extension Lip



ES9000 with 50mm Extension Lip



ES9000 with 75mm Extension Lip

## ES9000 Pre-Load Strike Technical Information

|                              |                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>               | 10 – 30Vdc                                                                                                           |
| <b>Current</b>               | 250mA @12Vdc – 130mA @24Vdc                                                                                          |
| <b>Solenoids</b>             | Solenoid rated for continuous use                                                                                    |
| <b>Electrical protection</b> | Polarity and back EMF protected                                                                                      |
| <b>Monitoring</b>            | Solenoid Monitor – 1 amp NO/NC microswitch<br>Door / Latch Monitor – 1 amp NO/NC microswitch                         |
| <b>Holding force</b>         | 1300kg static strength rating                                                                                        |
| <b>Endurance</b>             | 1,200,000 cycles endurance rating @ 25kg pre-load<br>2,500,000 cycles general durability without pre-load conditions |
| <b>Latch</b>                 | Suitable for 15mm latch with 3mm door gap                                                                            |
| <b>Environment</b>           | Operational temperature range - 20C to +60C                                                                          |
| <b>Body</b>                  | Solid Stainless Steel Construction                                                                                   |
| <b>Keeper</b>                | Stainless Steel                                                                                                      |

## Specification Statement

The electric strike should be fully monitored and have independent door / latch and solenoid monitor switches. Holding force for the strike should be not less than 1300kg.

Where Power to Lock and Power to Open functions may be required in the same building, a single electric strike should be interchangeable from either fail safe or fail secure from the rear of the strike.

The electric strike should not consume current greater than 250mA @ 12Vdc and have a solenoid rated for continuous use. A fire rating not less than 4 hours is required where applicable. The strike must be capable of operating with up to 25kg of pre-load pressure applied to the keeper, be tested to 2.5 million operations and carry a minimum warranty of 5 years.

## Ordering Information

| Product Description                                                |
|--------------------------------------------------------------------|
| ES9000 Pre - Load Multi Function Strike                            |
| ES9000 Pre - Load Multi Function Strike - No Extension Lip         |
| ES9000 Pre - Load Multi Function Strike - 8mm Extension Lip        |
| ES9000 Pre - Load Multi Function Strike - with Extension Lip Holes |

Note: All ES9000 series electric strikes are supplied in Fail Safe configuration.

| Part Number | Product Description               | Part Number |
|-------------|-----------------------------------|-------------|
| 119001-000  | 13mm Rebate Plate                 | 210100-541  |
| 119001-010  | 25mm Extension Lip (40.5mm total) | 220200-505  |
| 119001-020  | 50mm Extension Lip (65.5mm total) | 220200-506  |
| 119001-060  | 75mm Extension Lip (90.5mm total) | 220200-507  |
|             | Dummy fixed striker               | 100200-000  |
|             | Mounting Kit                      | 220200-519  |

# Electromagnetic Locking Solutions



|                                   |    |
|-----------------------------------|----|
| Z Series Single Non Monitored EML | 52 |
| Z Series Single Monitored EML     | 54 |
| Z Series Double Non Monitored EML | 56 |
| Z Series Double Monitored EML     | 58 |
| Z Series Recessed EML             | 60 |
| Z Series Weather Resistant EML    | 62 |
| Accessories                       | 64 |



# Z2, Z4 and Z8 Single Series Monitored Electromagnetic Lock

## General Description

The Single Series Electromagnetic Locks operate with holding forces from 140kg up to 580kg. Covering a range of applications the Z2, Z4 and Z8 Electromagnets are ideal for applications from cupboard doors through to high use commercial swing doors.

With fixing options including wood, aluminium and steel constructions, as well as glass door applications, the range caters to most electromagnetic needs.

## Key Features

- Fail-safe: unlocks when power is removed
- Easy installation: suitable for both new and retrofit usage
- High holding force: refer to the technical data overleaf
- Self-alignment: armature plate pivots to accommodate door drop
- Silent operation: no humming or buzzing
- Dual voltage: site selectable 12 or 24 Vdc
- Monitoring: Reed Switch monitoring on all models. Hall-Effect monitoring on Z4 and Z8 models.
- Instantaneous release: smart electronics on the Z Series Electromagnets eliminate residual magnetism

## Monitoring

### Hall / Bond Monitoring

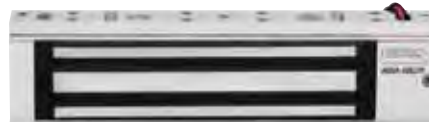
This indicates that the lock is powered and that the armature plate is in position and magnetically bonded (it monitors if the magnet is locked)

### Reed switch monitoring

An integrated reed switch monitors the door position separately (it monitors the position of the door)

## Applications

- Aluminium doors
- Glass doors
- IT Storage rooms
- Access control
- Surface mount for inswing and outswing doors



Z2 Electromagnetic Lock - Monitored



Z4 Electromagnetic Lock - Monitored



Z8 Electromagnetic Lock - Monitored

## Standards and Compliance



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005 (Part 1: Fire resistant door sets)

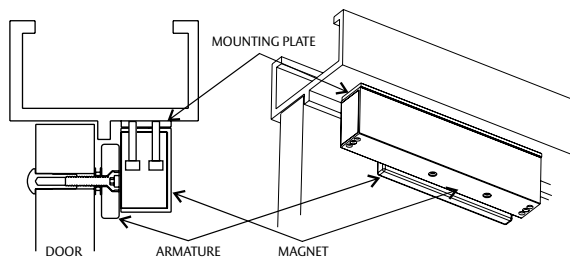


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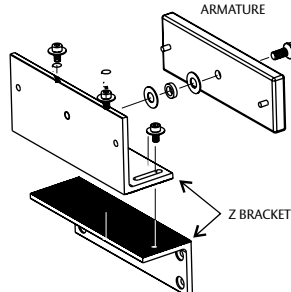


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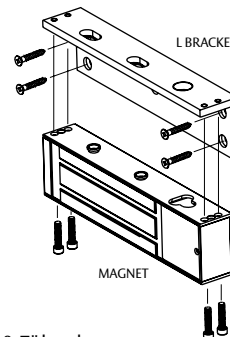
# Z2, Z4 and Z8 Single Series Monitored Electromagnetic Lock



Out swinging door using the standard mounting plate.



Typical in swinging door installation using "L & Z" brackets.



## Single Series Technical Information

|                              | Z2 Magnet                       | Z4 Magnet                       | Z8 Magnet                       |
|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| <b>Holding Force</b>         | 120kg – 140kg                   | 250kg – 280kg                   | 550kg – 580kg                   |
| <b>Dimensions</b>            | (L)170 x (H)42 x (D)23 mm       | (L)238 x (H)48 x (D)27 mm       | (L)266 x (H)72 x (D)40 mm       |
| <b>Voltage</b>               | 12Vdc/ 24Vdc ±10%               | 12Vdc/ 24Vdc ±10%               | 12Vdc/ 24Vdc ±10%               |
| <b>Current</b>               | 280mA @ (12Vdc) 140mA @ (24Vdc) | 450mA @ (12Vdc) 225mA @ (24Vdc) | 512mA @ (12Vdc) 256mA @ (24Vdc) |
| <b>Monitoring</b>            | Reed Switch                     | Hall-Effect & Reed Switch       | Hall-Effect & Reed Switch       |
| <b>Operating Temperature</b> | -25 to 55 Degrees               | -25 to 55 Degrees               | -25 to 55 Degrees               |
| <b>Operating Humidity</b>    | 0 - 95%                         | 0 - 95%                         | 0 - 95%                         |

## Specification Statement

The Single Series Electromagnetic Lock should be constructed in an aluminium case with heavy duty electromagnet. The range only operates in fail safe mode and relies on a secondary lock or battery backup system. In some cases the magnet armature plate pivots to accommodate door drop. The lock needs to be equipped with "smart electronics" that have zero residual magnetism, (instantaneous release). This is crucial for correct operation.

## Ordering Information

| Product Description                  | Part Number |
|--------------------------------------|-------------|
| Z2 Electromagnet - Monitored         | 770150-010T |
| Z4 Electromagnet - Monitored (EML2H) | 770300-012T |
| Z8 Electromagnet - Monitored (EML6)  | 770600-012T |
| <b>Accessories</b>                   |             |
| Z2 L and Z Brackets                  | 770150-901T |
| Z4 L and Z Brackets                  | 770300-901T |
| Z8 Land Z Brackets                   | 770600-901T |
| Z4 Glass Door Brackets               | 770300-905T |
| Z8 Glass Door Brackets               | 770600-905T |
| Z4 Amature Bracket Monitored         | 770300-910T |
| Z8 Amature Bracket Monitored         | 770600-955T |
| Z4 Screw Kit                         | 770300-913T |
| Z8 Screw Kit                         | 770600-950T |

# Z4 and Z8 Double Series Monitored Electromagnetic Lock



Z4 Double Electromagnetic Lock - Monitored



Z8 Double Electromagnetic Lock - Monitored

## General Description

The Double Series Electromagnetic Locks operate with holding forces from 500kg up to 1160kg. Covering a range of applications these magnets are ideal for applications from access ways through to high use commercial swing doors. With fixing options including wood, aluminium and steel constructions, as well as glass door applications, the range caters to most electromagnetic needs.

## Key Features

- Fail-safe: unlocks when power is removed
- Easy installation: suitable for both new and retrofit usage
- High holding force: refer to the technical data overleaf
- Self-alignment: armature plate pivots to accommodate door drop
- Silent operation: no humming or buzzing
- Dual voltage: site selectable 12 or 24 Vdc
- Monitoring: Hall-Effect and Reed Switch monitoring on all models
- Instantaneous release: Smart electronics on the Z Series electromagnets eliminate residual magnetism.

## Applications

- Aluminium doors
- Double swing doors
- Access control
- Surface mount for inswing and outswing doors

## Monitoring

### Hall / Bond Monitoring

This indicates that the lock is powered and that the armature plate is in position and magnetically bonded (it monitors if the magnet is locked)

### Reed switch monitoring

An integrated reed switch monitors the door position separately (it monitors the position of the door)

## Standards and Compliance



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005 (Part 1: Fire resistant door sets)

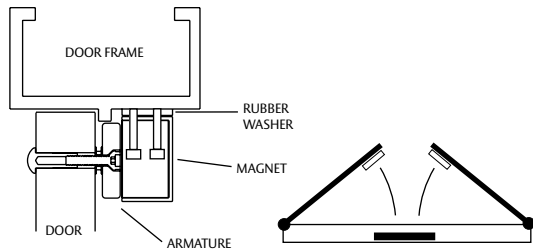


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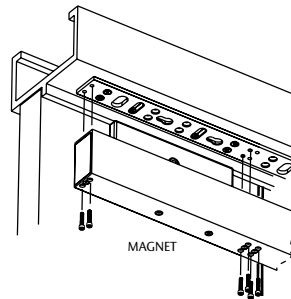


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# Z4 and Z8 Double Series Monitored Electromagnetic Lock



Out swinging door using the standard mounting plate.



Adjust position of magnet relative to the armature.

## Double Series Monitored Technical Information

|                       | Z4 Magnet                   | Z8 Magnet                      |
|-----------------------|-----------------------------|--------------------------------|
| Holding Force         | 500kg – 560kg               | 1100kg – 1160kg                |
| Dimensions            | (L)476 x (H)48 x (D)27 mm   | (L)532 x (H)72 x (D)40 mm      |
| Voltage               | 12Vdc/ 24Vdc ±10%           | 12Vdc/ 24Vdc ±10%              |
| Current               | 900mA @ 12Vdc 450mA @ 24Vdc | 1024mA @ 12Vdc 512mA @ (12Vdc) |
| Monitoring            | Hall-Effect and Reed Switch | Hall-Effect and Reed Switch    |
| Operating Temperature | -25 to 55 Degrees           | -25 to 55 Degrees              |
| Operating Humidity    | 0 - 95%                     | 0 - 95%                        |

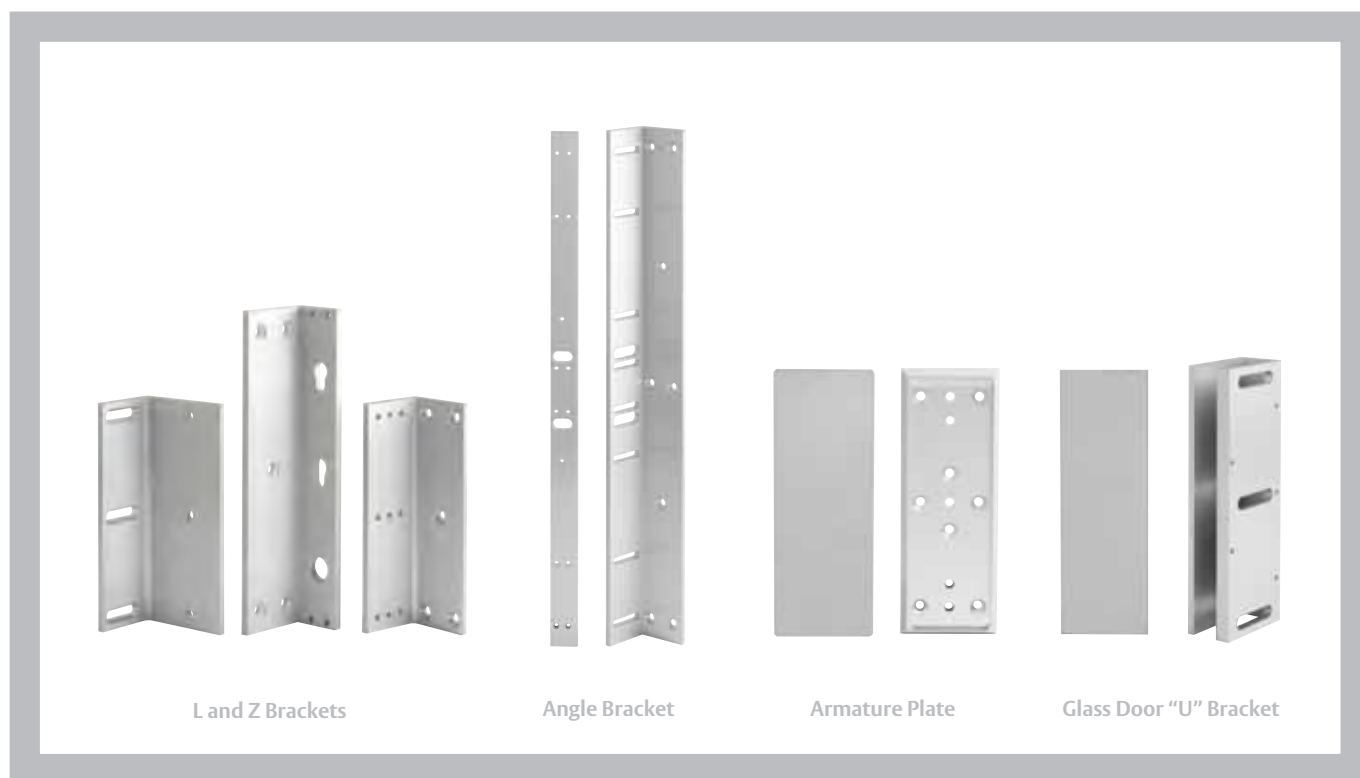
## Specification Statement

The Double Series Electromagnetic Lock should be constructed in an aluminium base with heavy duty electromagnet. The range only operates in fail safe mode and relies on a secondary lock or battery backup system. The lock needs to be equipped with “smart electronics” that have zero residual magnetism, (instantaneous release). This is crucial for correct operation.

## Ordering Information

| Product Description                          | Part Number |
|----------------------------------------------|-------------|
| Z4 Double Electromagnet – Monitored (EML2HD) | 770300-112T |
| Z8 Double Electromagnet – Monitored (EML10)  | 770600-112T |
| <b>Accessories</b>                           |             |
| Z4D L and Z Brackets                         | 770300-902T |
| Z8D L and Z Brackets                         | 770600-902T |
| Z4 Glass Door Brackets                       | 770300-905T |
| Z8 Glass Door Brackets                       | 770600-905T |
| Z4 Amature Bracket Monitored                 | 770300-910T |
| Z8 Amature Bracket Monitored                 | 770600-955T |
| Z4 Screw Kit                                 | 770300-913T |
| Z8 Screw Kit                                 | 770600-950T |

# Electromagnetic Lock Accessories



L and Z Brackets

Angle Bracket

Armature Plate

Glass Door "U" Bracket

## General Description

The Trimec Electromagnetic lock range offers a number of accessory options. These accessories allow the electromagnetic locks to be used in a number of different applications and can be adjusted and suited to each situation. This allows the installer to configure the door as required allowing user specific features such as open in / open out selection or glass door applications. Trimec's Electromagnetic Lock accessories meet or exceed local and international standards, providing safe and secure locking.

## Key Features

- Adjustable fixing positions
- Cast aluminium construction
- Meet and exceed International and local standards

## Applications

- Open in/Open out doors
- Glass door security
- Double doors security
- Sliding door security

## Ordering Information

| Product Description              | Part Number |
|----------------------------------|-------------|
| <b>L and Z Brackets</b>          |             |
| Z2                               | 770150-901T |
| Z4                               | 770300-901T |
| Z4 Double                        | 770300-902T |
| Z8                               | 770600-901T |
| Z8 Double                        | 770600-902T |
| <b>Adjustable Angle Bracket</b>  |             |
| Z4                               | 770300-903T |
| Z4 Double                        | 770300-904T |
| Z8                               | 770600-903T |
| Z8 Double                        | 770600-904T |
| <b>Glass Door Armature Plate</b> |             |
| Z4                               | 770300-908T |
| Z8                               | 770600-908T |
| <b>Glass Door "U" Bracket</b>    |             |
| Z4                               | 770300-905T |
| Z8                               | 770600-905T |

# LOCKING » PRODUCTS

**SECURITRON®**  
**ASSA ABLOY**

ASSA ABLOY, the global leader in door opening solutions

# Genuine Magalock® Selection Guide

## Out-Swing Door Magalock Selection Guide

Locks Mount on the Secure Side of the Door & Door Swings Away from Secure Side.

Dual Doors Will Require Two Locks (X2), One for Each Leaf Except for DM62.

**PREFERRED APPLICATION = X ALSO ACCEPTABLE FOR APPLICATION = X**

| DOOR TYPE                                 | M370           | M380           | M670           | M680           | M32 | M38 | M62            | DM62 | M68 | M82B | SAM            | SAM2-24        |
|-------------------------------------------|----------------|----------------|----------------|----------------|-----|-----|----------------|------|-----|------|----------------|----------------|
| Glass Door (w/ Aluminum Frame)            | X              | X              | X <sup>1</sup> | X <sup>1</sup> | X   | X   | X <sup>1</sup> |      |     |      | X <sup>2</sup> | X <sup>2</sup> |
| Wood Door (Traffic Control)               | X              | X              |                |                | X   | X   |                |      |     |      |                | X              |
| Wood Door (High Security)                 |                |                | X              | X              |     |     | X              | X    | X   | X    | X <sup>2</sup> |                |
| Metal Door (Traffic Control)              | X              | X              |                |                | X   | X   |                |      |     |      |                | X <sup>2</sup> |
| Metal Door (High Security)                |                |                | X              | X              |     |     | X              | X    | X   | X    | X <sup>2</sup> |                |
| Herculite Door (w/out Top or Bottom Rail) | X <sup>3</sup> | X <sup>3</sup> | X <sup>3</sup> | X <sup>3</sup> | X   | X   | X              |      | X   |      |                |                |
| Herculite Door (w/Top or Bottom Rail)     | X              | X              | X              | X              |     |     | X              |      | X   |      | X <sup>2</sup> | X <sup>2</sup> |

<sup>1</sup> Requires an Offset Strike for proper installation. <sup>2</sup> Not for use with Open Channel doors <sup>3</sup> Requires Glass Door Bracket and Adhesive (GDB and AKG)

## In-Swing Door Magalock Selection Guide

Locks Mounted on the Secure Side of the Door & Door Swings Toward Secure Side.

Dual Doors Will Require Two Locks (X2), One for Each Leaf.

**PREFERRED APPLICATION = X ALSO ACCEPTABLE FOR APPLICATION = X**

| DOOR TYPE                      | M370 | M380BD | M32F | M38 | M62F | M68 | M82FB | SAM | SAM2-24 |
|--------------------------------|------|--------|------|-----|------|-----|-------|-----|---------|
| Glass Door (w/ Aluminum Frame) | X    | X      | X    | X   | X    | X   |       | X   | X       |
| Wood Door (Traffic Control)    | X    | X      | X    | X   |      |     |       |     |         |
| Wood Door (High Security)      |      |        |      |     | X    | X   | X     | X   |         |
| Metal Door (Traffic Control)   | X    | X      | X    | X   |      |     |       |     | X       |
| Metal Door (High Security)     |      |        |      |     | X    | X   | X     | X   |         |

*In-Swing Door Magalocks (except SAM & SAM2-24) will require a corresponding "Z" Bracket to mount the Strike Plate (Armature).  
M38, M68, M370 and M380BD will require the appropriate T1-Top Jamb Kit.*

## Sliding Door Magalock Selection Guide

**PREFERRED APPLICATION = X ALSO ACCEPTABLE FOR APPLICATION = X**

| DOOR TYPE                       | M34R | SAM    | SAM2-24 |
|---------------------------------|------|--------|---------|
| All Sliding Door Types (Dual)   | X    | X (X2) | X (X2)  |
| All Sliding Door Types (Single) | X    | X      | X       |

All Securitron Magalocks are Fail Safe Electric Locking Devices

**SECURITRON®**  
**ASSA ABLOY**



### PRODUCT FEATURES:

- Bracket mounting provides the easiest install for out-swing doors
- Innovative install template for an effortlessly accurate alignment between magnet and armature plate
- Sleek, low profile and refined lines for improved aesthetics
- LED visual locked status with configurable red/green color output
- BondSTAT lock bond sensor – Patented
- Integrated door position switch
- Autosensing dual voltage with microprocessor technology
- Adjustable automatic relock timer (0.5-15 seconds)
- Wire chamber with anti-tamper switch
- Efficient, low power usage
- Size optimized for use with door closers
- MagnaCare Lifetime Replacement No Fault Warranty

### PRODUCT OPTIONS:

- Integrated passive infrared (PIR) Request to Exit (REX)
- Integrated video surveillance camera in color or black/white for lower light conditions
- Mounting for glass door applications

### SPECIFICATIONS:

- UL 10C Listed
- UL 1034 Burglary-Resistant Listed
- CAN4-S104, CAN/ULC Listed
- ANSI/BHMA A156.23, Grade 1; E18501-500, E18531-500
- CSFM- California State Fire Marshal Approved
- Patent: 8,094,017
- Patents Pending

#### Holding Force:

600lbs [272kg]

#### Dimensions:

Magnalock: 10" L x 2-7/16" D x 2-3/16" H  
Strike: 7-7/16" L x 5/8" D x 1-5/8" H

#### Operating Temperature:

+32 to +110F [0 to +43C]  
Indoor use only

#### Shipping Weight:

8lbs [3.6kg]

#### Finishes:

US28/628 – Satin Aluminum (Standard)

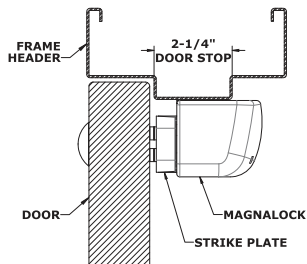
US19/335 – Satin Black

US03/605 – Polished Brass

US04/606 – Satin Brass

US10/612 – Satin Bronze

US20A/313 – Satin Brown



FITS IN 2-1/4" OF FLAT MOUNTING SPACE



# M380 SERIES

## 600lbs Holding Force

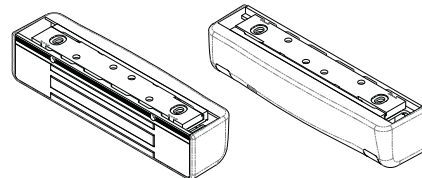
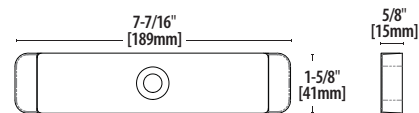
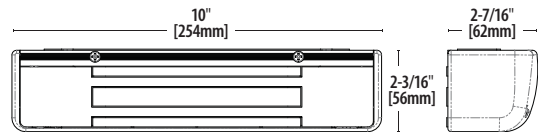
### The Smart, Stylish, and Secure Magnalock; Advanced Features, Amazingly Easy to Install

The M380 from Securitron provides strong hold, in a stylish way. With unsurpassed intelligence, an integrated optional REX and surveillance camera and incredible ease of installation, it sets a new standard for maglocks.

**Intelligent:** A built in, auto voltage-sensing microprocessor along with Securitron's patented BondSTAT and door position monitoring plus advanced options such as integrated camera and REX for the most functional maglock ever.

**Stylish:** The newest addition to the aesthetically pleasing line of maglocks the M380 look is refined enough for the most discriminating designer openings with consolidated features that eliminate the clutter of multiple devices around the door.

**Simple:** The fastest, easiest, most secure installation of any bracket mount maglock.



DUAL VOLTAGE



GRADE 1



FIRE RATED

SECURITRON™

ASSA ABLOY



# M380 SERIES

## Continued



Embedded CCTV captures full facial view of persons exiting door



Adjustable Motion Detector

### OPTIONAL PRODUCT FEATURES:

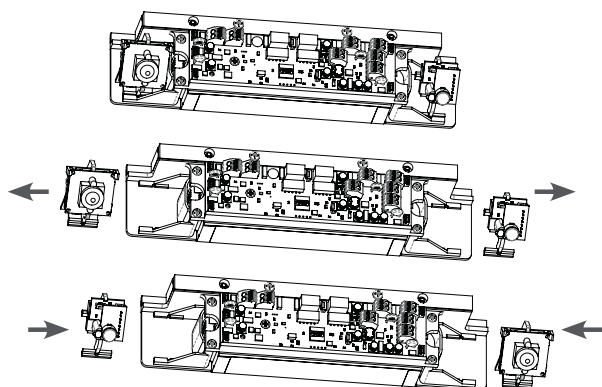
- Analog black/white CCTV camera
  - › 112 degree view angle
  - › 420 TV line resolution
  - › 48db S/N ratio
  - › 0.1 LUX minimum illumination day/night operation
  - › Supports BNC connector
- Analog color CCTV camera
  - › 112 degree view angle
  - › 520 TV line resolution
  - › 48db S/N ratio
  - › 1.5 LUX minimum illumination day/night operation
  - › Supports BNC connection
- Adjustable passive infrared (PIR) Request to Exit (REX)
  - › Automatically cuts power to M380 for egress
  - › Request to exit (REX) output
  - › Easily adjustable beam pattern
  - › Adjustable reload timer

**Electrical  
Magnalock Power**  
510mA at 12VDC  
270mA at 24VDC

**Camera Power\***  
180mA at 12VDC  
80mA at 24VDC

**PIR Power**  
25mA at 12VDC  
10mA at 24VDC

\* A separate continuous power input is required to power the camera and REX



The optional camera and the REX are designed as modular components that can be installed on either the left side or the right side of the magnet. The position of the camera and REX modules can be easily field configured for better positioning on the door.

### » MODELS

PART # | Description

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| <b>M380BD</b>        | M380 Standard Magnalock (w/BondSTAT, DPS), Satin Aluminum   |
| <b>M380BD-313</b>    | M380 Standard Magnalock, Satin Brown                        |
| <b>M380BD-335</b>    | M380 Standard Magnalock, Satin Black                        |
| <b>M380BD-605</b>    | M380 Standard Magnalock, Polished Brass                     |
| <b>M380BD-606</b>    | M380 Standard Magnalock, Satin Brass                        |
| <b>M380BD-612</b>    | M380 Standard Magnalock, Satin Bronze                       |
| <b>M380BDC</b>       | M380 w/ BW Camera Plus Standard Features, Satin Aluminum    |
| <b>M380BDC2</b>      | M380 w/ Color Camera Plus Standard Features, Satin Aluminum |
| <b>M380BDC2-313</b>  | M380 w/ Color Camera, Satin Brown                           |
| <b>M380BDC2-335</b>  | M380 w/ Color Camera, Satin Black                           |
| <b>M380BDC2-605</b>  | M380 w/ Color Camera, Polished Brass                        |
| <b>M380BDC2-606</b>  | M380 w/ Color Camera, Satin Brass                           |
| <b>M380BDC2-612</b>  | M380 w/ Color Camera, Satin Bronze                          |
| <b>M380BDC2X</b>     | M380 w/ REX and Color Camera, Satin Aluminum                |
| <b>M380BDC2X-313</b> | M380 w/ REX and Color Camera, Satin Brown                   |
| <b>M380BDC2X-335</b> | M380 w/ REX and Color Camera, Satin Black                   |
| <b>M380BDC2X-605</b> | M380 w/ REX and Color Camera, Polished Brass                |
| <b>M380BDC2X-606</b> | M380 w/ REX and Color Camera, Satin Brass                   |
| <b>M380BDC2X-612</b> | M380 w/ REX and Color Camera, Satin Bronze                  |
| <b>M380BDC-313</b>   | M380 w/ BW Camera, Satin Brown                              |
| <b>M380BDC-335</b>   | M380 w/ BW Camera, Satin Black                              |
| <b>M380BDC-605</b>   | M380 w/ BW Camera, Polished Brass                           |
| <b>M380BDC-606</b>   | M380 w/ BW Camera, Satin Brass                              |
| <b>M380BDC-612</b>   | M380 w/ BW Camera, Satin Bronze                             |
| <b>M380BDCX</b>      | M380 w/ REX and BW Camera, Satin Aluminum                   |
| <b>M380BDCX-313</b>  | M380 w/ REX and BW Camera, Satin Brown                      |
| <b>M380BDCX-335</b>  | M380 w/ REX and BW Camera, Satin Black                      |
| <b>M380BDCX-605</b>  | M380 w/ REX and BW Camera, Polished Brass                   |
| <b>M380BDCX-606</b>  | M380 w/ REX and BW Camera, Satin Brass                      |
| <b>M380BDCX-612</b>  | M380 w/ REX and BW Camera, Satin Bronze                     |
| <b>M380BDX</b>       | M380 w/ REX, Satin Aluminum                                 |
| <b>M380BDX-313</b>   | M380 w/ REX, Satin Brown                                    |
| <b>M380BDX-335</b>   | M380 w/ REX, Satin Black                                    |
| <b>M380BDX-605</b>   | M380 w/ REX, Polished Brass                                 |
| <b>M380BDX-606</b>   | M380 w/ REX, Satin Brass                                    |
| <b>M380BDX-612</b>   | M380 w/ REX, Satin Bronze                                   |

For bracket options, see page 34.

**SECURITRON**  
ASSA ABLOY



## PRODUCT FEATURES

- Bracket mounting provides the easiest install for out-swing doors
- Innovative templating for an effortlessly accurate alignment between magnet and armature plate
- Sleek, low profile and refined lines for improved aesthetics
- LED shows red or green for lock status indication
- Autosensing dual voltage with microprocessor technology
- Wire chamber anti-tamper switch
- Efficient, low power usage
- Size optimized for use with door closers
- MagnaCare Lifetime Replacement No Fault Warranty

## PRODUCT OPTIONS

- Mounting for glass door applications

## SPECIFICATIONS

- UL 1034 Burglary-Resistant Listed
- UL 10C Listed
- CAN4-S104, CAN/ULC Listed

- UL 294 Recognized Component
- ANSI/BHMA A156.23, Grade 1; E18501-1000
- CSFM- California State Fire Marshal Listed
- Patents: D682,655; D690,576
- Patents Pending

### Holding Force:

1100lbs [499 kg]

### Dimensions:

Magnalock: 11-1/2" L x 2-9/16" D x 2-1/2" H  
Strike: 9-1/2" L x 1/2" D x 2" H

### Electrical:

575mA (± 10%) at 12VDC  
275mA (± 10%) at 24VDC

### Operating Temperature:

+32 to +110F [0 to +43C]  
Indoor use only

### Shipping Weight:

13lbs [5.44kg]

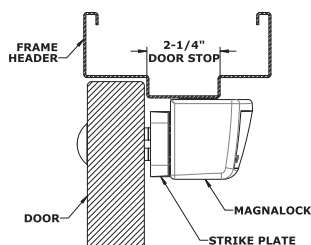
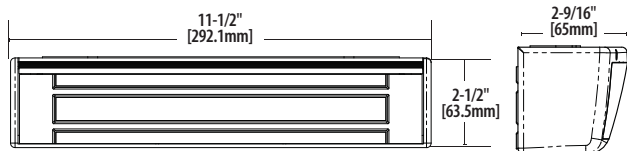
### Finishes:

US28/628 - Satin Aluminum Clear Anodized (Standard)

US20A/313 - Satin Brown Anodized

335 - Satin Black Anodized

600 - Paintable Primer Gray Finish



FITS IN 2-1/4" OF FLAT MOUNTING SPACE



# M670 SERIES

## 1100lbs Holding Force

### The Simple, Stylish and Secure Magnalock®

The M670 from Securitron delivers unsurpassed style and ease of installation.

**Style.** The aesthetics of the M670 are refined enough for the most discriminating designer openings.

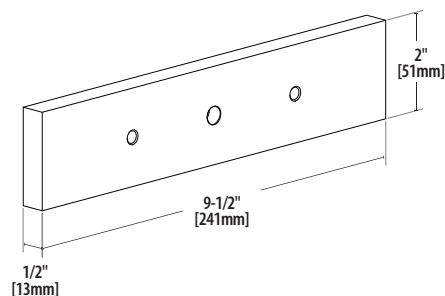
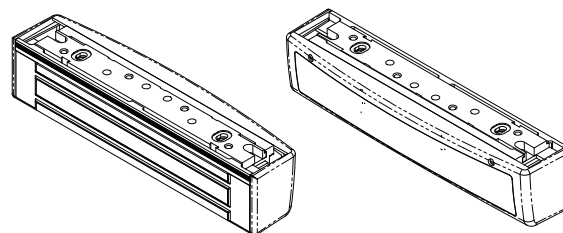
**Easy installation.** The fastest, easiest, most secure installation of any bracket-mount maglock.

## MODELS

PART # | Description

|                 |                                              |
|-----------------|----------------------------------------------|
| <b>M670</b>     | M670 Magnalock, Satin Aluminum               |
| <b>M670-313</b> | M670 Magnalock, Satin Brown                  |
| <b>M670-335</b> | M670 Magnalock, Satin Black                  |
| <b>M670-600</b> | M670 Magnalock, Paintable Primer Gray Finish |

For bracket options, see page 34.



DUAL VOLTAGE



GRADE 1



FIRE RATED

**SECURITRON®**  
**ASSA ABLOY**



## PRODUCT FEATURES

- Ultra-secure Direct Mount to the door frame for strength and reliability
- Fully sealed for weather-proof operations
- Sealed 10 ft. [3.05m] jacketed, stranded conductor cable
- Automatic dual voltage – no field adjustment required
- Instant release circuit – no residual magnetism
- Noise suppression – no interference with sensitive electronics
- Efficient, low power usage
- All ferrous metal surfaces plated for durability and rust resistance
- MagnaCare Lifetime Replacement No Fault Warranty

## PRODUCT OPTIONS

- Flexible mounting options for
  - › *Out-swing doors*
  - › *In-swing doors (-F, add to any model for Face Drilled)*
  - › *Metal, wood, Herculite or glass with aluminum frame*
- BondSTAT magnetic bond sensor – Patented (MBS)
- Integrated door position switch (DPS)
- Dress covers

## SPECIFICATIONS

- UL 10C Listed
- CAN4-S104, CAN/ULC-S533 Listed
- ANSI/UL 294 Listed
- CSA-C22.2 No.205 Listed
- ANSI/BHMA 156.23, Grade 1; E08501-500
- NFPA 101
- CSFM- California State Fire Marshal Approved
- MEA – City of New York Approved
- CE:EN 50091-1, EN 61000-6-2 Approved
- NEMA: 4X
- IEC: IP66
- Patent: 8,094,017
- Patents Pending

**Holding Force:**  
600lbs [272kg]

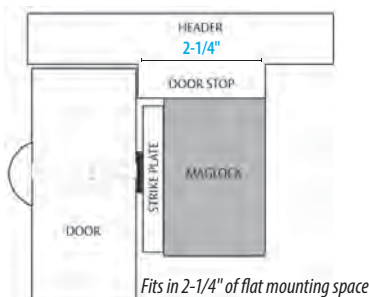
**Dimensions:**  
MagnaLock: 8" L x 1-5/8" D x 1-7/8" H  
Strike: 6-1/4" L x 1/2" D x 1-5/8" H

**Electrical:**  
300mA at 12VDC  
150mA at 24VDC

**Operating Temperature:**  
-40 to +140F [-40 to +60C]  
Indoor or Outdoor use

**Shipping Weight:**  
6lbs [2.72kg]

**Finishes:**  
US32D/630 – Satin Stainless Steel



# M32 SERIES

## 600lbs Holding Force

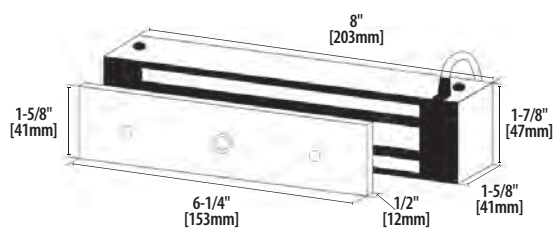
### The Ultimate in Magnalock® Reliability for Indoor/Outdoor Traffic Control

The M32 electromagnetic lock is ideal for traffic control in high-use areas within secured or monitored perimeters. With unsurpassed durability, the M32 will last long after most buildings wear out. Applications include storage areas, rooms, and hallways where reliability, high durability and low-maintenance are required.

## MODELS

PART # | Description

|               |                                                 |
|---------------|-------------------------------------------------|
| <b>M32</b>    | M32 Magnalock- 12/24VDC                         |
| <b>M32B</b>   | M32 Magnalock- 12/24VDC, MBS                    |
| <b>M32BD</b>  | M32 Magnalock- 12/24VDC, MBS, DPS               |
| <b>M32D</b>   | M32 Magnalock- 12/24VDC, DPS                    |
| <b>M32F</b>   | M32 Magnalock- 12/24VDC, Face Drilled           |
| <b>M32FB</b>  | M32 Magnalock- 12/24VDC, Face Drilled, MBS      |
| <b>M32FBD</b> | M32 Magnalock- 12/24VDC, Face Drilled, MBS, DPS |
| <b>M32FD</b>  | M32 Magnalock- 12/24VDC, Face Drilled, DPS      |



DUAL VOLTAGE



GRADE 1



FIRE RATED

SECURITRON®

ASSA ABLOY



### PRODUCT FEATURES

- Ultra-secure Direct Mount to door frame for strength and reliability
- Fully sealed for weather-proof operations
- Sealed 10 foot [3.05m] jacketed, stranded conductor cable
- Automatic dual voltage – no field adjustment required
- Instant release circuit – no residual magnetism
- Noise suppression – no interference with sensitive electronics
- Efficient, low power usage
- All ferrous metal surfaces plated for durability and rust resistance
- Fits in 2.5" of flat space
- MagnaCare Lifetime Replacement No Fault Warranty

### PRODUCT OPTIONS

- Flexible mounting options for
  - › *Out-swing doors*
  - › *In-swing doors (-F, add to any model for Face Drilled)*
  - › *Metal, wood, Herculite or glass with aluminum frames*
  - › *Swinging and sliding gates*
- BondSTAT magnetic bond sensor – Patented (MBS)
- Integrated door position switch (DPS)
- Universal threaded conduit fitting is 1/2" female – 3/4" male
- Split Strike Plates and Offset Strike Plates
- Dress Covers

### SPECIFICATIONS

- UL 10C Listed
- CAN4-S104, CAN/ULC-S533 Listed
- ANSI/UL 294 Listed
- CSA-C22.2 No.205 Listed
- ANSI/BHMA 156.23, Grade 1; E08501-1000
- NFPA 101
- CSFM- California State Fire Marshal Approved
- MEA – City of New York Approved
- CE:EN 50091-1, EN61000-6-2
- NEMA: 4X
- IEC: IP66
- Patent: 8,094,017
- Patents Pending

**Holding Force:**  
1200lbs. [544kg]

**Dimensions:**  
**Magnalock:** 8"L x 1-3/4"D x 3"H  
**Strike:** 6"L x 1/2"D x 2-3/4"H

**Electrical:**  
250mA at 12VDC  
150mA at 24VDC

**Operating Temperature:**  
-40 to +140F [-40 to +60C]  
Indoor or Outdoor use

**Shipping Weight:**  
11lbs [5kg]

**Finishes:**  
US32D/630 – Satin Stainless Steel



# M62 SERIES

## 1200lbs Holding Force

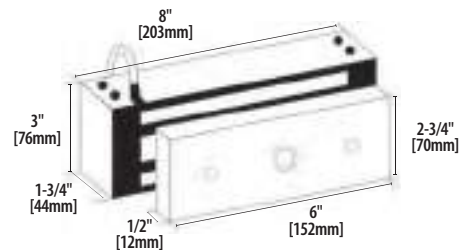
### The Ultimate in Magnalock® Versatility for Indoor/Outdoor Higher Security

The M62 is a strong, easy-to-maintain solution for interior, perimeter and exterior access control. With unsurpassed durability, the M62 will last long after most buildings wear out. Flexible mounting options support applications for hollow metal, concrete filled metal, wood, or glass with aluminum frames, and Herculite doors. Options include single and double door configurations, or specialty applications such as gates and fences.

### » MODELS

PART # | Description

|                |                                                               |
|----------------|---------------------------------------------------------------|
| <b>M62</b>     | M62 Magnalock- 12/24VDC                                       |
| <b>M62B</b>    | M62 Magnalock- 12/24VDC, MBS                                  |
| <b>M62BD</b>   | M62 Magnalock- 12/24VDC, MBS, DPS                             |
| <b>M62D</b>    | M62 Magnalock- 12/24VDC, DPS                                  |
| <b>M62F</b>    | M62 Magnalock- 12/24VDC, Face Drilled                         |
| <b>M62FB</b>   | M62 Magnalock- 12/24VDC, Face Drilled, MBS                    |
| <b>M62FBD</b>  | M62 Magnalock- 12/24VDC Face Drilled, MBS, DPS                |
| <b>M62FD</b>   | M62 Magnalock- 12/24VDC, Face Drilled, DPS                    |
| <b>M62FG</b>   | M62 Magnalock- 12/24VDC, Face Drilled, Gate Conduit           |
| <b>M62FGB</b>  | M62 Magnalock- 12/24VDC, Face Drilled, Gate Conduit, MBS      |
| <b>M62FGBD</b> | M62 Magnalock- 12/24VDC, Face Drilled, Gate Conduit, MBS, DPS |
| <b>M62FGD</b>  | M62 Magnalock- 12/24VDC, Face Drilled, DPS, Gate Conduit      |
| <b>M62G</b>    | M62 - Gate Conduit                                            |
| <b>M62GB</b>   | M62 - Conduit, MBS                                            |
| <b>M62GBD</b>  | M62 - Conduit, MBS, DPS                                       |
| <b>M62GD</b>   | M62 - Gate Conduit, DPS                                       |



SECURITRON®

ASSA ABLOY



## PRODUCT FEATURES

- Ultra-secure Direct Mount to door frame for strength and reliability
- Fully sealed for weather-proof operations
- Sealed 18" [45.7cm] jacketed, stranded conductor cable for each lock
- Automatic dual voltage - no field adjustment required
- Instant release circuit - no residual magnetism
- Noise suppression - no interference with sensitive electronics
- Efficient, low power usage
- All ferrous metal surfaces plated for durability and rust resistance
- MagnaCare Lifetime Replacement No Fault Warranty

## PRODUCT OPTIONS

- Flexible mounting options for
  - > *Out-swing doors*
  - > *Metal or wood doors*
- BondSTAT magnetic bond sensor - Patented (MBS)
- Integrated door position switch (DPS)
- Offset strike plates

## SPECIFICATIONS

- UL 10C Listed
- CAN4-S104, CAN/ ULC-S533 Listed
- ANSI/BHMA 156.23, Grade 1; E08511-1000
- NFPA 101
- CSFM- California State Fire Marshal Approved
- NEMA: 4X
- IEC: IP66
- Patent: 8,094,017
- Patents Pending

### Holding Force:

1200lbs [544kg] per lock

### Dimensions:

Magnalock: 22" L x 1-3/4" D x 3" H  
Strike: 6" L x 1/2" D x 2-3/4" H each

### Electrical:

250mA at 12VDC/lock  
150mA at 24VDC/lock

### Operating Temperature:

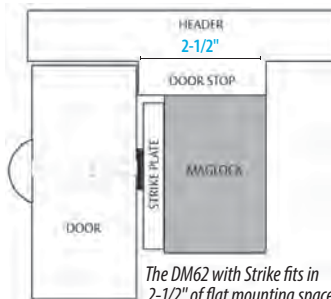
-40 to +140F [-40 to +60C]  
Indoor or Outdoor use

### Shipping Weight:

16lbs [7.26kg]

### Finishes:

US32D/630 - Satin Stainless Steel Finish



# DM62 SERIES

## Double Magnalock

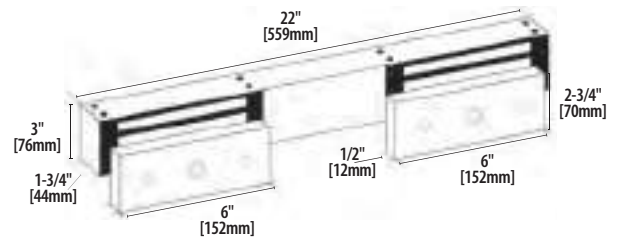
### The Ultimate Magnalock® Double Magnet for Indoor/Outdoor Higher Security

The versatile DM62 electromagnetic lock offers strength and ease of maintenance for interior, perimeter and exterior access control - in a compact double magnet. This all-in-one unit is designed for double doors with no mullion. With unsurpassed durability, the DM62 will last long after most buildings wear out.

## MODELS

PART # | Description

|                     |                                                         |
|---------------------|---------------------------------------------------------|
| <b>DM62</b>         | M62 [Double] - 12/24VDC                                 |
| <b>DM62B</b>        | M62 [Double] - 12/24VDC, MBS                            |
| <b>DM62BD</b>       | M62 [Double] - 12/24VDC, MBS, DPS                       |
| <b>DM62B-OS</b>     | M62 [Double] - 12/24VDC, MBS w/ Offset Strike           |
| <b>DM62D</b>        | M62 [Double] - 12/24VDC, DPS                            |
| <b>DM62-OS</b>      | M62 [Double] - 12/24VDC w/ Offset Strike                |
| <b>ASCWB-DM62CL</b> | Alum 1-1/2" Spacer - Concrete/Wood Bracket, DM62, Clear |



DUAL VOLTAGE



GRADE 1



FIRE RATED

SECURITRON®

ASSA ABLOY



LISTED

# M82B SERIES

## 1800lbs Holding Force

### Magnalock® Industrial Strength Hold for Challenging Indoor/Outdoor Environments

The M82 electromagnetic lock offers unsurpassed magneticholding strength, durability and ease of maintenance for interior, perimeter and exterior access control applications in high-risk environments. With unsurpassed durability, the M82 will last long after most buildings wear out. Flexible mounting options are available for higher security locations and other environments where extreme forces may be encountered.



#### PRODUCT FEATURES

- Ultra-secure Direct Mount to door frame for strength and reliability
- Fully sealed for weatherproof and tamper-resistant operations
- Sealed 10 ft. [3.05m] jacketed, stranded conductor cable
- Automatic dual voltage - no field adjustment required
- Instant release circuit - no residual magnetism
- Noise suppression - no interference with sensitive electronics
- Efficient, low power usage
- All ferrous metal surfaces plated for durability and rust resistance
- MagnaCare Lifetime Replacement No Fault Warranty

#### PRODUCT OPTIONS

- Flexible mounting options for
  - › Out-swing doors
  - › In-swing doors (-F, add to any model for Face Drilled)
  - › Metal or wood doors
- BondSTAT magnetic bond sensor - Patented (MBS)
- Integrated door position switch (DPS)
- Universal threaded conduit fitting is 1/2" female - 3/4" male
- Split Strike Plates and Offset Strike Plates available
- Dress Covers

#### SPECIFICATIONS

- UL 10C Listed
- CAN4-S104, CAN/ULC-S533 Listed
- ANSI/UL 294 Listed
- ANSI/BHMA 156.23, Grade 1; E08501-1500
- NFPA 101
- CSFM- California State Fire Marshal Approved
- CE:EN 50091-1, EN61000-6-2
- NEMA: 4X
- IEC: IP66
- Patent: 8,094,017
- Patents Pending

#### Holding Force:

1800lbs [816kg]

#### Dimensions:

Magnalock: 12"L x 1-3/4"D x 3"H

Strike: 9"L x 1/2"D x 2-3/4"H

#### Electrical:

350mA at 12VDC

200mA at 24VDC

#### Operating Temperature:

-40 to +140F [-40 to +60C]

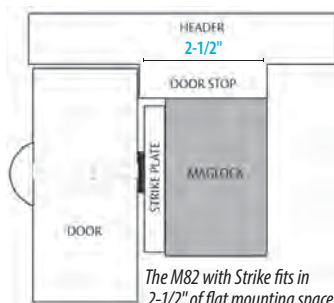
Indoor or Outdoor use

#### Shipping Weight:

16lbs [7.26kg]

#### Finishes:

US32D/630 - Satin Stainless Steel



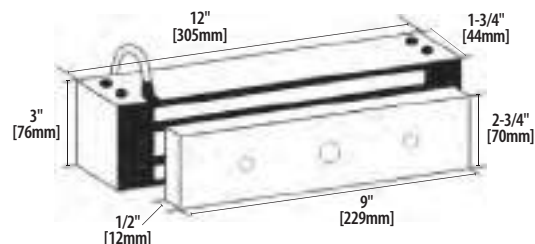
The M82 with Strike fits in 2-1/2" of flat mounting space



#### MODELS

PART # | Description

|                |                                                               |
|----------------|---------------------------------------------------------------|
| <b>M82B</b>    | M82 Magnalock- 12/24VDC, MBS                                  |
| <b>M82BD</b>   | M82 Magnalock- 12/24VDC, MBS, DPS                             |
| <b>M82B-SS</b> | M82 Magnalock- 12/24VDC, MBS w/ Split Strike                  |
| <b>M82FB</b>   | M82 Magnalock- 12/24VDC, Face Drilled, MBS                    |
| <b>M82FBD</b>  | M82 Magnalock- 12/24VDC, Face Drilled, MBS, DPS               |
| <b>M82FGB</b>  | M82 Magnalock- 12/24VDC, Face Drilled, Gate Conduit, MBS      |
| <b>M82FGBD</b> | M82 Magnalock- 12/24VDC, Face Drilled, Gate Conduit, MBS, DPS |
| <b>M82GB</b>   | M82 Magnalock- 12/24VDC, Gate Conduit, MBS                    |
| <b>M82GBD</b>  | M82 Magnalock- 12/24VDC, Gate Conduit, MBS, DPS               |



DUAL VOLTAGE



GRADE 1



FIRE RATED

**SECURITRON®**  
**ASSA ABLOY**



## PRODUCT FEATURES

- Secure mounted to door frame for strength and reliability
- Fully sealed for weather-proof operations
- Sealed 10 ft. [3.05m] jacketed, stranded conductor cable
- Automatic dual voltage - no field adjustment required
- Instant release circuit - no residual magnetism
- Noise suppression - no interference with sensitive electronics
- Efficient, low power usage
- All ferrous metal surfaces plated for durability and rust resistance
- MagnaCare Lifetime Replacement No Fault Warranty

## PRODUCT OPTIONS

- Flexible mounting options for
  - › *Out-swing*
  - › *In-swing*
  - › *Swing through*
  - › *Sliding*
  - › *Metal, wood, Herculite and glass door with aluminum frame*
  - › *Surface mounting for magnet or strike plate*
- BondSTAT magnetic bond sensor - Patented (MBS)
- Integrated door position switch (DPS)

## SPECIFICATIONS

- UL 10C Listed
- CAN4-S104, CAN/ ULC-5533 Listed
- ANSI/UL 294 Listed
- ANSI/BHMA 156.23, Grade 1; E08561-1000, E08571-1000, E08581-1000, E08591-1000
- CSFM - California State Fire Marshal Approved
- CE: EN 50091-1, EN 61000-6-2
- NEMA: 4X
- IEC: IP66
- Patents: 6,007,119; 6,135,515; 1,021,633; 741,880; 7,198,809; 9,258,809; 8,094,017

**Holding Force:**  
1200lbs [544kg]

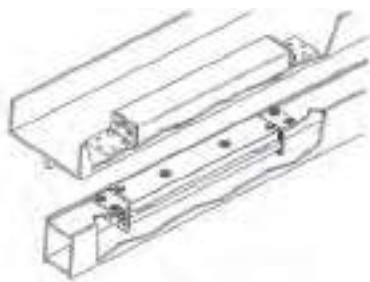
**Dimensions:**  
Magnalock: 10-7/8" L x 1-3/16" D x 1-1/2" H  
Strike: 10-7/8" L x 1-7/16" D x 1-1/2" H

**Electrical:**  
320mA at 12VDC  
170mA at 24VDC

**Operating Temperature:**  
-40 to +140F [-40 to +60C]  
Indoor or Outdoor use  
Not for use in open channel doors

**Shipping Weight:**  
6lbs [2.72kg]

**Finishes:**  
US32D/630 - Satin Stainless Steel Finish



# SAM

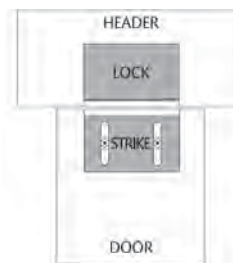
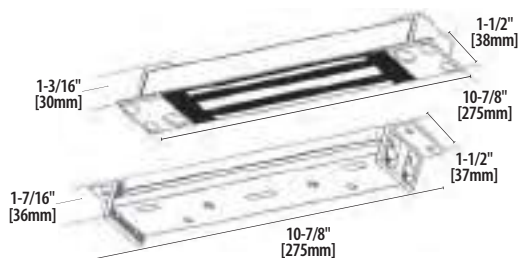
## 1200lbs Shear Aligning Magnalock®

### Hidden Strength at Any Angle for Any Application

Magnalock quality with concealed holding force and flexible mounting options for the most challenging door control situations. The SAM Shear Aligning Magnalock mounts fully concealed into wood, steel, aluminum or Herculite doors in any position: top, side or bottom. The SAM also has mounting options for swing through and sliding single or double doors.

## » MODELS

| PART #       | Description                                         |
|--------------|-----------------------------------------------------|
| <b>SAM</b>   | Shear Magnalock - 12/24VDC, Self Aligning           |
| <b>SAMB</b>  | Shear Magnalock - 12/24VDC, Self Aligning, MBS      |
| <b>SAMBD</b> | Shear Magnalock - 12/24VDC, Self Aligning, MBS, DPS |
| <b>SAMD</b>  | Shear Magnalock - 12/24VDC, Self Aligning, DPS      |



**SECURITRON®**

**ASSA ABLOY**

# ACCESSORIES

## SAM



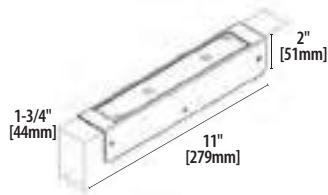
### SWB » SAM WOOD BRACKET

- SAM Wood Door Bracket provides additional strength and protection for the SAM strike plate in wood door applications
- MagnaCare Lifetime Replacement No Fault Warranty

### » MODELS

PART # | Description

|         |                                      |
|---------|--------------------------------------|
| SWB-03  | SAM Wood Bracket - Brass Polished    |
| SWB-10B | SAM Wood Bracket - Oil Rubbed Bronze |
| SWB-26D | SAM Wood Bracket - Satin Stainless   |



SMSS

### SAM SURFACE MOUNT KIT

- For specialty applications
- Permits the SAM magnet, strike or both to be surface mounted when mortising is not possible
- Stainless Steel
- MagnaCare Lifetime Replacement No Fault Warranty

### » MODELS

PART # | Description

|      |                                      |
|------|--------------------------------------|
| SMLS | Surface Mount Housing Lock - Shear   |
| SMSS | Surface Mount Housing Strike - Shear |

**SECURITRON**  
ASSA ABLOY

## EFFECTIVELY CONTROL PATIENT MOVEMENT THROUGH CRITICAL EGRESS DOORS



## iMXDa

### Fully Integrated Movement Exit Delay System

The safety and security that special patients need.  
The peace of mind that caregivers and family desire.

Model iEXDa is available for alarm initiation using standard panic exit devices - ideal for doors equipped with access control entry.

Model iMXDaH is designed and certified for use with the Hugs® Infant Protection system.



Microprocessor controlled Initiate Gap movement is quickly "trained" and set/reset in seconds using the mortise keyswitch



U.S. Patents: #5,758,913, #6,609,738  
UL 294, ULC-5533 2008





# ACCESSORIES

## for Magalock®



### ASS » SPLIT STRIKES/REPLACEMENT STRIKE PLATES

- Allows a single M32, M62 or M82 Magalock to secure a double door at traffic control holding force level
- Includes Split Strike Plates only
- MagnaCare Lifetime Replacement No Fault Warranty

#### » MODELS

PART # | Description

|        |                                                      |
|--------|------------------------------------------------------|
| ASS-32 | Strike Plate M32 - Split Set w/ Fasteners & Sex Bolt |
| ASS-62 | Strike Plate M62 - Split Set w/ Fasteners & Sex Bolt |
| ASS-82 | Strike Plate M82 - Split Set w/Fastners & Sex Bolt   |



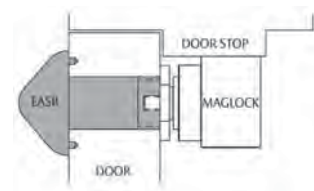
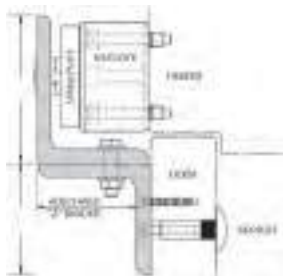
### ZA » Z BRACKET KITS - ADJUSTABLE

- Use on in-swing doors with Magalock "F" options (8-1/2" overall length)
- Provides 1-1/4" of lateral movement to accommodate most openings and allows for precision adjustments (2-1/4" to 3-1/2" from door/header)
- Includes an oversized dress cover
- MagnaCare Lifetime Replacement No Fault Warranty

#### » MODELS

PART # | Description

|            |                                                |
|------------|------------------------------------------------|
| ZA-32/62BK | Adjustable Z-Bracket - M32/62, Black Anodized  |
| ZA-32/62CL | Adjustable Z-Bracket - M32/62, Clear Anodized  |
| ZA-32/62SS | Adjustable Z-Bracket - M32/62, Satin Stainless |
| ZA-82BK    | Adjustable Z-Bracket - M82, Black Anodized     |
| ZA-82CL    | Adjustable Z-Bracket - M82, Clear Anodized     |
| ZA-82SS    | Adjustable Z-Bracket - M82, Satin Stainless    |



### EASB » ENERGY ABSORBING SEX BOLT

The Energy Absorbing Sex Bolt provides additional protection and shock absorption to augment holding force when a door experiences dynamic forces such as kicks or repeated blows. Used in mental health care and detention ancillary or administrative doors, and perimeter doors.

- For high-security applications on inflexible doors
- Replaces the standard Sex Bolt
- Contains a powerful internal spring that absorbs and dissipates the force of a blow
- MagnaCare Lifetime Replacement No Fault Warranty

#### » MODELS

PART # | Description

|          |                                         |
|----------|-----------------------------------------|
| EASB-250 | Energy Absorbing Bolt - 1/4" Spacer Kit |
| EASB-32  | Energy Absorbing Sex Bolt - Model 32    |
| EASB-62  | Energy Absorbing Sex Bolt - Model 62    |
| EASB-82  | Energy Absorbing Sex Bolt - Model 82    |



### TDK-1 » ACCESSORY FOR THICK DOORS

- The TDK-1 provides replacement screws so armature plates for the M32, M62, M82, M38 and M68 can be used on doors thicker than 1-3/4", and up to 3"
- MagnaCare Lifetime Replacement No Fault Warranty

#### » MODELS

PART # | Description

|       |                |
|-------|----------------|
| TDK-1 | Thick Door Kit |
|-------|----------------|

**SECURITRON®**  
**ASSA ABLOY**

Efficient. Flexible. Dependable.



**Ecoflex™ Technology**  
Always the right fit.



Ecoflex™ technology, available in SARGENT electrified mortise locks, represents a significant innovation in door opening technology. The Ecoflex electrified mortise lock is ideal for access control applications, whether it's used in conjunction with a wall reader, in an integrated hard-wired lock, or in an integrated battery powered lock.



| FEATURES                                                       | BENEFITS                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANSI/BHMA Grade 1 certified mortise lock                       | Strength and durability; assurance of high quality hardware                                                                                                                                                                                                                                                                                                    |
| Reduced energy consumption and product sustainability measures | <ul style="list-style-type: none"> <li>■ Up to 96% energy savings, as certified by GreenCircle</li> <li>■ Lower operating costs</li> <li>■ Assists with load reduction in optimizing energy performance credit in LEED</li> <li>■ Reduces number of power supplies required for hard-wired locks</li> <li>■ Improves battery life for offline locks</li> </ul> |
| Field configurable to fail-safe or fail-secure                 | <p>A single lock body can be used for a variety of applications throughout a facility</p> <ul style="list-style-type: none"> <li>■ Simplifies ordering</li> <li>■ Reduces stocking requirements with one flexible lock</li> <li>■ Offers greater flexibility to adapt to changing requirements</li> </ul>                                                      |
| Ability to operate from 12 volts to 24 volts                   | <ul style="list-style-type: none"> <li>■ Greater flexibility in system design</li> </ul>                                                                                                                                                                                                                                                                       |
| Innovative actuator design                                     | <p>Superior reliability</p> <ul style="list-style-type: none"> <li>■ Higher performance and reduced maintenance</li> <li>■ Ability to have longer cable runs without negatively impacting lock function</li> <li>■ Reduces risk of voltage drops and eliminates inductive kickback</li> <li>■ Lower total cost of ownership</li> </ul>                         |
| Available with a wide range of finishes and decorative levers  | <ul style="list-style-type: none"> <li>■ Blends into any environment seamlessly</li> </ul>                                                                                                                                                                                                                                                                     |

### Technical Specifications:

12V or 24V applications

- 500mA lock body peak current draw
- 15mA lock body holding current draw\*

\*Approximately 5% of an equivalent solenoid

### Available in:

- Electrified mortise locks
- Harmony Integrated Wiegand mortise locks
- IN120 WiFi mortise locks
- KP Series keypad mortise locks
- Passport 1000 P1 PoE mortise locks
- Passport 1000 P2 WiFi mortise locks
- Profile Series v.G1.5 offline locks
- Profile Series v.S1 PoE mortise locks
- Profile Series v.S2 WiFi mortise locks
- SE LP10 Integrated Wiegand mortise locks



In fail-safe applications, such as stairwells, the Ecoflex electrified mortise lock offers a potential savings of 50kWh per opening per year.

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience

**SARGENT Manufacturing Company**  
800-727-5477 • [www.sargentlock.com](http://www.sargentlock.com)



# **ABLOY® EL460, EL461, EL560, EL561**

*Europrofile handle controlled locks*



**ABLOY®** Europrofile locks offer intelligent solution for medium traffic doors. Locks can be installed with long plates or roses.

# Convenience, High security, High durability - Europrofile handle controlled locks

## APPLICATIONS

The locks are recommended to be used in the interior doors of business premises, public buildings, hospitals, educational premises etc. Typical applications are the doors of:

- Offices
- Meeting rooms
- Storage rooms
- Technical maintenance rooms
- Consulting rooms
- Fire doors (medium traffic)



**ABLOY® EL560** and **ABLOY® EL561** are used in wooden and metal doors. **ABLOY® EL460** and **ABLOY® EL461** are used in narrow profile doors. EL560 or EL460 with split spindle is chosen, when exit by handle is needed. EL561 or EL461 is used, when both access and exit are electrically controlled.

Handle controlled locks are best suited in medium traffic doors. The locks can be electrically controlled by access control system or by a remote control system such as timer, keypad or push button.

The locks can be used both in exit and fire rated doors (EN). The locks are not suitable for use with door automatics.

Also available:

- Microswitch locks
  - EL360 for wooden and metal doors
  - EL260 for narrow profile doors
- Mechanical locks
  - EL160 for wooden and metal doors
  - EL060 for narrow profile doors

Also available lock cases for Swiss cylinder (RZ):

- EL562 (split spindle), EL563 (through spindle) for wooden and metal doors
- EL462 (split spindle), EL463 (through spindle) for narrow profile doors
- EL362 microswitch lock for wooden and metal doors
- EL262 microswitch lock for narrow profile doors
- EL162 mechanical lock for wooden and metal doors
- EL062 mechanical lock for narrow profile doors

## FUNCTION

Handle controlled locks can be set to function as fail locked or as fail unlocked. In the fail locked setting, the lock can be opened by controlled handle when power is on, and it can not be opened by controlled handle, when power is off. In the fail unlocked setting, the electrical function is the opposite.

### **ABLOY® EL560** and **ABLOY® EL460**

Only outside handle is electrically controlled. The lock can always be opened by inside handle. Mechanical opening by cylinder is always possible.

### **ABLOY® EL561** and **ABLOY® EL461**

Both inside and outside handles are electrically controlled. Mechanical opening by cylinder or thumbturn is always possible.

## STANDARDS

### EN STANDARDS

|                          |                              |
|--------------------------|------------------------------|
| <b>EN 179:2008</b>       | <b>Exit</b>                  |
| <b>EN 1125:2008</b>      | <b>Panic exit</b>            |
| <b>EN 1634-1</b>         | <b>Fire resistance</b>       |
| <b>EN 61000-6-1:2007</b> | <b>EMC</b>                   |
| <b>EN 61000-6-3:2007</b> | <b>EMC</b>                   |
| <b>EN 12209:2004</b>     | <b>Mechanical resistance</b> |

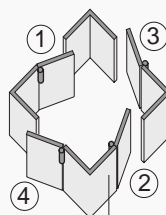
### LOCAL STANDARDS

|                      |                                                         |
|----------------------|---------------------------------------------------------|
| <b>NEN 5089:1995</b> | <b>SKG, mechanical strength and burglary resistance</b> |
|----------------------|---------------------------------------------------------|

**GOST-R**

## OPENING DIRECTIONS (HANDINGS)

|   | <b>ABLOY®</b>  | <b>DIN</b>     |
|---|----------------|----------------|
| ① | Right inwards  | Left inwards   |
| ② | Left inwards   | Right inwards  |
| ③ | Left outwards  | Left outwards  |
| ④ | Right outwards | Right outwards |



## STANDARD DELIVERY

Standard delivery includes:

- Lock case with opening direction 4 or 2,4
- Fixing screws
- Spindle adapters
- Lock case manual

Please specify when ordering:

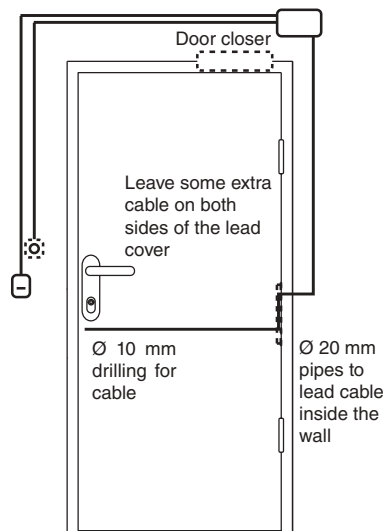
- Lock type
- Backset
- Forend
- Strike plate
- Split spindle EA288 or EA289 (EL460 and EL560)

## TECHNICAL DETAILS

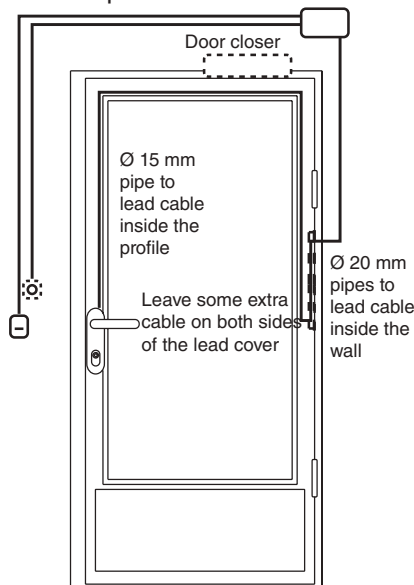
|                        |                                                                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating voltage:     | 12 – 24 V DC STAB (-10%, +15%)                                                                                                                               |
| Current:               | Max. 0.55 A (12V DC), 0.27 A (24V DC)<br>Idle 0.24 A (12V DC), 0.11 A (24V DC)                                                                               |
| Microswitches:         | Max. 0.5 A 30 V AC/DC resist, 10 W                                                                                                                           |
| Operating temperature: | -20°C - +60°C                                                                                                                                                |
| Bolt throw:            | 20 mm (deadbolt), 10 mm (double action bolt)                                                                                                                 |
| Backset:               | 55, 60, 65, 80, 100 mm (EL560, EL561)<br>30, 35, 40, 45 mm (EL460, EL461)                                                                                    |
| Forend:                | 20, 24 mm (EL560, EL561)<br>24, 28 mm (EL460, EL461)                                                                                                         |
| Spindle:               | 9 mm (8 mm with spindle adapters)                                                                                                                            |
| Settable functions:    | Mechanical functions:<br>- Handing of trigger bolt<br>- Electrically controlled side (EL560, EL460)<br>Electrical function:<br>- Fail locked / Fail unlocked |
| Monitoring outputs:    | Bolt deadlocked<br>Bolt inside the lock case<br>Trigger bolt in<br>Handle used<br>Cylinder used<br>Cable sabotage                                            |

## DOOR ENVIRONMENT

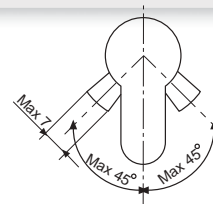
### Wooden and metal doors



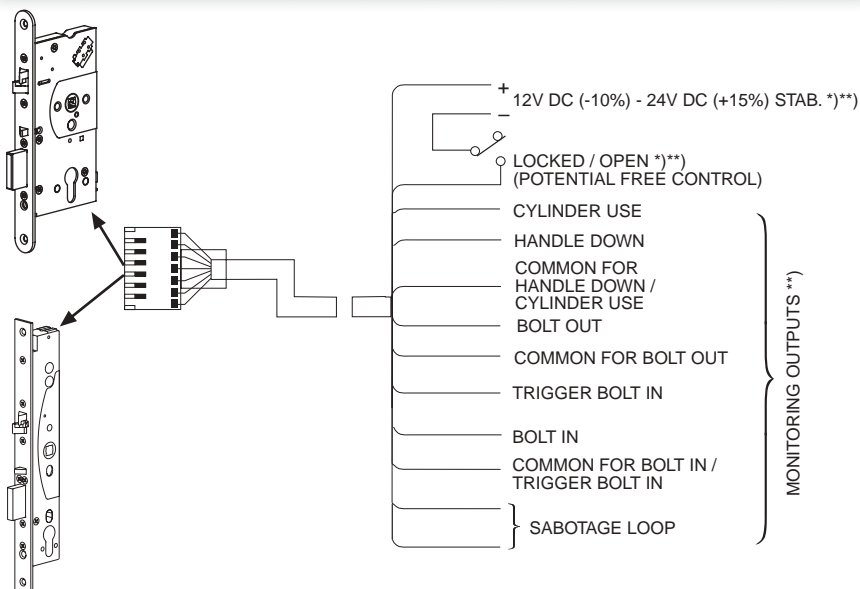
### Narrow profile doors



### CAM ANGLE



## CONTROL PRINCIPLE AND AVAILABLE MONITORING OUTPUTS



\*) Not microswitch or mechanical locks  
\*\*) Not mechanical locks

## CYLINDERS, FITTINGS AND ACCESSORIES (Please order separately)

|                       | EUROPROFILE DIN CYLINDER |                  |                    | FITTINGS                                      | SPLIT SPINDLES             | CABLES                    | LEAD COVERS    | STRIKE PLATES                                                                                                     |
|-----------------------|--------------------------|------------------|--------------------|-----------------------------------------------|----------------------------|---------------------------|----------------|-------------------------------------------------------------------------------------------------------------------|
|                       | ABLOY NOVEL              | ABLOY PROTEC     | ABLOY DISKLOCK PRO |                                               |                            |                           |                |                                                                                                                   |
| Single                | CY321U<br>CY331U         | CY321N<br>CY331N | CY321D             | ABLOY®*)<br>IKON<br>Ruko<br>BEZAULT<br>others | EA288 (8mm)<br>EA289 (9mm) | EA218 (6m)<br>EA219 (10m) | EA280<br>EA281 | EA321**)<br>EA322<br>EA323**)<br>EA324<br>EA325<br>EA326<br>EA327<br>EA328<br>EA329<br>EA330<br>EA331<br>EA332**) |
| Double                | CY322U<br>CY332U         | CY322N<br>CY332N | CY322D             |                                               |                            |                           |                |                                                                                                                   |
| Single with thumbturn | CY323U<br>CY333U         | CY323N<br>CY333N | CY323D             |                                               |                            |                           |                |                                                                                                                   |

\*) For further information, please contact Abloy Oy Architectural Hardware.

\*\*) Handing must be defined.



# Aperio® Wireless Lock Technology

ASSA ABLOY

Brought to you by ASSA ABLOY Group brands:  
ADAMS RITE | HES | MEDECO | SARGENT | SECURITRON

The global leader in  
door opening solutions



Lenel and ASSA ABLOY Aperio-enabled locks give you the flexibility to expand your access control system to almost every opening in your facility.

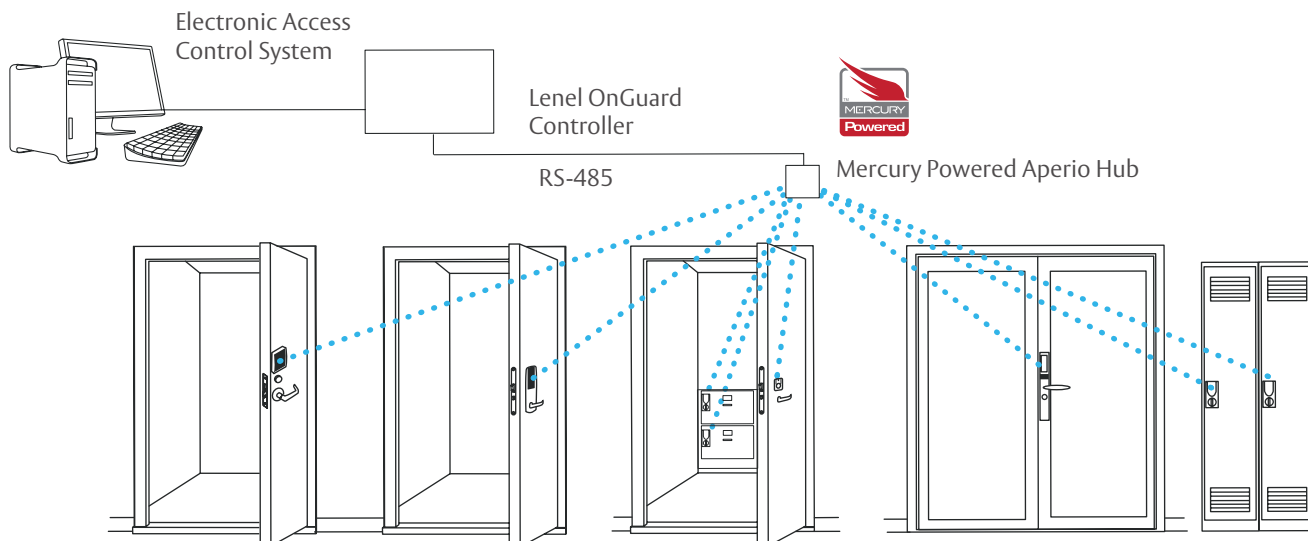
OnGuard access control delivers a rich, seamless total security solution regardless of the scale or complexity of the application. From a small office system to a global deployment involving multiple authentication factors, OnGuard delivers security, convenience, flexibility, and reliability.

Paired with ASSA ABLOY Aperio wireless locks, OnGuard users benefit from a flexible solution allowing easy, cost-effective expansion of the access control system, ensuring the appropriate degree of security throughout any facility.

- Closely integrated solution requires little to no training for experienced OnGuard users
- Robust feature set ensures easy management



*Aperio is a global wireless solution, available in a range of lock types to support various types of openings as well as local requirements in regions throughout the world*





# Aperio® Wireless Lock Technology

Available in a variety of locking solutions from ASSA ABLOY Group brands, Aperio is a global wireless platform that allows you to increase security – quickly, easily, and affordably. It uses local wireless communication between an Aperio lock and hub to connect to an access control system, eliminating the greatest cost and inconvenience of traditional access control – the wiring at the door.

## Aperio Features

- Utilizes IEEE 802.15.4 wireless communication between the lock and an Aperio hub that is connected to the electronic access control system
- Real-time communication with the access control system for greater security and control
- Real-time door status monitoring
- Advanced data security with standard encryption techniques
- AES 128-bit encryption
- Global wireless platform that addresses a wide range of security requirements
- ANSI/BHMA Grade 1 hardware, offering the highest degree of physical security available in access control locks
- Supports HID® 125 kHz proximity or 13.56 MHz iCLASS® (full authentication, all formats) credentials

## OnGuard

The proven open choice for today and tomorrow.

- OnGuard offers a single, unified platform, single database server, and single user interface
- With OnGuard, you can seamlessly synthesize data from access control, video, and other sensors
- Know every aspect and see all the data for any event in real time, from alarms to video



**Adams Rite**

### A100 Keyless Entry Control

Ideal for aluminum and glass storefront doors



**hes**

### K100 and KS100 Cabinet Locks

Ideal for cabinets, lockers & drawers—in applications such as healthcare, higher education and IT/data centers



**medeco**

### M100 eCylinder

Ideal upgrade to existing mechanical door hardware



**SARGENT**

### PR100 and IN100 Locks

Ideal for institutional and commercial applications



**SECURITRON**

### R100

Ideal for glass door applications



Aperio is a global wireless solution, available in a range of lock types to support various types of openings as well as local requirements in regions throughout the world

## ASSA ABLOY Americas

110 Sargent Drive

New Haven, CT 06511

[intelligentopenings.com](http://intelligentopenings.com)

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The Genuine HID Technology logo is a trademark owned and licensed by HID Global.

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience



1212 Pittsford-Victor Road

Pittsford, New York, 14534

[www.lenel.com](http://www.lenel.com)

Aperio<sup>TM</sup>

ASSA ABLOY

Technology

Wireless possibilities  
for online door control

## ASSA ABLOY introducing Aperio™

All over the world, demands for higher security and easy-to-use installations are increasing. Being the world leader in door opening solutions, ASSA ABLOY has developed technologies like Hi-O and CLIQ and continually researches the markets to gather information about end-user needs. In response to these needs, ASSA ABLOY has now developed Aperio: a powerful new technology integrating mechanical and electronic systems.

By introducing the Aperio technology, ASSA ABLOY pursues its commitment to driving the industry towards intelligent solutions around the door.



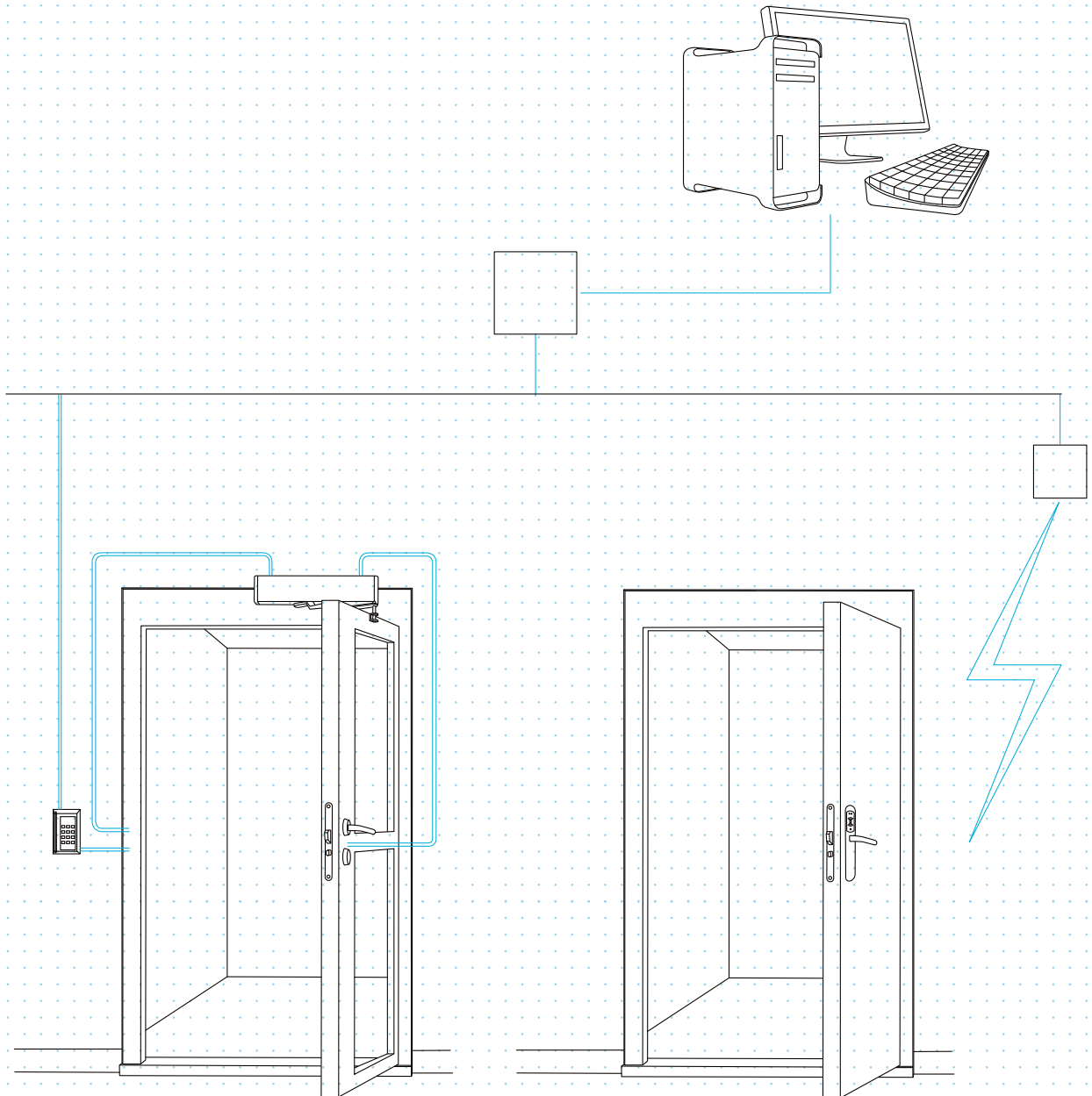
# Aperio™ is the missing link

Aperio is a new technology developed to complement existing electronic access control systems, providing end-users with a simple, intelligent way to upgrade the controllability and security level of their premises.

The heart of Aperio is a short-distance, wireless communication protocol, designed to link an online electronic access system with an Aperio enabled mechanical lock.

Any number of existing doors can be equipped with Aperio, and at a much lower cost than installing the regular electronic access system on every door.

Aperio is easily integrated with most units and systems, regardless of the manufacturer, since it has been developed around an open standard.



Wired access control door

Aperio enabled door

## Adding Aperio™ technology increases security

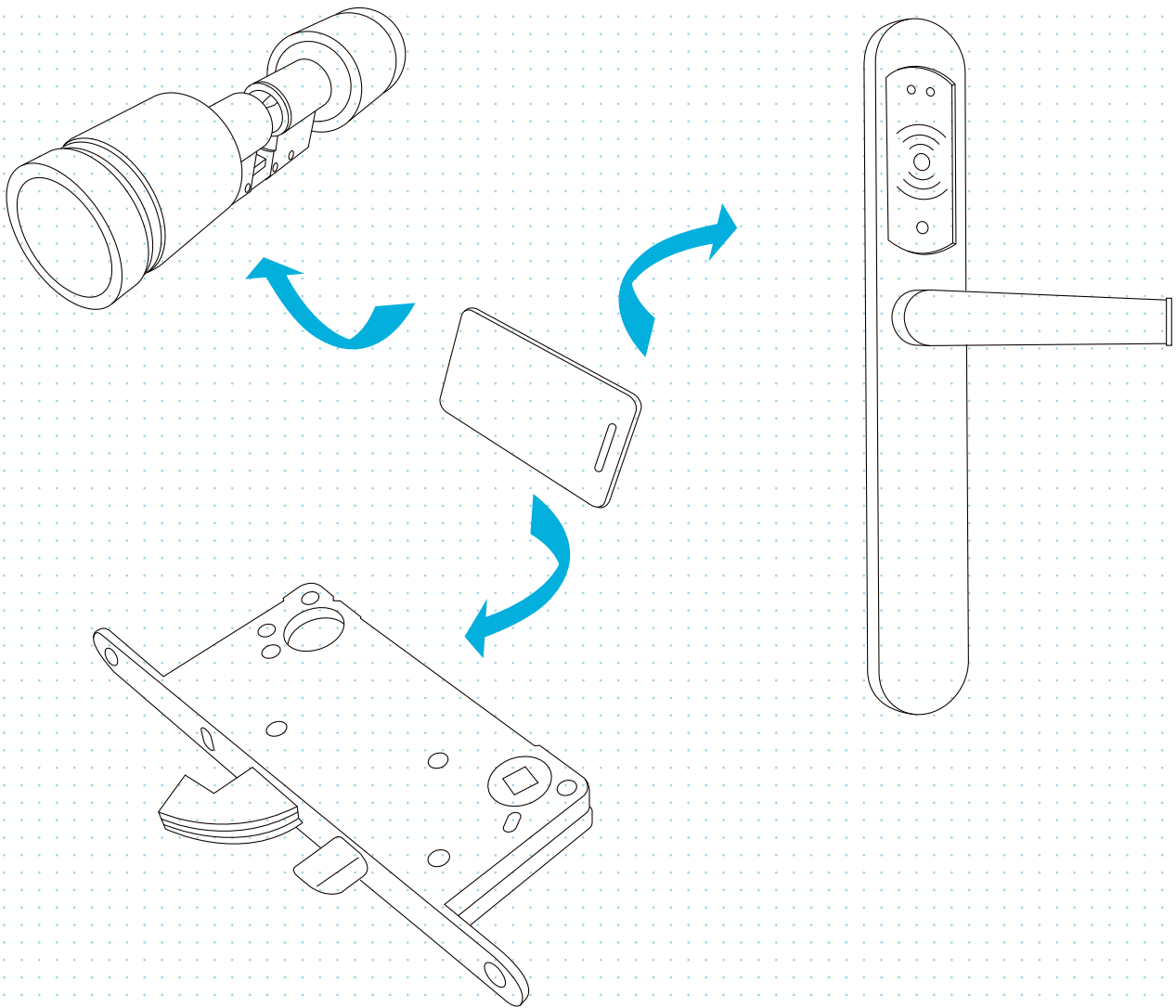
The Aperio technology  
can be applied to  
different kinds of  
products around  
the door.

Expanding your system by adding Aperio technology on additional doors increases the total security level of the premises. It is easy to install and enhances both the management and surveillance of the complete system. It also provides an intermediate level of security between wired doors and mechanical cylinders.

With all doors linked online, authorization is updated in real time, providing a high level of

control. The possibility to audit trail and time zone increases monitoring of the system.

Aperio technology fits perfectly into a system with wired doors, but it is also designed for future security demands, e.g., it uses AES encryption via a wireless connection.



## Adding Aperio™ technology increases security

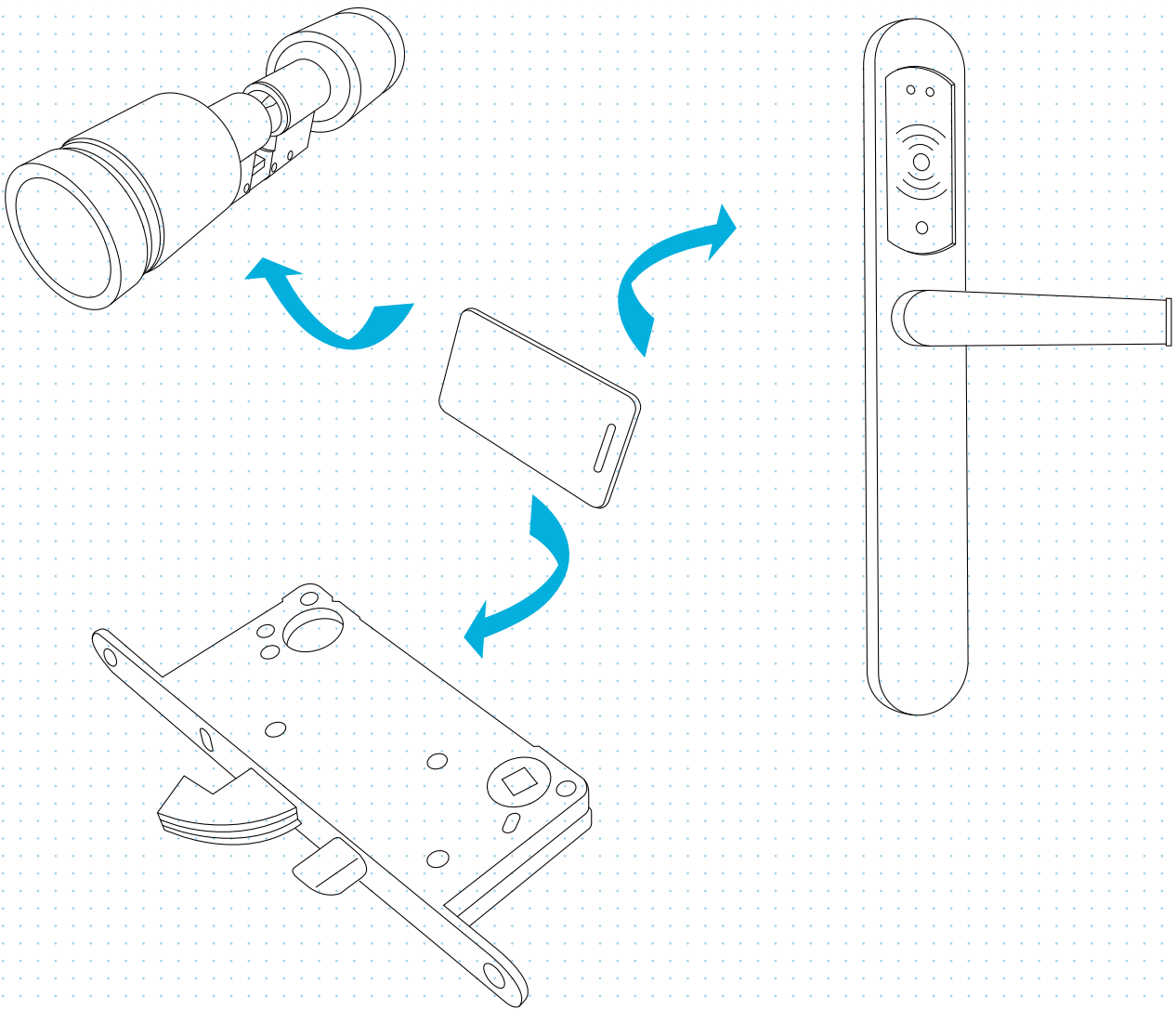
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# Simplified management of security

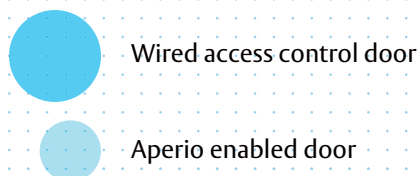
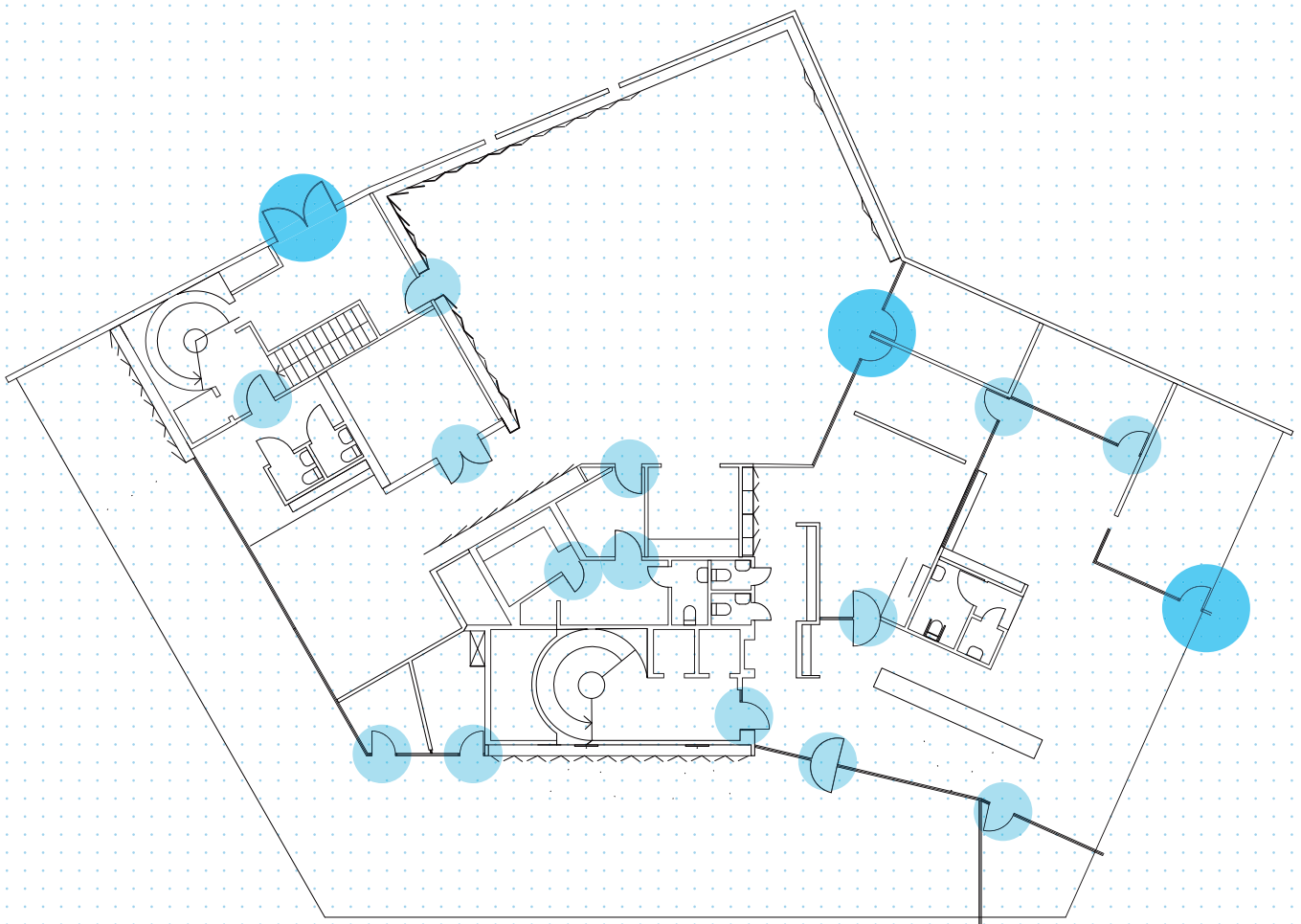
Installing Aperio provides a simple way to facilitate card-based electronic access, while also fulfilling end-users' needs for an easily operated system.

Aperio enabled products are managed with an existing access control system. This offers a high level of control over usage, audit trails, and can be centrally managed.

Any number of additional doors can be wirelessly connected to the access control system through Aperio technology.

Aperio technology, being compatible with most common RFID technologies, makes integration easy. In most cases, the existing cards can be used. With only one credential to manage, it is easy to update authorization online.

Having one credential for both wired and wireless doors is convenient for end-users. Choosing a card-based system also eliminates both the time-and-money-consuming process involved with lost keys.



# Aperio™ is developed by the global leader in door opening solutions

The technologies developed by ASSA ABLOY enable end-users to plan long-term security investments without any doubt about the future and evolving standards.

With an extensive history in door opening solutions, and new technologies already on the market, the ASSA ABLOY origin serves as a guarantee of quality solutions, long-term support and technological updates.

The ASSA ABLOY Group features more than one hundred companies, producing products all over the world and meeting demanding customer-needs and different standards.

Operating in forty countries, we form local partnerships and adapt to local products and standards.



As the global leader in door opening solutions ASSA ABLOY continually researches the markets to gather information about end-user needs.





ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.

**ASSA ABLOY**

## Benefits

### Convenience

#### **Security manager:**

- Aperio enabled products are managed with existing software and an access control system
- There is only one credential to manage
- Easy to install – no need to modify the door
- Easy to update authorization online, no need to visit each door
- Can use the existing cards, no need to exchange user credentials
- Supports most common RFID technologies

#### **End-user:**

- Only one credential for the wired and wireless doors

### Open standard

- Not proprietary
- Existing RFID technologies
- Expandable

### Security

- Online means authorization is updated in real time guaranteeing a high level of control
- Auditing trail and time zone increases system monitoring
- Provides an intermediate level of security between wired doors and mechanical cylinders
- Fits perfectly in systems with wired doors

### Cost efficient

- Easy to install – no need to wire the door, therefore extremely cost efficient
- The RFID card credential is cheap and in most cases already existing



# Cylinder

ASSA ABLOY

The global leader in  
door opening solutions







# Cylinders and Key Systems

## ASSA cylinders & key systems



### Key management systems

- ✦ Master key systems designed to order.
- ✦ ASSA Keybank software makes system administration simple.
- ✦ ASSA key cabinets employ sophisticated technology to preserve the security of your keys.



### Electromechanical cylinders

- ✦ The ASSA CLIQ system combines the best of electronics and mechanical technology in a single cost-effective package.
- ✦ Intelligent key systems provide maximum security, with instant cancellation of lost or stolen keys and full audit trails available.
- ✦ All standard cylinder shapes are available and the system may be re-programmed at any time, allowing maximum flexibility and maintaining the level of security over the life of the system.



### Cylinders

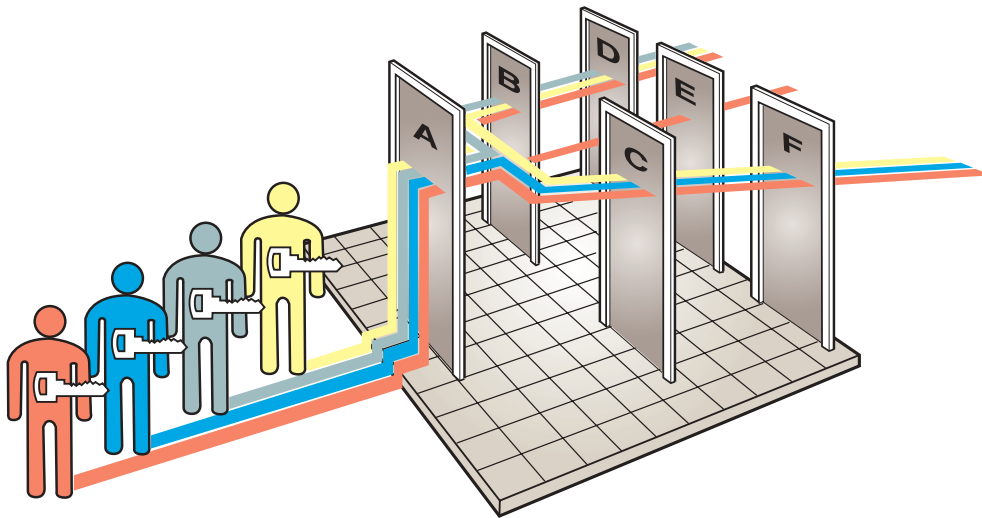
- ✦ Available at six different levels of security.
- ✦ Cylinders in the range have been tested and approved for use on the most security-conscious applications in the UK.
- ✦ A full range of shapes is available, allowing the cylinders to be used with all common makes of lockcase.



### Padlocks

- ✦ Tested to the highest levels of BS EN 12320.
- ✦ May be master keyed in the same system as ASSA cylinders.
- ✦ Available in a range of sizes and shackle types to suit different applications.

## ASSA master key systems



Security and convenience of movement are inevitably in conflict with each other. A master key system is, by its very nature, a compromise between total security and totally free movement which would entail no security. With a little thought and planning a system can be designed to suit the client's precise operational requirements within each building.

All ASSA locks can be incorporated in a master key system. These are in turn designed around the people who will use them. This has led to systems being designed in a way that is unique to ASSA ABLOY Door Solutions. The number of locks in a building is first established, followed by the people who will use them and the areas they need to enter. Only then are the customer's

particular requirements detailed on a special chart, enabling the system to be made up to suit the specific security requirements of the customer. Users can then be issued with their own unique key which allows them to move freely - but only through areas they need to enter.

A simplified example of a typical ASSA Master Key System. Each person is issued with their own unique key which only opens doors appropriate to their job function. For example, all open door A, but only the Senior Manager can open Door E. ASSA Master Key Systems designed in this way can be extended to satisfy the requirements of large and complex installations without compromising their integrity.

- Cleaner:  
Doors A, B, C, D, F
- Department Head A:  
Doors A, B, D
- Department Head B:  
Doors A, C, F
- Senior Manager:  
All doors

ASSA supply special forms for use in recording detailed master key information in an easily intelligible manner.

## Professional service & support

We have been designing and supplying master key systems in the UK for over 50 years. That expertise is at your service whenever you decide to install or upgrade an ASSA system. Our specialist in-house Systems Department will be happy to advise you on the different options available. In particular, they can ensure that your system is properly planned to accommodate all future expansion, thus avoiding the potentially costly long-term problems possible

with an "off-the-shelf" system. The system is then designed using the latest computer software aids. All these services are available to you free of charge. Once your system has been designed, the cylinders can be assembled and supplied by your local ASSA Security Centre, thus ensuring fast and responsive service. All Security Centres are closely monitored by ASSA ABLOY Door Solutions to ensure the highest standards of quality

and security are observed. They are also required to employ staff who have been specially trained by ASSA ABLOY Door Solutions, enabling them to provide advice and ongoing support with all elements of your system. Backed up when necessary by our own Systems Department, this ensures that you can be assured of the best possible service throughout the lifetime of your system.



## Key management software

Keybank for Windows™ has been designed to make the process of key management a simple one. It maintains a full record of the master key system, including a graphical door plan, lock chart, and lists of doors, keys and users. All are fully cross-referenced and automatically updated.

The features Keybank offers include:

- Detailed procedures for recording when keys are issued.
- Receipts and reminder notices.
- Key/User access reports.

The system will run on any standard Windows™ PC.



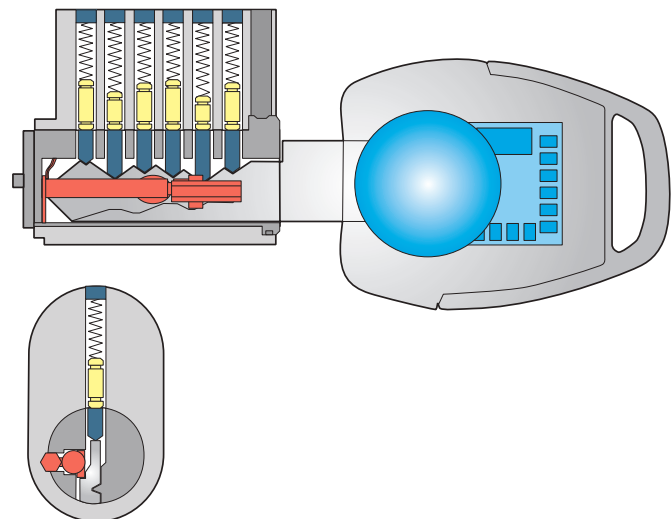
## ASSA CLIQ



An ASSA CLIQ cylinder combines a CLIQ electromechanical element with an ASSA dp4400 (or dp2400) cylinder mechanism. Any of the cylinder shapes on the following pages may be fitted with the CLIQ function; please see the next section (pages 2:14-19) for compatible dp4400 and dp2400 mechanical cylinders that may also be incorporated into a master key system with CLIQ. The ASSA dp4400 cylinder offers extremely high security and full resistance to any currently known method of picking.

The dp2400 range offers a lower-cost option within an overall 4400 master key system on doors where higher security is not required.

- MK** All shapes of ASSA CLIQ cylinders and padlocks can be put in the same master key system. CLIQ keys can operate both electromechanical and mechanical cylinders in the same system, but mechanical keys will only operate the mechanical cylinders.
- Dual security levels: may be combined with dp2400 cylinders in the same master key system.
- Protected by worldwide patents.
- Eligible for inclusion in an Option 10 Complete Package Guarantee.



BS EN 1303 : 2005  
SG 6

## Finishes

In the increasingly polluted atmosphere in which we live, the demands on products to resist corrosion are particularly high. ASSA products have the benefit of the latest automatic plating equipment, which incorporates the best of modern plating processes.

Satin chrome, polished chrome and black chrome give extremely good weather resistance whilst polished brass is offered as a decorative finish.

In addition our products are suitable for replating, on occasions when it is important to match the finish of other ironmongery on a project.

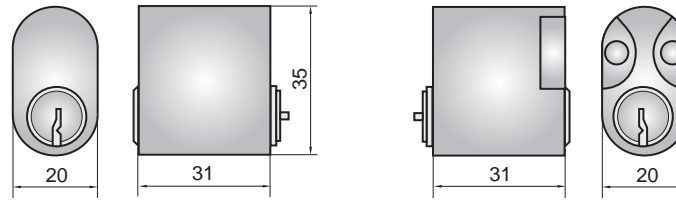
|                           | Cylinders              |                           |                          | Accessories            |                           |                          | Padlocks               |
|---------------------------|------------------------|---------------------------|--------------------------|------------------------|---------------------------|--------------------------|------------------------|
|                           | Satin chrome<br>Fin 13 | Polished chrome<br>Fin 11 | Polished brass<br>Fin 20 | Satin chrome<br>Fin 13 | Polished chrome<br>Fin 11 | Polished brass<br>Fin 20 | Black chrome<br>Fin 18 |
| Scandinavian oval & round | ✓                      | ●                         | ✓                        | ✓                      | ●                         | ✓                        |                        |
| Round threaded            | ✓                      | ●                         | ✓                        | ✓                      | ●                         | ✓                        |                        |
| Euro profile              | ✓                      | ●                         | ✓                        | ✓                      | ✓                         | ✓                        |                        |
| Oval profile              | ✓                      | ●                         | ✓                        | ✓                      | ✓                         | ✓                        |                        |
| Padlocks                  |                        |                           |                          |                        |                           |                          | ✓                      |

- ✓ Standard finish
- Special finish

## Scandinavian oval

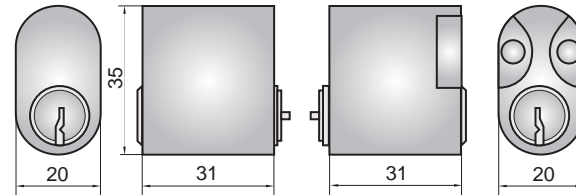
For use with ASSA Modular, Evolution and Narrow Profile lockcases. The cylinder is fixed to the lockcase with two hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **4401\***  
Single cylinder (outside)

➤ **4403\***  
Single cylinder (inside)

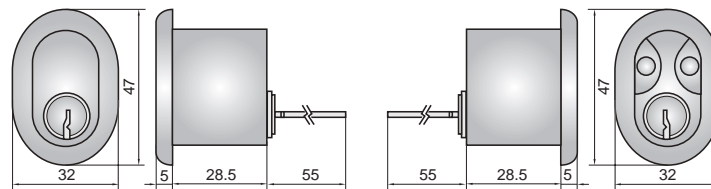


➤ **4402\***  
Double cylinder

For use with ASSA rim lockcases. The cylinder is fixed to the lockcase with two brass screws which can be cut to length.

Supplied with rim cylinder sleeve.

Sleeve is not required when used with Evolution 35mm backset lockcases and Narrow Profile accessories.



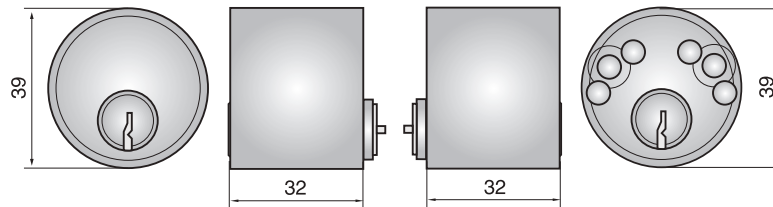
➤ **4407\***  
Single rim cylinder (outside)

➤ **4409\***  
Single rim cylinder (inside)

## Scandinavian round

For use with ASSA Modular and Evolution lockcases. The cylinder is fixed with four high security hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **4411\***  
Single cylinder (outside)

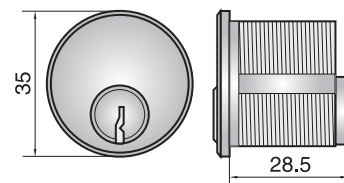
➤ **4413\***  
Single cylinder (inside)

➤ **4412\***  
Double cylinder

## Round threaded

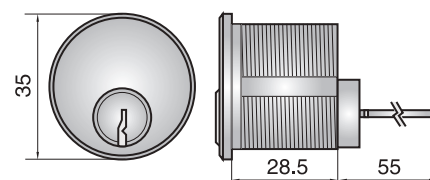
For use with locking devices accepting screw-in cylinders. State lock type when ordering to ensure that correct cam is supplied.

4451 Round Threaded cylinders are also available with microswitch for use as a momentary action keyswitch. See Electric Locking section for further information.



➤ **4451\***  
Single mortice cylinder

For use with rim locks and other locking devices accepting rim cylinders. Supplied with 5mm Spacer Ring and fixing screws.



➤ **4457\***  
Rim cylinder

\* With CLIQ function



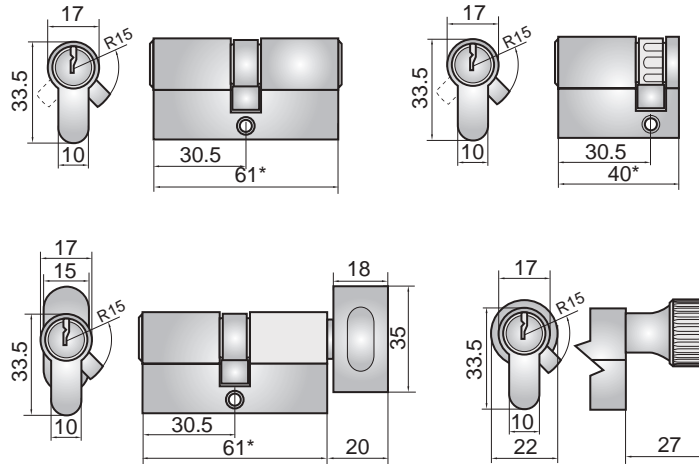
## Euro profile

For use with locks accepting Euro profile cylinders. Cylinders are supplied with fixing screw.

\* Standard lengths are:  
Single 40mm and 45mm  
Double 61mm and 71mm  
W/Turn 61mm and 71mm

Extended length cylinders are also available: see page 2:38.

Decorative and security accessories are available: see Door Furniture section.



➤ **44M22\***  
Double cylinder

➤ **44M23\***  
Single cylinder

➤ **44M27\***  
Single cylinder  
with Distinction oval turn

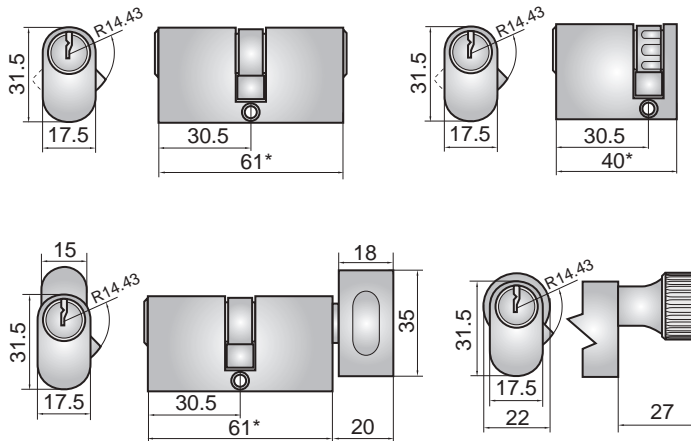
➤ **44M24\***  
Single cylinder  
with small round turn

## Oval profile

For use with locks accepting Oval profile cylinders. Cylinders are supplied with fixing screw.

CLIQ function is not available on extended cylinders (+5mm/+5mm).

Decorative and security accessories are available: see Door Furniture section.



➤ **4432\***  
Double cylinder

➤ **4433\***  
Single cylinder

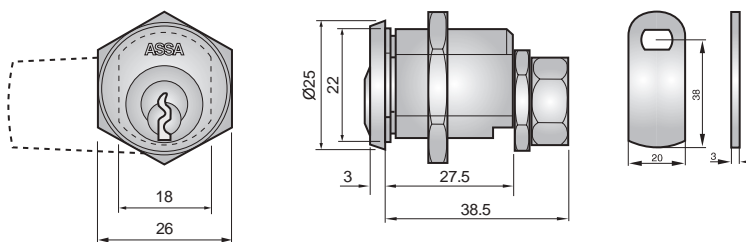
➤ **4437\***  
Single cylinder  
with Distinction oval turn

➤ **4434\***  
Single cylinder  
with small round turn

## Master keyed cam lock

For use on cabinet doors and similar applications. Can easily be adjusted for door thicknesses up to 23mm.

Catches should be specified separately. Standard catch reference 05 is shown; please contact us for details of other options.



➤ **2471\***  
Cam lock

\* With CLIQ function

## Padlocks

### Class 2

Padlock body of extruded brass, black chrome plated.

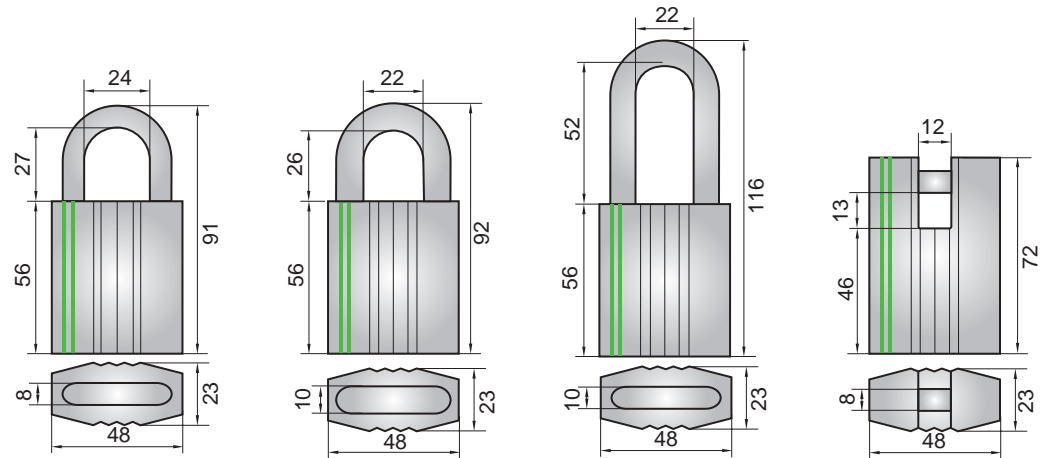
Shackle of rustproofed hardened steel, 8mm or 10mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

Tensile strength over 1½ tons.

Green stripes indicate Security Grade 3 to BS EN 12320.

**BS EN 12320**  
**SG 3**



44241\*  
Key locking

44246\*  
Key locking  
10mm dia. shackle

44247\*  
Key locking  
extended shackle

44249\*  
Key locking  
close shackle

### Class 3

Padlock body of hardened steel, black chrome plated.

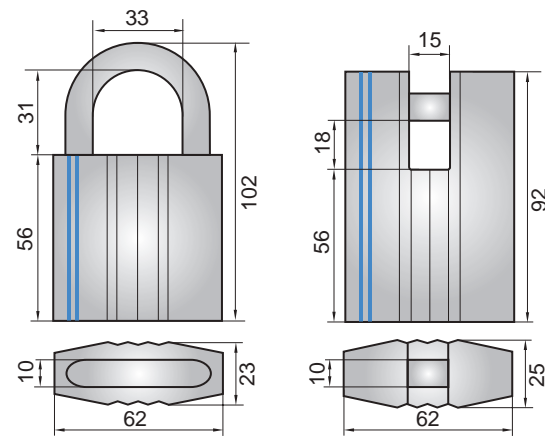
Shackle of rustproofed hardened steel, 10mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

Tensile strength: over 4½ tons.

Blue stripes indicate Security Grade 4 to BS EN 12320.

**BS EN 12320**  
**SG 4**



44341\*  
Key locking

44349\*  
Key locking  
close shackle

### Class 4 / Class 5

Padlock body of hardened steel, black chrome plated.

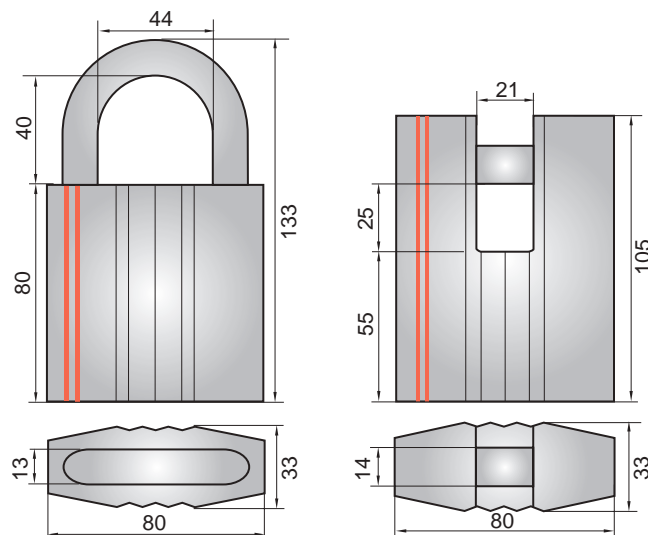
Shackle of rustproofed hardened steel, 13mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

Tensile strength: over 10 tons.

Red stripes indicate Security Grade 5 (open shackle) or Grade 6 (close shackle) to BS EN 12320.

**BS EN 12320**  
**SG 5 / 6**
















44441\*  
Key locking

44549\*  
Key locking  
close shackle

\* With CLIQ function

Table of references

|                                                                                     |  |  |  |  |  |  |        |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|                                                                                     | ASSA dp4400                                                                       | ASSA dp2400                                                                       | ASSA Twin Combi 5800                                                               | ASSA 4800                                                                           | ASSA Flexcore                                                                       | ASSA 5-pin                                                                          |        |
|    | <b>Scandinavian oval cylinders</b>                                                |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |        |
|                                                                                     | Single cylinder (outside)                                                         | 4401                                                                              | 2401                                                                               | C5801                                                                               | 4801                                                                                | F501                                                                                | R501   |
|                                                                                     | Single cylinder (inside)                                                          | 4403                                                                              | 2403                                                                               | C5803                                                                               | 4803                                                                                | F503                                                                                | R503   |
|                                                                                     | Double cylinder                                                                   | 4402                                                                              | 2402                                                                               | C5802                                                                               | 4802                                                                                | F502                                                                                | R502   |
|                                                                                     | Rim single cylinder (outside)                                                     | 4407                                                                              | 2407                                                                               | C5807                                                                               | 4807                                                                                | F507                                                                                | R507   |
|                                                                                     | Rim single cylinder (inside)                                                      | 4409                                                                              | 2409                                                                               | C35807                                                                              | 34807                                                                               | F3507                                                                               | R3507  |
|                                                                                     | Rim double cylinder                                                               | 4408                                                                              | 2408                                                                               | C135807                                                                             | 134807                                                                              | F13507                                                                              | R13507 |
|    | <b>Scandinavian round cylinders</b>                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |        |
|                                                                                     | Single cylinder (outside)                                                         | 4411                                                                              | n/a                                                                                | C5811                                                                               | 4811                                                                                | n/a                                                                                 | n/a    |
|                                                                                     | Single cylinder (inside)                                                          | 4413                                                                              | n/a                                                                                | C5813                                                                               | 4813                                                                                | n/a                                                                                 | n/a    |
|                                                                                     | Double cylinder                                                                   | 4412                                                                              | n/a                                                                                | C5812                                                                               | 4812                                                                                | n/a                                                                                 | n/a    |
|   | <b>Round threaded cylinders</b>                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |        |
|                                                                                     | Mortice single cylinder                                                           | 4451                                                                              | 2451                                                                               | C5851                                                                               | 4851                                                                                | F551                                                                                | R551   |
|                                                                                     | Mortice double cylinder                                                           | 4452                                                                              | 2452                                                                               | C5852                                                                               | 4852                                                                                | F552                                                                                | R552   |
|                                                                                     | Rim single cylinder                                                               | 4457                                                                              | 2457                                                                               | C5857                                                                               | 4857                                                                                | F557                                                                                | R557   |
|  | <b>Euro profile cylinders</b>                                                     |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |        |
|                                                                                     | Single cylinder                                                                   | 4423                                                                              | 2423                                                                               | C5823                                                                               | 4823                                                                                | F523                                                                                | R523   |
|                                                                                     | Double cylinder                                                                   | 4422                                                                              | 2422                                                                               | C5822                                                                               | 4822                                                                                | F522                                                                                | R522   |
|                                                                                     | Single cyl with large round turn                                                  | n/a                                                                               | n/a                                                                                | C5821                                                                               | 4821                                                                                | F521                                                                                | R521   |
|                                                                                     | Single cyl with small round turn                                                  | 4424                                                                              | 2424                                                                               | C5824                                                                               | 4824                                                                                | F524                                                                                | R524   |
|                                                                                     | Single cylinder with oval turn                                                    | 4427                                                                              | 2427                                                                               | C5827                                                                               | 4827                                                                                | F527                                                                                | R527   |
|  | <b>UK oval profile cylinders</b>                                                  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |        |
|                                                                                     | Single cylinder                                                                   | 4433                                                                              | 2433                                                                               | C5833                                                                               | 4833                                                                                | F533                                                                                | R533   |
|                                                                                     | Double cylinder                                                                   | 4432                                                                              | 2432                                                                               | C5832                                                                               | 4832                                                                                | F532                                                                                | R532   |
|                                                                                     | Single cyl with large round turn                                                  | n/a                                                                               | n/a                                                                                | C5831                                                                               | 4831                                                                                | F531                                                                                | R531   |
|                                                                                     | Single cyl with small round turn                                                  | 4434                                                                              | 2434                                                                               | C5834                                                                               | 4834                                                                                | F534                                                                                | R534   |
|                                                                                     | Single cylinder with oval turn                                                    | 4437                                                                              | 2437                                                                               | C5837                                                                               | 4837                                                                                | F537                                                                                | R537   |
|  | <b>Cam and furniture locks</b>                                                    |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |        |
|                                                                                     | Cam lock                                                                          | n/a                                                                               | 2471                                                                               | C5870                                                                               | 4870                                                                                | n/a                                                                                 | R5207  |
|                                                                                     | Furniture lock                                                                    | n/a                                                                               | n/a                                                                                | n/a                                                                                 | n/a                                                                                 | n/a                                                                                 | R5208  |
|  | <b>Padlocks</b>                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |        |
|                                                                                     | Class Two snap locking                                                            | n/a                                                                               | n/a                                                                                | n/a                                                                                 | 24840                                                                               | F2540                                                                               | R2540  |
|                                                                                     | Class Two open shackle                                                            | 44241                                                                             | 24241                                                                              | C25841                                                                              | 24841                                                                               | F2541                                                                               | R2541  |
|                                                                                     | Class Two extended shackle                                                        | 44243                                                                             | 24243                                                                              | C25843                                                                              | 24843                                                                               | F2543                                                                               | R2543  |
|                                                                                     | Class Two 10mm shackle                                                            | 44246                                                                             | 24246                                                                              | C25846                                                                              | 24846                                                                               | n/a                                                                                 | n/a    |
|                                                                                     | Class Two close shackle                                                           | 44249                                                                             | 24249                                                                              | C25849                                                                              | 24849                                                                               | F2549                                                                               | R2549  |
|                                                                                     | Class Three open shackle                                                          | 44341                                                                             | n/a                                                                                | C35841                                                                              | 34841                                                                               | n/a                                                                                 | n/a    |
|                                                                                     | Class Three close shackle                                                         | 44349                                                                             | n/a                                                                                | C35849                                                                              | 34849                                                                               | n/a                                                                                 | n/a    |
|                                                                                     | Class Four open shackle                                                           | 44441                                                                             | n/a                                                                                | C45841                                                                              | n/a                                                                                 | n/a                                                                                 | n/a    |
|                                                                                     | Class Four close shackle                                                          | n/a                                                                               | n/a                                                                                | n/a                                                                                 | 54849                                                                               | n/a                                                                                 | n/a    |
|                                                                                     | Class Five close shackle                                                          | 44549                                                                             | n/a                                                                                | C55849                                                                              | n/a                                                                                 | n/a                                                                                 | n/a    |

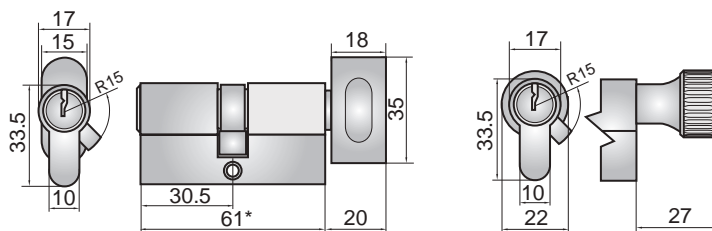
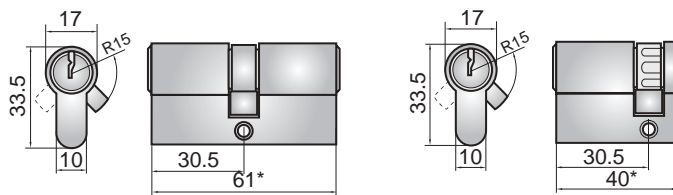
## Euro profile

For use with locks accepting Euro profile cylinders. Cylinders are supplied with fixing screw.

\* Standard lengths are:  
 Single 40mm and 45mm  
 Double 61mm and 71mm  
 W/Turn 61mm and 71mm

Extended length cylinders are also available: see page 2:38.

Decorative and security accessories are available: see Door Furniture section.



➤ **4422**  
 Double cylinder

➤ **4423**  
 Single cylinder

➤ **4427**  
 Single cylinder  
 with Distinction oval turn

➤ **4424**  
 Single cylinder  
 with small round turn

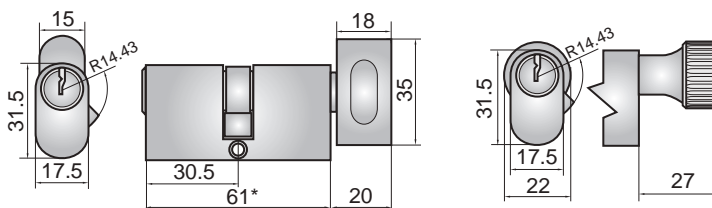
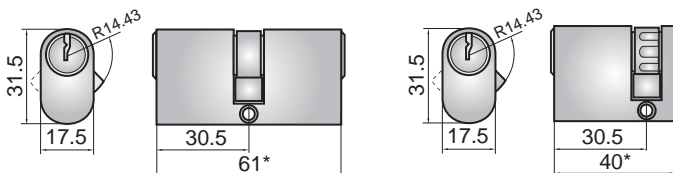
## Oval profile

For use with locks accepting Oval profile cylinders. Cylinders are supplied with fixing screw.

\* Standard lengths are:  
 Single 40mm and 45mm  
 Double 61mm and 71mm  
 W/Turn 61mm and 71mm

Also available in:  
 Single 50mm (+10)  
 Double 81mm (+10+10)  
 W/Turn 81mm (+10+10)

Decorative and security accessories are available: see Door Furniture section.



➤ **4432**  
 Double cylinder

➤ **4433**  
 Single cylinder

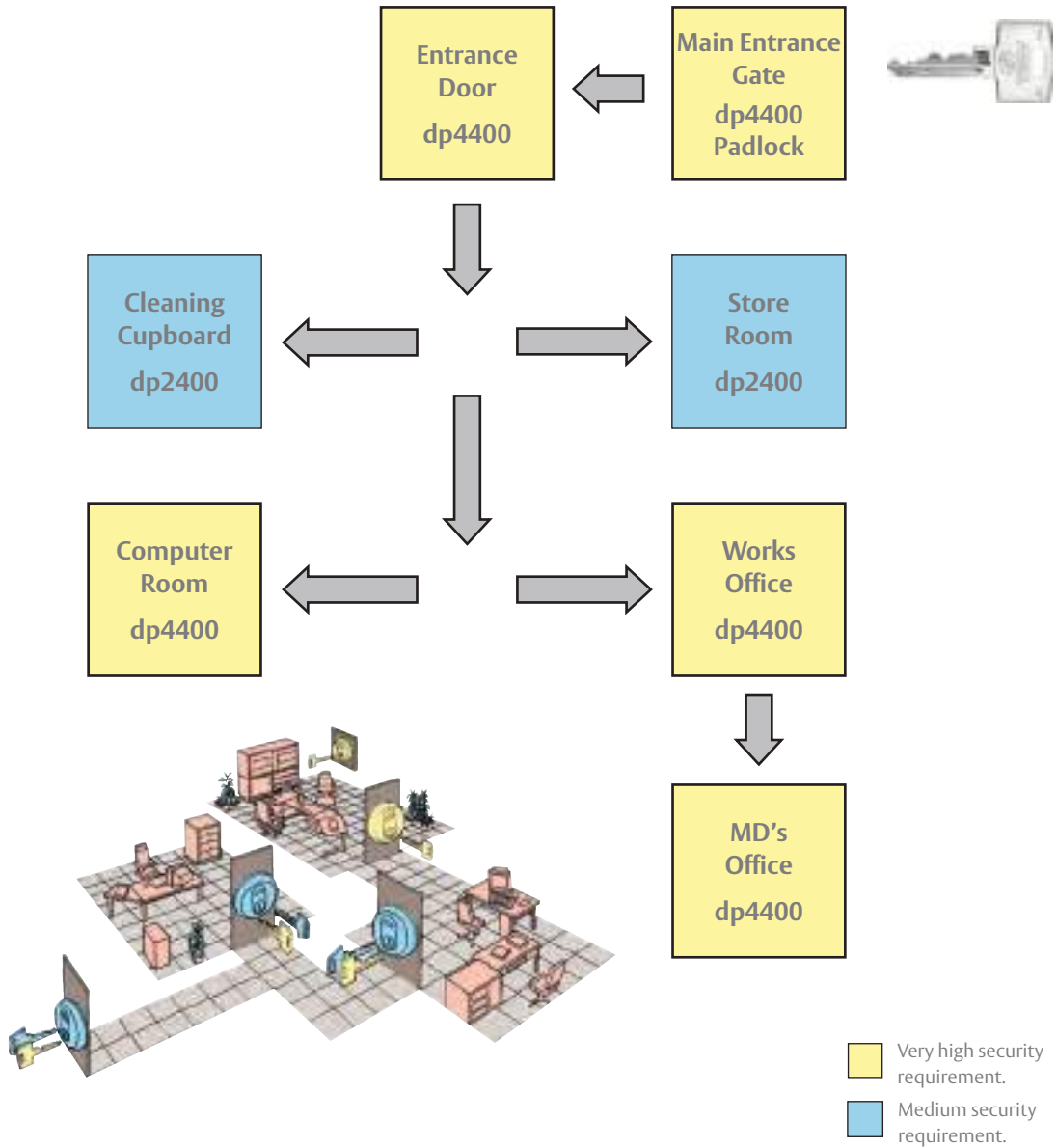
➤ **4437**  
 Single cylinder  
 with Distinction oval turn

➤ **4434**  
 Single cylinder  
 with small round turn

## ASSA dual systems

The ASSA dp4400 / dp2400 dual system is ideal for situations where very high security is required on certain doors, such as perimeter doors and places where high value equipment is kept. At the same time it eliminates over-specifying on doors where such a high level of security is not required. As a result it becomes both convenient and cost-effective where a high security master key system is required.

A dp dual system can also incorporate ASSA CLIQ electronic cylinders (see page 2:6).



The ASSA dp2400 system is fully compatible with dp4400 very high security cylinders. This allows the creation of dual security master key systems, with ASSA dp4400 cylinders on sensitive doors and lower-cost dp2400 cylinders on other doors. The range features a 6-pin tumbler mechanism plus a patented sidebar mechanism and case-hardened drill-resistant inserts.

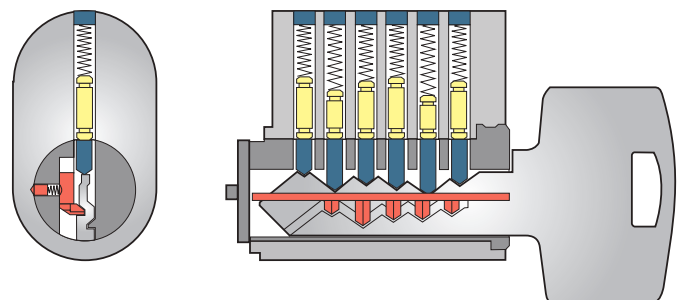
ASSA dp keys are fully protected by international patents against unauthorised duplication. All ASSA dp key profiles are restricted.

**MK** All shapes of ASSA dp2400 (and dp4400 and ASSA CLIQ) cylinders and padlocks can be placed in the same master key system.

**DP** Dual security levels: may be combined with ASSA dp4400 and ASSA CLIQ cylinders in the same master key system (see page 2:18).

**IP** Protected by worldwide patents.

**10** Eligible for inclusion in an Option 10 Complete Package Guarantee.



# ABLOY® PROTEC<sup>2</sup>

## THE ULTIMATE LOCKING SOLUTION



**ABLOY® PROTEC<sup>2</sup>** is the latest milestone in the development of the unique **ABLOY®** rotating disc cylinder keying systems that offers several unsurpassed and superior security features and benefits.

## PROFESSIONAL SOLUTIONS FOR ULTIMATE HIGH SECURITY NEEDS

The world is challenged by mounting security threats in every conceivable sector. Our mission is to meet these challenges and to provide complete locking solutions for the 21st century's marketplace. **ABLOY® PROTEC<sup>2</sup>** is one more milestone in that mission.

**ABLOY®** locks and cylinders are chosen worldwide for highly sensitive applications. They are recognised as the world's premium high security locking systems, used extensively by private, commercial and government end users who demand the ultimate in high security.

Security solutions may vary at different premises according to their size and type of business. But the need for high security system solutions is universal. As an example, the world is dependent on water, electricity and communications networks. Security in these utilities is essential for our well being and therefore their protection is vital.

A growing number of applications depend upon the ability to deliver their services 24/7. Any break or interruption to their service caused by vandalism or physical attack can prove devastating for the security, health, financial costs and reputation of a facility or an enterprise. Combining safety, security and convenience is a challenging task so the quality, design and functionality of the locking system must meet those challenges.

Security threats are not static, nor are the solutions. **ABLOY** has extensive experience and expertise in the field of high security locking systems and we can offer you highly secure and customized solutions.

## Secure in every way

In an **ABLOY® PROTEC<sup>2</sup>** locking system, different products can be keyed into the same master key system and thus all products can be operated with just a single key. This simplifies your locking system and key management. The range is wide, there are 1,97 billion different key combinations providing the possibility to create extensive Master Key systems that fulfil your exact specifications.

**ABLOY® PROTEC<sup>2</sup>** is durable and long lasting thanks to its superior design and precision manufacturing. The unique and patented rotating disc technology provides smooth and reliable functionality also in extreme environments.

**ABLOY® PROTEC<sup>2</sup>** can be integrated with electromechanical **CLIQ**-technology. This electromechanical system is intelligent and highly customizable. It enables flexible and secure access management, including time functions, into your daily operations. And in case of a lost or stolen key it can easily be electronically removed. Both the cylinders and keys collect audit trail of use. **CLIQ** makes things click. It lifts your locking security to a whole new level.

# ABLOY® PROTEC<sup>2</sup>

## WE HAVE ONLY ONE MISSION – TO OFFER YOU THE ULTIMATE IN HIGH SECURITY PROTECTION

The patented technology in **ABLOY® PROTEC<sup>2</sup>** is superior and it exceeds the highest industry standards. Our worldwide team of security professionals can help you design a system that is right for you.

The **UNIQUE ABLOY®** cylinder mechanism, based on the use of **rotating discs** instead of the traditional springs and pins, is known widely by security professionals as the world's **PREMIUM** high security locking system. **ABLOY® PROTEC<sup>2</sup>** is the latest development of this unique technology which offers numerous **UNSURPASSED** features and benefits over conventional locking products.







PATENTED features in keys and cylinders assure that the installations will be protected for many years to come. **ABLOY® PROTEC<sup>2</sup> worldwide patents are valid until 2031.**

SECURE level has been further improved in **ABLOY® PROTEC<sup>2</sup>** by a new disc controller and key design. **This patented disc controller structure requires a moving element in the key** to mate with the cylinder internally in order to function, thus raising the difficulty of any attempt to copy an unauthorised key, reaching a new higher level of security.



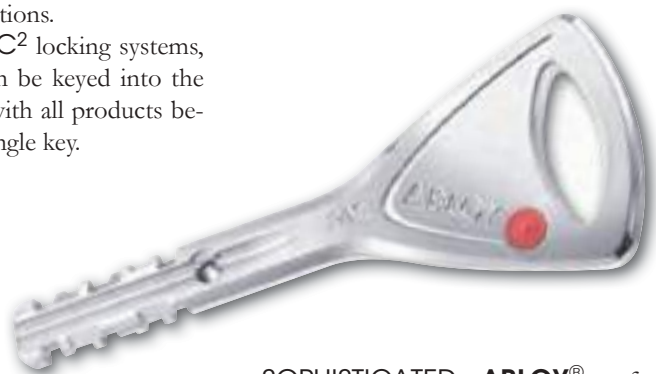
LONGEVITY is further reinforced with our **new patented feature, AWS (Anti Wear System)** which is a mechanism in the **ABLOY® PROTEC<sup>2</sup>** key and cylinder that prolongs the life cycle even in extensive use applications.

CONTROLLED distribution of **ABLOY® PROTEC<sup>2</sup>** key blanks and the use of different security levels and profiles ensures the highest level of key control tailored to your exact needs.

PROFESSIONAL design makes **ABLOY® PROTEC<sup>2</sup>** cylinders **virtually pick proof and bump proof. DBS (Disc Blocking System) is a patented feature** that stops attempts to manipulate the discs.

SUPERIOR master keying features are offered based on our vast number of different key combinations.

In **ABLOY® PROTEC<sup>2</sup>** locking systems, different products can be keyed into the same master system with all products being operated with a single key.



PRACTICAL planning of your master key system is possible along with the ability to incorporate multi level systems each with unique access rights for different user groups.

EXPANDABLE locking systems can be designed to cover large and extensive facilities.

UPGRADEABLE system may combine a mechanical master key system with electromechanical functions.

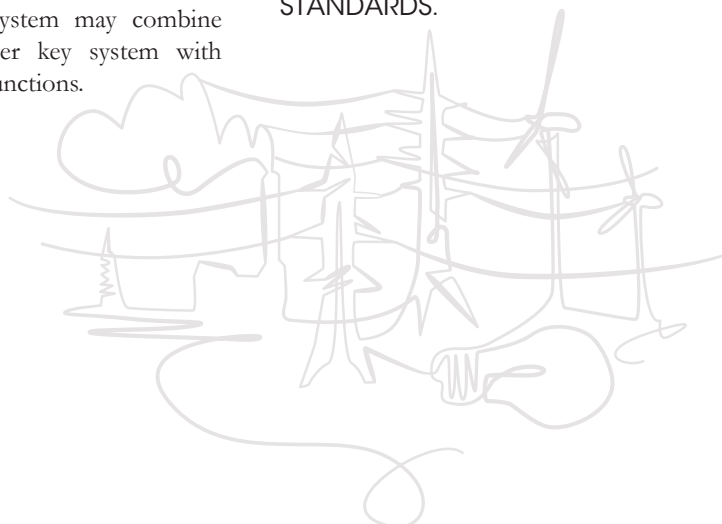
ULTIMATE high security features can be further enhanced by integrating the intelligent **CLIQ** technology with the mechanical **ABLOY® PROTEC<sup>2</sup>** master key system to utilise both mechanical and electronic identification. Communication is encrypted. Cylinders and keys can record the audit trail of their use. Adding and denying access rights is easy, flexible and secure.

DURABLE design without springs and pins provides **RELIABLE** function in severe environments.

SOPHISTICATED **ABLOY®** software provides a user friendly tool to facilitate the easy administration of the locking system.

EXTENSIVE PRODUCT RANGE of **ABLOY® PROTEC<sup>2</sup>** means that we can secure numerous applications from door environments to industrial applications and equipment.

**ABLOY® PROTEC<sup>2</sup>** offers a global solution. Products are designed and manufactured to **MEET** and **EXCEED** requirements of several international, national and customer specific **STANDARDS.**



# ABLOY® PROTEC<sup>2</sup>

## ONE CORE, WIDE PRODUCT RANGE

**ABLOY®** PROTEC<sup>2</sup> meets and exceeds requirements of several international, national and customer specific standards and requirements. With an extensive product range, **ABLOY®** PROTEC<sup>2</sup> provides a global solution.

While the core of the cylinder remains the same, the outer covering can be changed to meet the requirements of the specific application.

## Superior quality for superior demands

**ABLOY®** locks and cylinders are chosen worldwide for sensitive applications in the most exposed locations, continually defying the elements, on land and sea, in the coldest and the hottest of climates. **ABLOY®** products are selected as the first choice of the professionals in countless applications all around the world.

Our clients trust us.

**ABLOY** professional high security solutions are used worldwide in:

- Governmental and institutional applications
- Utilities
- Telecommunication applications
- Industrial plants
- Education
- Healthcare
- Museums and Heritage
- Corporate applications
- Transportation
- And many more



# ABLOY® PROTEC<sup>2</sup>

## ABLOY HAS A KEY-ROLE IN THE WORLDWIDE SECURITY

We have over 100 years experience and expertise in the field of high security locking products. Ever since its' invention **ABLOY®** has been at the highest level of the lock Industry.

The driving force behind every part of **ABLOY** is a commitment to provide reliable service together with the highest quality products for any given application worldwide. **ABLOY®** products are result of continuous R & D, testing and ability to understand and solve our customers' highest security needs.

Abloy Oy has a world-wide network of sales units and distributors. They have extensive knowledge of **ABLOY®** products and can provide you the best local service and expertise.

Please contact us. Our professional team is here to help you.

**All ABLOY® cylinder products are designed and manufactured in Finland.**

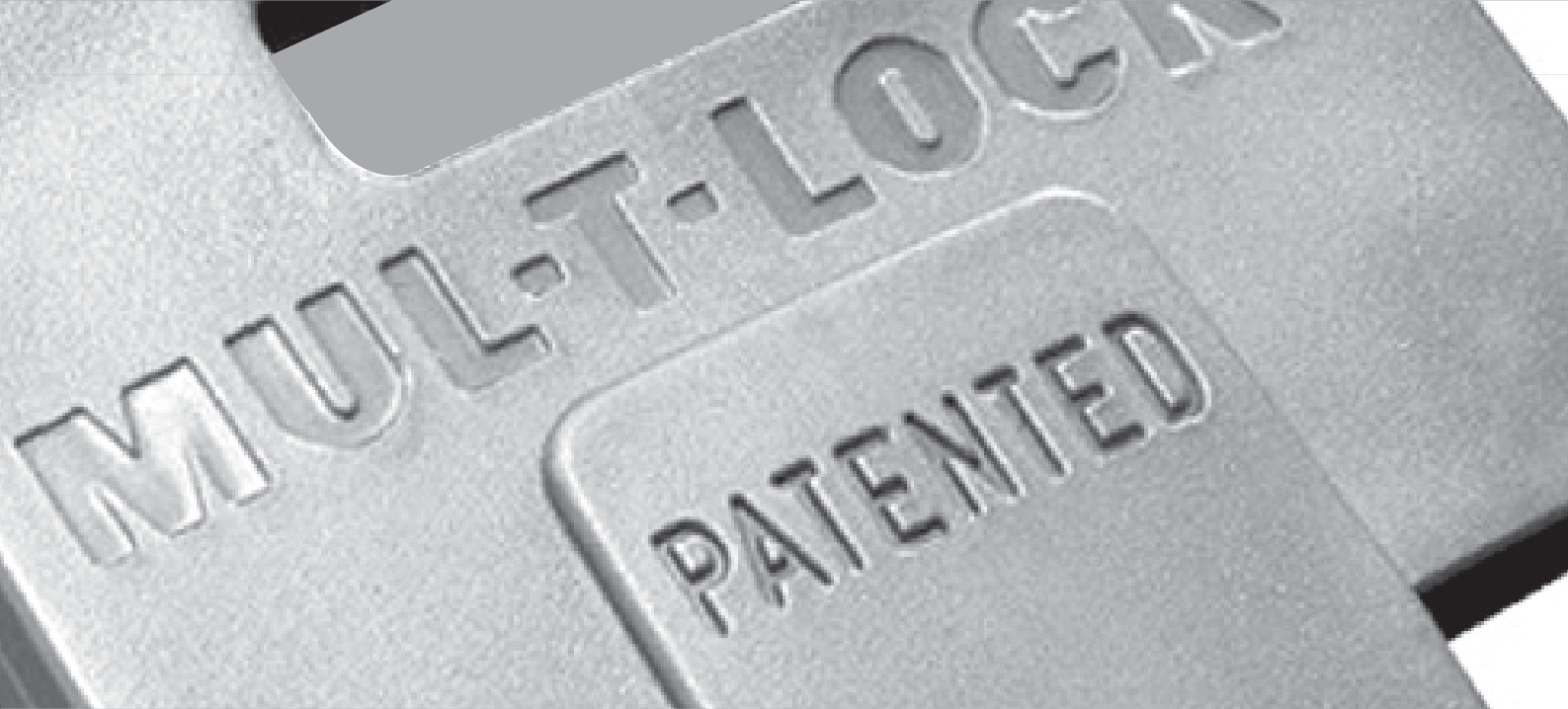


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Your local **ABLOY** contact:

[www.abloy.com](http://www.abloy.com)



# **CYLINDER PLATFORMS**

# Mul-T-Lock® MT5® Platform

## High Security with patented key control

Mul-T-Lock's MT5®, the 5th generation patented state-of-the-art High Security cylinder platform, with built-in experience of 3 decades, features an advanced security concept that combines several powerful elements: the patented Alpha Spring located at the tip of the key, a magnetic key duplication card, and a dedicated computerized key-cutting machine - the KC5.

All combined, these features enable millions of possible combinations, extensive master-keying capabilities, keyway exclusivity for dealers, and automatic cutting of large key series.

The MT5®'s breakthrough features include:

- ▶ **Patented security:** the innovative Alpha Spring at the tip of the MT5® key - with a patent that expires only in 2025, engages a unique pin at the rear of the locking mechanism, to create an additional shear line.
- ▶ **KC5 - a dedicated key cutting machine:** the MT5® platform is supported by the super-smart newly developed KC5 electronic key cutting machine, that duplicates MT5® keys and automatically cuts large series of keys by interfacing with MASTERpiece software.
- ▶ **Advanced key control:** MT5® keys are provided with a coded magnetic duplication card - which can be read by the dedicated KC5 key cutting machine.
- ▶ **A new configuration** of Mul-T-Lock's unique telescopic pin technology, with 5 telescopic pins that fit special cuts on the MT5® key.
- ▶ **A huge** number of possible locking combinations, thanks to the double locking mechanism of telescopic pins and patented Alpha Spring.
- ▶ **Compliance** with the toughest international standards: European EN1303, SKG (Netherlands), Israeli standard, etc.



### MT5® +

Mul-T-Lock® High Security is even further enhanced by MT5®+, an advanced version of the MT5® platform, featuring:

- ▶ An additional locking bar mechanism.
- ▶ An even greater number of possible combinations, enabled by the MT5®+'s three different locking mechanisms.
- ▶ A special milled pattern on the patented key, which fits the locking bar.
- ▶ Exclusive keyway options based on the milled pattern.
- ▶ Extensive master keying capabilities, supporting very large and complex master key systems that incorporate hierarchy and matrix design requirements even within the same suite.



# Mul-T-Lock<sup>®</sup> Interactive<sup>®</sup> + Platform

## Advanced key technology

Mul-T-Lock's Interactive<sup>®</sup>+ platform builds on the foundation and innovation of the Interactive system, adding new features for enhanced effectiveness.

Mul-T-Lock's latest patent-pending technology protection is currently only available through the platform's unique pin design in Interactive<sup>®</sup>+ cylinders.

- ▶ Interactive<sup>®</sup>+ increases security effectiveness with a telescopic pin tumbler mechanism that requires the simultaneous alignment of both internal and external shear lines for plug rotation.
- ▶ Featuring enhanced intrusion protection, Interactive<sup>®</sup>+ is highly pick, drill and bump resistant.
- ▶ Coded key cards and service through trained and authorized Mul-T-Lock<sup>®</sup> Interactive<sup>®</sup>+ dealers help prevent unauthorized duplication
- ▶ Available in all formats and product types — retrofit cylinders, padlocks, locks and multi-point locks — one key can fit them all.
- ▶ Master keying capabilities allow users to design the system they need
- ▶ Backwards compatibility provides existing Interactive users the flexibility to expand their systems seamlessly and migrate to Interactive<sup>®</sup>+ at their own pace

Mul-T-Lock<sup>®</sup> Interactive<sup>®</sup>+ Platform meets the world's most stringent standards.



# Mul-T-Lock® Classic Platform

Mul-T-Lock's Classic platform is based on several special features:

- ▶ Mul-T-Lock's unique telescopic pin tumbler mechanism, with internal and external pins – requiring the simultaneous alignment of both internal and external shear lines for the plug to rotate.
- ▶ A specially designed plug, which forms a spherical, 3-dimensional shear line with the top and bottom pins, within the cylinder body.
- ▶ Steel inserts with high drill resistance
- ▶ High pick and bumping resistance
- ▶ Optional side and back pins, specially suited for master key systems.
- ▶ A coded Mul-T-Lock® key card supplied in every package, to enhance key security. Additional keys may be cut by authorized Mul-T-Lock® dealers, upon presentation of the key card – in accordance with Mul-T-Lock's official key cutting procedures.



The Classic platform meets the requirements of some of the most stringent European and American standards.



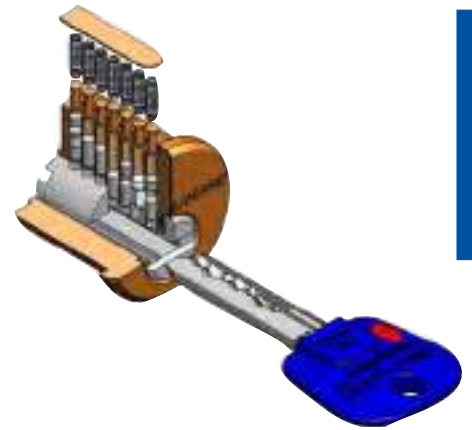
# Mul-T-Lock® Integrator® Platform

Mul-T-Lock's Integrator® platform, one generation ahead of the standard 7X7, introduces several advantageous features:

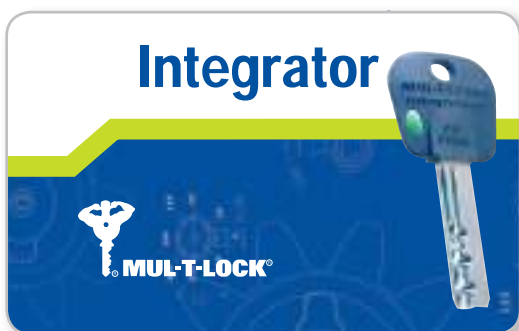
- ▶ A unique, high-precision 7-pin tumbler mechanism
- ▶ A patented key blank with a copy-protected oval cut, available in 3 different configurations: Internal, External and Twin
- ▶ Special launcher pins inserted into relevant cylinder plug chambers, corresponding to the key's oval cut

Thanks to its improved design, the robust Integrator® platform offers enhanced tamper resistance, a range of keyed alike and keyed different options, and flexible master keying possibilities.

Key limitation is ensured by the key and key blank, supplied together with a coded Mul-T-Lock® key card in every Integrator® package. Additional keys may be cut by authorized Mul-T-Lock® dealers, upon presentation of the key card – in accordance with Mul-T-Lock's official key cutting procedures.



Cylinder Platforms



[www.mul-t-lock.com](http://www.mul-t-lock.com)



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©2015 Mul-T-Lock Technologies Ltd



# Mul-T-Lock® 7X7® Platform

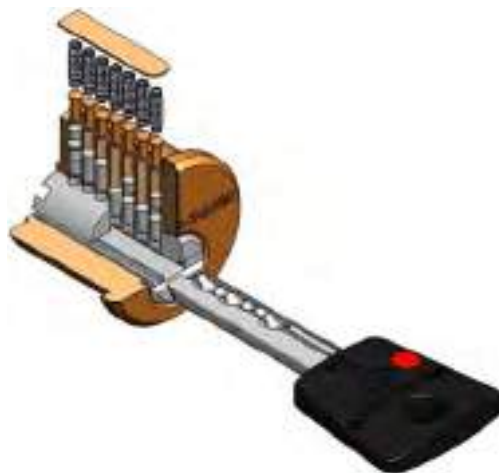
7X7 is Mul-T-Lock's standard platform, providing an excellent level of basic security and exceptional value for money.

The 7x7 features:

- ▶ A pin tumbler mechanism with 7 chambers
- ▶ A reversible nickel silver key with a plastic head

The 7x7 platform may be keyed alike, keyed different or master keyed.

Key limitation is ensured by the key and key blank, supplied together with a coded Mul-T-Lock® key card. Additional keys may be cut by authorized Mul-T-Lock® dealers, upon presentation of the key card – in accordance with Mul-T-Lock's official key cutting procedures.



# Keying Possibilities

Mul-T-Lock® offers its costumers a variety of convenient and secure keying solutions to meet their specific needs:

- ▶ **Keyed different:** Mul-T-Lock's traditional High Security equips each cylinder with its own distinct combination.
- ▶ **Keyed alike:** for exceptional customer convenience, Mul-T-Lock® has developed the One-Key-Fits-All option, enabling users to open many locks - for example: home, office, garage & file cabinet - with a single key.
- ▶ **Master keying:** large organizations enjoy Mul-T-Lock's advanced and friendly master key systems, that are easy to manage even when the requirements are vast and complex.

# Master Keying

## The power of being your own master

Mul-T-Lock® is a world leader in the design and manufacture of master key systems for many needs and purposes. Mul-T-Lock's master key systems offer several major benefits for end-users:

- ▶ Overloaded key rings are replaced by a single master key.
- ▶ The main master key enables system managers to open every door in the system - while other users are provided with keys that only open specific doors.
- ▶ A wide range of Mul-T-Lock® products – such as cylinders for the user's home, office and vehicle - may be incorporated into a single master key system, controlled by one key.

Mul-T-Lock's master keying products are also exceptionally locksmith-friendly and are supplied with pinning kits, tools and computerized programs.

Special training is available for dealers who wish to design and build master key systems for their own customers.

There is always a trade-off between security and convenience.

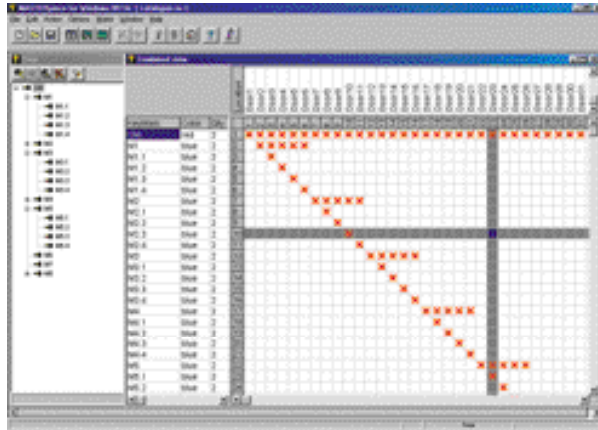


# Master Keying Software

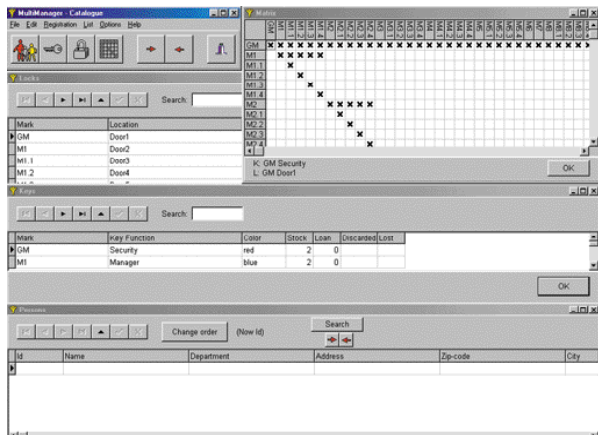
Mul-T-Lock's master keying offering includes two friendly software programs:

**MASTERpiece:** An advanced solution for the master key system designer. Automatically presenting all required information on the computer screen, and supporting both hierarchal and matrix design methods, MASTERpiece enables a fast, easy and efficient designing process.

**Multimanager:** The smart key management software program. Specially created for security officers who manage complex master key systems, this friendly program records all information about keys distributed to users.



Cylinder Platforms



# Master Keying Design Methods

Mul-T-Lock's master key systems may be based on two alternative design methods:

**The hierarchal design:** Incorporating several levels of access authorization, with higher levels authorized to open lower level entrances. Ordinarily hierarchal systems include Grand Master (GM) keys, which can open every cylinder in the system, all the way down to keys that unlock a single cylinder.

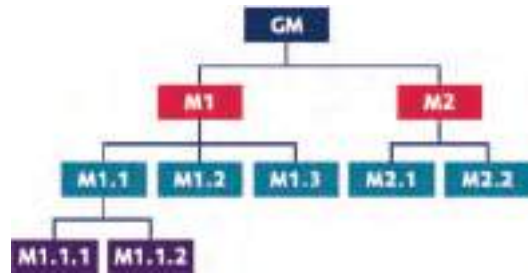


Illustration: In this example, the GM (Grand Master) key opens all cylinders, M1 & M2 are 2 different master keys accessing the doors of 2 separate departments, and each of the bottom level keys, such as M1.1.1 and M2.2, fits just one cylinder.

**The Matrix design:** Based on a matrix chart, in which each column represents a cylinder on the premises, and each row represents a key holder. This method enables the designer to define precise access authorization for each key.

Illustration: In this example, key K1 opens all 4 cylinders, K2 can only open C2, and C2 is a central cylinder, which can be opened by all 4 keys.

| Key | C1 | C2 | C3 | C4 |
|-----|----|----|----|----|
| K1  | ×  | ×  | ×  | ×  |
| K2  |    | ×  |    |    |
| K3  |    | ×  | ×  |    |
| K4  |    | ×  |    | ×  |



# Key Options

## Range of key heads

Mul-T-Lock® offers a range of top quality key blanks for its various cylinder platforms. Keys are made of high-grade metals, for long-lasting durability. Key may include the following features:

- ▶ Reversible nickel silver design
- ▶ Colored insert for easy identification
- ▶ Option for personalized message embossed on metal or plastic key heads
- ▶ Option for plastic key heads with personalized inserts
- ▶ Key duplication card



Interactive®+ – with plastic key head



Interactive®+ – all nickel silver



Interactive®+ CLIQ®



Interactive® – with plastic key head



Interactive® – all nickel silver



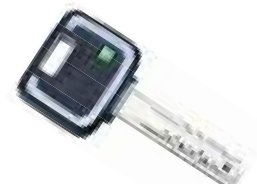
MT5® CLIQ®



Integrator®



Classic – all nickel silver



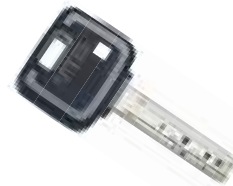
M10



Classic – with plastic key head



7X7®



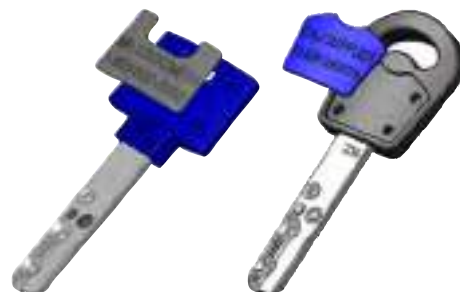
MT5®

# Key Options

## Personalized key heads

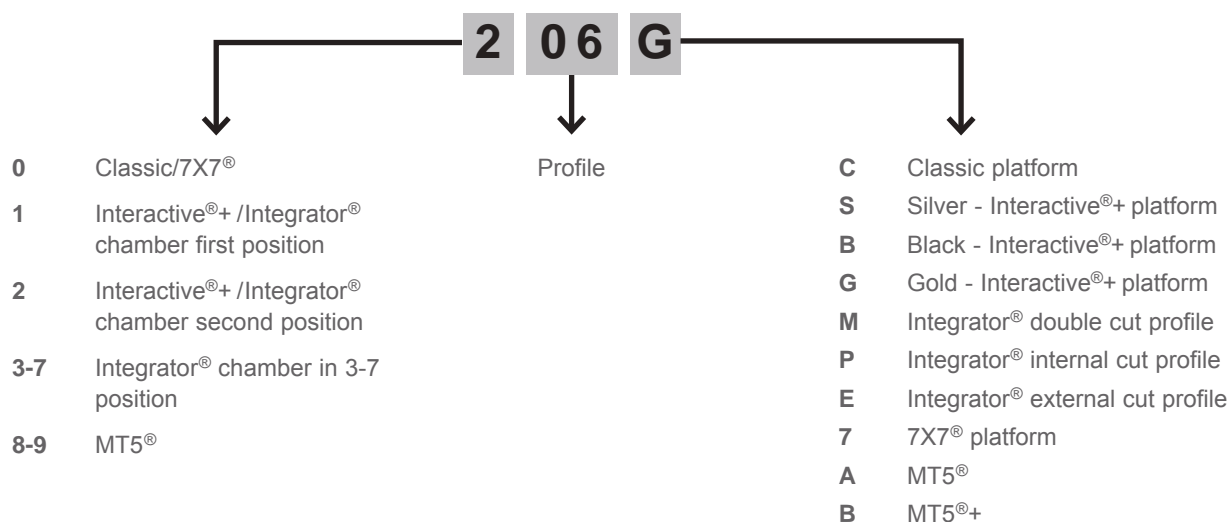
Mul-T-Lock® offers costumers (locksmiths, OEMs etc.) three ways to personalize Mul-T-Lock's key blanks, thereby advertising their business on the keys they sell:

- ▶ A new cost-effective concept - personal info (name, logo, phone, etc.) embossed on plastic inserts, available in two different shapes that fit into special insert-compatible plastic key heads
- ▶ Personal info embossed on plastic key heads
- ▶ Personal info embossed on key heads of metal key blanks



## Ordering key blanks

To order the key blanks of your choice, you must send in the appropriate key blank identification code, consisting of 4 digits/characters: 206S, 006C, 005C, etc.



To order your personalized inserts or key blanks with personalized key heads (plastic or metal), please email the info to be advertised on the key head to Mul-T-Lock® Headquarters.

The personalized key head will be designed, and once you have approved the graphics and placed your order, the personalized key blanks / inserts will be produced and delivered.

Please note:

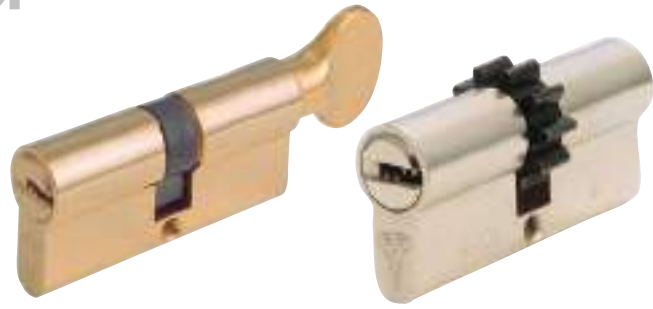
Minimum quantity per order is:

- ▶ Plastic inserts – 3,000 units
- ▶ Key blanks with personalized plastic key heads – 2,500 units
- ▶ Personalized all-metal keys blanks - 1,000 units



[www.mul-t-lock.com](http://www.mul-t-lock.com)

# Euro Profile Cylinder



## Application

Compatible with locks and lock cases using Euro profile cylinder.

## Operation

360° rotation by operating key or thumbturn. Standard double cylinder, full key insertion disengages other side.

## Materials

Body and plug: high quality brass  
Cam and cogwheel: steel  
Pins: nickel silver and stainless steel

## Standard finishes

Nickel satin, brass, shiny brass

## Special finishes

Nickel chrome, antique brass

## Cylinder mechanism

Mul-T-Lock's unique, high precision pin tumbler system.

## Keys

Reversible nickel silver key with plastic key head and colored insert. Also available in all nickel silver.

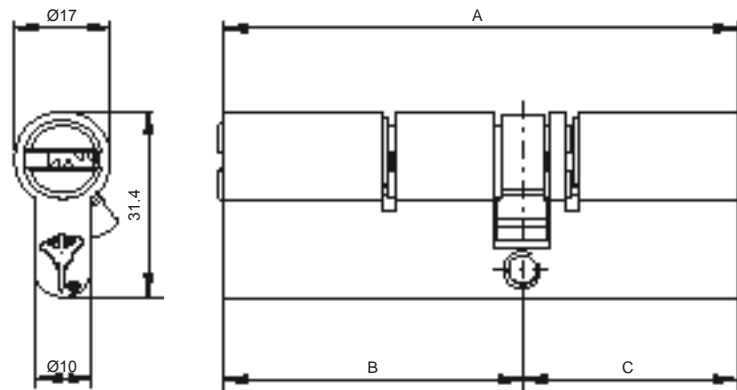
## Cylinder options

- Classic, Interactive<sup>®</sup>+, MT5<sup>®</sup> platforms
- '3 IN 1' (changeable combination)
- Keyed different, keyed alike
- Master keyed
- Variety of thumbturns, cams and cogwheels
- Emergency cylinder with both sides permanently operational

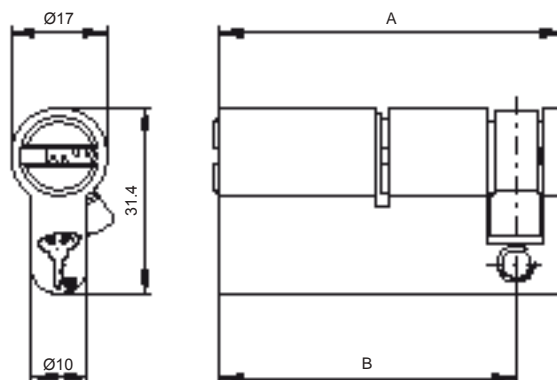
## Standards

ISI 950, EN1303

## Double cylinder



## Single cylinder





# Euro Profile Cylinder

## Lengths Available (mm)

### Double cylinder

| A  | B    | C    |
|----|------|------|
| 62 | 31   | 31   |
| 66 | 31   | 35   |
| 66 | 33   | 33   |
| 70 | 35   | 35   |
| 71 | 31   | 40   |
| 71 | 33   | 38   |
| 75 | 40   | 35   |
| 76 | 31   | 45   |
| 76 | 33   | 43   |
| 76 | 38   | 38   |
| 78 | 33   | 45   |
| 80 | 40   | 40   |
| 80 | 45   | 35   |
| 81 | 31   | 50   |
| 81 | 33   | 48   |
| 81 | 38   | 43   |
| 82 | 47.5 | 34.5 |
| 83 | 35   | 48   |
| 83 | 45   | 38   |
| 85 | 45   | 40   |
| 85 | 50   | 35   |
| 86 | 31   | 55   |
| 86 | 33   | 53   |
| 86 | 38   | 48   |
| 86 | 43   | 43   |
| 88 | 40   | 48   |
| 88 | 50   | 38   |
| 90 | 45   | 45   |
| 90 | 50   | 40   |
| 90 | 55   | 35   |
| 91 | 31   | 60   |
| 91 | 33   | 58   |

| A   | B  | C  |
|-----|----|----|
| 91  | 38 | 53 |
| 91  | 43 | 48 |
| 93  | 40 | 53 |
| 93  | 48 | 45 |
| 95  | 50 | 45 |
| 95  | 55 | 40 |
| 95  | 60 | 35 |
| 96  | 31 | 65 |
| 96  | 33 | 63 |
| 96  | 38 | 58 |
| 96  | 43 | 53 |
| 96  | 48 | 48 |
| 100 | 50 | 50 |
| 100 | 55 | 45 |
| 100 | 60 | 40 |
| 100 | 65 | 35 |
| 101 | 31 | 70 |
| 101 | 38 | 63 |
| 101 | 43 | 58 |
| 101 | 48 | 53 |
| 101 | 68 | 33 |
| 105 | 55 | 50 |
| 105 | 60 | 45 |
| 105 | 65 | 40 |
| 105 | 70 | 35 |
| 106 | 53 | 53 |
| 110 | 55 | 55 |
| 110 | 60 | 50 |
| 110 | 65 | 45 |
| 110 | 70 | 40 |
| 110 | 75 | 35 |
| 111 | 48 | 63 |

| A   | B   | C   |
|-----|-----|-----|
| 115 | 60  | 55  |
| 115 | 65  | 50  |
| 115 | 70  | 45  |
| 115 | 75  | 40  |
| 115 | 80  | 35  |
| 116 | 33  | 83  |
| 118 | 33  | 85  |
| 120 | 60  | 60  |
| 120 | 65  | 55  |
| 120 | 70  | 50  |
| 120 | 75  | 45  |
| 120 | 80  | 40  |
| 125 | 50  | 75  |
| 125 | 65  | 60  |
| 125 | 70  | 55  |
| 125 | 80  | 45  |
| 130 | 50  | 80  |
| 130 | 55  | 75  |
| 130 | 65  | 65  |
| 130 | 70  | 60  |
| 130 | 95  | 35  |
| 135 | 55  | 80  |
| 135 | 60  | 75  |
| 135 | 65  | 70  |
| 135 | 100 | 35  |
| 136 | 68  | 68  |
| 140 | 40  | 100 |
| 140 | 60  | 80  |
| 140 | 65  | 75  |
| 140 | 70  | 70  |

### Single cylinder

| A     | B   |
|-------|-----|
| 40.5  | 31  |
| 42.5  | 33  |
| 44.5  | 35  |
| 47.5  | 38  |
| 49.5  | 40  |
| 52.5  | 43  |
| 54.5  | 45  |
| 57.5  | 48  |
| 59.5  | 50  |
| 64.5  | 55  |
| 69.5  | 60  |
| 74.5  | 65  |
| 79.5  | 70  |
| 84.5  | 75  |
| 89.5  | 80  |
| 99.5  | 90  |
| 134.5 | 125 |

**Note:** For lengths from 40 mm up use standard plugs and additional spacers in order to get the required length. Other lengths are available by special order.

Not all lengths are available in all platforms.

# U.K. Oval Profile Cylinder



## Application

Compatible with lock and lock cases using UK oval profile cylinder.

## Operation

360° rotation by operating key or thumbturn. Standard double cylinder, full key insertion disengages other side.

## Materials

Body and plug: high quality brass  
Cam and cogwheel: steel  
Pins: nickel silver and stainless steel

## Standard finishes

Nickel satin, brass

## Cylinder mechanism

Mul-T-Lock's unique, high precision pin tumbler system.

## Keys

Reversible nickel silver key with plastic key head and colored insert. Also available in all nickel silver.

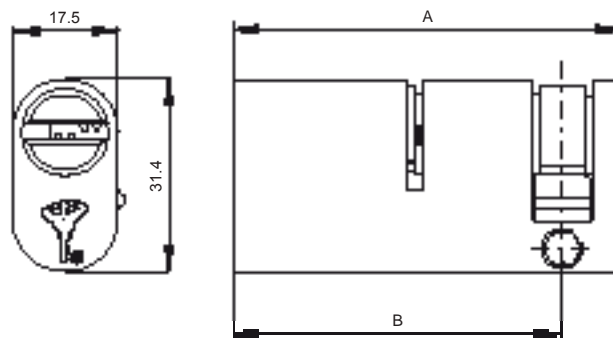
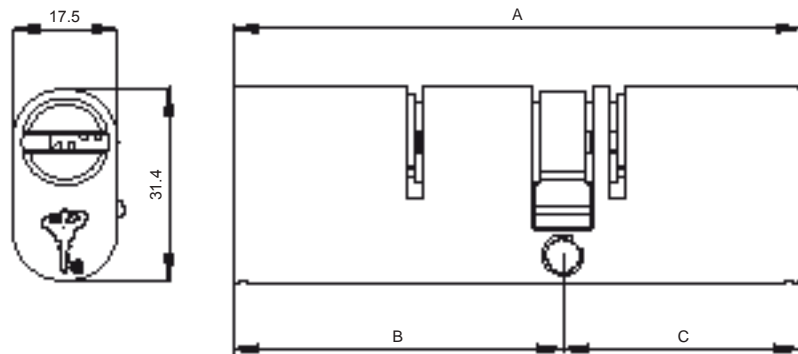
## Cylinder options

- Classic, Interactive<sup>®</sup>+, MT5<sup>®</sup> platforms
- '3 IN 1' (changeable combination)
- Keyed different, keyed alike
- Master keyed
- Variety of thumbturns, cams and cogwheels
- Emergency cylinder with both sides permanently operational

## Standards

Applicable to CEN

## Double cylinder



# U.K. Oval Profile Cylinder

## Lengths Available (mm)

### Double cylinder

| A  | B  | C  |
|----|----|----|
| 62 | 31 | 31 |
| 66 | 33 | 33 |
| 70 | 35 | 35 |
| 71 | 33 | 38 |
| 75 | 35 | 40 |
| 76 | 33 | 43 |
| 80 | 35 | 45 |
| 80 | 40 | 40 |
| 85 | 35 | 45 |
| 85 | 40 | 40 |
| 90 | 35 | 55 |
| 90 | 40 | 50 |
| 90 | 45 | 45 |
| 95 | 35 | 60 |
| 95 | 40 | 55 |

| A   | B  | C  |
|-----|----|----|
| 95  | 45 | 50 |
| 100 | 35 | 65 |
| 100 | 40 | 60 |
| 100 | 45 | 55 |
| 100 | 50 | 50 |
| 105 | 35 | 70 |
| 105 | 40 | 65 |
| 105 | 45 | 60 |
| 105 | 50 | 55 |
| 110 | 40 | 70 |
| 110 | 45 | 65 |
| 110 | 50 | 60 |
| 115 | 45 | 70 |
| 115 | 50 | 65 |
| 120 | 50 | 70 |

### Single cylinder

| A    | B  |
|------|----|
| 42.5 | 33 |
| 44.5 | 35 |
| 49.5 | 40 |
| 54.5 | 45 |
| 59.5 | 50 |
| 64.5 | 55 |
| 69.5 | 60 |
| 74.5 | 65 |
| 79.5 | 70 |

**Note:** For lengths from 40 mm up use standard plugs and additional spacers in order to get the required length. Other lengths are available by special order.  
Not all lengths are available in all platforms.

# Swiss Profile Cylinder



## Application

Compatible with locks and lock cases using Swiss profile cylinder.

## Operation

360° rotation by operating key or thumbturn. Standard double cylinder, full key insertion disengages other side.

## Materials

Body and plug: high quality brass  
Cam and cogwheel: steel  
Pins: nickel silver and stainless steel

## Standard finishes

Nickel satin, brass

## Cylinder mechanism

Mul-T-Lock's unique, high precision pin tumbler system.

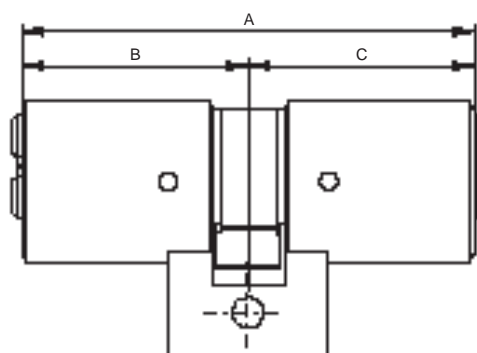
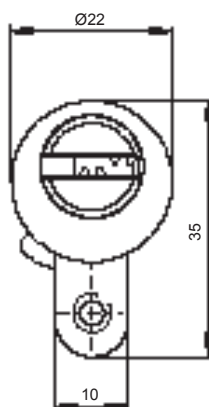
## Keys

Reversible nickel silver key with plastic key head and colored insert. Also available in all nickel silver.

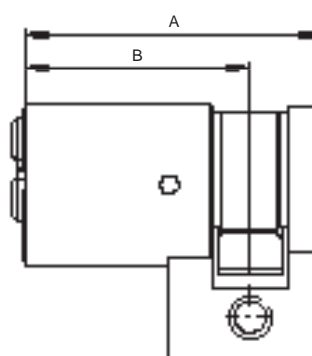
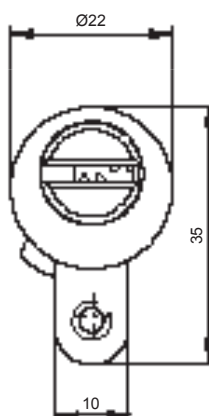
## Cylinder options

- Classic, Interactive<sup>®</sup>+, MT5<sup>®</sup> platforms
- '3 IN 1' (changeable combination)
- Keyed different, keyed alike
- Master keyed
- Variety of thumbturns, cams and cogwheels
- Emergency cylinder with both sides permanently operational

## Double cylinder



## Si



# Mortise Cylinder



## Application

Compatible with residential and commercial door locksets. Interfaces with locksets of major brands (see available cams).

Can retrofit a 'Jumbo' cylinder with an adaptor ring.

## Operation

360° rotation by operating key or thumbturn.

## Materials

Body and plug: high quality brass  
Cam: steel  
Pins: nickel silver and stainless steel

## Standard finish

Nickel chrome matt, nickel chrome, shiny brass

## Special finishes

Antique bronze, black, antique brass, PVD

## Cylinder mechanism

Mul-T-Lock's unique, high precision pin tumbler system.

## Keys

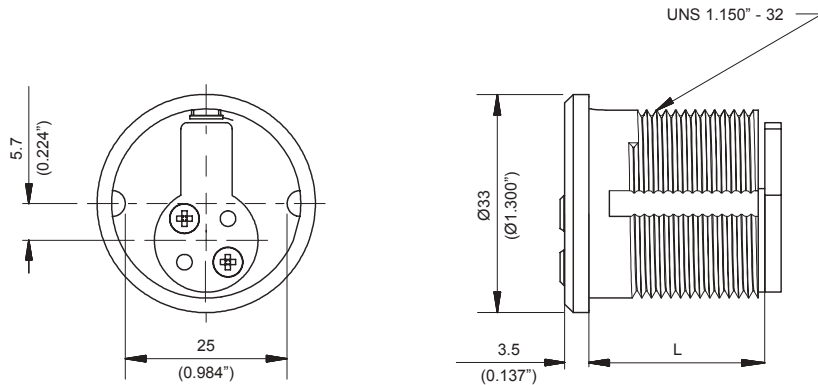
Reversible nickel silver key with plastic key head and colored insert. Also available in all nickel silver.

## Cylinder options

- Classic, Interactive<sup>®</sup>+, MT5<sup>®</sup> platforms
- '3 IN 1' (changeable combination)
- Keyed different, keyed alike
- Master keyed
- Variety of cams

## Standards

ISI950

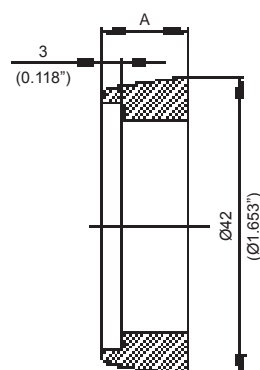


## Length available (mm)

| Cylinder                                    | L    |       |
|---------------------------------------------|------|-------|
|                                             | mm   | Inch  |
| 1 <sup>\"</sup>                             | 23.1 | 0.909 |
| 1 <sup>1</sup> / <sub>8</sub> <sup>\"</sup> | 27.1 | 1.067 |
| 1 <sup>1</sup> / <sub>4</sub> <sup>\"</sup> | 30.3 | 1.193 |
| 1 <sup>3</sup> / <sub>8</sub> <sup>\"</sup> | 33.5 | 1.318 |
| 1 <sup>1</sup> / <sub>2</sub> <sup>\"</sup> | 36.7 | 1.445 |
| 1 <sup>3</sup> / <sub>4</sub> <sup>\"</sup> | 43.1 | 1.697 |
| 2 <sup>\"</sup>                             | 49.5 | 1.949 |

(\* ) Product with 4 chambers, not UL Listed.

## Spacer ring



| A    |        |
|------|--------|
| mm   | Inch   |
| 5.7* | 0.224* |
| 8.9  | 0.350  |
| 12.2 | 0.480  |
| 15.5 | 0.610  |

\*Supplied as standard



# Mortise Cylinder Cams

## Options Available

|                                         |                                            |                                             |                                                             |                                       |
|-----------------------------------------|--------------------------------------------|---------------------------------------------|-------------------------------------------------------------|---------------------------------------|
| <p>Adams Rite type<br/>P/N 85000020</p> | <p>Yale standard type<br/>P/N 85000014</p> | <p>Russwin type<br/>P/N 85000019</p>        | <p>Falcon type<br/>P/N 85000041</p>                         | <p>Lockwood type<br/>P/N 85000054</p> |
| <p>Segal type<br/>P/N 86001008</p>      | <p>Schlage type<br/>P/N 85000057</p>       | <p>Sargent offset type<br/>P/N 85000082</p> | <p>Jumbo type P/N 85000112<br/>(Required ring 85000157)</p> | <p>Baldwin type<br/>P/N 85000117</p>  |
| <p>Yale type<br/>P/N 85000165</p>       | <p>Vingcard type<br/>P/N 51075696</p>      | <p>Yale type A-04<br/>P/N 85000185</p>      | <p>Yale type 2160<br/>P/N 85000186</p>                      |                                       |

Cylinders

# Rim Cylinder



## Application

Compatible with residential and commercial surface mounted door locksets. Interfaces with locksets of major brands. Suits wide range of lock mechanisms.

## Operation

360° rotation by operating key.

## Materials

Body and plug: high quality brass  
Tail: steel  
Pins: nickel silver and stainless steel

## Standard finish

Nickel chrome matt, nickel chrome, shiny brass

## Special finishes

Antique bronze, black, antique brass, PVD

## Cylinder mechanism

Mul-T-Lock's unique, high precision pin tumbler system.

## Keys

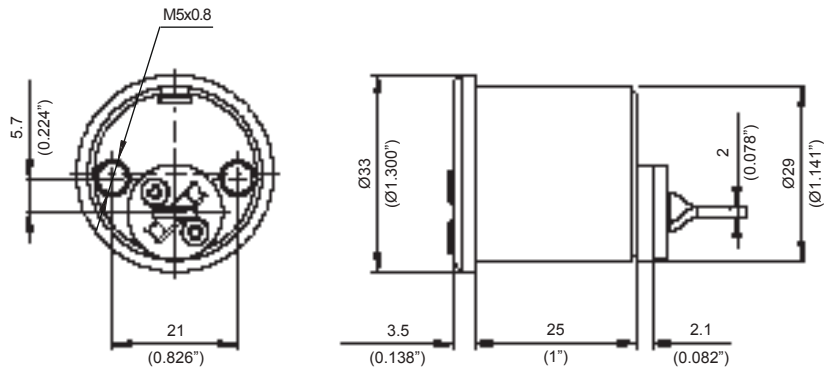
Reversible nickel silver key with plastic key head and colored insert. Also available in all nickel silver.

## Cylinder options

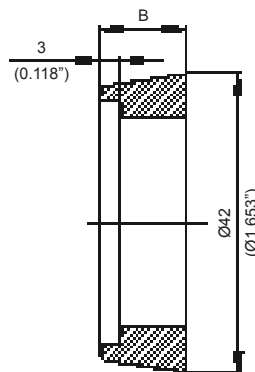
- Classic, Interactive<sup>®</sup>+, MT5<sup>®</sup> platforms
- '3 IN 1' (changeable combination)
- Keyed different, keyed alike
- Master keyed
- Variety of tails

## Standards

ISI950



## Spacer ring

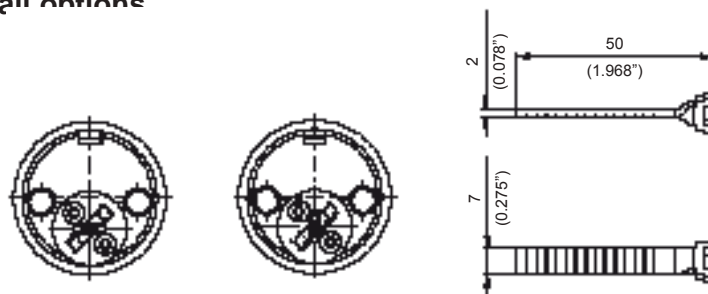


| B           |        |
|-------------|--------|
| mm          | Inch   |
| Flat ring** |        |
| 5.7*        | 0.224* |
| 8.9         | 0.350  |
| 12.2        | 0.480  |
| 15.5        | 0.610  |

\*Supplied as standard

\*\*For rim application

## Tail options



# Euro Profile Modular Cylinder



With the Mul-T-Lock® Modular cylinder kit, you can build cylinders of any desired length, from 31 to 80 mm.

Based on “single cylinder” lengths of 31, 33 and 35 mm, the kit contains a vast assortment of parts for building cylinder sides of any length, and creating cylinders of unusual sizes such as 31X31, 33X78, or 35X40, etc.

Assembly is as easy as 1,2,3. Just pick out the parts required for the desired length, according to the attached Reference Table, and assemble them together.

The cylinders are built on a central two-sided bar, with each side identified by a number indicating the length group it belongs to.

Bars for double sided cylinders are marked “X,X” (2 digits), while bars for single sided cylinders are marked “X” (one digit)

## Example

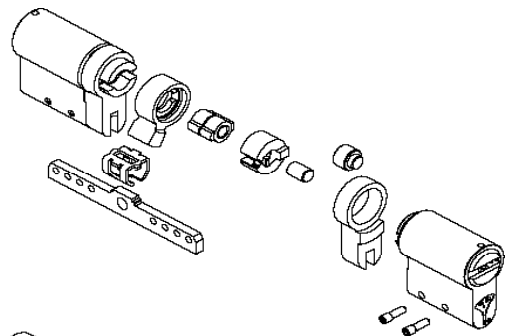
The following parts are required for building a 31X46 mm double cylinder:

- For the 31 mm side: 1 bar type 1, 1 body type 31, plug 31, and nothing else
- For the 46 mm side: 1 bar type 2, 1 body type 31, plug 31, 15 mm body spacer, 15 mm plug spacer and 15 mm plug adapter
- 1 bar adapter
- 4 threaded pins

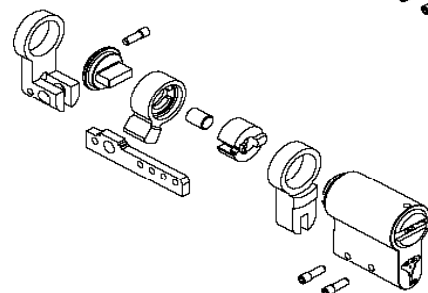
**Note:** Cylinder bodies and plugs should be ordered separately according to the profile (keyway) you are using, and based on the Reference Table.

To restock the kit, use special catalogue numbers.

## Double cylinder



## Single cylinder



[www.mul-t-lock.com](http://www.mul-t-lock.com)



# Euro Profile Modular Cylinder

## Catalogue Part Numbers for Restocking

|    | Catalogue P/N | Description          |    | Catalogue P/N | Description           |
|----|---------------|----------------------|----|---------------|-----------------------|
| 1  | 84400001      | Bar 1                | 32 | 88000061      | Plug spacer Ø5x32 mm  |
| 2  | 84400002      | Bar 2                | 33 | 88000062      | Plug spacer Ø5x35 mm  |
| 3  | 84400003      | Bar 3                | 34 | 88000063      | Plug spacer Ø5x37 mm  |
| 4  | 84400004      | Bar 4                | 35 | 88000064      | Plug spacer Ø5x40 mm  |
| 5  | 84400005      | Bar 5                | 36 | 88000065      | Plug spacer Ø5x42 mm  |
| 6  | 84400008      | Threaded pin         | 37 | 88000066      | Plug spacer Ø5x45 mm  |
| 7  | 84400010      | Bar adapter          | 38 | 88000067      | Plug spacer Ø5x47 mm  |
| 8  | 84400011      | Bar 1,1              | 39 | 81200100      | Cam 30°               |
| 9  | 84400012      | Bar 1,2              | 40 | 80000019      | Coupling              |
| 10 | 84400013      | Bar 1,3              | 41 | 84400130      | Body spacer 5 mm      |
| 11 | 84400014      | Bar 1,4              | 42 | 84400131      | Body spacer 10 mm     |
| 12 | 84400015      | Bar 1,5              | 43 | 84400132      | Body spacer 15 mm     |
| 13 | 84400019      | Bar 2,2              | 44 | 84400133      | Body spacer 20 mm     |
| 14 | 84400020      | Bar 2,3              | 45 | 84400134      | Body spacer 25 mm     |
| 15 | 84400021      | Bar 2,4              | 46 | 84400135      | Body spacer 30 mm     |
| 16 | 84400022      | Bar 2,5              | 47 | 84400136      | Body spacer 35 mm     |
| 17 | 84400023      | Bar 3,3              | 48 | 84400137      | Body spacer 40 mm     |
| 18 | 84400024      | Bar 3,4              | 49 | 84400138      | Body spacer 45 mm     |
| 19 | 84400025      | Bar 4,4              | 50 | 80100613      | Plug adapter Ø5x10 mm |
| 20 | 80000322      | Plug spacer Ø7x2 mm  | 51 | 80100615      | Plug adapter Ø5x15 mm |
| 21 | 88000018      | Plug spacer Ø7x5 mm  | 52 | 80100617      | Plug adapter Ø5x20 mm |
| 22 | 88000025      | Plug spacer Ø7x7 mm  | 53 | 80002027      | Plug adapter Ø5x25 mm |
| 23 | 88000052      | Plug spacer Ø5x10 mm | 54 | 80002029      | Plug adapter Ø5x30 mm |
| 24 | 88000053      | Plug spacer Ø5x12 mm | 55 | 80002032      | Plug adapter Ø5x35 mm |
| 25 | 88000054      | Plug spacer Ø5x15 mm | 56 | 80002034      | Plug adapter Ø5x40 mm |
| 26 | 88000055      | Plug spacer Ø5x17 mm | 57 | 80002036      | Plug adapter Ø5x45 mm |
| 27 | 88000056      | Plug spacer Ø5x20 mm | 58 | 84400057      | Allen key 1.5 mm      |
| 28 | 88000057      | Plug spacer Ø5x22 mm | 59 | 82600260      | Emergency cam         |
| 29 | 88000058      | Plug spacer Ø5x25 mm | 60 | 87602150      | STD cover 5 pin       |
| 30 | 88000059      | Plug spacer Ø5x27 mm | 61 | 84600053      | Single CYL. coupling  |
| 31 | 88000060      | Plug spacer Ø5x30 mm | 62 | 51207080      | Single CYL. adapter   |

# Special Cylinder Applications

## 3 IN 1 cylinder

The '3 IN 1' cylinder has been designed by Mul-T-Lock® to allow users to easily change their key combinations through a simple and speedy process: The user inserts and operates the next key in a sequence of three keys, and the introduction of each new key invalidates the previous key combination.

When all three combinations have been used, the cylinder may be re-keyed by an authorised Mul-T-Lock® locksmith.

The '3 IN 1' cylinder may be ordered with three separate duplicating cards for the green, yellow and red keys.



## Flex Control

### Simple. Convenient. Flexible

Mul-T-Lock's new Flex Control cylinder, operating from the High Security telescopic pin Interactive+ cylinder platform, offers a unique ability to control access in any business, retail or residential environment.

Mul-T-Lock's Flex Control cylinder offers:

Access restriction when and to whom you want

Flexible for use with all workers, whether domestic staff, temporary workers or full time employees for home or business owner

Simple to install and maintain – no wiring. Batteries or software. As simple as installing any regular cylinder

Additional keys can be supplied upon presentation of a unique registration card at an authorized Mul-T-Lock® dealer.

Feature and benefits at glance:

Choice - decide when and for how long blue key holder can gain access to the premises.

Efficient security: no need to replace the cylinder or collect keys to restrict access.

Cost effective – Replaces the need for additional lock that are often install to restrict access.

Flexible format – Suitable for cylinders of any length.

Patent Protection – Utilising the Interactive+ platform offering a high level of protection and security for any property.

With every Flex Control cylinder, you will receive a set of four color-coded keys:

White key – neutral key, for you and anyone you want to have full-time access, such as you and your family members or key employees

Blue key - for those you want to have limited access and at the times you decide

Red and Green keys - allow you to control the blue key holder's access by rotating the cylinder 90° clock wise or counter clock wise with either the red or green key

Supplied with a single magnetic strip card, printed with all key codes

The new Flex Control Cylinder can provide reassurance and controlled access to any premises in a simple 90° turn of the cylinder. By using the patent protected control keys provided, Mul-T-Lock® present a simple, cost effective way to control access rights for a business or home using trusted and proven mechanical technology.



## Construction master cylinder

Mul-T-Lock® has developed a new-concept High Security construction master cylinder, that provides construction contractors with maximum convenience, while ensuring peace of mind for new property owners.

Contractors using the new product enjoy control of all apartments on the construction site - or even on several sites - with one master key.

Each cylinder in the system also has an owner key, provided to the owner when he/she moves into the apartment.

At this time a technician turns a special change key in the cylinder, disabling the contractor's master key. This procedure is not reversible.

This creative new solution is fully contained in the cylinder itself and requires no supplementary devices.



[www.mul-t-lock.com](http://www.mul-t-lock.com)

# Special Cylinder Features

## Reinforced cylinder

Enhanced resistance to breaking attempts.



## Emergency cylinder

Operated with keys inserted and rotated on opposite sides, enabling both sides to be permanently operational.



## Break Secure cylinder

Patented Euro profile cylinder, specially developed by Mul-T-Lock® to meet a specific need: enhancing resistance to manipulation attacks. Unlike ordinary cylinders that tend to break in the middle when manipulated, allowing the door to be opened by attacker Break Secure snaps at the front. This keeps the door locked and the burglars outside, and permits the owners to open the cylinder with their original Mul-T-Lock® keys when they return.



## Anti-ligature thumbturn with external override

Innovative thumbturn with emergency override mechanism, specially designed to address the risk of self-harm within psychiatric and probationary type accommodation facilities.

Allows occupant privacy, while enabling immediate access for medical or supervisory staff if necessary.



# Cylinder Accessories

## Thumbturn range



Ellipse thumbturn



Oval thumbturn



Round thumbturn

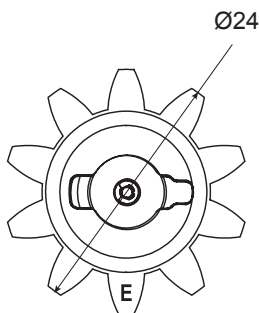
## Anti-ligature thumbturn



## Standard thumbturn

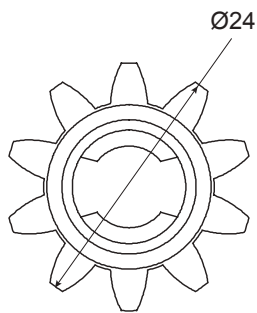


## Cogwheels (diameter in mm)



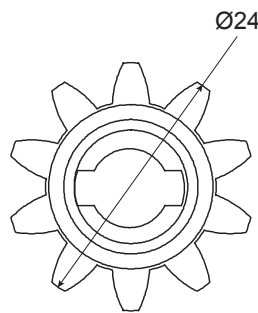
Z=10  
m=2

P/N 82600280



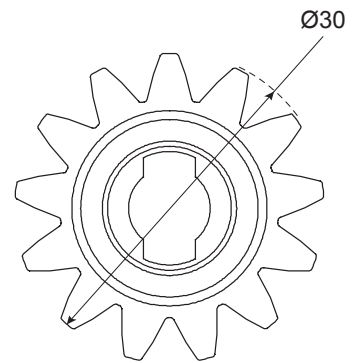
Z=10  
m=2

P/N 80000461



Z=10  
m=2

P/N 80001081



Z=13  
m=2

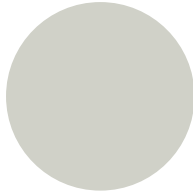
P/N 89100011



[www.mul-t-lock.com](http://www.mul-t-lock.com)

# Cylinder Finishes

## Standard finishes



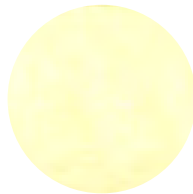
Nickel Satin (NST)



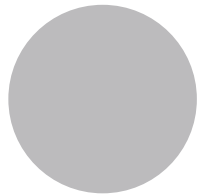
Electroplated Brass (EB/CB)  
US4  
BHMA606



Nickel Chrome Matt (NCM)  
US26D  
BHMA626

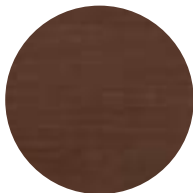


Shiny Brass (SB)  
US3  
BHMA605



Nickel Chrome (NC)  
US26  
BHMA625

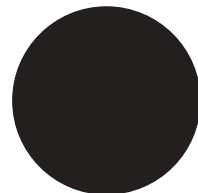
## Special finishes



Dark (10B)  
US10B  
BHMA613



Antique Brass (ABP)  
US5  
BHMA609



Black  
US19  
BHMA631



SBH



PVD



Antique Bronze (ABZ)

### Notes:

- The colors above are for reference only and can vary from the original.
- Certain finishes are available on particular products only.
- Delivery times may vary according to type of finish.

# Exit Device

ASSA ABLOY

The global leader in  
door opening solutions







# 7000 Series

Architectural Exit Devices





## introduction

Yale® 7000 series exit devices deliver an unparalleled combination of durability, breadth of line, innovation and aesthetics.

As the most recognized name in the door hardware industry, *Yale* offers a proven selection of hard-working exit devices. The simple, clean lines of our wide and narrow stile devices are visually appealing and bring a gracious totality to the Yale line of locks and hardware.

To meet electronic access control needs, *Yale* 7000 series exit devices come with a full array of electromechanical options and accessories. The 7000 series can be effortlessly integrated into existing security or fire alarm systems to ensure every opening is safeguarded.

Today's architecture stresses the safety and security of a building's contents, the most important of these being people. Reducing the consequences of potential risks is the goal of any designer. By mounting panic and fire exit devices, vandals are deterred, but swift, unobstructed egress is permitted. *Yale* 7000 series exit devices meet life safety codes and fire safety requirements, allowing for local ordinances to be met and allowing peace of mind for the people inside.

### 7000 series features

#### Durability

- Steel chassis and heavy-duty components for superior strength, robustness and lower maintenance

#### Breadth and Innovation

- Full range of mechanical and electromechanical options for security and life safety applications
- Patented security features including SquareBolt® latchbolts (Pat. no. 5,605,362) and delayed egress exit devices (Pat. no. 7,469,942).

#### Aesthetics

- Clean, modern, sleek design
- High-quality attractive architectural finishes deliver consistency & durability

### 7100(F) series

A conventional exit device for single swing doors or pairs of doors of metal, wood or composite construction.

### 7200 series

A narrow stile exit device compatible with the aesthetics and function requirements of contemporary doors of aluminum or metal construction.

### 7200M(F) series

A narrow appearance exit device designed for wide or flush stile doors of metal, wood or composite construction.

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## finishes

| ANSI/<br>BHMA<br>Code | Finish Description                                    | ANSI/<br>BHMA<br>Code | Finish Description                                                                                                  |
|-----------------------|-------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| 605                   | Bright Brass, Clear Coated                            | 619                   | Satin Nickel Plated, Clear Coated                                                                                   |
| 606                   | Satin Brass, Clear Coated                             | 620                   | Satin Nickel Plated, Blackened, Satin Relieved, Clear Coated                                                        |
| 609                   | Satin Brass, Blackened, Satin Relieved, Clear Coated  | 625                   | Bright Chrome Plated (540F trim only)                                                                               |
| 611                   | Bright Bronze, Clear Coated                           | 626                   | Satin Chrome Plated (trim only)  |
| 612                   | Satin Bronze, Clear Coated                            | 629                   | Bright Stainless Steel                                                                                              |
| 613                   | Dark Oxidized Satin Bronze, Oil Rubbed <sup>1</sup>   | 630                   | Satin Stainless Steel            |
| 613E                  | Dark Oxidized Satin Bronze - equivalent               | 693                   | Black Painted                                                                                                       |
| 616                   | Satin Bronze, Blackened, Satin Relieved, Clear Coated | 722                   | Black Oxidized Bronze, Oil Rubbed <sup>2</sup>                                                                      |

| Finishes For Touchbar Covers Only |                                |
|-----------------------------------|--------------------------------|
| BN <sup>3</sup>                   | Semi-gloss black fused polymer |
| LUM                               | Lumi-Lite® Photoluminescence   |
| SS                                | Stainless Steel                |

1. New May1, 2010
2. Formerly 613 prior to May 1, 2010
3. Standard for device accent parts and strikes

Finish available with MicroShield® antimicrobial coating, additional finishes by special application. Consult factory for availability.





## features

### squarebolt® exit device

A revolutionary security and safety exit device from Yale®, the *SquareBolt* patented design (Pat. no. 5,605,362) presents an improved physical barrier over standard rim latchbolts.



Available in wide stile, narrow stile, and narrow appearance designs, the *SquareBolt* exit device locks into place and stays there. Credit cards, crowbars, door rattling and shaking are resisted, significantly reducing the threat of unauthorized entry.

### electrified exit devices

The *Yale* 7000 series exit device offers a complete range of electrical options:

- Latch Pullback
- Electric Dogging
- Mortise Device Trim Control
- Touchbar Monitor or Signaling
- Outside Trim Monitor or Signaling
- Latchbolt Position Monitor or Signaling
- Delayed Egress (Pat. no 7,469,942)
- Electric Trim Control
- Exit Alarm

Continuity in appearance, security and functions with the 7000 Series mechanical exit devices is maintained.

7000 series electrified exit devices may be integrated into the security and alarm monitoring systems of most buildings.

### windstorm

Certified (refer to local Hurricane codes). Specify suffix "WS" to 7150(F), 7170(F) or 7250M(F) devices.



Hurricane

### warranty

- Mechanical exit devices and heavy-duty trim carry a five-year limited warranty.
- Utility-duty trim carries a one-year limited warranty.
- Electrical options and components carry a two-year limited warranty.

### microshield®

7000 series exit devices and trim are available with *MicroShield*® antimicrobial coating. *MicroShield* is a revolutionary hardware finish coating, using a silver ion based technology, which inhibits the growth of bacteria, algae, yeast, fungus, mold and mildew. *MicroShield* is non-toxic and lasts for the lifetime of the finish to which it is applied. To order, suffix option code "YMS".



Note: *MicroShield* coating may vary finish color from architectural standards. *MicroShield* is not intended as a substitute for traditional infection control programs such as hand hygiene or use of disinfectants. Coated products must still be cleaned to insure the surfaces will be free of destructive microbes. Yale makes no representations or warranties, express or implied, as to the efficacy of the *MicroShield* antimicrobial. A copy of the *MicroShield* warranty is available upon request.

### lumi-lite®

*Lumi-lite* uses photoluminescence technology to provide visibility of exit doors in low-light, no light or smoky conditions. *Lumi-lite* absorbs ambient lighting which is then emitted when the light source is diminished or eliminated. This patent pending feature is provided as an option for the touchpad cover for the 7000 series exit devices. To order with device, suffix option code "LUM".

The touchpad cover can also be ordered separately and easily retrofits to existing 7000 series exit devices in the field. See page 48 for how to order separately.

Touchpad cover comes standard with the word "EXIT" centered on the top half in approximately 1" high lettering.



### performance standards

UL - cUL Panic Exit Listing: Doors up to 4'0" x 10'0"\* (1.22m x 3.05m), single swing or pairs.

UL - cUL Fire Exit Label: Doors up to 4'0" x 10'0" (1.22m x 2.44m), single swing or pairs.

\*UL does not set height limitations on panic devices.

| Listing Agency                  | Listing Number                                     |                   |                          |                   |
|---------------------------------|----------------------------------------------------|-------------------|--------------------------|-------------------|
|                                 | Panic Exit Devices                                 | Fire Exit Devices | Windstorm Rated Assembly | Latching Hardware |
| Underwriters Laboratories, Inc. | (FVSR)                                             | (GXHX)            | (ZHLA)                   | (ZHEM)            |
| California Fire Marshal         | 4140-0257: 111                                     | 3725-0257: 112    |                          |                   |
| New York City                   | MEA: 477-91-E<br>MEA: 333-05-M                     |                   |                          |                   |
| B.H.M.A. (ANSI A156.3)          | Directory of Certified Exit Devices                |                   |                          |                   |
| B.H.M.A. (ANSI A156.24)         | Directory of Certified Delayed Egress Exit Devices |                   |                          |                   |

Note: Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Yale Locks & Hardware makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

### free-wheeling lever trim

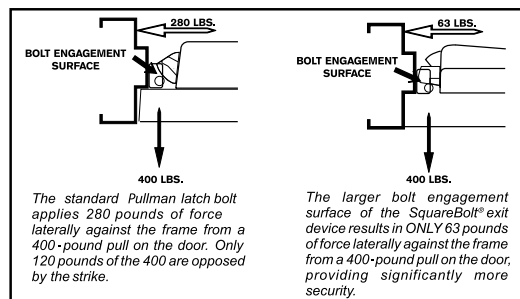
All *Yale* exit device trims (except mortise trim) feature the unique Free-Wheeling lever mechanism, similar to our 5400LN cylindrical lock. This Free-Wheeling trim features a clutch mechanism which allows the lever to float down 60 degrees when operated in the locked condition, greatly improving vandal resistance.



## SquareBolt®

7150(F)

Just as easy to open as traditional latchbolts, the SquareBolt® exit device's unique construction offers innovative protection. Its patented *SquareBolt* (Pat. no. 5,605,362) design presents an improved physical barrier over standard rim latchbolts. The *SquareBolt* exit device locks into place and stays there. Credit cards, crowbars, door rattling and shaking are resisted, significantly reducing the threat of unauthorized entry.




### certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware  
 GXHX/GXHX7 - Fire exit hardware (F)  
 (4' x 8' single, 8' x 8' pairs, 3 hr.)  
 ZHEM - Latching hardware  
 ZHLA - Windstorm rated assemblies

ANSI/BHMA Certified: A156.3 Type 1 or 28, Grade 1  
 U.S. Patent #: 5,605,362



### features

- Patented *SquareBolt* security deadbolt (Pat. no. 5,605,362) designed for maximum holding power
- Non-handed for easy installation
- Can be retrofitted onto existing 7100 series templated doors
- Fully adjustable surface-mounted 3/8" diameter roller strike complete with positive locking plate and shims
- Available in double cylinder function (handing must be specified)
- Available certified hurricane resistant  Hurricane (refer to local codes). Specify 7150(F)WS

### applications

- Single swing doors
- Pairs of doors with removable mullions
- Metal, wood or composite door materials

### specifications

|                      |                                                                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support. |
| Door Thickness:      | 1-3/4" (44mm) standard. Optional door thicknesses available to 4-1/2"; specify door thickness when ordering.                                                                             |
| Minimum Stile Width: | 4-1/2" (114mm)                                                                                                                                                                           |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                               |
| Deadbolt:            | Patented 1" (25mm) slide projection bolt with full 3/4" (19mm) projection                                                                                                                |
| Strike:              | 757F, 793 optional (double door application, panic only)                                                                                                                                 |
| Fasteners:           | Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.                                                         |
| Trims:               | 620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim, 121NL cylinder only. See pages 27-29.                                |
| Dogging:             | Hex key dogging supplied standard on panic devices                                                                                                                                       |
| Options:             | Cylinder dogging, shim kit #723, sex nuts and bolts, MicroShield®, Lumi-Lite®                                                                                                            |
| Warranty:            | 5-year limited                                                                                                                                                                           |

## rim

### 7100(F)

The 7100(F) is a rim exit device to be used with single doors or pairs of doors constructed of metal, wood or composite materials. Designed for application in high-use areas, the 7100(F) comes in a variety of finishes and can be combined with a variety of trims to match any desired style.



## certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware  
GXHX/GXHX7 - Fire exit hardware (F)  
(4' x 8' single, 8' x 8' pairs, 3 hr.)

ANSI/BHMA Certified: A156.3 Type 1, Grade 1



## features

- Designed for wide stile doors
- 3/4" throw deadlocking stainless steel pullman latchbolt
- Electroplated ferrous components provide corrosion resistance
- Available in double cylinder function (handing must be specified)

## applications

- Non-handed for easy installation
- Single swing doors
- Pairs of doors with removable mullions
- Metal, wood or composite door materials

## specifications

|                      |                                                                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support. |
| Door Thickness:      | 1-3/4" (44mm) standard. Optional door thicknesses available to 4-1/2"; specify door thickness when ordering.                                                                             |
| Minimum Stile Width: | 4-1/2" (114mm)                                                                                                                                                                           |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                               |
| Latchbolt:           | 3/4" (19mm) deadlocking stainless steel pullman-type                                                                                                                                     |
| Strike:              | 757F, 793 optional (double door application, panic only)                                                                                                                                 |
| Fasteners:           | Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.                                                         |
| Trims:               | 620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim, 121NL cylinder only. See pages 27-29.                                |
| Dogging:             | Hex key dogging supplied standard on panic devices                                                                                                                                       |
| Options:             | Cylinder dogging, shim kit #723, sex nuts and bolts, MicroShield®, Lumi-Lite®                                                                                                            |
| Warranty:            | 5-year limited                                                                                                                                                                           |

## surface vertical rod

### 7110(F)

The 7110(F) is a surface vertical rod exit device to be used on wide stile or flush doors up to 8' (fire) and 10' (panic) where two-point latching is desired.

#### certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware  
 GXHX/GXHX7 - Fire exit hardware (F)  
 (8' x 8' pairs, 3 hr.)

ANSI/BHMA Certified: A156.3 Type 2, Grade 1 

#### features

- Designed for wide stile and flush doors
- Handed. Specify hand (field reversible)
- Bottom deadbolt for secure latching
- Fully adjustable roller strike

#### applications

- Pairs of doors
- Double egress
- Metal, wood or composite door materials

#### specifications

|                      |                                                                                                                                                                                                                                     |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support.                                            |
| Door Opening Height: | Standard door height 7' (213cm), with the device centerline at 39-15/16" (101cm) from floor.<br>Optional heights up to 8' (fire) and 10' (panic) available by using rod extensions. For fire rated openings over 8', see 7170F SVR. |
| Door Thickness:      | 1-3/4" (44mm) standard. Optional door thicknesses available to 4-1/2"; specify door thickness when ordering.                                                                                                                        |
| Minimum Stile Width: | 4-1/2" (114mm)                                                                                                                                                                                                                      |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                                                                          |
| Latchbolt:           | Top: 3/4" (19mm) throw, pullman-type with automatic deadlatching<br>Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing                                                                                            |
| Vertical Rods:       | 1/2" O.D. tubular brass, bronze or stainless steel with rod guides                                                                                                                                                                  |
| Strike:              | Top: Roller type 791. Bottom: Flush mounted 790. 794 floor strike optional (threshold openings).                                                                                                                                    |
| Fasteners:           | Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.                                                                                                    |
| Trims:               | 620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim. See pages 27-29.                                                                                                |
| Dogging:             | Hex key dogging supplied standard on panic devices                                                                                                                                                                                  |
| Options:             | Cylinder dogging, shim kit #724, sex nuts and bolts, rod extensions, bottom pullman latch (panic only) MicroShield®, Lumi-Lite®                                                                                                     |
| Warranty:            | 5-year limited                                                                                                                                                                                                                      |



## concealed vertical rod

### 7120(F)

The 7120(F) is a concealed vertical rod exit device to be used on metal doors only up to 8' (fire) and 10' (panic) where two-point latching is desired.

#### certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware  
 GXHX/GXHX7 - Fire exit hardware (F)  
 (8' x 8' pairs, 3 hr.)

ANSI/BHMA Certified: A156.3 Type 8, Grade 1



#### features

- Designed for wide stile and flush doors
- Handed. Specify hand (field reversible)
- Bottom deadbolt for secure latching
- Fully adjustable roller strike

#### applications

- Pairs of doors
- Double egress
- Metal doors only

#### specifications

|                      |                                                                                                                                                                                                                                  |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support.                                         |
| Door Opening Height: | Standard door height adjustable to 8' (244cm), with the device centerline at 39-15/16" (101cm) from floor. Optional heights up to 10' (panic) available by using rod extensions. For fire rated openings over 8', see 7160F CVR. |
| Door Thickness:      | 1-3/4" (44mm) standard. 2" and 2-1/4" (51mm and 57mm) optional; specify when ordering.                                                                                                                                           |
| Minimum Stile Width: | 4-1/2" (114mm)                                                                                                                                                                                                                   |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                                                                       |
| Latchbolt:           | Top: 3/4" (19mm) throw, pullman-type with automatic deadlatching<br>Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing                                                                                         |
| Vertical Rods:       | 1/2" (13mm) O.D. telescoping tubular rods                                                                                                                                                                                        |
| Strike:              | Top: Roller type 791 (panic and fire). Bottom: Flush mounted 790 (panic and fire). 794 floor strike optional (threshold openings).                                                                                               |
| Fasteners:           | Machine screws standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.                                                                                                                         |
| Trims:               | 620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim. See pages 27-29.                                                                                             |
| Dogging:             | Hex key dogging supplied standard on panic devices                                                                                                                                                                               |
| Options:             | Cylinder dogging, shim kit #723, sex nuts and bolts, rod extensions, bottom pullman latch (panic only) MicroShield®, Lumi-Lite®                                                                                                  |
| Warranty:            | 5-year limited                                                                                                                                                                                                                   |



## mortise

### 7130(F)

The 7130(F) is an exit device integrated with the Yale® 8700 Series Mortise Lock for use on single doors or active leaf of a pair of doors where life safety and extra security are required. The 8700 Series Mortise Lock used is modified for use with exit devices only.

### certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware  
 GXHX/GXHX7 - Fire exit hardware (F)  
 (4' x 8' single, 8' x 8' pairs, 3 hr.)  
 (4' x 9' single, 8' x 9' pairs, 1-1/2 hr.)

ANSI/BHMA Certified: A156.3 Type 3, Grade 1



### features

- Designed for wide stile and flush doors
- Handed; specify hand
- Two-piece mechanical 3/4" throw deadlocking stainless steel latchbolt
- Easily disassembles for maintenance and service
- Available in double cylinder function

### applications

- Single swing doors
- Pairs of doors with vertical rod devices or automatic flush bolts
- Metal, wood or compatible door materials

### specifications

|                      |                                                                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support. |
| Door Thickness:      | 1-3/4" (44mm) standard. 2" and 2-1/4" (51mm and 57mm) optional; specify when ordering.                                                                                                   |
| Minimum Stile Width: | 4-1/2" (114mm)                                                                                                                                                                           |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                               |
| Latchbolt:           | Two piece mechanical 3/4" (19mm) deadlocking stainless steel with anti-friction insert and auxiliary deadlocking latch                                                                   |
| Strike:              | Curved lip, non-handed 798. Optional 712 for door pairs with astragals. Optional 718 open back strike.                                                                                   |
| Fasteners:           | Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.                                                         |
| Trims:               | 620F/650F series escutcheon trim, 630F/660F/670F series pull/thumbpiece trim, 684F offset pull trim. See pages 27-29.                                                                    |
| Dogging:             | Hex key dogging supplied standard on panic devices                                                                                                                                       |
| Options:             | Cylinder dogging, shim kit #723, sex nuts and bolts, MicroShield®, Lumi-Lite®                                                                                                            |
| Warranty:            | 5-year limited                                                                                                                                                                           |

#### Order as follows, according to function.


|                     |                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------|
| <b>7130-K5(F)</b>   | (01) Exit only.                                                                            |
|                     | (02) Entry by pull or rigid knob when dogged.                                              |
|                     | (03) Key retracts latchbolt.<br>Electrical control for 652F knob trim, w/wo key override.  |
| <b>7130-L5(F)</b>   | (02) Entry by rigid lever when dogged.                                                     |
|                     | (03) Key retracts latchbolt.<br>Electrical control for 652F lever trim, w/wo key override. |
|                     | <b>7130-T5(F)</b>                                                                          |
| <b>7130-K8(F)</b>   | (08) Entry by knob lock/unlocked by key or knob only (passage).                            |
| <b>7130-L8(F)</b>   | (08) Entry by lever lock/unlocked by key or lever only (passage).                          |
| <b>7130-L8(F)-2</b> | (08) Entry by lever lock/unlocked by key either side or lever only (passage).              |
| <b>7130-T8(F)</b>   | (05) Entry by thumbpiece lock/unlocked by key or thumbpiece only (passage).                |

## 7200 series applications

### introduction

7200 Series narrow stile exit devices are designed for aluminum openings and are compatible with the aesthetics and functional requirements of contemporary glass doors. The device features lines chosen by leading architects and is available with the proven SquareBolt® exit device for increased security.

### applications

| Single Door                                   | UL Listing | Maximum Opening | Application                                                                           |                                                                                       |
|-----------------------------------------------|------------|-----------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>SquareBolt®</b>                            |            |                 |                                                                                       |                                                                                       |
| 7250                                          | Panic      | 4' x *          | Surface applied; single-point latching.                                               |    |
| <b>Rim</b>                                    |            |                 |                                                                                       |                                                                                       |
| 7200                                          | Panic      | 4' x *          | Surface applied; single-point latching.                                               |                                                                                       |
| <b>Surface Vertical Rod</b>                   |            |                 |                                                                                       |                                                                                       |
| 7210                                          | Panic      | 4' x 10'        | Surface applied; two-point latching.                                                  |    |
| <b>Concealed Vertical Rod</b>                 |            |                 |                                                                                       |                                                                                       |
| 7220                                          | Panic      | 4' x 10'        | Rods concealed in door; two-point latching.                                           |   |
| Pair of Doors                                 | UL Listing | Maximum Opening | Application                                                                           |                                                                                       |
| <b>Surface Vertical Rod</b>                   |            |                 |                                                                                       |                                                                                       |
| 7210 x 7210                                   | Panic      | 8' x 10'        | Two independent doors with two-point latching, swinging in the same direction.        |  |
| <b>Surface Vertical Rod (Double Egress)</b>   |            |                 |                                                                                       |                                                                                       |
| 7210 x 7210                                   | Panic      | 8' x 10'        | Two independent doors with two-point latching, swinging in opposite directions.       |  |
| <b>Concealed Vertical Rod</b>                 |            |                 |                                                                                       |                                                                                       |
| 7220 x 7220                                   | Panic      | 8' x 10'        | Two independent metal doors with two-point latching, swinging in the same direction.  |  |
| <b>Concealed Vertical Rod (Double Egress)</b> |            |                 |                                                                                       |                                                                                       |
| 7220 x 7220                                   | Panic      | 8' x 10'        | Two independent metal doors with two-point latching, swinging in opposite directions. |  |
| Pair of Doors with Removable Mullion          | UL Listing | Maximum Opening | Application                                                                           |                                                                                       |
| <b>SquareBolt® x SquareBolt®</b>              |            |                 |                                                                                       |                                                                                       |
| 7250 x 7250 x M300                            | Panic      | 8' x 10'        | Two independent active doors with removable mullion.                                  |  |
| <b>Rim x Rim</b>                              |            |                 |                                                                                       |                                                                                       |
| 7200 x 7200 x M300                            | Panic      | 8' x 10'        | Two independent active doors with removable mullion.                                  |                                                                                       |

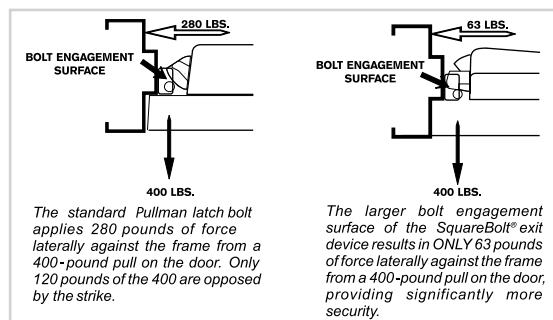
\*UL does not set a door height limitation on panic applications.



## SquareBolt®

7250

The unique construction of the *SquareBolt* exit device offers innovative protection. The patented square latchbolt design provides an improved physical barrier over standard pullman-type rim latchbolts. It locks into place and stays there. Credit cards, crowbars, door rattling and shaking are resisted, significantly reducing the threat of unauthorized entry, especially in applications that include removable mullions. The 7250 *SquareBolt* is designed for narrow stile doors.



### certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware

ANSI/BHMA Certified: A156.3, Type 4 or 28, Grade 1  
U.S. Patent #: 5,605,362



### features

- Patented *SquareBolt* security deadbolt (Pat. no. 5,605,362) designed for maximum holding power
- Non-handed for easy installation
- Maintains the look of the Yale® 7200 series architectural exit devices, allowing for continuity in both design and finish
- Fully adjustable surface mounted 3/8" diameter roller strike complete with positive locking plate and shims
- Used with narrow stile trim

### applications

- Single swing narrow stile doors
- Pairs of narrow stile doors with removable mullions
- Metal and aluminum doors
- For panic-rated doors only

### specifications

|                      |                                                                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support. |
| Door Thickness:      | 1-3/4" (44mm) standard. 2" and 2-1/4" (51mm and 57mm); specify when ordering.                                                                                                            |
| Minimum Stile Width: | 2" (51mm)                                                                                                                                                                                |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                               |
| Deadbolt:            | Patented 1" (25mm) slide projection bolt with full 3/4" (19mm) projection                                                                                                                |
| Strike:              | Standard: 759. Optional: 793 (double door applications, panic only)                                                                                                                      |
| Fasteners:           | Machine screws standard for panic hardware                                                                                                                                               |
| Trims:               | 500F series escutcheon trim, 510F series pull/thumbpiece trim, 480F series offset pull trim. See pages 30-31.                                                                            |
| Dogging:             | Hex key dogging supplied standard                                                                                                                                                        |
| Options:             | Cylinder dogging, shim kit #723NS, sex nuts and bolts, MicroShield®, Lumi-Lite®                                                                                                          |
| Warranty:            | 5-year limited                                                                                                                                                                           |

## rim

### 7200

The 7200 is a narrow stile rim exit device compatible with the aesthetics and functional requirements of contemporary doors. The 7200 comes in varied finishes and can be combined with a variety of trims to match any desired style.



## certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware

ANSI/BHMA Certified: A156.3, Type 4, Grade 1



## features

- Designed for narrow stile doors
- 3/4" throw deadlocking stainless steel pullman latch
- Non-handed for easy installation

## applications

- Single swing narrow stile doors
- Pairs of narrow stile doors with removable mullions
- Metal and aluminum doors
- For panic-rated doors only

## specifications

|                      |                                                                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support. |
| Door Thickness:      | 1-3/4" (44mm) standard. 2" (51mm) and 2-1/4" (57mm); specify when ordering.                                                                                                              |
| Minimum Stile Width: | 2" (51mm)                                                                                                                                                                                |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                               |
| Latchbolt:           | 3/4" (19mm) deadlocking stainless steel pullman type.                                                                                                                                    |
| Strike:              | Standard: 759. Optional: 793 (double door applications, panic only)                                                                                                                      |
| Fasteners:           | Machine screws standard for panic hardware                                                                                                                                               |
| Trims:               | 500F series escutcheon trim, 510F series pull/thumbpiece trim, 480F series offset pull trim. See pages 30-31.                                                                            |
| Dogging:             | Hex key dogging supplied standard                                                                                                                                                        |
| Options:             | Cylinder dogging, shim kit #723NS, sex nuts and bolts, MicroShield®, Lumi-Lite®                                                                                                          |
| Warranty:            | 5-year limited                                                                                                                                                                           |

## surface vertical rod

### 7210

The 7210 is a narrow stile surface vertical rod exit device to be used on narrow stile, aluminum and metal doors where two-point latching is desired.

### certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware

ANSI/BHMA Certified: A156.3 Type 5, Grade 1



### features

- Designed for narrow stile doors
- Handed. Specify hand (field reversible)
- Bottom deadbolt for secure latching
- Fully adjustable roller strike

### applications

- Pairs of narrow stile doors
- Metal and aluminum doors
- For panic-rated doors only

### specifications

|                      |                                                                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support. |
| Door Opening Height: | Standard door height 7' (213mm), with the device centerline at 39-15/16" (101cm) from floor.<br>Optional heights specify suffix -8, -9, -10.                                             |
| Door Thickness:      | 1-3/4" (44mm) standard. 2" (51mm) and 2-1/4" (57mm); specify when ordering.                                                                                                              |
| Minimum Stile Width: | 2" (51mm).                                                                                                                                                                               |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                               |
| Latchbolt:           | Top: 3/4" (19mm) stainless steel throw, pullman-type with automatic deadlatching.<br>Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing.                               |
| Vertical Rods:       | 1/2" (13mm) O.D. tubular brass, bronze or stainless steel with rod guides.                                                                                                               |
| Strike:              | Top: Roller type 791. Bottom: Flush mounted 790. 794 floor strike optional (threshold openings).                                                                                         |
| Fasteners:           | Machine screws standard for panic hardware.                                                                                                                                              |
| Trims:               | 500F series escutcheon trim, 510F series pull/thumbpiece trim, 480F series offset pull trim. See pages 30-31.                                                                            |
| Dogging:             | Hex key dogging supplied standard                                                                                                                                                        |
| Options:             | Cylinder dogging, shim kit #724, sex nuts and bolts, -8, -9, -10 opening height, rod extensions, bottom pullman latch, MicroShield®, Lumi-Lite®                                          |
| Warranty:            | 5-year limited                                                                                                                                                                           |



## concealed vertical rod

### 7220

The 7220 is a narrow stile concealed vertical rod exit device to be used on narrow stile, aluminum and metal doors where two-point latching is desired.

### certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware

ANSI/BHMA Certified: A156.3 Type 6, Grade 1



### features

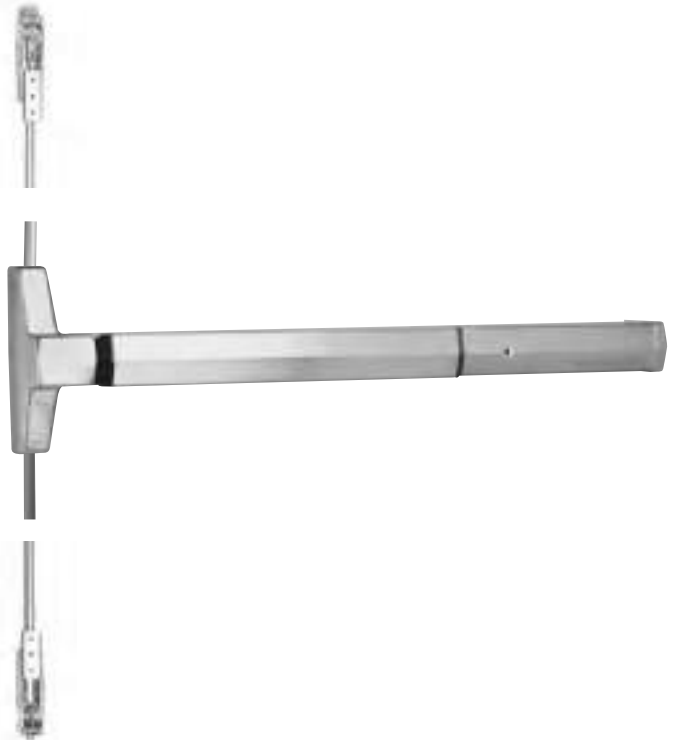
- Designed for narrow stile doors
- Handed. Specify hand (field reversible)
- Bottom deadbolt for secure latching
- Fully adjustable roller strike

### applications

- Pairs of narrow stile doors
- Metal and aluminum doors
- For panic-rated doors only


### specifications

|                      |                                                                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Opening Width:  | -24 for 24" (60cm) doors<br>-36 for 30" - 36" (76cm - 91cm) doors<br>-48 for 36" - 48" (91cm - 122cm) doors<br>Optional sizes can be special ordered. Consult Technical Product Support. |
| Door Opening Height: | Standard door height adjustable to 8' (244cm), with the device centerline at 39-15/16" (101cm) from floor. Optional heights specify suffix -9, -10                                       |
| Door Thickness:      | 1-3/4" (44mm) standard. 2" (51mm) and 2-1/4" (57mm); specify when ordering.                                                                                                              |
| Minimum Stile Width: | 2" (51mm).                                                                                                                                                                               |
| Projection:          | 3-1/4" (83mm) active, 2-3/4" (70mm) dogged                                                                                                                                               |
| Latchbolt:           | Top: 3/4" (19mm) stainless steel throw, pullman-type with automatic deadlatching.<br>Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing.                               |
| Vertical Rods:       | 1/2" (13mm) O.D. telescoping tubular rods                                                                                                                                                |
| Strike:              | Top: Roller type 791. Bottom: Flush mounted 790. 794 floor strike optional (threshold openings).                                                                                         |
| Fasteners:           | Machine screws standard for panic hardware.                                                                                                                                              |
| Trims:               | 500F series escutcheon trim, 510F series pull/thumbpiece trim, 480F series offset pull trim. See pages 30-31.                                                                            |
| Dogging:             | Hex key dogging supplied standard                                                                                                                                                        |
| Options:             | Cylinder dogging, shim kit #723NS, sex nuts and bolts, -9, -10 opening height, rod extensions, bottom pullman latch, MicroShield®, Lumi-Lite®                                            |
| Warranty:            | 5-year limited                                                                                                                                                                           |



## trim designs for escutcheons


























## standard

|                                                                                                                                  |                                                                                                                                         |                                                                                                                                      |                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Arcadia AR</b> <br>Projection: 3-1/4" (82mm) | <b>Augusta AU</b> <br>Projection: 2-5/8" (61mm)        | <b>Carmel CR</b> <br>Projection: 3-1/8" (79mm)     | <b>Jefferson JN</b> <br>Projection: 2-9/16" (65mm) |
| <b>Monroe MO</b> <br>Projection: 3" (76mm)      | <b>Pacific Beach PB</b> <br>Projection: 3-5/16" (84mm) | <b>Pinehurst PN</b> <br>Projection: 3-1/16" (78mm) | <b>Virginia VI</b> <br>Projection: 3-1/8" (79mm)   |
| <b>Hampton HA</b> <br>Projection: 3-3/8" (86mm) | <b>Copenhagen CO</b> <br>Projection: 3-1/2" (90mm)     | <b>Litchfield LF</b> <br>Projection: 2-7/8" (73mm) |                                                                                                                                       |

Note: Projection dimensions are provided using the 620F series escutcheon plates.

## Reflections®



|                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
|-----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                 | TB                                                                                  | UB                                                                                  | TC                                                                                  | UC                                                                                  |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| <b>Hudson</b>   |  |  |  |  |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| Projection      | 3-1/16" (78mm)                                                                      | 3-1/4" (83mm)                                                                       | 3" (76mm)                                                                           | 3-7/16" (87mm)                                                                      |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
|                 | TE                                                                                  | TI                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| <b>Danube</b>   |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| Projection      | 3" (76mm)                                                                           | 3-3/8" (85mm)                                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
|                 | TG                                                                                  | TO                                                                                  | TJ                                                                                  | TK                                                                                  |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| <b>Seine</b>    |  |  |  |  |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| Projection      | 2-13/16" (71mm)                                                                     | 3-1/2" (89mm)                                                                       | 3-1/16" (78mm)                                                                      | 3-1/4" (83mm)                                                                       |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
|                 | TM                                                                                  | TN                                                                                  | TP                                                                                  | TR                                                                                  | TS                                                                                  | TQ                                                                                   |                                                                                       |                                                                                       |                                                                                       |
| <b>Thames</b>   |  |  |  |  |  |  |                                                                                       |                                                                                       |                                                                                       |
| Projection      | 3-1/16" (78mm)                                                                      | 3-1/16" (78mm)                                                                      | 3-5/16" (84mm)                                                                      | 3-1/16" (78mm)                                                                      | 3-1/8" (80mm)                                                                       | 3-1/16" (78mm)                                                                       |                                                                                       |                                                                                       |                                                                                       |
|                 | TT                                                                                  | TU                                                                                  | TV                                                                                  | TW                                                                                  | UW                                                                                  | TX                                                                                   | UX                                                                                    | TU                                                                                    | TZ                                                                                    |
| <b>Victoria</b> |  |  |  |  |  |  |  |  |  |
| Projection      | 2-11/16" (68mm)                                                                     | 3-1/4" (83mm)                                                                       | 3-1/2" (89mm)                                                                       | 3" (76mm)                                                                           | 3-7/16" (87mm)                                                                      | 3-5/8" (92mm)                                                                        | 3-7/16" (87mm)                                                                        | 3-5/16" (84mm)                                                                        | 3-7/16" (87mm)                                                                        |

Note: Projection dimensions are provided using the 620F series escutcheon plates.

## 7100 series trims

### 620F and 650F series escutcheon trim

- Certified ANSI/BHMA A156.3, Grade 1. **BHMA CERTIFIED**
- Trim through-bolts to exit device for strength.
- Beveled sides improve attack resistance.
- Solid forged escutcheon and Free-Wheeling trim resists vandalism and abuse.
- Flush cylinder in 6-pin applications for additional security.
- 1-3/4" (44mm) door standard. For doors through 2-1/4" (57mm) or shim-mounted devices, specify on order.
- Dimensions: 3" x 10-1/4" x 13/16" (76mm x 260mm x 19mm).
- Cylinders not included. See page 42 & 44 for cylinder options. 1-1/2" mortise cylinder required for mortise trim.
- Available with AR, AU, CR, JN, MO, PB, PN, VI, HA lever designs and CO, LF knob designs. See page 26.
  - Finishes: 605, 606, 609, 611, 612, 613, 613E, 616, 619, 620, 626, 629, 630, 693, 722
- Available with Reflections® lever designs. See page 26.
  - Finishes: 605, 606, 611, 612, 613, 613E, 619, 626, 629, 630, 722
- Trim ordering example: AU626F x 626 x RHR.
- 5-year limited warranty.

| Application                                                    | Cylinder      | Classroom/ Storeroom Cylinder Controls Thumbturn | Exit Only Blank Plate | Nightlatch Access by Key | Classroom/ Storeroom Cylinder Controls Knob | Nightlatch Cylinder by Knob | Passage Active Knob | Dummy Trim Rigid Knob | Classroom Cylinder Controls Lever | Storeroom Cylinder Controls Lever | Nightlatch Cylinder by Lever | Passage | Dummy Trim Free-Wheeling | Dummy Rigid Lever |
|----------------------------------------------------------------|---------------|--------------------------------------------------|-----------------------|--------------------------|---------------------------------------------|-----------------------------|---------------------|-----------------------|-----------------------------------|-----------------------------------|------------------------------|---------|--------------------------|-------------------|
| 7100(F)<br>7150(F)<br>7110(F)<br>7120(F)<br>7160(F)<br>7170(F) | Rim           | 603F <sup>1</sup>                                | 620F                  | 621F <sup>2</sup>        | 622F <sup>1</sup>                           | 623F <sup>2</sup>           | 624F                | 625F                  | 626F                              | 626F <sup>1</sup>                 | 627F <sup>2</sup>            | 628F    | 628F <sup>1</sup>        | 629F              |
| 7130(F)                                                        | Mortise       | —                                                | 620F                  | 651F                     | 652F <sup>3</sup>                           | 652F                        | 654F                | 654F                  | 656F                              | —                                 | 656F                         | 658F    | —                        | 658F              |
| 7100(F)-2<br>7150(F)-2                                         | Rim x Rim     | —                                                | —                     | —                        | —                                           | —                           | —                   | —                     | 626F                              | —                                 | —                            | —       | —                        | —                 |
| 7130(F)-2                                                      | Mortise x Rim | —                                                | —                     | —                        | —                                           | —                           | —                   | —                     | 656F                              | —                                 | —                            | —       | —                        | —                 |
| ANSI                                                           |               | 11/12                                            | 01                    | 03                       | 08/09                                       | 03                          | 14                  | 02                    | 08                                | 09                                | 03                           | 14      | 02                       | 02                |

<sup>1</sup> 09, 12 and Free Wheeling 02 achieved with single trim modification at installation.

<sup>2</sup> Not recommended for use with vertical rod devices.

<sup>3</sup> 08 only

For 626, 629 & 630 finishes the escutcheon is plated to simulate stainless steel.

For 629 & 630 finishes the standard levers are plated to simulate stainless steel.

Free-Wheeling is not available on mortise trim.

For 620F series trim, optional door thickness available up to 4-1/2", specify on order.



## 7100 series trims

### 630F, 660F and 670F series pull/thumbpiece trim

- Certified ANSI/BHMA A156.3, Grade 1. **BHMA** certified
- Trim through-bolts to exit device for strength.
- Beveled sides improve attack resistance.
- Solid forged escutcheon resists vandalism and abuse.
- Flush cylinder in 6-pin applications for additional security.
- 1-3/4" (44mm) door standard. For doors through 2-1/4" (57mm) or shim-mounted devices, specify on order.
- Plate Dimensions: 2-3/4" x 15-1/2" x 5/8" (70mm x 394mm x 16mm).
- Pull Dimensions: 6-7/16" (164mm) on centers x 2-1/8" (54mm) projection.
- Cylinders not included. See page 42 & 44 for cylinder options. 1-1/2" mortise cylinder required for mortise trim.
- Finishes: 605, 606, 609, 612, 613, 613E, 616, 619, 620, 626, 629, 630, 693, 722
- Trim ordering example: 630F x 630
- 5-year limited warranty.

| Applications                                                   | Cylinder          | Exit Only Blank Plate | Nightlatch Access by Key | Nightlatch Cylinder by Pull | Classroom Cylinder Controls T-Piece | Storeroom Cylinder Controls T-Piece | Dummy Trim Pull Plate | Passage Active T-Piece |
|----------------------------------------------------------------|-------------------|-----------------------|--------------------------|-----------------------------|-------------------------------------|-------------------------------------|-----------------------|------------------------|
| 7100(F)<br>7150(F)<br>7110(F)<br>7120(F)<br>7160(F)<br>7170(F) | Rim               | 630F                  | 631F <sup>2</sup>        | 632F <sup>2</sup>           | 633F                                | 633F <sup>1</sup>                   | 634F                  | 635F                   |
| 7100(F)-2<br>7150(F)-2                                         | Rim x Rim         | —                     | —                        | —                           | 633F                                | —                                   | —                     | —                      |
| 7130(F)                                                        | Mortise           | 630F<br>K5F           | 661F<br>K5F              | 662F<br>K5F                 | 673F<br>T8F                         | —                                   | 634F<br>K5F           | 675F<br>T8F            |
| 7130(F)-2                                                      | Mortise x Mortise | —                     | —                        | —                           | —                                   | —                                   | —                     | —                      |
| ANSI                                                           |                   | 01                    | 03                       | 03                          | 05                                  | 06                                  | 02                    | 15                     |

- <sup>1</sup> **06 achieved with single trim modification at installation.**  
<sup>2</sup> **Not recommended for use with vertical rod exit devices.**  
**For 630F series trim, optional door thickness available up to 4-1/2", specify on order.**

For 626, 629 & 630 finishes the escutcheon is plated to simulate stainless steel.

### 680F series offset pull trim

- 1-3/4" (44mm) door standard. For doors through 2-1/4" (54mm) or shim-mounted devices, specify on order.
- Plate Dimensions: 3" x 10-1/4" x 13/16" (76mm x 260mm x 21mm)
- Pull Dimensions: 7-1/4" (184mm) on centers x 2-13/32" (61mm) projection.
- Trim through-bolts to exit device for strength.
- Beveled sides improve attack resistance.
- Solid forged escutcheon resists vandalism and abuse.
- Flush cylinder in 6-pin applications for additional security.
- Cylinders not included. See page 42 & 44 for cylinder options. 1-1/2" mortise cylinder required for mortise trim.
- Finishes: 605, 606, 609, 611, 612, 613, 613E, 616, 619, 620, 626, 629, 630, 693, 722
- Trim ordering example: 681F x 630 x LHR
- 5-year limited warranty

| Applications                                                   | Cylinder | Dummy Pull | Nightlatch Access by Key |      |
|----------------------------------------------------------------|----------|------------|--------------------------|------|
| 7100(F)<br>7150(F)<br>7110(F)<br>7120(F)<br>7160(F)<br>7170(F) | Rim      | 680F       | 681F*                    | —    |
| 7130(F)<br>7130(F)-2                                           | Mortise  | —          | —                        | 684F |
| ANSI                                                           | —        | 02         | 03                       | —    |

\*Not recommended for use with vertical rod exit devices.  
 For 626, 629 & 630 finishes the escutcheon is plated to simulate stainless steel.

## SecureX® electrified options

The Yale® 7000 Series exit devices offer a complete range of electrical options. A continuity in appearance, security and functions with the 7000 Series mechanical exit device is maintained. These electrified exit devices may be integrated into the monitoring security and alarm systems of most buildings.

### electrified options

| Model #    | Exit Device Description               | A | B | D | G | H | O | P | S | SAFE | SECURE | 690F | 691F |
|------------|---------------------------------------|---|---|---|---|---|---|---|---|------|--------|------|------|
| 7100(F)    | Rim Device (Wide)                     | x | x | x | x | x | x | x | x |      |        | x    | x    |
| 7110(F)    | Surface Vertical Rod (Wide)           | x | x | x | x |   |   | x | x |      |        | x    | x    |
| 7120(F)    | Concealed Vertical Rod (Wide)         | x | x | x | x |   |   | x | x |      |        | x    | x    |
| 7130(F)    | Mortise Device (Wide)                 | x | x | x | x |   |   | x | x | x    | x      |      |      |
| 7150(F)    | Rim SquareBolt® Device (Wide)         | x | x | x | x | x |   | x | x | x    |        | x    | x    |
| 7150(F)WS  | Rim SquareBolt Windstorm (Wide)       | x | x |   |   |   |   | x | x | x    |        | x    | x    |
| 7160(F)    | Concealed Vertical Rod (Wide)         | x | x | x | x |   |   | x | x | x    |        | x    | x    |
| 7170(F)    | Surface Vertical Rod (Wide)           | x | x | x | x |   |   | x | x | x    |        | x    | x    |
| 7170(F)WS  | Surface Vertical Rod Windstorm (Wide) | x | x |   |   |   |   | x | x | x    |        | x    | x    |
| 7200(M)(F) | Rim Device (Narrow)                   | x | x | x | x |   |   |   | x | x    |        |      |      |
| 7210(M)(F) | Surface Vertical Rod (Narrow)         | x | x | x | x |   |   |   | x | x    |        |      |      |
| 7220(M)(F) | Concealed Vertical Rod (Narrow)       | x | x | x | x |   |   |   | x | x    |        |      |      |
| 7250(M)(F) | Rim SquareBolt Device (Narrow)        | x | x | x | x |   |   |   | x | x    |        |      |      |

### electrified hardware option descriptions

|    |                        |
|----|------------------------|
| A  | Alarm Option           |
| B  | Touchbar Monitor       |
| D  | Delayed Egress         |
| G  | Electric Dogging       |
| H* | Security Package (DPS) |
| O  | Trim Monitor Switch    |

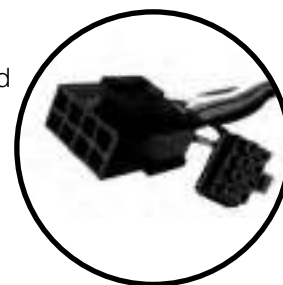
|        |                                 |
|--------|---------------------------------|
| P      | Electric Latch Retraction       |
| S      | Latchbolt Position Monitor      |
| SAFE   | Fail Safe Operation (Mortise)   |
| SECURE | Fail Secure Operation (Mortise) |
| 690F   | Fail Safe Electrified Trim      |
| 691F   | Fail Secure Electrified Trim    |

**Note: Any combination of the following options cannot be ordered together:**  
 1) P, G, or D 2) B or A 3) D, B or A  
 \*Only available for rim and SquareBolt® Devices when used with Delayed Egress option.



What normally took an hour or more to connect now takes minutes. Yale electrified exit devices and trims are equipped with ElectroLynx® connectors. As a standard feature, these “plug & play” connectors link power from the incoming source to electrified locking products, including hinges, locks, exit devices, magnetic holders and strikes.

Note: Electrified door hardware with ElectroLynx® connectors require a compatible number of lead wires attached to the door hinge.





## SecureX® electrified options

### electric latch retraction “P”

#### Operation

Allows the latchbolt to be retracted electrically for momentary or maintained periods of time from a remote location. The exit device bolt remains retracted for as long as the device is energized. Removal of power returns the device to the life safety, self-latching mechanical mode. Easy interface with central or local fire alarm systems, automatic door operators, and access control systems. Allows free egress at all times. Manual hex key dogging standard on non-rated devices.

#### Electrical Specifications

Solenoid Assembly

- Continuous duty
- 9 amp inrush
- Requires a 4-wire minimum pivot or hinge to transfer power from frame to door.
- Requires the 782 controller for operation (USING ANY OTHER POWER SUPPLY VOIDS THE WARRANTY OF THE DEVICE.)

#### Listings

UL/cUL listed for panic and fire exit hardware. Fire-rated devices must be wired into an automatic fire alarm system.

#### Applications

Rim: 7100(F), 7200, 7200M(F)  
 SquareBolt®: 7150(F), 7250, 7250M(F)  
 SVR: 7110(F), 7170(F), 7210, 7210M(F)  
 CVR: 7120(F), 7160(F), 7220, 7220M(F)  
 Mortise: 7130(F)

#### Ordering

Suffix “P” to the Model Number. Ex: 7100P.

**Note: Not available on “D” delayed egress exit devices.**

### electric dogging “G”

#### Operation

Provides continuous latch retraction and pushpad dogging simultaneously. When power is applied to the device, depressing the pushpad will retract the latchbolt and continuously hold down the pushpad in the unlock position for push/pull operation. Removal or interruption of power will release the pushpad and the latchbolt will extend and secure the opening. For use in areas that require quiet door operation.

Exit device allows free egress at all times.

#### Electrical Specifications

2 Holding Magnets

- .35 amps @ 24VDC

Requires a 2-wire pivot or hinge and a standard 24VDC regulated and filtered power source (Recommended BPS power supplies)

#### Listings

UL/cUL listed for panic and fire exit hardware. Fire-rated devices must be wired into an automatic fire alarm system.

#### Applications

Rim: 7100(F), 7200, 7200M(F)  
 SquareBolt: 7150(F), 7250, 7250M(F)  
 SVR: 7110(F), 7170(F), 7210, 7210M(F)  
 CVR: 7120(F), 7160(F), 7220, 7220M(F)  
 Mortise: 7130(F)

#### Ordering

Suffix “G” to the Model Number. Ex: 7150G.

**Note: Not available on “D” delayed egress exit devices.**

### mortise device trim control “safe/secure”

#### Operation

Allows the outside trim to lock or unlock electrically from a remote location. Exit device allows free egress at all times.

Fail Safe devices are commonly used in stair towers or locations that require the trim to unlock when power is removed or during fire alarm activation.

Fail Secure devices are used to secure openings and are usually integrated into the building security system to allow access control. Fail Secure trims remain locked when power is removed.

#### Electrical Specifications

Solenoid

- .35 amps @ 24VDC only (12 volt not available)
- Continuous duty
- Requires a 2-wire pivot or hinge and a standard 24VDC regulated and filtered power source (Recommended BPS power supplies)

#### Listings

UL/cUL listed for panic and fire exit hardware.

#### Applications

Mortise: 7130(F) - lever functions only

#### Ordering

“Safe” – Maintains the outside trim in a locked state when energized. Removal of power unlocks outside trim.

“Secure” – Unlocks the outside trim when energized. Remains locked when power is removed.

Suffix “SAFE” or “SECURE” to the Model Number. Ex: 7130 x L5 x Safe.

## SecureX® electrified options

### delayed egress “D”

#### Operation

An exit door is normally closed and latched. The delayed egress device secures the door in the locked mode with the Red LED indicating locked mode status. Depressing the pushpad for less than three seconds will cause the device to beep without initiating the alarm. Depressing the pushpad for three seconds or longer will initiate an irreversible local audible beeping tone and a visual amber indicator. The person depressing the pushpad is denied egress for 15 or 30 seconds while alarm signals unauthorized egress. After the factory-set delay time (15 or 30 seconds), the device releases for egress, the LED changes to Green and the beep changes to a steady tone which continues to alarm until reset. The remote monitoring contact outputs can be used to alert security personnel.

**Note: The 15-second time delay is standard. (Optional 30-seconds may be accepted by local jurisdiction.)**

#### Electrical Specifications

- Input Voltage 24VDC (+/- 10%)  
Power Consumption:
- Standard Device: 500 mA
- Device with Security Package: 750 mA
- Device with Electric Mortise Trim Control: 1.25 Amps

#### Certifications & Listings

UL/cUL Listed: FUKD/FUKD7 - Controlled Exit Panic Devices  
FWAX/FWAX7 - Special Locking Arrangements  
GXHX/GXHX7 - Fire Exit Hardware  
ANSI/BHMA Certified: A156.3 & A156.24   
U.S. Patent #: 7,469,942

#### Applications

- For use on hollow metal interior or exterior doors.
- Available for 7100(F), 7200M(F) and 7200 series rim, SquareBolt®, surface vertical rod, concealed vertical rod and mortise panic and



fire-rated exit devices. For surface vertical rod exit devices, rod and latch guards (provided by other) must be used.

- Complies with NFPA 101 “Code For Safety To Life From Buildings And Structures” by National Fire Protection Association.
- BOCA options available to comply with National Building Code requirements. BOCA option is not suitable for installations in accordance with NFPA 101.
- 1-3/4" door thickness standard; 2" and 2-1/4" optional; specify when ordering.
- Standard 36" device fits doors 35"- 36" Device cannot be cut less than 35".
- Option -48 fits doors 41"- 48". Devices cannot be cut less than 41".

#### Standard Features

##### Key Switch Operation:

- Normal: The system is armed by applying power to the device (solid Red LED). Depressing the pushpad for more than the nuisance delay time starts the exit delay cycle.
- Bypass: Turning the key switch clockwise to the bypass position allows immediate egress without alarming. The bar functions as a standard exit device (Red LED flashes slowly).
- Reset/Delay: Used to reset device after the factory-set 15 or 30-second delay cycle has timed out. Rearm: If the device is armed, turning the key counterclockwise to the reset mode will release the device without alarm for egress and will rearm after 10 seconds (Red LED flashes quickly).

##### Local Visual Status Indicator:

- RED: The exit device is secure and the delayed egress circuitry is energized.

- AMBER: The egress cycle has started, indicated by an irreversible local audible beeping tone.
- GREEN: The exit device is in alarm and has released.

##### Nuisance Delay Time:

- Depressing the pushpad for less than three seconds sounds an audible beep without activating the irreversible alarm sequence. (Immediate alarm can be selected by removing a jumper on the control board.)

##### Internal Alarm Siren:

- When armed, depressing the pushpad initiates the internal 85db alarm siren.

##### Remote Control Inputs:

- Remote Reset: Accepts a momentary contact (keyswitch, pushbutton, etc) to reset the unit during alarm or allows momentary egress (10 seconds) when the unit is armed.
- Remote Bypass: Accepts a momentary contact to put the unit in a maintained bypass operation. The exit device functions as a standard device.

##### Alarm Outputs:

- Two sets of normally open and normally closed contacts. Contacts change only during alarm status. One set of contacts changes when device delay cycle has started (Alarm). One set of contacts changes when device has released (Secure).

##### Door Sign:

- Door sign per code included.

## SecureX® electrified options

### delayed egress “D”

#### Options

##### Security Package “H”:

- An internal door position switch that gives added security to the opening and is recommended. When using this option the alarm will sound if the door is not closed and latched when arming the device or if the door is forced open when the device is armed.
- To order, suffix “H”.
- NOTE: Available for 7100(F) Rim and 7150(F) SquareBolt® devices only.

##### Latchbolt Position Monitor “S”:

- Used to monitor the positions of the latchbolt or vertical rods (SPDT switch).
- To order, suffix “S”.
- See page 37 for more information.

##### Trim Monitor Switch “O”:

- Used when outside trim is desired. This switch will allow Bypass (disarms device) when the trim is used for ingress. The device will need to be reset upon entry by means of the keyswitch on the device or a remote switch.
- To order, suffix “O”.
- NOTE: If the security package or external DPS is not used, standard trim will allow entry without affecting the device in an armed mode. The device will only be affected when the pushpad is depressed.
- See page 37 for more information.

##### NFPA 101 Requirements:

- 15- & 30-Second Delay
- Upon depressing the pushpad for 3 seconds, the delayed egress device will sound an audible beeping tone and allow the door to be opened after 15 (or 30) seconds. The tone will then change to a continuous alarm until reset. Resetting of the alarm and re-arming of the device is accomplished by manual means only.
- To order, specify NFPA 15-second

or NFPA 30-second.

- Purchase orders that do not have an option noted will default to the NFPA 15-second delay.
- NOTE: Where approved by the authority having jurisdiction, a delay not exceeding 30 seconds shall be permitted.

##### BOCA Requirements:

- 15- & 30-Second Delay
- Upon depressing the pushpad for 1 second, the delayed egress device will sound an audible beeping tone and allow the door to be opened within 15 (or 30) seconds. The tone will then change to a continuous alarm until reset. Resetting of the alarm and re-arming of the device occurs automatically once the door has been returned to the closed position for 30 seconds. The 30-second re-arming timer will re-start if the pushpad is depressed or the door is re-opened before actual re-arming of the device occurs. A DPS (Door Position Switch) is required for the BOCA option.
- To order specify BOCA 15-second or BOCA 30-second.
- Purchase orders that do not have an option noted will default to the NFPA 15-second delay.
- NOTE: An increase in the egress delay to 30 seconds shall not be permitted except as approved by the authority having jurisdiction.

##### Electric Trim Control - “SAFE” or “SECURE”:

- The mortise delayed egress exit device can be ordered with fail safe or fail secure outside trim operation. In a fire condition the fail safe trim will release for entry. When access control is used the fail secure trim allows entry by means of a remote card reader, keyswitch, pushbutton, etc.
- To order, suffix “Safe” or “Secure”.

- NOTE: The trim will open the door without affecting the device in an armed condition, if a door position switch is not used.

### required accessories

#### Power Supply:

A regulated and filtered power supply with a fire alarm interface is required. 1 Amp minimum @ 24VDC per device. Special options will require more amperage. Consult factory. Recommend: BPS series.

#### Power Transfer:

Allows the power cable to make the transition from frame to door without pinching or removal of insulation.

#### Cylinders

Utilizes a 1-1/8" mortise cylinder with a 2160 cam. Cylinder not included unless specified. See page 44 & 45.

#### Ordering

Suffix “D” after device.  
Example: 7150FD

## alarm kit & electric trim

### alarm kit "A"



**Activation:** Alarm is armed by turning key clockwise. Low audible chirp indicates alarm has been activated. Alarm will sound when the exit device pushpad is depressed. Factory preset for standard alarm mode which automatically resets after 5 minutes.

**Continuous Alarm Mode:** Alarm sounds continuous when the exit device pushpad is depressed. Alarm must be manually reset by keyswitch. (This feature is selected by a switch on the circuit board.)

**Low Battery Warning:** Audible chirp.

**Nuisance Alarm:** Factory preset for instant alarm. Selectable feature for alarm to sound when pushpad is depressed for more than 2 seconds. (This feature is selected by a switch on the circuit board.)

**Arming Delay/Authorized Egress:** 10-second delay (after arming) permitting egress (by turning key clockwise).

**Alarm Shunt:** Ingress shunt alarm input for devices with latchbolt position (S) monitor. NOTE: "S" included with SVR devices.

**Power Requirements:** One 9-Volt Battery (included).

**Loudness:** 90db @ 10 feet.

**Arm/Disarm:** Uses one 1-1/8" straight cam mortise cylinder. Clockwise turn arms the alarm, counter clockwise turn disarms or silences the alarm.

**Device Status:** A Red LED indicator will illuminate every 30 seconds when the alarm is armed.

**Tamper Resistant:** Built-in safety monitor sounds alarm when tampering occurs.

**Warning Decal:** "EMERGENCY EXIT - ALARM WILL SOUND"

**Applications:** Rim: 7100(F), 7200, 7200M(F); SquareBolt®: 7150(F), 7250, 7250M(F); SVR: 7110(F), 7170(F), 7210, 7210M(F); CVR: 7120(F), 7160(F), 7220, 7220M(F); Mortise: 7130(F)

**Kit:** Available in kit form for field retrofit.

**Bar Length:** Available for 36"- 48" devices only. May not be used on bars less than 36".

- Standard 36" device fits doors 35"-36" Device cannot be cut less than 35".
- Option -48 fits doors 41"- 48". Devices cannot be cut less than 41".

**How to Order:** Specify 7116 for alarm kit. Suffix "-A" when ordering with device. Ex: 7150-A.

**NOTE:** The 7116 alarm kit cannot be retrofitted in the field to the 7110(F), 7170(F), 7210 or 7210M(F) surface vertical rod exit devices. This option is available as a factory order only for these devices. Any attempt to retrofit the 7116 alarm kit with these surface vertical rod exit devices will void the warranties for these products.

### electric trim

The electrified 600 series heavy-duty trim provides electric locking and unlocking of trim. Ideal for door control where increased security is necessary at all times, while meeting life safety codes. Electric trim is ideal for many applications, including stairwell towers, high-security areas, schools, hospitals, and factories.



#### Functions

##### 690F Trim - Fail Safe

- Lever is locked when power is on (Free-Wheeling)
- Power off allows entry from trim
- Inside device is always active for egress
- Mechanical key override (09 Function - Key allows lever to retract latchbolt. Key can only be removed in locked position)

##### 691F Trim - Fail Secure

- Lever is locked when power is off (Free-Wheeling)
- Power on allows lever activation for entry
- Inside device is always active for egress
- Mechanical key override (09 Function - Key allows lever to retract latchbolt. Key can only be removed in locked position.)

#### Features

- Accepts all standard and Reflections® decorative lever designs
- Plug connector with 4' wire lead (Exit device is used as wire raceway, not door)
- Key Override - Requires rim cylinder (sold separately)

#### Applications

- 7100(F) Rim Device
- 7150(F) SquareBolt®
- 7110(F), 7170(F) Surface Vertical Rod

#### Electrical Specifications

- 330 mA @ 24 Volts  
SM - Security Monitor Switch
- 4 AMP @ 250VAC  
Voltage: 24 VAC/VDC only  
BPS series power supplies recommended.

#### Options

- SM - Security Monitor. A SPDT switch that monitors the position of the solenoid (lock and unlock status).
- EX - Trim gasket for exterior applications.

## monitors and signal switches

### touchbar monitor "B"

Provides indication of the pushpad being depressed. Used as a Request to Exit switch to shunt alarm systems, release electromagnetic locks or monitor egress.

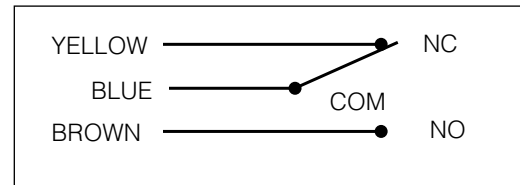
**Electrical Specifications:** 4 Amps @ 250VAC contacts

**Listings:** UL/cUL listed for panic and fire exit hardware.

**Applications:** Rim: 7100(F), 7200, 7200M(F)  
 SquareBolt®: 7150(F), 7250, 7250M(F)  
 SVR: 7110(F), 7170(F), 7210, 7210M(F)  
 CVR: 7120(F), 7160(F), 7220, 7220M(F)  
 Mortise: 7130(F)

**Ordering:** Suffix "B" to the Model Number. Ex: 7120B.

Note: Not available on "D" Delayed Egress devices or with the "A" Alarm kit option.



### latchbolt position monitor "S"

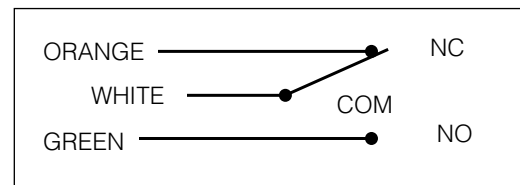
Provides indication on the position of the latchbolt. Used with security systems to monitor the latchbolt, also used to activate automatic door operators upon latch retractions.

**Electrical Specifications:** SPDT contacts rated 5 amp @ 28VDC

**Listings:** UL/cUL listed for panic and fire exit hardware.

**Applications:** Rim: 7100(F), 7200, 7200M(F)  
 SquareBolt®: 7150(F), 7250, 7250M(F)  
 SVR: 7110(F), 7170(F), 7210, 7210M(F)  
 CVR: 7120(F), 7160(F), 7220, 7220M(F)  
 Mortise: 7130(F)

**Ordering:** Suffix "S" to the Model Number. Ex: 7120S.



### trim monitor switch "O"

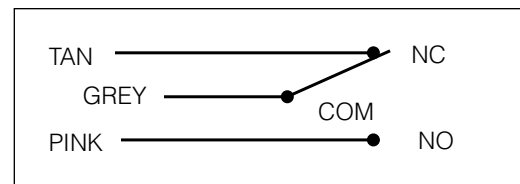
Provides indication of the trim being operated from the outside. Used as a Request to Enter signal switch to shunt alarms, also used to monitor entry.

**Electrical Specifications:** SPDT contacts rated 5 amp @ 28VDC

**Listings:** UL/cUL listed for panic and fire exit hardware.

**Applications:** Rim: 7100(F)  
 SquareBolt®: 7150(F)  
 SVR: 7110(F), 7170(F)  
 CVR: 7120(F), 7160(F)  
 Mortise: 7130(F)

**Ordering:** Suffix "O" to the Model Number. Ex: 7150O.



## stand-alone door alarm

The SDA16 stand-alone battery operated door alarm is designed to continually monitor the status of a door. When the door is opened without authorization, an alarm is triggered to alert the security violation. This alarm features a Peizo horn which blasts a deafening 105+ decibels to alert the violation.

This unit is ideal for emergency doors as well as stairwell doors and rear exit doors in retail environments. The unit, which can also be hardwired, easily complements existing hardware, making any opening alarmed. The SDA16 door alarm is typically mounted on the interior of the door frame or door and is paired with a magnet mounted on the opposing side of the door gap.

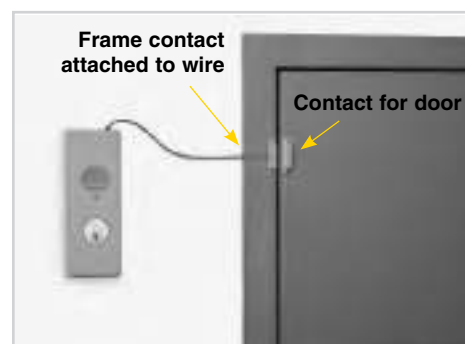


### features

- Dimensions: 8.3"L x 3.1"W x 2.0"D (210mm L x 79mm W x 52mm D)
- Non-handed unit (field reversible)
- Unit powered by 9V battery
- Unit can be hardwired by using WH-11 wire harness and 784 power supply
- No battery is required in unit with hard-wire option – if power is lost, optional gel-cell battery in power supply will give approximately 10,000 operations
- Reverse battery protection safeguards the unit if the battery is incorrectly installed
- A low-voltage battery is indicated by an audible signal every 30 seconds
- Piezo horn blasts at 105+ decibels if the door is used with out proper authorization
- The LED will flash every 30 seconds, indicating either the unit is armed or, if under auto reset, that the door has been violated
- Various field-adjustable features by dip switch including automatic alarm reset, REX and passage time delay, and LED color preference
- A tamper switch provides instantaneous signal to sound horn in the event the cover is removed. Horn will sound until the unit is reset by the key or remote reset/arm switch
- Conformally coated electronics for weather resistance
- Cover is held in place by cam lock which protects mounting screws, electrical system and internal sensors
- Accepts external cylinder (not included, must be specified)
- Accepts standard mortise cylinders (not included, must be specified)

### remote mounting

The SDA16 can be installed remotely from the door by attaching the contacts to the door and frame. The unit can be installed up to 6 feet from the door. This provides the ideal solution for circumstances where exposure to weather may be an issue. To order specify "SDA16XL".



**Note: Actual wire length is 6 feet.**

### cylinders and accessories

- 784 Power supply (9VDC) — includes plug-in wall transformer
- Plug-in wall transformer with 12' cable assembly (part no. 00-0000-3425)
- Gel-cell battery — optional for use with 784 power supply (part no. 00-0000-3426)
- WH-11 Wire harness for remote power and remote unlock
- Mortise cylinder for unit
- Rim cylinder for outside control
- See pages 42 & 45 for cylinder information.

## facts and figures

| <p>Cover Detail</p> |                            | 7100 Series<br>(all variables)           | <table border="1"> <thead> <tr> <th>Series</th> <th>"A"</th> <th>"B"</th> </tr> </thead> <tbody> <tr> <td>7100-36</td> <td><u>32-7/8"</u><br/>(835mm)</td> <td><u>18"</u><br/>(457mm)</td> </tr> <tr> <td>7100F-36</td> <td></td> <td></td> </tr> <tr> <td>7100-48</td> <td><u>44-7/8"</u><br/>(1130mm)</td> <td><u>24"</u><br/>(610mm)</td> </tr> <tr> <td>7100F-48</td> <td></td> <td></td> </tr> </tbody> </table>                                                                                                                                                                                                      | Series | "A" | "B" | 7100-36 | <u>32-7/8"</u><br>(835mm) | <u>18"</u><br>(457mm) | 7100F-36 |                           |                       | 7100-48   | <u>44-7/8"</u><br>(1130mm) | <u>24"</u><br>(610mm) | 7100F-48 |                            |                       |          |                            |                       |           |  |  |
|---------------------|----------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|---------|---------------------------|-----------------------|----------|---------------------------|-----------------------|-----------|----------------------------|-----------------------|----------|----------------------------|-----------------------|----------|----------------------------|-----------------------|-----------|--|--|
| Series              | "A"                        | "B"                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7100-36             | <u>32-7/8"</u><br>(835mm)  | <u>18"</u><br>(457mm)                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7100F-36            |                            |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7100-48             | <u>44-7/8"</u><br>(1130mm) | <u>24"</u><br>(610mm)                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7100F-48            |                            |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| <p>Cover Detail</p> |                            | 7200 and 7200M Series<br>(all variables) | <table border="1"> <thead> <tr> <th>Series</th> <th>"A"</th> <th>"B"</th> </tr> </thead> <tbody> <tr> <td>7200-36</td> <td><u>34-5/8"</u><br/>(880mm)</td> <td><u>18"</u><br/>(457mm)</td> </tr> <tr> <td>7200M-36</td> <td><u>32-7/8"</u><br/>(835mm)</td> <td><u>18"</u><br/>(457mm)</td> </tr> <tr> <td>7200MF-36</td> <td></td> <td></td> </tr> <tr> <td>7200-48</td> <td><u>46-5/8"</u><br/>(1184mm)</td> <td><u>24"</u><br/>(610mm)</td> </tr> <tr> <td>7200M-48</td> <td><u>44-7/8"</u><br/>(1130mm)</td> <td><u>24"</u><br/>(610mm)</td> </tr> <tr> <td>7200MF-48</td> <td></td> <td></td> </tr> </tbody> </table> | Series | "A" | "B" | 7200-36 | <u>34-5/8"</u><br>(880mm) | <u>18"</u><br>(457mm) | 7200M-36 | <u>32-7/8"</u><br>(835mm) | <u>18"</u><br>(457mm) | 7200MF-36 |                            |                       | 7200-48  | <u>46-5/8"</u><br>(1184mm) | <u>24"</u><br>(610mm) | 7200M-48 | <u>44-7/8"</u><br>(1130mm) | <u>24"</u><br>(610mm) | 7200MF-48 |  |  |
| Series              | "A"                        | "B"                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7200-36             | <u>34-5/8"</u><br>(880mm)  | <u>18"</u><br>(457mm)                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7200M-36            | <u>32-7/8"</u><br>(835mm)  | <u>18"</u><br>(457mm)                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7200MF-36           |                            |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7200-48             | <u>46-5/8"</u><br>(1184mm) | <u>24"</u><br>(610mm)                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7200M-48            | <u>44-7/8"</u><br>(1130mm) | <u>24"</u><br>(610mm)                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |
| 7200MF-48           |                            |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |     |     |         |                           |                       |          |                           |                       |           |                            |                       |          |                            |                       |          |                            |                       |           |  |  |

## trim dimensions

|                              |                              |                              |
|------------------------------|------------------------------|------------------------------|
| <b>620F/650F Series</b>      | <b>630F/660F Series</b>      | <b>500F Series</b>           |
|                              |                              |                              |
| Projection:<br>13/16" (20mm) | Projection:<br>2-3/4" (70mm) | Projection:<br>1/4" (6mm)    |
| <b>510F Series</b>           | <b>680F Series</b>           | <b>480F Series</b>           |
|                              |                              |                              |
| Projection:<br>2-1/8" (54mm) | Projection:<br>3" (76mm)     | Projection:<br>2-7/8" (73mm) |

\*Length varies by pull, see page 31

**SARGENT®**

**ASSA ABLOY**

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# 90 Series

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Exit Device





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## 90 Series Exit Devices

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# SARGENT®

# ASSA ABLOY



### MicroShield®

As part of their promise to provide innovative solutions to their customers, certain ASSA ABLOY Group brands offer the MicroShield® technology, a silver-based antimicrobial coating designed to inhibit the growth of bacteria.

MicroShield® is a registered trademark of Yale Security Inc., an ASSA ABLOY Group company.

### MicroShield® Coating

- Revolutionary finish coating available on all SARGENT product lines, utilizes a silver-based antimicrobial compound from Agion Technologies
- As an integral part of the finish coating, MicroShield lasts for the life of the hardware
- MicroShield coating permanently suppresses the growth of bacteria, algae, fungus, mold and mildew. It is effective against a broad spectrum of bacteria.
- Non-toxic and completely safe. The Agion antimicrobial compound is EPA and NSF approved and FDA listed for use in medical and food preparation equipment.
- Applications: Anywhere there is need for a clean environment (hospitals, laboratories, schools, medical centers, daycare, food processing etc.)



### Agion has achieved:



Agion's silver antimicrobial has been certified for its material content, recyclability, and manufacturing characteristics. Cradle To Cradle Certified<sup>CM</sup> products meet established standards for human health, environmental health and recyclability.

Cradle To Cradle Certified<sup>CM</sup> is a certification mark of MBDC.

# Features, Applications and UL Fire Door Ratings

## 90 Series Exit Devices

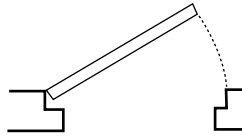


### Features

- Full line of exit devices offering a selection of both wide and narrow stile exit devices, including concealed and surface vertical rods, rim and mortise
- Maximum 4-1/2" (114mm) projection, minimum 2-3/4" (70mm) dogged
- All SARGENT exit devices can be masterkeyed or grand masterkeyed with any other SARGENT product
- All crossbar assemblies are brass, bronze, stainless steel, or steel (see specific device)
- Stainless steel springs throughout
- Trim is through-bolted
- All exit devices meet ANSI standard 156.3, Grade 1
- UL Listed
- UL Listed to Canadian safety standards
- All fire exit hardware for hollow metal door applications listed up to 3 hours (A label) (Double doors require astragal)
- All fire exit hardware for wood door applications listed up to 1-1/2 hour (B label) except where noted

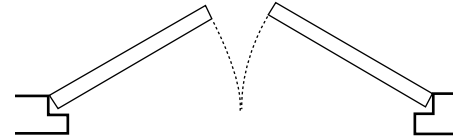
### Applications

#### Single Door



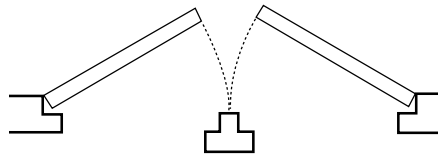
**Rim Type 9800**  
Surface application.

#### Pairs of Doors without Mullion



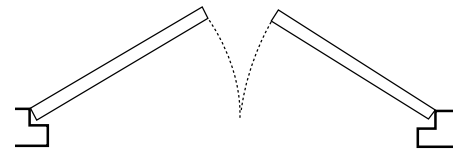
**Surface Vertical Rod Type 9700 or Concealed Vertical Rod Type 9400 - 2 Each**  
2 point locking both doors. Each door active. Do not use an overlapping astragal.

#### Pairs of Doors with 980 Mullion



**Rim Type 9800 - 2 Each**  
**980 Mullion - 1 Each**  
Two independent active doors with full double door opening when required.

#### Pairs of Doors without Mullion



**Vertical Rod Type 9700 - 1 Each**  
**Rim Type 9800 - 1 Each**  
Both devices are surface applied. A coordinator is recommended.

| ● = Available                                               |                                                      |                   |                               | UL Fire Door Rating |                      |                    |                      |                    |
|-------------------------------------------------------------|------------------------------------------------------|-------------------|-------------------------------|---------------------|----------------------|--------------------|----------------------|--------------------|
| Application                                                 | Type Of Device                                       | Series Device     | Maximum Door Opening          | (A)<br>3<br>Hour    | (B)<br>1-1/2<br>Hour | (C)<br>3/4<br>Hour | (D)<br>1-1/2<br>Hour | (E)<br>3/4<br>Hour |
| Single Doors                                                | Mortise                                              | 12-9900           | 4'0" X 10'0"<br>(1219 X 3048) | ●                   | ●                    | ●                  | ●                    | ●                  |
|                                                             | Rim                                                  | 12-9800 **        | 4'0" X 8'0"<br>(1219 X 2438)  | ●                   | ●                    | ●                  | ●                    | ●                  |
|                                                             | Concealed                                            | 12-9400           | 4'0" X 7'2"<br>(1219 X 2184)  | ●                   | ●                    | ●                  | ●                    | ●                  |
| Pair of Doors Swinging in the same direction                | Mortise and Surface Vertical Rod                     | 12-9900 X 12-9700 | 8'0" X 8'0"<br>(2438 X 2438)  | ●                   | ●                    | ●                  | ●                    | ●                  |
|                                                             | Two Rim With Mullion (12-980 available)              | 12-9800 X 12-9800 | 8'0" X 8'0"<br>(2438 X 2438)  | ●                   | ●                    | ●                  | ●                    | ●                  |
|                                                             | *Two Surface Vertical Rod No astragal No coordinator | 12-9700 X 12-9700 | 8'0" X 8'0"<br>(2438 X 2438)  |                     | ●                    | ●                  | ●                    | ●                  |
|                                                             | Two Concealed Vertical Rod No overlapping astragal   | 12-9400 X 12-9400 | 8'0" X 7'2"<br>(2438 X 2184)  |                     | ●                    | ●                  | ●                    | ●                  |
| Double Egress Pair of Doors Swinging in opposite directions | *Two Surface Vertical Rod                            | 12-9700 X 12-9700 | 8'0" X 8'0"<br>(2438 X 2438)  | ●                   | ●                    | ●                  | ●                    | ●                  |
|                                                             | *Two Concealed Vertical Rod                          | 12-9400           | 8'0" X 7'2"<br>(2438 X 2184)  | ●                   | ●                    | ●                  | ●                    | ●                  |

\* Limited for Fire Doors listed by UL for this use. NFPA requires an astragal on 3 hour applications.

\*\* 75 and 76 functions are not available with 12- fire rated 9800 devices  
Vertical rod applications will not work with astragal

**Note:** Please contact door manufacturer for specifications regarding fire door construction

Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Sargent Manufacturing Company makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

## 9800 Series Rim Exit Device

### 90 Series Exit Devices



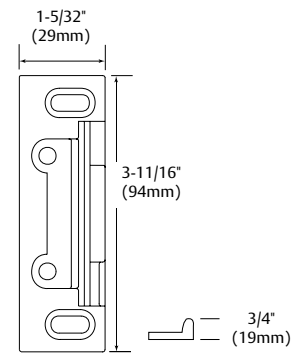
### 9800 Rim Exit Device

The 9800 Series exit devices are ordered with trim and shipped complete with the strike, screw packs and cylinder as required in one carton. The cross bars are cut to the correct length, based on door width.

### Specifications

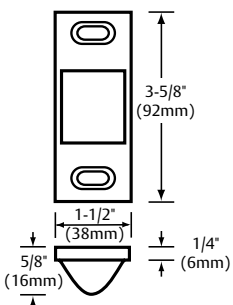
|                    |                                                                                                                                                  |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| For Doors          | Wood or metal. 1-3/4" (44.5mm) thick standard. 2-1/4" (57mm) thick on order. Other door thickness, consult factory. 4-1/8" (105mm) minimum stile |
| Mounting           | Supplied standard with wood and machine screws. Through-bolts available on order                                                                 |
| Chassis Cover      | Brass, bronze or stainless steel                                                                                                                 |
| Chassis            | Nonferrous alloy                                                                                                                                 |
| Crossbar           | 1" brass, bronze and stainless steel tubing. Specify 42- for reinforced cross bar                                                                |
| Hand               | Reversible                                                                                                                                       |
| Dogging            | Standard Allen key dogging                                                                                                                       |
| Strike             | 649 standard strike for panic and fire                                                                                                           |
| Fire Exit Hardware | See chart page 1                                                                                                                                 |

### 649 Strike

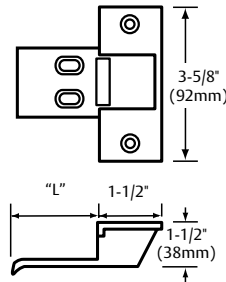


- For 9800 and 12-9800
- Supplied standard
- Surface applied
- Black nylon coated

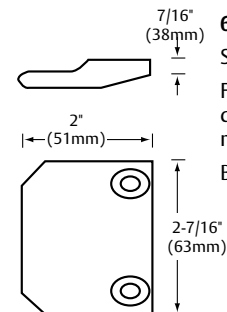
### Alternate Strikes for Rim Devices 9800



**613**  
Half mortised  
Nylon coating on face plate only  
Specify hardware finish



**642**  
Full mortised  
Dimension "L" equals door thickness plus 1/2"  
Nylon coating on lip only  
Specify hardware finish



**644**  
Surface applied  
For use on pairs of doors without mullion  
Black nylon coated

## 9800 Functions and Trims

### 90 Series Exit Devices

**How to order:** Options 10-SG- Series 98 Function 13 Trim ETL Hand RHR O/S Finish 26D I/S Finish 32D Door Width 36"

#### 700 Series ET Trim



Exits with ET Trim, specify lever design after the ET designation (e.g., ETL)

#### Lever Designs for ET Controls

A, B, E, F, J, L, P, W

Also available with Coastal Series & Studio Collection Levers

**Note:** Voltage must be specified for 73, 74, 75 & 76 function ET trims (12v or 24v)

#### PRK Knob Trim

PRK Trim with K knob is through-bolted to the chassis.



To order:

PRK trim less exit device,  
Specify: 814-PRK for 04 function  
Specify: 810-PRK for 10 function  
Specify: 813-PRK for 13 function  
Specify: 825-PRK for 15 function

| SARGENT Function Numbers | ANSI Function Numbers | Description & Cylinder Info (1-3/4" Door)                                                                                                      | ANSI Type 1 9800 Panic & Fire |
|--------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 04                       | 03                    | Night Latch<br>Key Retracts Latch<br>#34 Cylinder Supplied                                                                                     | 9804 x ET_                    |
| 10                       | 01                    | No outside Operation (No Cylinder)                                                                                                             | 9810                          |
| 10                       | 02                    | No outside Operation (No Cylinder)<br>ET Control is used as Pull Only                                                                          | 9810 x ET_                    |
| 13                       | 08                    | Key Outside Unlocks/locks Trim<br>#41 Cylinder Supplied                                                                                        | 9813 x ET_                    |
| 15                       | 14                    | Passage Only (No cylinder)                                                                                                                     | 9815 x ET_                    |
| 73                       |                       | Electrified ET Trim - Fail Safe<br>Power Off, Unlocks Lever (No Cylinder)                                                                      | 9873 x ET_                    |
| 74                       |                       | Electrified ET Trim - Fail Secure<br>Power Off, Locks Lever (No Cylinder)                                                                      | 9874 x ET_                    |
| 75++                     |                       | Electrified ET Trim - Fail Safe<br>Power Off, Unlocks Lever, Key Retracts Latch<br>#34 Cylinder Supplied<br>NOT available with 12-9800 devices | 9875 x ET_                    |
| 76**                     |                       | Electrified ET Trim - Fail Secure<br>Power Off, Locks Lever, Key Retracts Latch<br>#34 Cylinder Supplied<br>NOT available with 12-9800 devices | 9876 x ET_                    |

**Note:** Exit devices are available in all standard finishes, except 14, 15, 26 & 26D. With these finishes, exit devices are supplied in 32 or 32D to match accordingly. For nickel finishes, specify 14/32 or 15/32D to receive nickel finished trims and stainless exit devices

|    |    |                                                                          |            |
|----|----|--------------------------------------------------------------------------|------------|
| 04 | 03 | Night Latch<br>Key Retracts Latch<br>#34 Rim Cylinder Supplied           | 9804 x PRK |
| 10 | 02 | No outside Operation<br>PRK used as a Pull only                          | 9810 x PRK |
| 13 | 08 | Classroom<br>Key Outside Unlocks/locks Trim<br>#34 Rim Cylinder Supplied | 9813 x PRK |
| 15 | 14 | Passage Only (No cylinder)                                               | 9815 x PRK |

#### Options

##### 9800

##### Mechanical Options:

- 12-
  - 31-
  - 36-
  - 37-
  - 42-
  - 54-
  - 76-
  - 85-
  - 86-
  - 87-
  - CPC-
  - SG-
  - TB-
- ##### Cylinder Options:
- 10-
  - 10-21-
  - 10UL-
  - 10-63-
  - 11-
  - 11-21-
  - 11-60-
  - 11-63-
  - 11-64-
  - 11-70-7P-
  - 11-72-7P-
  - 11-73-7P-
  - 11-65-73-7P-
  - 21-
  - 22-
  - 51-
  - 52-
  - 60-
  - 63-
  - 64-
  - 70-
  - 72-
  - 73-
  - 65-73-
  - 65-73-7P-
  - 73-7P-
  - 81-
  - 82-
  - F1-82-
  - 83-
  - F1-83-
  - 84-
  - BR-
  - LC-
  - SC-
  - SE-

#### Pull & Thumb Piece Trim Section

#### Trim Designations

- Use three letter designations (Ex "PTB") when ordering the exit device with trim
- Use the six digit designation (Ex "866-MAL") when ordering trim without an exit device, always specify finish

#### Series

| SARGENT Function Numbers | ANSI Function Numbers | Description & Cylinder Info. (1-3/4" Door)                  | 814-FLL | 814-FLW | 814-MAL | 814-PTB | 814-ST5 | 862 Pull | 9800 Panic & Fire       |
|--------------------------|-----------------------|-------------------------------------------------------------|---------|---------|---------|---------|---------|----------|-------------------------|
| 04                       | 03                    | Night Latch<br>Key Retracts Latch<br>#34 Cylinder Supplied  | 814-FLL | 814-FLW | 814-MAL | 814-PTB | 814-ST5 | 862 Pull | 9804 x Trim Designation |
| 10                       | 02                    | No O/S Operation or<br>Cylinder (Pull Only)                 | 810-FLL | 810-FLW | 810-MAL | 810-PTB | 810-ST5 | 862 Pull | 9810 x Trim Designation |
| 28                       | 15                    | Passage Only<br>(No cylinder)                               | 828-FLL | 828-FLW | 828-MAL | 828-PTB | 828-ST5 | N/A      | 9828 x Trim Designation |
| 63                       | 05                    | Key Outside Unlocks/<br>Locks Trim<br>#34 Cylinder Supplied | 866-FLL | 866-FLW | 866-MAL | 866-PTB | 866-ST5 | N/A      | 9863 x Trim Designation |

**Note:** Thumb piece trims for 63 and 66 function devices are identical and are identified as 66 function when trim is ordered separately

**Note:** FLW trim is not available in 32(629) or 32D(630)

#### Available Finishes

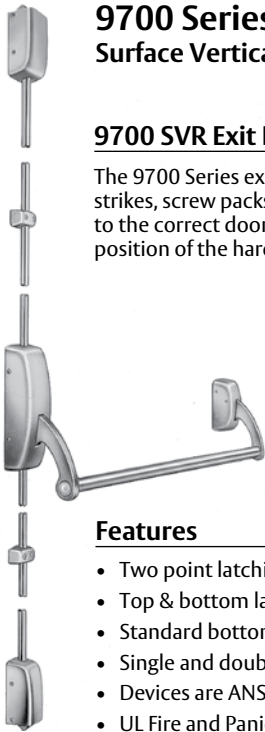
| SARGENT Finishes | BHMA Finishes |
|------------------|---------------|
| 03               | 605           |
| 04               | 606           |
| 09               | 611           |
| 10               | 612           |
| 10B              | 613           |
| 10BE             | 613E          |
| 10BL             | 614           |
| 14               | 618           |
| 15               | 619           |
| 20D              | 624           |
| 26               | 625           |
| 26D              | 626           |
| 32               | 628           |
| 32D              | 630           |

# 9700 Series Surface Vertical Rod Exit Device

## 90 Series Exit Devices

# SARGENT®

# ASSA ABLOY



### 9700 Series Surface Vertical Rod Exit Device

#### 9700 SVR Exit Device

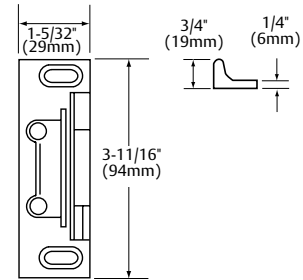
The 9700 Series exit devices are ordered with trim and shipped complete with the strikes, screw packs and cylinder as required in one carton. The cross bars are cut to the correct door width and vertical rods are made to order, based on mounting position of the hardware and opening height.

#### Features

- Two point latching (top and bottom of the door)
- Top & bottom latchbolt projection adjustable through center case
- Standard bottom latch compatible with latchtrack thresholds (by others)
- Single and double door applications
- Devices are ANSI A156.3 – 2008 Grade 1
- UL Fire and Panic listed
- Rods are 1/2" (13mm) brass, bronze or stainless steel

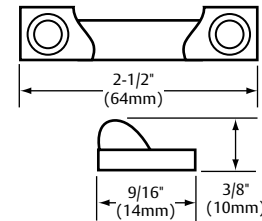
#### 646 Top Strike

- Standard Top Strike for both Panic & Fire (12-) Hardware
- Surface applied to frame
- Black nylon coated
- Replaces 629 Strike



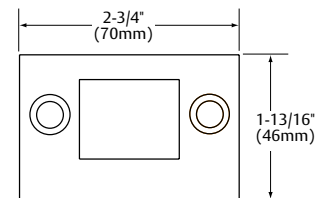
#### 624 Bottom Strike

- Standard for 9700
- Applied to surface of floor or to a flat threshold
- Black nylon coated



#### 655 Bottom Strike

- Standard bottom strike for 12-9700 and 14-9700
- Stainless steel
- Black nylon coated
- Replaces 647 Strike



#### Specifications for 9700 Series Exit

|                    |                                                                                                                                                                      |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For Doors          | Wood or metal. 1-3/4" (44.5mm) thick standard. 2-1/4" (57mm) thick on order. Other door thickness, consult factory. 3" (76mm) minimum stile. Maximum door height 96" |
| Mounting           | Supplied standard with wood and machine screws. Through-bolts available on order                                                                                     |
| Chassis Cover      | Brass, bronze or stainless steel                                                                                                                                     |
| Chassis            | Nonferrous alloy                                                                                                                                                     |
| Crossbar           | 1" brass, bronze and stainless steel tubing. Specify 42- for reinforced cross bar                                                                                    |
| Hand               | Non Handed                                                                                                                                                           |
| Dogging            | Standard Allen key dogging                                                                                                                                           |
| Strikes            | 646 top strike for panic & fire and 624 bottom strike for panic & 655 bottom strike for fire                                                                         |
| Rod                | 1/2" brass, bronze or stainless steel                                                                                                                                |
| Fire Exit Hardware | See chart page 1                                                                                                                                                     |
| Opening Height     | 84" (2134mm) Standard                                                                                                                                                |

#### Inside Lever Assembly for 300 Series Aux Control



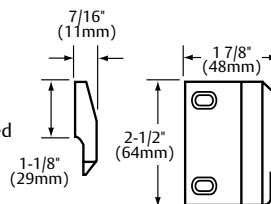
Attaches to top rod and engages with 300 Series Auxiliary Control. Packed standard with 306 and 313 Auxiliary Controls

Part # 97-2378

#### 648 & 653 Strikes (Alternate Strikes for 9700 SVR Devices)

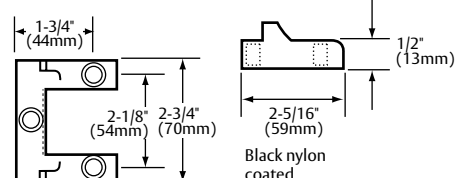
##### 648 Strike

For doors having transom panel applications  
Black nylon coated



##### 653 Strike

Alternate for 12-9700



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## 9700 Functions and Trims

### 90 Series Exit Devices

|                      |                       |                     |                       |                    |                    |                         |                          |                          |                           |                   |
|----------------------|-----------------------|---------------------|-----------------------|--------------------|--------------------|-------------------------|--------------------------|--------------------------|---------------------------|-------------------|
| <b>How to order:</b> | <b>Options</b><br>11- | <b>Series</b><br>97 | <b>Function</b><br>13 | <b>Trim</b><br>ETL | <b>Hand</b><br>RHR | <b>O/S Finish</b><br>15 | <b>I/S Finish</b><br>32D | <b>Door Width</b><br>36" | <b>Door Height</b><br>84" | <b>AFF</b><br>36" |
|----------------------|-----------------------|---------------------|-----------------------|--------------------|--------------------|-------------------------|--------------------------|--------------------------|---------------------------|-------------------|

#### 700 Series ET Trim



Exits with ET Trim, specify lever design after the ET designation (e.g., ETL)

#### Lever Designs for ET Controls

A, B, E, F, J, L, P, W

Also available with Coastal Series & Studio Collection Levers

**Note:** Voltage must be specified for 73 & 74 function ET trims (12v or 24v)

| SARGENT Function Numbers | ANSI Function Numbers | Description & Cylinder Info. (1-3/4" Door)                                                    | ANSI Type 2 9700 Panic & Fire |
|--------------------------|-----------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| 06                       | 09                    | Key unlocks Trim, Trim retracts latch/ Trim relocks when key is removed #41 Cylinder Supplied | 9706 x ET_                    |
| 10                       | 01                    | No outside Operation (No Cylinder)**                                                          | 9710                          |
| 10                       | 02                    | No outside Operation (No Cylinder)** ET Control is used as Pull Only                          | 9710 x ET_                    |
| 13                       | 08                    | Key Outside Unlocks/locks Trim #41 Cylinder Supplied                                          | 9713 x ET_                    |
| 15                       | 14                    | Passage Only (No cylinder)                                                                    | 9715 x ET_                    |
| 73                       |                       | Electrified ET Trim - Fail Safe Power Off, Unlocks Lever (No Cylinder)**                      | 9773 x ET_                    |
| 74                       |                       | Electrified ET Trim - Fail Secure Power Off, Locks Lever (No Cylinder)**                      | 9774 x ET_                    |

**Note:** Exit devices are available in all standard finishes, except 14, 15, 26 & 26D. With these finishes, exit devices are supplied in 32 or 32D to match accordingly. For nickel finishes, specify 14/32 or 15/32D to receive nickel finished trims and stainless exit devices

**Note:** AFF means Above Finished Floor, center line of rail Above Finished Floor

\*\* Cylinder Override is available with a 306 Aux Control

Example Order: 9773F 12V x ETMG x 306 x RHR x 32D 36" w x 84" H

| SARGENT Function Numbers | ANSI Function Numbers | Description & Cylinder Info. (1-3/4" Door)                                                        | 9700 Panic & Fire |
|--------------------------|-----------------------|---------------------------------------------------------------------------------------------------|-------------------|
| 06                       | 09                    | Key unlocks Trim, Trim retracts latch/ Trim relocks when key is removed #34 Rim Cylinder Supplied | 9706 x PRK        |
| 10                       | 02                    | No outside Operation PRK used as a Pull only                                                      | 9710 x PRK        |
| 13                       | 08                    | Classroom Key Outside Unlocks/locks Trim #34 Rim Cylinder Supplied                                | 9713 x PRK        |
| 15                       | 14                    | Passage Only (No cylinder)                                                                        | 9715 x PRK        |

#### PRK Knob Trim

PRK Trim with K knob is through-bolted to the chassis.



To order:

PRK trim less exit device, Specify: 813-PRK for 06 function  
Specify: 810-PRK for 10 function  
Specify: 813-PRK for 13 function  
Specify: 825-PRK for 15 function

#### 300 Series++ Auxiliary Control

300 Series Auxiliary Control



| SARGENT Function Numbers | ANSI Function Numbers | Description & Cylinder Info. (1-3/4" Door)                                                    | 9700 Panic & Fire |
|--------------------------|-----------------------|-----------------------------------------------------------------------------------------------|-------------------|
| 06                       | 12                    | Key unlocks Turn; Turn retracts latch/ Turn relocks when key is removed #41 Cylinder Supplied | 9710 x 306        |
| 13                       | 11                    | Key Outside Unlocks/locks Turn #41 Cylinder Supplied                                          | 9710 x 313        |

**Note:** When ordering 9700 Series Exit Device x 300 Series Aux. Control, specify 10 Function for the exit. Example: 9710F x 306 x RHR x 32D x 42" x 90"

++ **Note:** Exit Devices must be mounted 38" AFF when used with a 300 Series Auxiliary Controls to meet ICC/ANSI A117.1-2003 Accessible & Usable Buildings and Facilities Code

#### Pull & Thumb Piece Trim Section

#### Trim Designations

- Use three letter designations (Ex "PTB") when ordering the exit device with trim
- Use the six digit designation (Ex "866-MAL") when ordering trim without an exit device, always specify finish

#### Series



9700 Panic & Fire

| SARGENT Function Numbers | ANSI Function Numbers | Description & Cylinder Info. (1-3/4" Door)           | 810-FLL | 810-FLW | 810-MAL | 810-PTB | 810-ST5 | 9710 x Trim Designation |
|--------------------------|-----------------------|------------------------------------------------------|---------|---------|---------|---------|---------|-------------------------|
| 10                       | 02                    | Pull Only (No Cylinder)**                            |         |         |         |         |         | 9710 x Trim Designation |
| 28                       | 15                    | Passage Only (No cylinder)                           | 828-FLL | 828-FLW | 828-MAL | 828-PTB | 828-ST5 | 9728 x Trim Designation |
| 63                       | 05                    | Key Outside Unlocks/locks Trim #34 Cylinder Supplied | 866-FLL | 866-FLW | 866-MAL | 866-PTB | 866-ST5 | 9763 x Trim Designation |

\*\*\* Cylinder Override is available with a 306 Aux Control

**Note:** Thumb piece trims for 63 and 66 function devices are identical and are identified as 66 function when trim is ordered separately

**Note:** FLW trim is not available in 32(629) or 32D(630)

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| Options                    |  |
|----------------------------|--|
| 9700                       |  |
| <b>Mechanical Options:</b> |  |
| 12-                        |  |
| 14-                        |  |
| 31-                        |  |
| 36-                        |  |
| 37-                        |  |
| 42-                        |  |
| 54-                        |  |
| 76-                        |  |
| 85-                        |  |
| 86-                        |  |
| 87-                        |  |
| CPC-                       |  |
| SG-                        |  |
| TB-                        |  |
| <b>Cylinder Options:</b>   |  |
| 10-                        |  |
| 10-21-                     |  |
| 10UL-                      |  |
| 10-63-                     |  |
| 11-                        |  |
| 11-21-                     |  |
| 11-60-                     |  |
| 11-63-                     |  |
| 11-64-                     |  |
| 11-70-7P-                  |  |
| 11-72-7P-                  |  |
| 11-73-7P-                  |  |
| 11-65-73-7P-               |  |
| 21-                        |  |
| 22-                        |  |
| 51-                        |  |
| 52-                        |  |
| 60-                        |  |
| 63-                        |  |
| 64-                        |  |
| 70-                        |  |
| 72-                        |  |
| 73-                        |  |
| 65-73-7P-                  |  |
| 73-7P-                     |  |
| 81-                        |  |
| 82-                        |  |
| F1-82-                     |  |
| 83-                        |  |
| F1-83-                     |  |
| 84-                        |  |
| BR-                        |  |
| LC-                        |  |
| SC-                        |  |
| SE-                        |  |

#### Available Finishes

| SARGENT Finishes | BHMA Finishes |
|------------------|---------------|
| 03               | 605           |
| 04               | 606           |
| 09               | 611           |
| 10               | 612           |
| 10B              | 613           |
| 10BE             | 613E          |
| 10BL             | 614           |
| 14               | 618           |
| 15               | 619           |
| 20D              | 624           |
| 26               | 625           |
| 26D              | 626           |
| 32               | 629           |
| 32D              | 630           |

## 9900 Series Mortise Lock Exit Device

### 90 Series Exit Devices



### 9900 Mortise Lock Exit Device

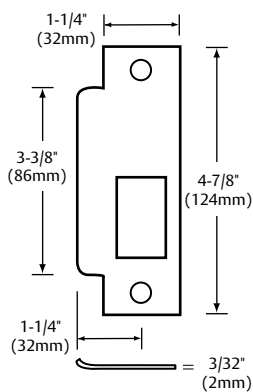
The 9900 Series exit devices are ordered with trim and shipped complete with the strike, screw packs and cylinder as required in one carton. The cross bars are cut to the correct length, based on door width.

### Specifications

|                    |                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| For Doors          | Wood or metal. 1-3/4" (44.5mm) thick standard. Other door thickness, consult factory. 4-1/2" (114mm) minimum stile |
| Mounting           | Supplied standard with wood and machine screws. Through-bolts available on order                                   |
| Chassis Cover      | Brass, bronze or stainless steel                                                                                   |
| Chassis            | Nonferrous alloy                                                                                                   |
| Crossbar           | 1" brass, bronze and stainless steel tubing. Specify 42- for reinforced cross bar                                  |
| Hand               | Handed, please specify hand when ordering                                                                          |
| Mortise Lock       | 900 Series Mortise Lock, non-reversible                                                                            |
| Dogging            | Standard Allen key dogging                                                                                         |
| Strike             | C908 standard for panic and fire rated                                                                             |
| Fire Exit Hardware | See chart page 1                                                                                                   |

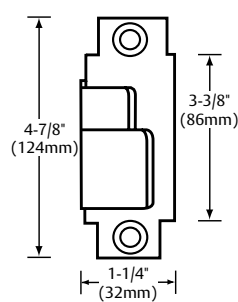
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### C908 Strike



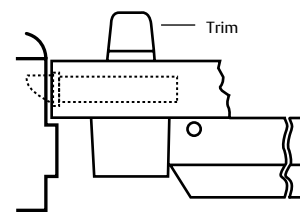
- Curved lip ANSI A115.1
- Handed. 1-1/4" lip standard
- Longer, lips in increments of 1/4" through 2-7/8" available
- Black nylon coated

### 815 Open Back Strike

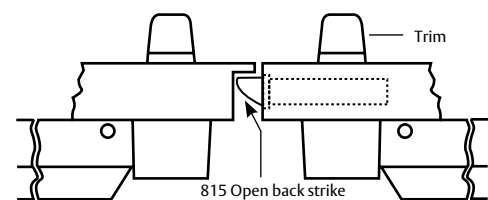


- ANSI A115.14 Open Back
- Beveled 1/8" in 2"
- Specify hand of active door
- "B" label
- Required for pairs of doors with 9700 and 9900 on pair
- Black nylon coated

### Single Door





### Pair of Doors



## 9900 Functions and Trims

### 90 Series Exit Devices

| How to order:                                                                                                                                                                           | Options<br>10-SG-                                                                                                                                                                    | Series<br>99                    | Function<br>13               | Trim<br>ETL                                                                                                                                                                                                                                                                                                                                                                                                             | Hand<br>RHR | O/S Finish<br>26 | I/S Finish<br>32                         | Door Width<br>36" | Options<br>9900 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------|------------------------------------------|-------------------|-----------------|
| <b>700 Series ET Trim</b>                                                                                                                                                               |                                                                                                                                                                                      |                                 |                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |             |                  |                                          |                   |                 |
|                                                                                                        | Exits with ET Trim, specify lever design after the ET designation (e.g., ETL)                                                                                                        |                                 |                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |             |                  |                                          |                   |                 |
| <b>Lever Designs for ET Controls</b>                                                                                                                                                    | A, B, E, F, J, L, P, W<br>Also available with Coastal Series & Studio Collection Levers<br><b>Note:</b> Voltage must be specified for 73, 74, 75 & 76 function ET trims (12v or 24v) |                                 |                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |             |                  |                                          |                   |                 |
| <b>PRK Knob Trim</b>                                                                                                                                                                    | <br>PRK Trim with K knob is through-bolted to the chassis.                                         |                                 |                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |             |                  |                                          |                   |                 |
| To order:<br>PRK trim less exit device,<br>Specify: 814-PRK for 04 function<br>Specify: 810-PRK for 10 function<br>Specify: 813-PRK for 13 function<br>Specify: 825-PRK for 15 function |                                                                                                                                                                                      |                                 |                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |             |                  |                                          |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | <b>SARGENT Function Numbers</b> | <b>ANSI Function Numbers</b> | <b>Description &amp; Cylinder Info (1-3/4" Door)</b>                                                                                                                                                                                                                                                                                                                                                                    |             |                  | <b>ANSI Type 3 8900 Panic &amp; Fire</b> |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 04                              | 03                           | Night Latch<br>Key Retracts Latch<br>#46 Cylinder Supplied                                                                                                                                                                                                                                                                                                                                                              |             |                  | 9904 x ET_                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 10                              | 01                           | No outside Operation (No Cylinder)                                                                                                                                                                                                                                                                                                                                                                                      |             |                  | 9910                                     |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 10                              | 02                           | No outside Operation (No Cylinder)<br>ET Control is used as Pull Only                                                                                                                                                                                                                                                                                                                                                   |             |                  | 9910 x ET_                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 13                              | 08                           | Key Outside Unlocks/locks Trim<br>#41 Cylinder Supplied                                                                                                                                                                                                                                                                                                                                                                 |             |                  | 9913 x ET_                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 15                              | 14                           | Passage Only (No cylinder)                                                                                                                                                                                                                                                                                                                                                                                              |             |                  | 9915 x ET_                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 75++                            |                              | Electrified ET Trim - Fail Safe<br>Power Off, Unlocks Lever,<br>Key Retracts Latch<br>#46 Cylinder Supplied                                                                                                                                                                                                                                                                                                             |             |                  | 9975 x ET_                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 76**                            |                              | Electrified ET Trim - Fail Secure<br>Power Off, Locks Lever,<br>Key Retracts Latch<br>#46 Cylinder Supplied                                                                                                                                                                                                                                                                                                             |             |                  | 9976 x ET_                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      |                                 |                              | <b>Note:</b> Exit devices are available in all standard finishes, except 14, 15, 26 & 26D. With these finishes, exit devices are supplied in 32 or 32D to match accordingly. For nickel finishes, specify 14/32 or 15/32D to receive nickel finished trims and stainless exit devices<br>++ 75 Function without cylinder is available as a 73 Function<br>** 76 Function without cylinder is available as a 74 Function |             |                  |                                          |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 04                              | 03                           | Night Latch Key Retracts Latch<br>#41 Mortise Cylinder Supplied                                                                                                                                                                                                                                                                                                                                                         |             |                  | 9904 x PRK                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 10                              | 02                           | No outside Operation<br>PRK used as a Pull only                                                                                                                                                                                                                                                                                                                                                                         |             |                  | 9910 x PRK                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 13                              | 08                           | Classroom<br>Key Outside Unlocks/locks Trim<br>#41 Mortise Cylinder Supplied                                                                                                                                                                                                                                                                                                                                            |             |                  | 9913 x PRK                               |                   |                 |
|                                                                                                                                                                                         |                                                                                                                                                                                      | 15                              | 14                           | Passage Only (No cylinder)                                                                                                                                                                                                                                                                                                                                                                                              |             |                  | 9915 x PRK                               |                   |                 |






- Mechanical Options:**
- 12-
  - 23-
  - 31-
  - 36-
  - 37-
  - 42-
  - 54-
  - 76-
  - 85-
  - 86-
  - 87-
  - CPC-
  - SC-
  - TB-
- Cylinder Options:**
- 10-
  - 10-21-
  - 10UL-
  - 10-63-
  - 11-
  - 11-21-
  - 11-60-
  - 11-63-
  - 11-64-
  - 11-70-7P-
  - 11-72-7P-
  - 11-73-7P-
  - 11-65-73-7P-
  - 21-
  - 22-
  - 51-
  - 52-
  - 60-
  - 63-
  - 64-
  - 70-
  - 72-
  - 73-
  - 65-73-
  - 65-73-7P-
  - 73-7P-
  - 81-
  - 82-
  - F1-82-
  - 83-
  - F1-83-
  - 84-
  - BR-
  - LC-
  - \*SC-
  - \*SE-

\* Options are not available with the following functions: 04 x ET, 75 & 76

### Pull & Thumb Piece Trim Section

### Trim Designations

- Use three letter designations (Ex "PTB") when ordering the exit device with trim
- Use the six digit designation (Ex "866-MAL") when ordering trim without an exit device, always specify finish & hand

| SARGENT Function Numbers | ANSI Function Numbers | Description & Cylinder Info. (1-3/4" Door)              | Series                                                                              |                                                                                     |                                                                                     |                                                                                      |                                                                                       | 9900 Panic & Fire       |
|--------------------------|-----------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------|
| 04                       | 03                    | Night Latch-Key Retracts Latch<br>#41 Cylinder Supplied |  |  |  |  |  | 9904 x Trim Designation |
| 10                       | 02                    | No O/S Operation or Cylinder (Pull Only)                | 810-FLL                                                                             | 810-FLW                                                                             | 810-MAL                                                                             | 810-PTB                                                                              | 810-STB                                                                               | 9910 x Trim Designation |
| 28                       | 15                    | Passage Only (No cylinder)                              | 828-FLL                                                                             | 828-FLW                                                                             | 828-MAL                                                                             | 828-PTB                                                                              | 828-STB                                                                               | 9928 x Trim Designation |
| 63                       | 05                    | Key Outside Unlocks/locks Trim #41 Cylinder Supplied    | 866-FLL                                                                             | 866-FLW                                                                             | 866-MAL                                                                             | 866-PTB                                                                              | 866-STB                                                                               | 9963 x Trim Designation |

### Available Finishes

| SARGENT Finishes | BHMA Finishes |
|------------------|---------------|
| 03               | 605           |
| 04               | 606           |
| 09               | 611           |
| 10               | 612           |
| 10BE             | 613           |
| 10BL             | 613E          |
| 14               | 614           |
| 15               | 618           |
| 20D              | 619           |
| 26               | 624           |
| 26D              | 625           |
| 32               | 626           |
| 32D              | 629           |
|                  | 630           |

**Note:** Thumb piece trims used with mortise lock exit devices are handed  
**Note:** Thumb piece trims for 63 and 66 function devices are identical and are identified as 66 function when trim is ordered separately  
**Note:** FLW trim is not available in 32(629) or 32D(630)



# 9400 Series Narrow Stile Concealed Vertical Rod Exit Device

## 90 Series Exit Devices

**SARGENT®**

**ASSA ABLOY**

|                      |                       |                     |                       |                    |                      |                          |                           |                   |
|----------------------|-----------------------|---------------------|-----------------------|--------------------|----------------------|--------------------------|---------------------------|-------------------|
| <b>How to order:</b> | <b>Options</b><br>12- | <b>Series</b><br>94 | <b>Function</b><br>04 | <b>Hand</b><br>RHR | <b>Finish</b><br>32D | <b>Door Width</b><br>36" | <b>Door Height</b><br>84" | <b>AFF</b><br>36" |
|----------------------|-----------------------|---------------------|-----------------------|--------------------|----------------------|--------------------------|---------------------------|-------------------|



### 9400 CVR Exit Device

The 9400 Series Exit Device is available with two functions:

9404 - Night latch

9410 - No outside operation (no cylinder)

### Specifications

|                                  |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| For Doors                        | Metal doors with 1-3/4" (44.5mm) thickness only. Requires proper reinforcements                                                                     |
| Mounting                         | Supplied standard with machine screws.                                                                                                              |
| Chassis Cover                    | Brass, bronze or stainless steel                                                                                                                    |
| Chassis                          | Nonferrous alloy                                                                                                                                    |
| Crossbar                         | 13/16" x 1-3/8" oval seamless tubing; standard length for doors up to 36"; crossbar available for doors 36-1/2" to 48"                              |
| Hand                             | Field Reversible. Order as RHRB or LHRB                                                                                                             |
| Dogging                          | Standard Allen key dogging<br>Less dogging available, special order                                                                                 |
| Strikes                          | 94-2390 top strike pack; 94-2391 bottom strike pack                                                                                                 |
| Rod                              | 3/8" solid steel (top); 1/2" steel tubing<br>Rods for doors 8'6" standard<br>Rods for doors 8'6" to 10'8" optional                                  |
| Trim                             | Night Latch Cylinder Retainer with 04 function;<br>862, 863, 864 pulls available separately                                                         |
| Opening Height                   | 8'6" standard to 10'8" optional                                                                                                                     |
| Stile Width                      | 2-1/8" minimum with 1/2" stop, single door;<br>1-3/4", pair of doors                                                                                |
| Projection                       | 4-7/8"; 3-1/8" depressed                                                                                                                            |
| Backset                          | 1-3/8" on single door with 3/8" stop;<br>1" on pair of doors without mullion                                                                        |
| Cylinder                         | 41 Mortise cylinder<br>Supplied with 9404 / 12-9404 only;<br>Cylinder kit includes:<br>Cylinder, Night Latch Cylinder Retainer, and mounting screws |
| Warranty                         | 1 Year Limited                                                                                                                                      |
| Certifications / Compliance ANSI | ANSI A156.3 Grade 1; A117.1 Accessibility Code                                                                                                      |
| Fire Exit Hardware               | See chart on page 1                                                                                                                                 |

### Options

**9400**

#### Mechanical Options:

12-  
85-

#### Cylinder Options:

10-

10UL-

11-

11-21-

82-

F1-82-

BR-

SC-

SE-

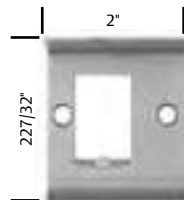
### 9400 Night Latch Cylinder Retainer

- Key retracts latch
- Standard with 9404 & 12-9404
- Supplied with a # 41 Cylinder



### 94-2390 Top Strike

- Standard Top Strike for 9400



### 94-2391 Bottom Strike

- Standard Bottom Strike for 9400
- Strike to be flush with finish floor



# 9898 Reversible Rim Exit and Trim for the 9898 Rim Exit Device

## 90 Series Exit Devices

**SARGENT®**

**ASSA ABLOY**



The 9898 Multi-function Rim Exit Device is the perfect stocking device.

- 4 functions determined by trim specified
- Device & trim sold separately; easy to mix and match
- 5 available trim designs
- Trim is non-handed
- Device is field reversible

How to Order: 9898 x Finish x Door Width

**Note:** If door width information is not supplied, SARGENT will supply a cross bar for a 44" door width

- Cross bars can easily be cut to length in the field

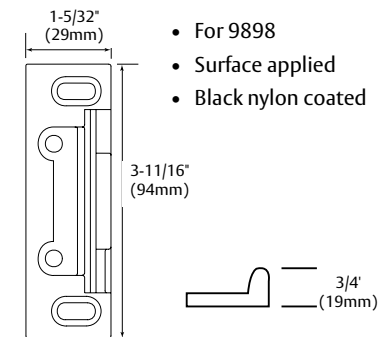
Available options for 9898 exit devices are 42-, SG- & CPC

Available options for 9898 trim are 10-, 10UL-, 11-, 11-60-, 11-63-, 11-64-, 21-, 22-, 60-, 63-, 64-, 81-, 82-, F1-82-, 83-, F1-83-, 84-, BR-, CPC- and SG

### Specifications

|                    |                                                                                                                                                  |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| For Doors          | Wood or metal. 1-3/4" (44.5mm) thick standard. 2-1/4" (57mm) thick on order. Other door thickness, consult factory. 4-1/8" (105mm) minimum stile |
| Mounting           | Supplied standard with wood and machine screws. Through-bolts available on order                                                                 |
| Chassis Cover      | Brass, bronze or stainless steel                                                                                                                 |
| Chassis            | Nonferrous alloy                                                                                                                                 |
| Crossbar           | 1" brass, bronze and stainless steel tubing. Specify 42- for reinforced cross bar                                                                |
| Hand               | Non-handed                                                                                                                                       |
| Dogging            | Standard Allen key dogging                                                                                                                       |
| Strike             | 649 Strike                                                                                                                                       |
| Fire Exit Hardware | Not available                                                                                                                                    |

### 649 Strike



### Available Trim Designs & Functions to be used with any 9898 Device

- All trims are non-handed for 9898 devices
- Determine available Trim Designs & Functions with chart below
- How to Order Trim: Specify "Product Designation" from the chart below and finish required

### Product Designation



| Functions | ANSI | Descriptions                                                                  | 814-FLL<br>x Finish | 814-FLW<br>x Finish | 814-MAL<br>x Finish | 814-PTB<br>x Finish | 814-ST5<br>x Finish |
|-----------|------|-------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 04        | 03   | Key Retracts Latch<br>#34 Cylinder Required & Supplied                        | 814-FLL<br>x Finish | 814-FLW<br>x Finish | 814-MAL<br>x Finish | 814-PTB<br>x Finish | 814-ST5<br>x Finish |
| 10        | 02   | No O/S Operation or Cylinder (Pull Only)                                      | 810-FLL<br>x Finish | 810-FLW<br>x Finish | 810-MAL<br>x Finish | 810-PTB<br>x Finish | 810-ST5<br>x Finish |
| 10        | 01   | No O/S Operation or Cylinder (Exit Only)                                      | N/A                 | N/A                 | N/A                 | 802-PTB<br>x Finish | N/A                 |
| 28        | 15   | Passage Only<br>(No cylinder)                                                 | 828-FLL<br>x Finish | 828-FLW<br>x Finish | 828-MAL<br>x Finish | 828-PTB<br>x Finish | 828-ST5<br>x Finish |
| 63        | 05   | Key Outside Unlocks/<br>locks Thumb Piece<br>#34 Cylinder Required & Supplied | 866-FLL<br>x Finish | 866-FLW<br>x Finish | 866-MAL<br>x Finish | 866-PTB<br>x Finish | 866-ST5<br>x Finish |

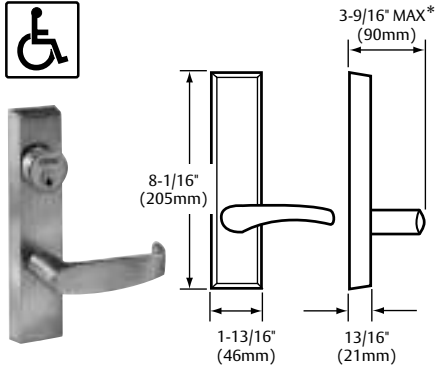
**Note:** Thumb piece trims for 63 and 66 function devices are identical and are identified as 66 function when trim is ordered separately

**Note:** FLW trim is not available in 32(629) or 32D(630)

# ET Trim, Levers and Pulls

## 90 Series Exit Devices

### ET Lever Controls



\*Projection varies by lever design.  
2-1/2" (63mm) projection with L Lever

ET lever trim can be used with most 90 Series exit devices. Easy operating lever handle allows convenient one hand operation. ET Escutcheons are forged or cast brass and the levers are brass or bronze. Stainless steel is available.

### ET Designations

(Used to order ET trim without device)

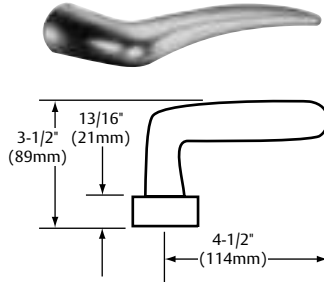
Specify: 704 x ET, 706 x ET, 710 x ET, 713 x ET, 715 x ET, 773 x ET, 774 x ET, 775 x ET & 776 x ET include lever design and finish and hand

Example: 713 x ETJ x 26D x RHR

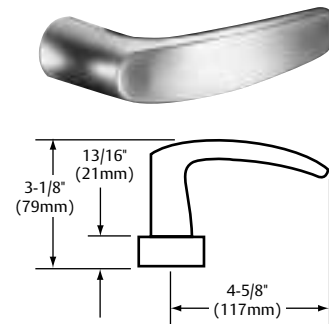
**Note:** ET trim used with 90 Series device use standard ET trims with out a suffix

### A Lever

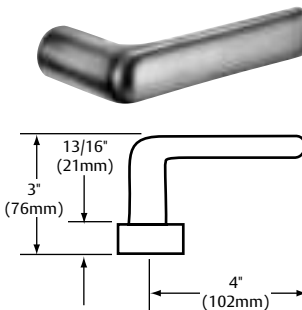
- Handed



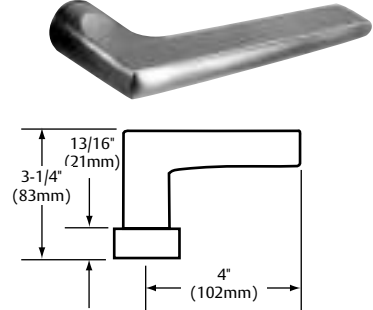
### B Lever



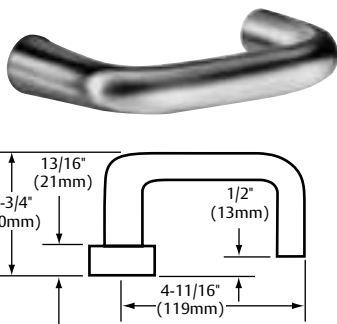
### E Lever



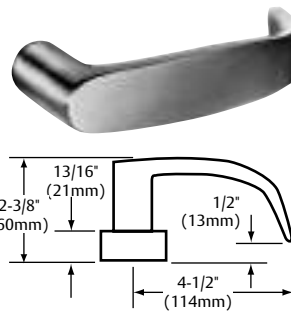
### F Lever



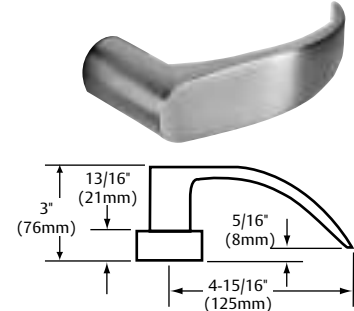
### J Lever\*



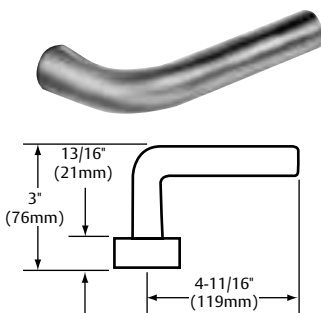
### L Lever\*



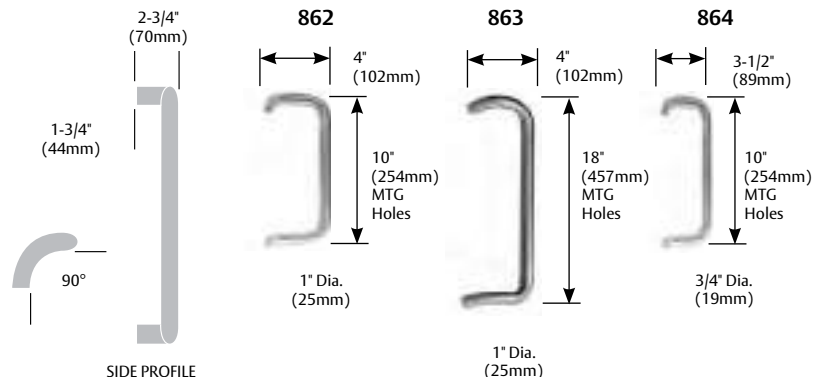
### P Lever\*



### W Lever



### Pulls



\* Lever returns within 1/2" (13mm) of door face

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901281 6/15/14

## Studio Collection Levers

### 90 Series Exit Devices

# Studio<sup>collection</sup>

#### Features

- Studio Collection levers can be used with all SARGENT 90 Series exit devices with ET trim
- All levers - solid brass or stainless steel
- Available with all lever functions
- Finishes available: 03, 04, 09, 10, 10B, 10BE, 10BL, 14, 15, 20D, 26, 26D, 32 & 32D
- Always specify hand

#### Centro Series



MD



MJ



MP<sup>∞</sup>



ND\*



NJ\*

#### Notting Hill Series



MQ



MT<sup>∞</sup>



MM



MY\*

#### Rialto Series



MO



MZ\*

#### Aventura Series



MB



ME



MF



NF



MG



MI



NI\*



MW\*

#### Odéon Series



MN<sup>∞</sup>



MH



MK<sup>∞</sup>



MS



MU



MV



MX\*



NS\*



NU\*

#### Gramercy Series\*\*



RCM<sup>∞</sup>



RAL<sup>∞</sup>



REM<sup>∞</sup>



RAM<sup>∞</sup>



RAS<sup>∞</sup>



RAW<sup>∞</sup>



RAG<sup>∞</sup>



RGM<sup>∞</sup>

\* Lever returns within 1/2" (13mm) of door face

∞ Levers are not available with Simpli™ Roseless trim

\*\*The Gramercy Levers are customized. Refer to the next page for ordering information



# Panic Exit device with stand-alone Alarm



## EMERGENCY EXIT DOORS

### A security solution that is both simple and revolutionary

Where there is no justification for installing a sophisticated access-control and maintenance system, JPM has come up with this first mechanical Anti-Panic Push Bar that can sound an alarm if an unauthorised exit is made. The Push Bar Alarm is certified to EN 1125 CE standard, and is fitted with a stand-alone integrated alarm. A unique solution for small and medium-sized retail outlets with high exposure to theft.



## Technical datas



### Rim panic exit device with horizontal action touch bar and stand-alone alarm

- Versions:
  - Side latch rim lock (1 latch)
  - Top and bottom rim lock (2 latches)
  - Side, Top and Bottom rim lock (3 latches)
- Non handed
- Main case with cross follower
- Bar adjustable on site (400 to 200 mm depending on models). Bar must remain equal to 60% of the door width.
- Maximum projection: 60 mm
- Resistance to corrosion - 96 hours in salt spray or 240 for multipoints version
- In compliance with security regulations against fire in public places (art. C045)
- 9 VDC battery supplied
- Can be fitted on two hours fire - Rated doors
- Cylinder: 40 mm - Half european type cylinder - Sold separately

#### PUSH BAR 90+ 1 side latch

- Deadlocking latch bolt preventing the retraction of the horizontal bolt from outside, and which effectively contributes to the door's resistance to fire.

#### PUSH BAR 90+ top and bottom latches

- Top and bottom latches with automatic relatching, keeping the latches retracted when the door is open (thus avoiding contact with the floor)
- Anti-picking device on top and bottom latches for improved resistance to breaking and entering from outside, and an excellent resistance to fire
- Set of threaded rods and protective rod covers

#### PUSH BAR 90+ Side + top and bottom latches

- Top and bottom latches with automatic relatching, keeping the latches retracted when the door is open (thus avoiding contact with the floor)
- Anti-picking device on top and bottom latches for improved resistance to breaking and entering from outside, and an excellent resistance to fire
- Set of threaded rods and protective rod covers
- Certification NF QE+C.
- Mark CE - EN1125.

## Special features

### SAFETY:

- Products holder of the NF mark.
- Products designed for fitting to Emergency Exits.
- Standard models can be fitted to fire-rated door units.
- CE EN-1125 approved.

### THE CHARACTERISTICS approved by the NF mark are:

- Opening with a weak push by elderly people or children.
- Opening in a situation of panic.
- Endurance, durability, resistance.
- In compliance with security regulations against fire in public places (art. C045).

### PERFORMANCE:

- Top and bottom latches with automatic relatching, keeping the latches retracted when the door is open (thus avoiding contact with the floor).
- Anti-picking device on top and bottom latches for improved resistance to breaking and entering from outside, and an excellent resistance to fire.

- Resistance to corrosion - 96 hours in salt spray or 240 for multipoints version.
- 90 Db alarm.
- Flashing red LED.
- Key resetting.
- 9 VDC battery.

# Lever Handle

**ASSA ABLOY**

The global leader in  
door opening solutions







 **Valli&Valli**

**ASSA ABLOY**

**V&V**

ASSA ABLOY, the global leader  
in door opening solutions

**Novità** *Novelties*





H 1057  
Serie Retrò  
design Valli Workshop

**Novità** *Novelties*



# H 1057 Serie Retrò

design Valli Workshop



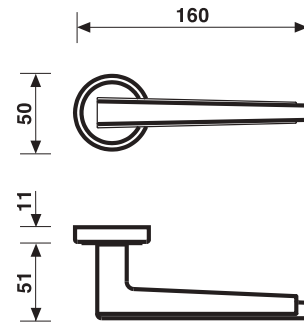
**Materiale Ottone**  
*Material Brass*

**Maniglia per finestra**  
*Window Handle*

H 1057 FRS-41



H 1057 R8



**Finiture**  
*Finishes*

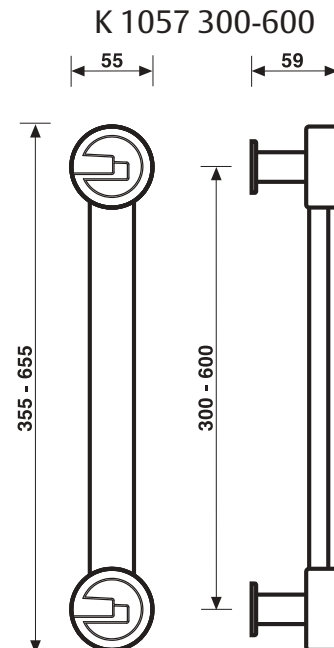
**Nella stessa serie sono disponibili**  
*Coordinated accessories*



Oro lucido

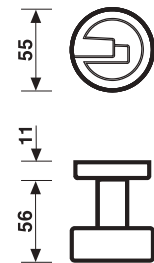
Bronzo opaco

Cromo



K 1057 300-600

K 1057 R8







H 1056  
Serie Quadra  
design Valli Workshop



**Novità** *Novelties*



# H 1056 Serie Quadra

design Valli Workshop



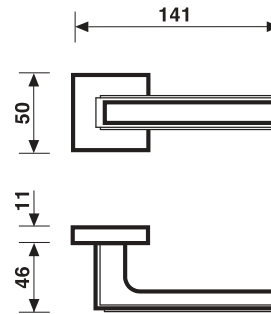
**Materiale Nikrall Lega Zama UNI 3717**  
*Material Nikrall Lega Zama UNI 3717*

**Maniglia per finestra**  
*Window Handle*

H 1056 FRS-41



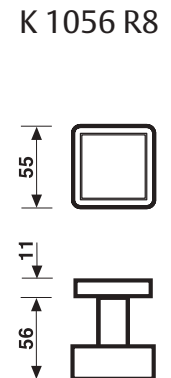
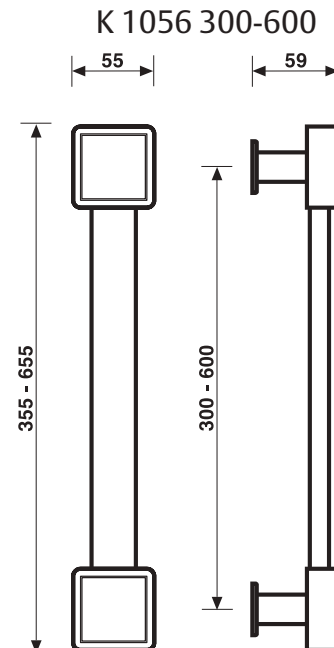
H 1056 R8



## Finiture

*Finishes*

**Nella stessa serie sono disponibili**  
*Coordinated accessories*



**Novità** *Novelties*



# H 1055 Serie Words

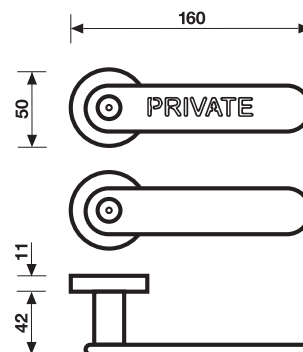
design Franco Poli



**Materiale Ottone e Alluminio**  
*Material Brass and Alluminum*

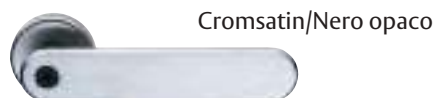
**Maniglia per finestra**  
*Window Handle*

H 1055 FRS-41

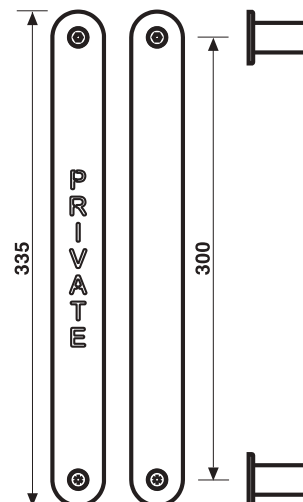


**Finiture**  
*Finishes*

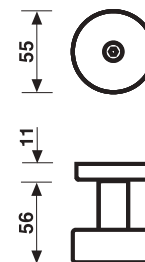
**Nella stessa serie sono disponibili**  
*Coordinated accessories*



K 1055 300-600



K 1055 R8



Extra: scritta in stampatello (massimo 10 lettere)  
*Extra: writings in block letters (max 10 characters)*

**Novità** *Novelties*



# H 1054 Serie W.W.

design Valli Workshop



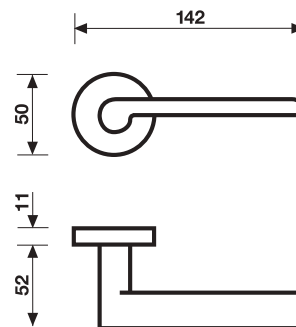
**Materiale Ottone**  
*Material Brass*

**Maniglia per finestra**  
*Window Handle*

H 1054 F | H 1054 FRS-41



H 1054 R8



**Finiture**  
*Finishes*

**Nella stessa serie sono disponibili**  
*Coordinated accessories*



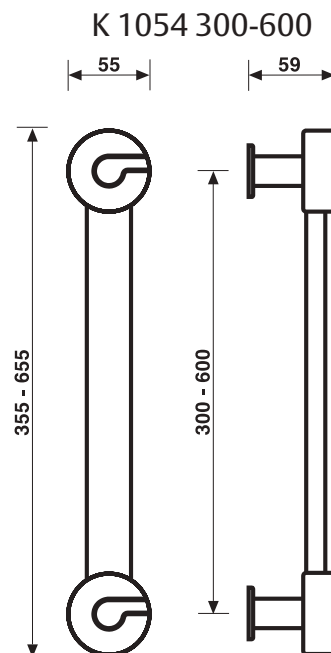
Nik matt



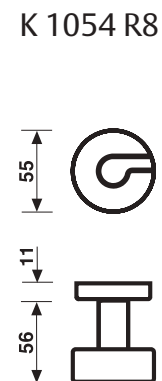
Orsatin opaco



Cromo



K 1054 300-600



K 1054 R8

**Novità** *Novelties*



# H 1052 Serie Supersonic

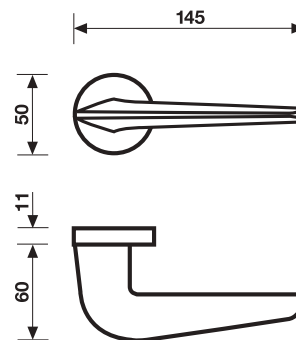
design Mikhail Leykin



**Materiale Ottone**  
*Material Brass*

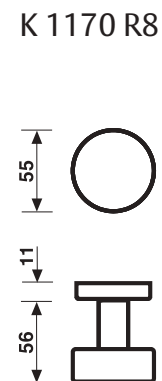
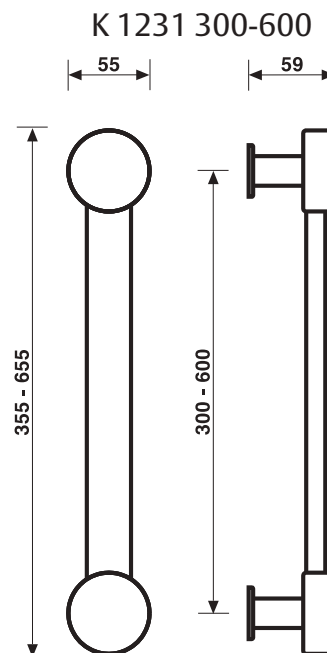
**Maniglia per finestra**  
*Window Handle*

H 1052 F | H 1052 FRS-41



**Finiture**  
*Finishes*

**Nella stessa serie sono disponibili**  
*Coordinated accessories*





# Collezione storica Valli&Valli *Valli&Valli legacy Collection*

## H 1051 Serie Tieste

design Yoshimi Kono



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 1050 Serie Giasone

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 1049 Serie Divara

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 1046 Serie Nais

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 1045 Serie Bess

design Yoshimi Kono



Materiale Nikrall Lega Zama Uni 3717 |  
*Material Nikrall Lega Zama UNI 3717*  
Finiture | *Finishes* **Cromo - Cromsatin -  
Cromsatin/Cromo**

## H 1044 Serie Oberon

design Vincent Van Duysen



Materiale Nikrall Lega Zama Uni 3717 |  
*Material Nikrall Lega Zama UNI 3717*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 1044 Serie Oberon Q

design Vincent Van Duysen



Materiale Nikrall Lega Zama Uni 3717 |  
*Material Nikrall Lega Zama UNI 3717*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 1043 Serie Alcina

design Matteo Thun



Materiale Nikrall Lega Zama Uni 3717 |  
*Material Nikrall Lega Zama UNI 3717*  
Finiture | *Finishes* **Cromo/Cromsatin - Orolux/  
Orsatin**

## H 1042 Serie Walkiria

design Panacom Architects - Arseniy Leonovich



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido - Cromsatin - Cromo**

## H 1040 Serie Siberia

design Gabriele e Oscar Buratti



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin - Bronzsat**

## H 1039 Serie Fedra

design Jean-Baptiste Sibertin Blanc



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromsatin/Cromo - Oro lucido**

## H 1037 Serie Teseo

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido - Ottone naturale antico - Brunito**

## H 123 Serie Luigi XVI

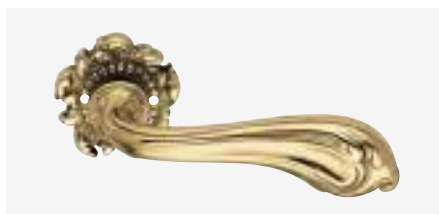
design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido - Ottone naturale antico**

## H 120 Serie Luigi XV

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido - Ottone naturale antico**

## H 1034 Serie Polis

design Decoma Design



Materiale Nikrall Lega Zama Uni 3717 |  
*Material Nikrall Lega Zama UNI 3717*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 1027 Serie Dafne

design Studio Carlesi Design



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido - Cromsatin**

## H 1026 Serie Dido

design Antonio Bullo



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Orsatin/Oro lucido - Cromsatin/Cromo**

## H 1024 Serie Lolita

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido - Cromsatin - Cromo**

# Collezione storica Valli&Valli *Valli&Valli legacy Collection*

## H 1022 Serie Ernani

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido/Orsatin - Cromsatin/Cromo**

## H 1018 Serie Otello

design Marius Schreyer Design



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido/Orsatin - Cromo/Cromsatin**

## H 1016 Serie Nabucco

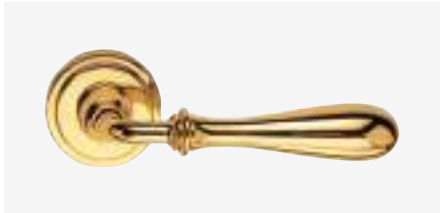
design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido - Cromsatin - Anticato**

## H 1004 Serie Antares

design Valli Workshop



Materiale Ottone e Ottone/Porcellana |  
*Material Brass and Brass/Porcelain*  
Finiture | *Finishes* **Oro Lucido - Ottone naturale - Brunito - Brunito/Avorio - Fumé**

## H 1003 Serie Croco

design Matteo Thun



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro lucido - Oro lucido/Orsatin - Orsatin - Cromo/Cromsatin - Cromsatin - Anticato**

## H 914/8 Serie Medicea

design Pasquale Valli



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Patiné**

## H 198 Serie Mizar

design Eero Aarnio



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Oro Lucido - Orsatin - Cromsatin - Anticato**

## H 195 Serie Orchidea

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromsatin - Oro lucido**

## H 192 Serie Prunus

design Valli Workshop



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Nikmatt**

## H 179 Serie Aida

design Matteo Thun



Materiale Ottone | *Material Brass*

Finiture | *Finishes* **Oro lucido**

## H 176 Serie Spiga

design Valli Workshop

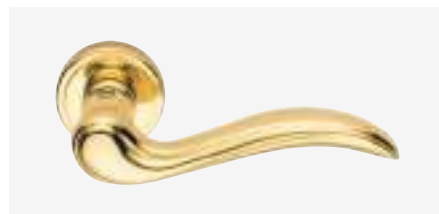


Materiale Ottone e porcellana | *Brass and Porcelain*

Finiture | *Finishes* **Bianco/Oro Lucido - Fiorato/Oro lucido - Brunito/Avorio**

## H 174 Serie Altair

design Valli Workshop



Materiale Ottone | *Material Brass*

Finiture | *Finishes* **Oro lucido**

## H 165 Serie Germana

design Valli Workshop

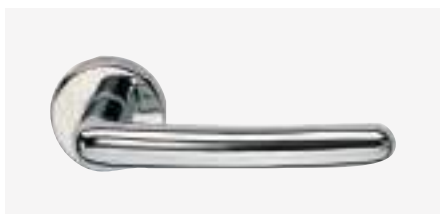


Materiale Ottone | *Material Brass*

Finiture | *Finishes* **Oro Lucido - Orsatin - Anticato**

## H 163 Serie Sarissa

design Valli Workshop



Materiale Ottone | *Material Brass*

Finiture | *Finishes* **Oro lucido - Cromsatin - Cromo**

ASSA ABLOY è leader mondiale nei sistemi di chiusura ed apertura delle porte adatti a soddisfare ogni requisito di sicurezza, protezione e comfort dell'utilizzatore

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience

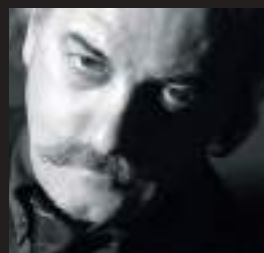
Z11292/04.2015

 **Valli&Valli**

**ASSA ABLOY**







# Designers

Eero Aarnio  
Ron Arad  
Gae Aulenti  
Mario Bellini  
Dante O. Benini e Luca Gonzo  
Cini Boeri Architetti  
Achille Castiglioni  
Pierluigi Cerri  
David Chipperfield  
Antonio Citterio  
Carlo Colombo  
Odile Decq - Benoît Cornette  
Droog Design - Ronald Lewerissa  
Foster and Partners  
Doriana e Massimiliano Fuksas  
Frank O. Gehry  
Eri Goshen  
Michael Graves  
Gregotti Associati  
Zaha Hadid  
Jan Kleihues  
Hans Kollhoff  
Yoshimi Kono  
Leon Krier  
Chi Wing Lo  
Vico Magistretti  
Angelo Mangiarotti  
Richard Meier  
Renzo Mongiardino  
Jean Nouvel  
Fabio Novembre  
John Pawson  
Gustav Peichl  
Piano Design Workshop  
Franco Poli  
Andrée Putman  
Alan Ritchie - Philip Johnson Architects  
Aldo Rossi  
Skidmore, Owings & Merrill  
Sottsass Associati  
Taller Design Ricardo Bofill  
Matteo Thun  
Marco Triaca  
Giancarlo Vegni  
Marco Zanuso



**Novità** *Novelties*





**H 5023**  
Serie Viceversa  
design Cini Boeri Architetti

Novità *Novelties*



# H 5023 Serie Viceversa

design Cini Boeri Architetti



**Materiale Acciaio Inox AISI 316L**

*Material Stainless Steel AISI 316L*

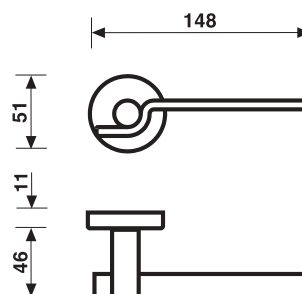
**Maniglia per finestra**

*Window Handle*

H 5023 FRS-41



H 5023 R8



## Finiture

*Finishes*

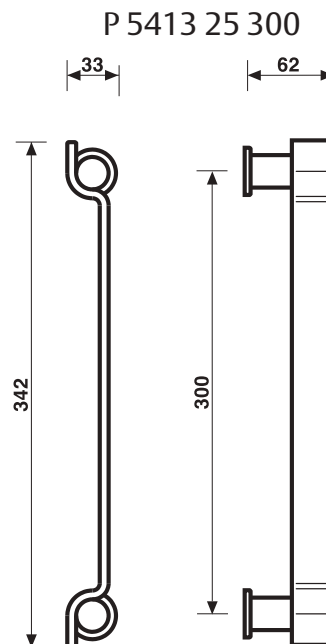


Satinato

Lucido

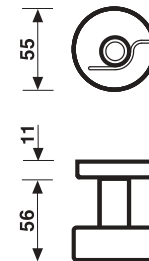
**Nella stessa serie sono disponibili**

*Coordinated accessories*



P 5413 25 300

K 5023 R8



**Novità** *Novelties*



# H 376 Serie Mercurio

design Fusital Workshop

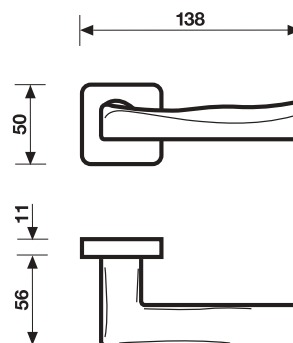


## Materiale Ottone

Material Brass

## Maniglia per finestra

Window Handle



H 376 FRS

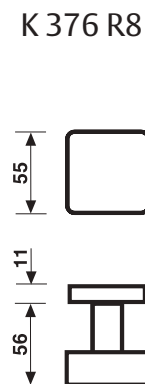
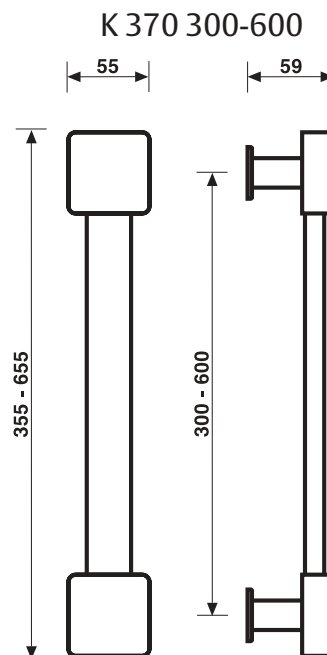


## Finiture

Finishes

## Nella stessa serie sono disponibili

Coordinated accessories



**Novità** *Novelties*





H 375

Serie Bassorilievo  
design Marco Triaca



**Novità** *Novelties*



# H 375 Bassorilievo

design Marco Triaca



## Materiale Ottone

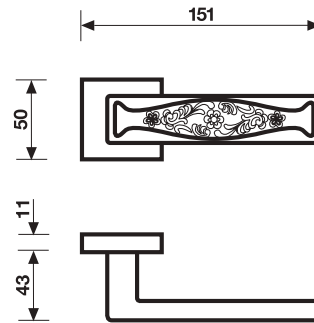
Material Brass

## Maniglia per finestra

Window Handle

H 375 FRS

H 375 R8

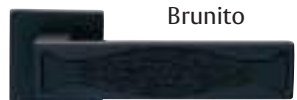


## Finiture

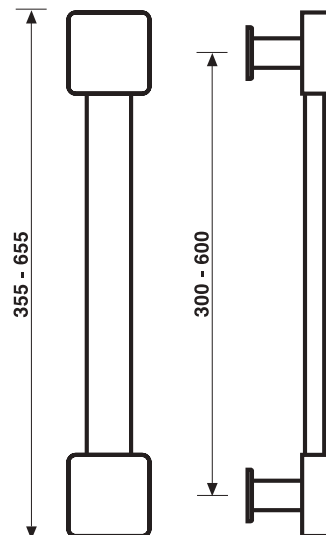
Finishes

## Nella stessa serie sono disponibili

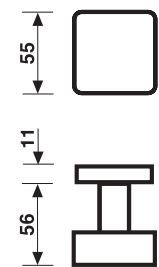
Coordinated accessories



K 370 300-600



K 340 R8



**Novità** *Novelties*



# H 374 Serie Compasso

design Franco Poli



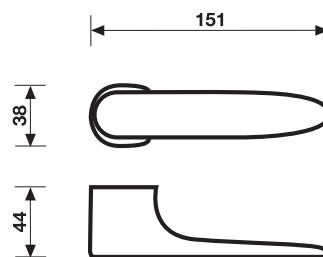
**Materiale Ottone**  
*Material Brass*

**Maniglia per finestra**  
*Window Handle*

H 374 FRS

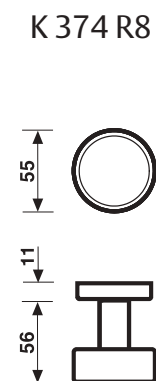
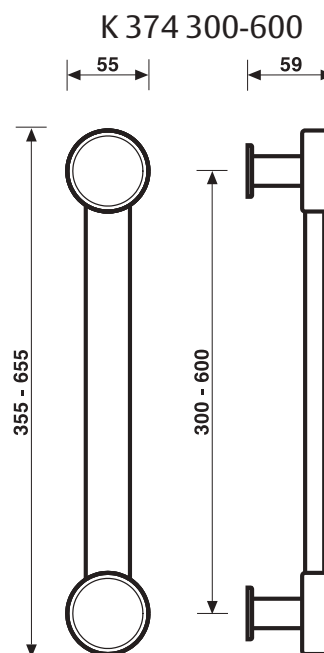


H 374 R8



**Finiture**  
*Finishes*

**Nella stessa serie sono disponibili**  
*Coordinated accessories*



L'inserto grezzo può essere personalizzato a cura del cliente  
*The unfinished inlay can be personalized c/o the customer*

# Collezione storica Fusital *Fusital legacy Collection*

## H 373 Serie DOB

design Dante O. Benini e Luca Gonzo



Materiale Ottone/Acciaio Inox AISI 316 L |  
Material Brass/Stainless Steel AISI 316 L  
Finiture | Finishes **Cromo/nero opaco**

## H 372 Serie EG

design Eri Goshen



Materiale Ottone | Material Brass  
Finiture | Finishes **Cromo - Cromsatin**

## H 371 Serie LK

design Leon Krier



Materiale Ottone | Material Brass  
Finiture | Finishes **Cromo - Cromsatin**

## H 370 Serie MDF

design Doriana e Massimiliano Fuksas



Materiale Ottone | Material Brass  
Finiture | Finishes **Cromo - Cromsatin**

## H 369 Serie EG

design Eri Goshen



Materiale Nikrall Lega Zama Uni 3717 |  
Material Nikrall Lega Zama UNI 3717  
Finiture | Finishes **Cromo - Cromsatin**

## H 368 Serie CA

design Cerri & Associati



Materiale Ottone | Material Brass  
Finiture | Finishes **Cromo - Cromsatin**

## H 367 Serie GV

design Giancarlo Vegni



Materiale Ottone | Material Brass  
Finiture | Finishes **Cromo - Cromsatin**

## H 364 Serie MB

design Mario Bellini



Materiale Ottone | Material Brass  
Finiture | Finishes **Cromo - Cromsatin**

## H 363 Serie DC

design David Chipperfield Architects



Materiale Ottone | Material Brass  
Finiture | Finishes **Cromo - Cromsatin**

## H 362 Serie CC

design Carlo Colombo



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 361 Serie AC4

design Antonio Citterio con Toan Nguyen



Materiale Nikrall Lega Zama Uni 3717 |  
*Material Nikrall Lega Zama UNI 3717*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 359 Serie SOM NY

design Skidmore, Owings & Merrill



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin - Bronzsat**

## H 358 Serie JP1

design John Pawson



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 356 Serie ZH

design Zaha Hadid con Woody Yao



Materiale Nikrall Lega Zama Uni 3717 |  
*Material Nikrall Lega Zama UNI 3717*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 354 Serie FOG

design Frank O. Gehry



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin - Oro**

## H 352 Serie ODBC

design Odile Decq - Benoît Cornette



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 350 Serie CA

design Cerri & Associati



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

## H 348 Serie DC

design David Chipperfield Architects



Materiale Ottone | *Material Brass*  
Finiture | *Finishes* **Cromo - Cromsatin**

# Collezione storica Fusital *Fusital legacy Collection*

## H 344 Serie JN

design Jean Nouvel



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromo - Cromsatin*

## H 343 Serie JP

design John Pawson



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromo - Cromsatin*

## H 341 Serie HK2

design Hans Kollhoff



Materiale Ottone e Acciaio Inox AISI 316 L |  
*Material Brass and Stainless Steel AISI 316 L*  
Finiture | *Finishes Cromo/Inox Satinato*

## H 338 Serie YK

design Yoshimi Kono



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromsatin*

## H 335 Serie RM

design Richard Meier



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromo*

## H 334 Serie NF

design Foster and Partners



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromsatin - Oro*

## H 332 Serie M

design Renzo Mongiardino



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Oro*

## H 330 Serie T

design Matteo Thun



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromsatin*

## H 329 Serie RB

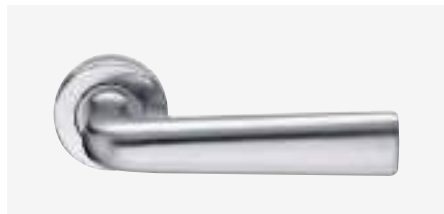
design Taller Design Ricardo Bofill



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromo/Cromsatin - Oro/Orosatin*

## H 327 Serie AC 2

design Antonio Citterio



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Oro - Cromsatin*

## H 326 Serie AC 1

design Antonio Citterio



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Oro - Cromsatin*

## H 317 Serie AC

design Antonio Citterio



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromo - Cromsatin - Oro*

## H 315 Serie G

design Pierluigi Cerri



Materiale Ottone e Porcellana | *Material Brass and Porcelain*  
Finiture | *Finishes Cromo - Oro*

## H 311 Serie Sei MB

design Mario Bellini



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromo - Cromsatin*

## H 310 Serie C Cinque

design Achille Castiglioni



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Cromo - Cromsatin*

## H 37 Serie Tre B

design Cini Boeri



Materiale Ottone | *Material Brass*  
Finiture | *Finishes Orsatin*

## H 5021 Serie Arrowhead

design Frank O. Gehry



Materiale Acciaio Inox AISI 316 L | *Material Stainless Steel AISI 316 L*  
Finiture | *Finishes Satinato - Lucido*

## H 5017 Serie Gottardo

design Hans Kollhoff



Materiale Acciaio Inox AISI 316 L | *Material Stainless Steel AISI 316 L*  
Finiture | *Finishes Satinato - Lucido*



## Collezione storica Fusital *Fusital legacy Collection*

### H 5015 Serie K2

design Antonio Citterio



Materiale Acciaio Inox AISI 316 L - Pelle |  
Material Stainless Steel AISI 316 L - Leather  
Finiture | Finishes **Satinato - Lucido - Satinato/Pelle  
nera - Satinato/Pelle arancione**

### H 5014 Serie Bernina

design Fusital Workshop



Materiale Acciaio Inox AISI 316 L |  
Material Stainless Steel AISI 316 L  
Finiture | Finishes **Satinato - Lucido**

### H 5008 Serie Himalaya

design Taller Design Ricardo Bofill



Materiale Acciaio Inox AISI 316 L |  
Material Stainless Steel AISI 316 L  
Finiture | Finishes **Satinato**



## H 377 SL Duemilasedici Collection Design: Steve Leung



The handle designed for Fusital by Steve Leung is characterised by a bold design. Traditional features are combined and restyled with contemporary aesthetic appeal. Two sources of inspiration were involved: the brass locks on traditional Chinese trunks and an ancient door lock. Working concurrently on his own sketches made by hand and using cutting-edge 3D printing technology, Leung saw the visual project take shape, allowing him to also explore the ergonomic aspect and tactile dimension that leads to research into materials and finishes for a project.

Defined by the designer as “a bold statement”, the entire collection was designed for interiors featuring minimalist elegance: the H377 handle has great appeal, combining functionality with contemporary design while paying tribute to the Chinese tradition.

Like Fusital, Steve Leung firmly believes that a handle is a fundamental part of an interior design project: it determines a person's initial approach to space, offering a visual and tactile experience that creates the first impression of an interior.

Therefore, the finishes were painstakingly selected: the dark bronze finish evokes the important heritage that has inspired the collection; the choice of titanium gives the handle a seemingly “unfinished” and industrial appearance that is extremely elegant and contemporary; the matt black version is a great timeless classic that contrasts perfectly with total white interiors.

[www.vallievalli.com](http://www.vallievalli.com)



Material:

Brass

Finishes:

Dark Bronze

Matt Black

Titanium

The Collection includes:

- door handle with a square rose, 50 mm.
- window handle with 4-release mechanism
- dedicated fixed / swivel knob
- large handle with dedicated roses, pitch 300
- square BZG privacy lock, 50 mm
- standard square keyhole escutcheon, 50 mm
- square keyhole escutcheon and cylinder hole, 50 mm

#### **About Steve Leung**

Steve Leung is one of the most famous Hong Kong-based architects and interior and product designers. His talent is recognised internationally. In 1997, he completely reorganised and infused new lifeblood into the Steve Leung Designers Ltd studio (of which he is the Founder and President), where he oversees a staff of more than 400 talented professionals involved in a broad range of top-design projects that include real estate development and the design of residential complexes, hotels and business spaces in over 100 cities worldwide.

A genuine exponent of contemporary style, Leung has created works that are appreciated all over the world. In 2013, he was invited to join the renowned London-based design studio Yoo, and in 2015 he received the prestigious Andrew Martin International Interior Designer of the Year Award.

[www.vallievalli.com](http://www.vallievalli.com)

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The world's favorite lock



# Lever Handle



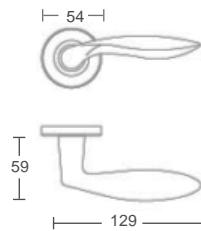
# Lever Handle

The world's favorite lock



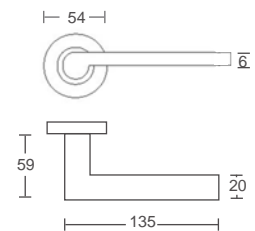
## B7C5/CP

Lever handle on rose with 10 mm height escutcheon, Chrome Plated.



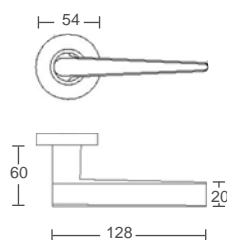
## LP01/SS

Lever handle on rose with 10 mm height escutcheon, Satin stainless steel.



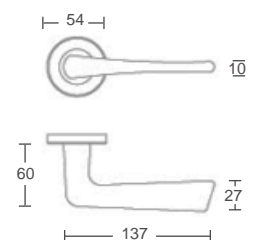
## LP02/SS

Lever handle on rose with 10 mm height escutcheon, Satin stainless steel.



## YTL/P/SD033/SS

Lever handle on rose with 10 mm height escutcheon, Satin stainless steel.



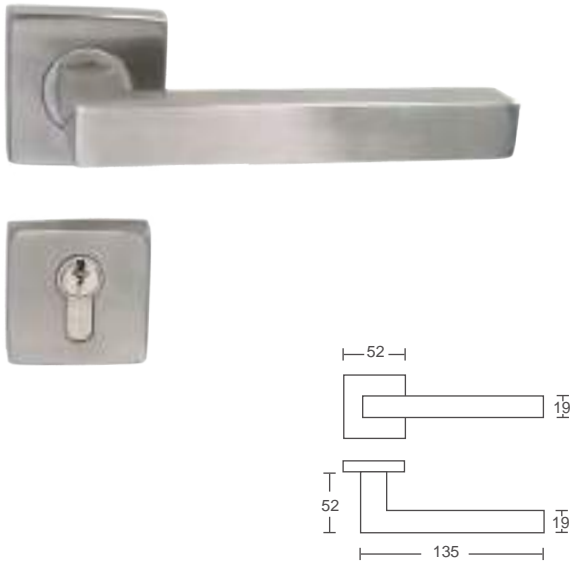
# Lever Handle

The world's favorite lock



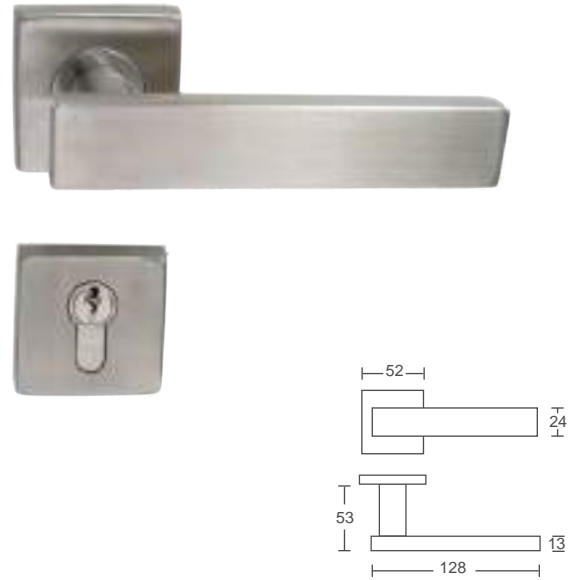
## YTL/P/SD048/R/SS

Lever handle on square rose with 10 mm height escutcheon, Satin stainless steel.



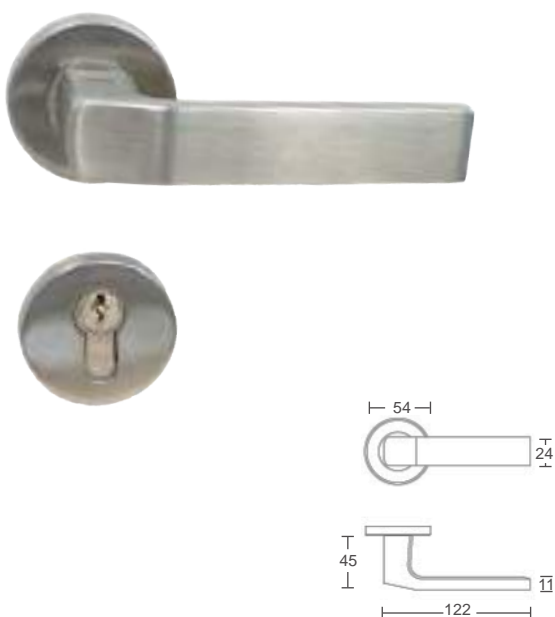
## YTL/P/SD073/R/SS

Lever handle on square rose with 10 mm height escutcheon, Satin stainless steel.



## YTL/P/SF014/SS

Lever handle on rose with 10 mm height escutcheon, Satin stainless steel



## YTL/P/SF032/PS

Lever handle on rose with 10 mm height escutcheon, Polished stainless steel.



# Lever Handle

The world's favorite lock



## YTL/P/SF069/SS

Lever handle on rose with 10 mm height escutcheon, Satin stainless steel.



## YTL/P/SF136/SS

Lever handle on rose with 10 mm height escutcheon, Satin stainless steel.



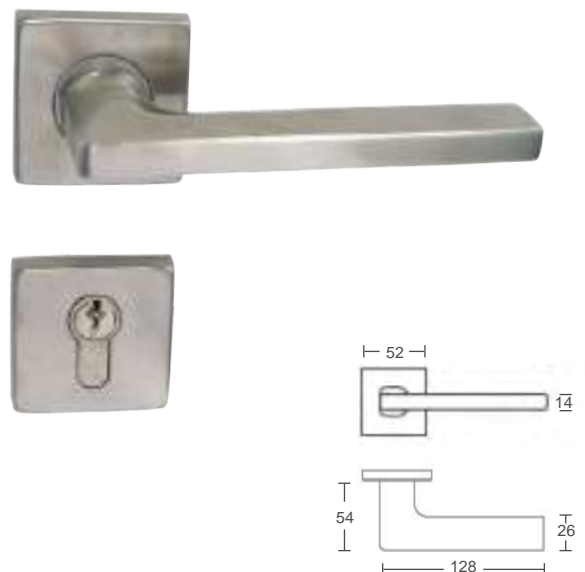
## YTL/P/SF141/SS

Lever handle on rose with 10 mm height escutcheon, Satin stainless steel.



## YTL/P/SF148/R/SS

Lever handle on square rose with 10 mm height escutcheon, Satin stainless steel.



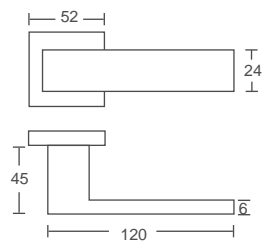
# Lever Handle

The world's favorite lock



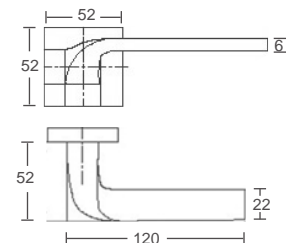
## YTL/P/SF177/R/SS

Lever handle on square rose with 10 mm height escutcheon, Satin stainless steel.



## YTL/P/SF0268/R/SS

Lever handle on square rose with 10 mm height escutcheon, Satin stainless steel



### Available finish are requested with different Material :

Standard Finish : Satin Nickel , Satin stainless Steel , Satin chrome , Satin Brass, Polished stainless steel , Polished chrome , Polished brass, Antique Copper , Antique Brass

PVD Finish : Satin Brass(PVD) , Polished Brass (PVD) , Satin Matt Black (PVD) , Polished Matt Black (PVD), Satin Bronze (PVD) , Polished Bronze (PVD), Dark Oxidized Satin Bronze (PVD)

All dimensions are in mm





# Digital Door Lock

**ASSA ABLOY**

The global leader in  
door opening solutions







The world's favorite lock



# Digital Door Lock COLLECTION

# About Yale

All over the world, people are actively securing all they care about; their home, their family, their personal belongings or their business with the name they trust the most, Yale. That's why we proudly say that **Yale is "the world's favorite lock"**.

Yale is the brand behind locks of every design and function in over 125 countries.

As one of the oldest international brands, today's Yale is among the best-known and most respected names in the lock industry, with millions of Yale locks in use worldwide.

Yale is a part of the ASSA ABLOY Group. At ASSA ABLOY, we believe that freedom enriches people and that fear makes us poorer.

To realize freedom, we must firstly feel safe and secure. That's why the ASSA ABLOY Group of companies is committed to creating high quality door opening solutions.



Yale®



# Yale Digital Door Lock Collection

Yale digital door locks bring you keyless convenience to unlock your door. Choose from the latest in digital door locking technology – **fingerprint, RFID card or keypad** – to open your door. Each offers an immediate door opening solution and adds simplicity to your lifestyle.

These digital door locks can also be paired with alarms to offer additional security from burglary, vandalism and fire. Combining cutting-edge technology with practical reliability, **Yale digital door locks are the future of door locks.**

- No need to bring along your keys when you go out
- No more rummaging through your pockets, purses or bags
- No more forgotten and lost keys
- No more cutting keys for visitors

## Smart Keypad & Operation Status Notification

Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.

- Open / Close Status
- Registered PIN code Display
- Bolt Jamming Alarm
- 3-minute Lock
- Forced Lock Setting
- Low Battery Notification



### Confirmed the PIN code

The registered PIN code disappears after lighting on each number in order



### Registered the card

The number of cards registered appears for seconds.



### Open / Close

The LED turns on from up to downward.



Fingerprints and traces may remain on the keypad



Touch the keypad with your palm to activate the lock



Touch at least 3 keys at once can mix all the fingerprint traces on the keypad

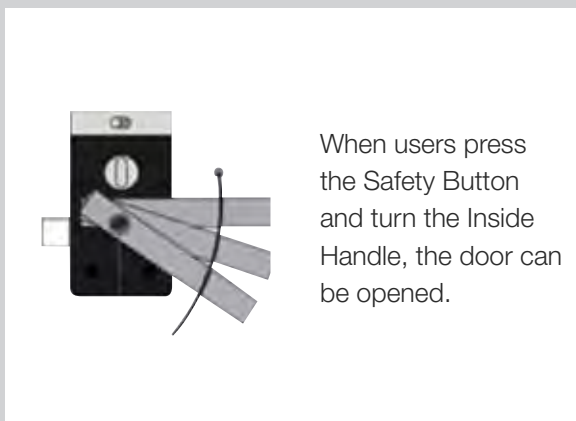
## One Touch Easy Scan

Unlike the “Activate first and then Scan” approach, Yale YDM4109 Digital Door Lock requires only one action to activate the lock and scan the fingerprint at the same time. Segmented Optic Fingerprint Scan can also reduce the residual fingerprint traces; thus greatly reducing the likelihood of a fingerprint be copied.



## Safety Handle

Inside door handles are equipped with Safety Button. When users press the Safety Button and turn the Inside Handle, the door can be opened. While avoiding external intrusion, Safety Handle can also prevent children or large pets mistakenly opened the lock. This function can be decided according to personal convenience.



When users press the Safety Button and turn the Inside Handle, the door can be opened.

## Fake PIN Code

Fake PIN Code input enables personal PIN codes to be hidden within longer sequences of numbers. The Fake PIN Code can be used either before or after the user code.

1



**Touch the keypad with your palm**

Touch at least 3 keys at once to activate the lock

2



**Input your User Code & Fake PIN Code:**

Fake PIN Code > Registered User Code

3



**Touch the keypad with your palm**

or Press “\*” to open the lock

**Or**  
Registered User Code > Fake PIN Code

## Magic Mirror Touchpad

A Magic Mirror (no bezel design) function is applied on Yale Digital Rim Lock YDG313 & YDR323, which the keypad number appears on the mirror as soon as a user touches the product. The user can check the rear through the Magic Mirror, so that security can be enhanced



## Clip Type Bracket

No need for Holes-Drilling preparation on glass door. The installation convenience of YDG313 Digital Rim Lock is improved by the clip type bracket with a very strong double side tape.



Clip Type Bracket to fix



Double glass door installation



Strike & strike box accessories for double glass door

## Multiple Accesses

Yale Digital Doors allow multiple access methods: PIN Code, Fingerprint Verification, RFID Card or even Remote Control



Remote Control (Wall Mount Type / Portable Type)



RFID Card

RFID Card (Sticker Type)

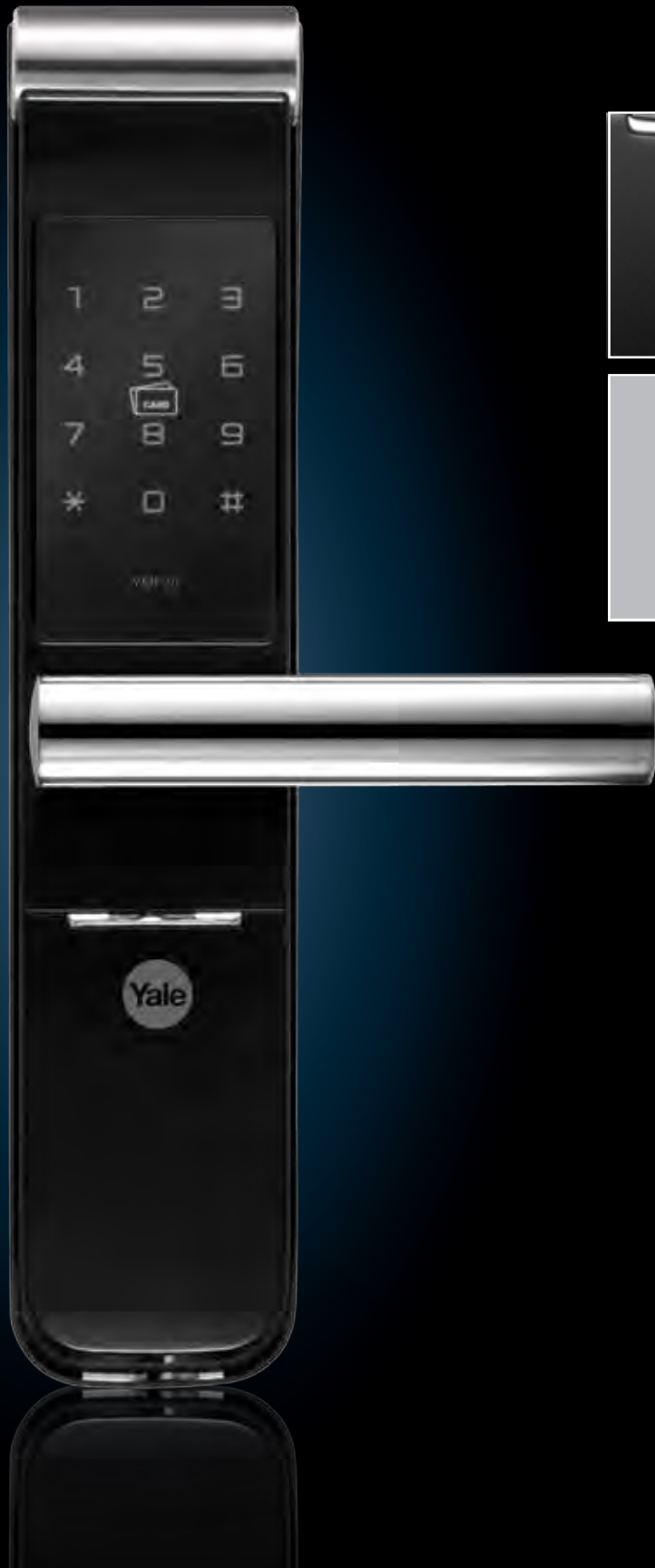






# YMF30

## Premium RFID Card Digital Door Lock



- Europrofile Mortise Lock
- RFID Card & Touch Keypad
- Key Override
- Emergency Power Supply Terminal

## Reliable      Convenient      Safe

### Europrofile Mortise



### RFID Card & Touch Keypad



### Key Override



**YMF30 (Silver with Black)**  
 Front Body 28.5 (D) X 68.7 (W) X 322.3 (H)  
 Back Body 31.8 (D) X 69.1 (W) X 325.2 (H)



### Multiple Access

Yale YMF30 has three access solutions, PIN Code, RFID card, Key override for your convenience.



### Smart Keypad & Operation Status Notification

Keypad can be seen only when you touch the screen with your palm. Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.



### Security / Normal Mode

For multi-user environment, YMF30 can be turned to Security Mode that master can register and delete each user while Normal Mode controls all the users at one time.



### Fake PIN Code

To prevent the PIN Code from being exposed, it allows you to enter Fake numbers before or after entering your PIN Code.



### Missing Card Invalidation

Once you lose your RFID Card, it has no validation as long as you re-register rest of your keys.



### Anti-Panic egress with Safety Handle

For convenience and in case of emergency, the door is automatically unlocked whenever the inner lever handle is used. The safety handle will prevent children or large pets mistakenly open the door.



### Mechanical Key Override

For emergency, it can also be unlocked with a mechanical key.



### Alarm (Break/Damage)

80dB alarm goes off if anyone attempts to damage the lock or force the door open.



### Low Battery and Emergency Power

It warns in case of low battery with alarm and LED. When the batteries are completely discharged, you can easily supply emergency power to the lock with the standard 9V battery.



### Remote Control (Optional)

Remote control type is also available. Wireless Floating ID technology is adopted and works up to 50m.

## Product Specifications

|                 |                          |
|-----------------|--------------------------|
| Type            | Europrofile Mortise Lock |
| RFID Card       | 4 (Max. 40)              |
| Mechanical Keys | 2                        |
| PIN Code        | 6-12 digits              |
| Color           | Silver with Black        |
| Backset         | 60 / 70 mm               |
| Door Thickness  | 40-80 mm                 |



# YMF40

## Premium Fingerprint Digital Door Lock



- Europrofile Mortise Lock
- Fingerprint Verification & Touch Keypad
- Key Override
- Emergency Power Supply Terminal

## Reliable      Convenient      Safe

### Europrofile Mortise



### Fingerprint Verification & Touch Keypad



### Key Override



**YMF40 (Silver with Black)**  
 Front Body 28.5 (D) X 68.7 (W) X 322.3 (H)  
 Back Body 31.8 (D) X 69.1 (W) X 325.2 (H)



#### Multiple Access

Yale YMF40 has three access solutions, PIN Code, Fingerprint Verification, Key override for your convenience.



#### Fingerprint Verification with Automatic Cover

Fingerprint Reader Cover open automatically for users to swipe their fingerprints in one shot without the need to open or close the cover to enter a fingerprint



#### Voice Guide Feature

As the voice guide is offered that lets you know the operation status and how to set each feature and mode for easier and more convenient use.



#### Security / Normal Mode

For multi-user environment, YMF40 can be turned to Security Mode that master can register and delete each user while Normal Mode controls all the users at one time.



#### Smart Keypad & Operation Status Notification

Keypad can be seen only when you touch the screen with your palm. Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.



#### Anti-Panic egress with Safety Handle

For convenience and in case of emergency, the door is automatically unlocked whenever the inner lever handle is used. The safety handle will prevent children or large pets mistakenly open the door.



#### Mechanical Key Override

For emergency, it can also be unlocked with a mechanical key.



#### Alarm (Break/Damage)

80dB alarm goes off if anyone attempts to damage the lock or force the door open.



#### Low Battery and Emergency Power

It warns in case of low battery with alarm and LED. When the batteries are completely discharged, you can easily supply emergency power to the lock with the standard 9V battery.



#### Remote Control (Optional)

Remote control type is also available. Wireless Floating ID technology is adopted and works up to 50m.

## Product Specifications

|                          |                          |
|--------------------------|--------------------------|
| Type                     | Europrofile Mortise Lock |
| Fingerprint Verification | Up to 20                 |
| Mechanical Keys          | 2                        |
| PIN Code                 | 6-12 digits              |
| Color                    | Silver with Black        |
| Backset                  | 60 / 70 mm               |
| Door Thickness           | 40-80 mm                 |



# YDM3115

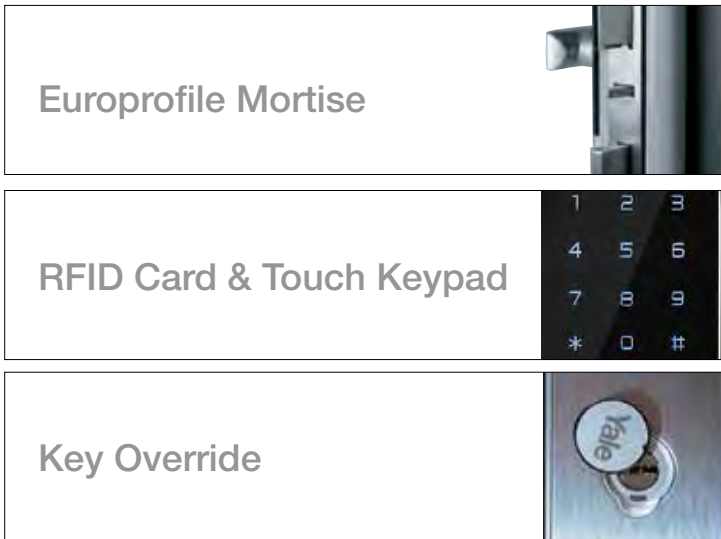
Premium RFID Card Digital Door Lock













- Europrofile Mortise Lock
- RFID Card & Touch Keypad
- Key Override
- Emergency Power Supply Terminal

# YDM3115

Reliable      Convenient      Safe



**YDM3115 (Silver)**  
 Front Body 29.8 (D) X 72 (W) X 344 (H) mm  
 Back Body 36 (D) X 72 (W) X 344 (H) mm

- 
**Multiple Access**  
 Yale YDM3115 has three access solutions, PIN Code, RFID card, Key override for your convenience.
- 
**Smart Keypad & Operation Status Notification**  
 Keypad can be seen only when you touch the screen with your palm. Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.
- 
**Security / Normal Mode**  
 For multi-user environment, YDM3115 can be turned to Security Mode that master can register and delete each user while Normal Mode controls all the users at one time.
- 
**Fake PIN Code**  
 To prevent the PIN Code from being exposed, it allows you to enter Fake numbers before or after entering your PIN Code.
- 
**Missing Card Invalidation**  
 Once you lose your RFID Card, it has no validation as long as you re-register rest of your keys.
- 
**Automatic Locking**  
 YDM3115 automatically locks the door after checking it is properly closed. (Manual operation is also available.)
- 
**Mechanical Key Override**  
 For emergency, it can also be unlocked with a mechanical key.
- 
**Alarm (Break/Damage)**  
 80dB alarm goes off if anyone attempts to damage the lock or force the door open.
- 
**Low Battery and Emergency Power**  
 It warns in case of low battery with alarm and LED. When the batteries are completely discharged, you can easily supply emergency power to the lock with the standard 9V battery.
- 
**Remote Control (Optional)**  
 Remote control type is also available. Wireless Floating ID technology is adopted and works up to 50m.

## Product Specifications

|                 |                          |
|-----------------|--------------------------|
| Type            | Europrofile Mortise Lock |
| RFID Card       | 4 (Max. 40)              |
| Mechanical Keys | 2                        |
| PIN Code        | 6-12 digits              |
| Color           | Silver / Gold            |
| Backset         | 60 / 70 mm               |
| Door Thickness  | 40-80 mm                 |

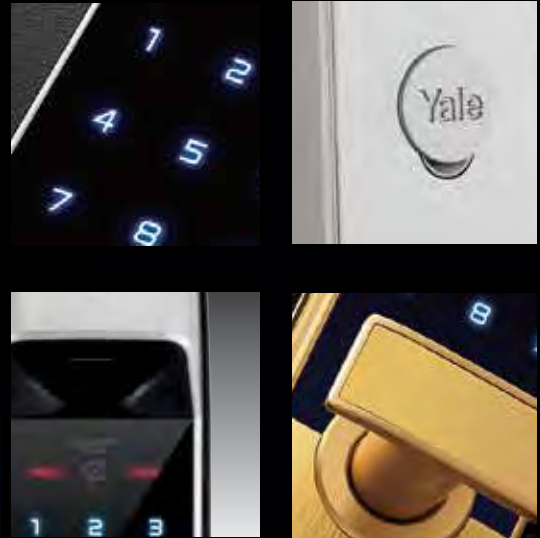


**YDM3115 (Gold)**



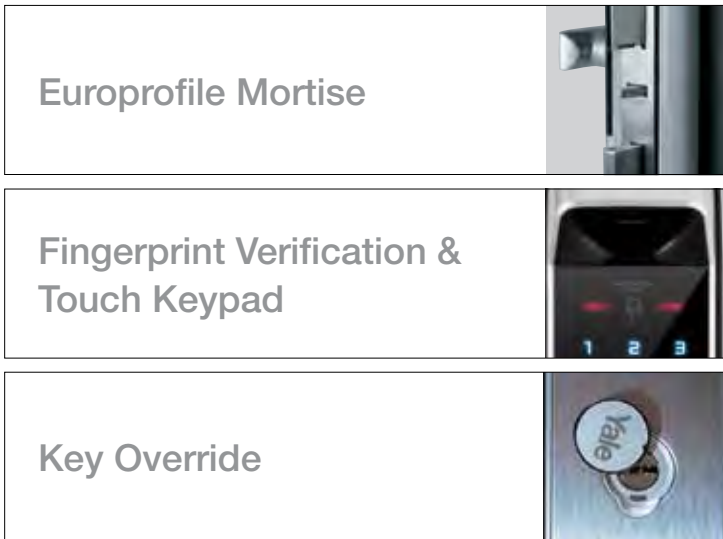
# YDM4115

## Premium Fingerprint Digital Door Lock



- Europrofile Mortise Lock
- Fingerprint Verification & Touch Keypad
- Key Override
- Emergency Power Supply Terminal

**Reliable      Convenient      Safe**



**YDM4115 (Silver)**  
 Front Body 47.1(D)X72(W)X364(H) mm  
 Back Body 36.0(D)X72(W)X344(H) mm



**Multiple Access**

Yale YDM4115 has three access solutions, PIN Code, Fingerprint Verification, Key override for your convenience.



**One-touch Fingerprint Verification Method**

Easy Scan technology has been applied to conveniently read a fingerprint in one shot without the need to open or close the cover to enter a fingerprint.



**Voice Guide Feature**

As the voice guide is offered that lets you know the operation status and how to set each feature and mode for easier and more convenient use.



**Security / Normal Mode**

For multi-user environment, YDM4115 can be turned to Security Mode that master can register and delete each user while Normal Mode controls all the users at one time.



**Smart Keypad & Operation Status Notification**

Keypad can be seen only when you touch the screen with your palm. Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.



**Automatic Locking**

YDM4115 automatically locks the door after checking it is properly closed. (Manual operation is also available.)



**Mechanical Key Override**

For emergency, it can also be unlocked with a mechanical key.



**Alarm (Break/Damage)**

80dB alarm goes off if anyone attempts to damage the lock or force the door open.



**Low Battery and Emergency Power**

It warns in case of low battery with alarm and LED. When the batteries are completely discharged, you can easily supply emergency power to the lock with the standard 9V battery.



**Remote Control (Optional)**

Remote control type is also available. Wireless Floating ID technology is adopted and works up to 50m.

**Product Specifications**

|                          |                          |
|--------------------------|--------------------------|
| Type                     | Europrofile Mortise Lock |
| Fingerprint Verification | Up to 20                 |
| Mechanical Keys          | 2                        |
| PIN Code                 | 6-12 digits              |
| Color                    | Silver / Gold            |
| Backset                  | 60 / 70 mm               |
| Door Thickness           | 40-80 mm                 |



**YDM4115 (Gold)**





# YDM3109

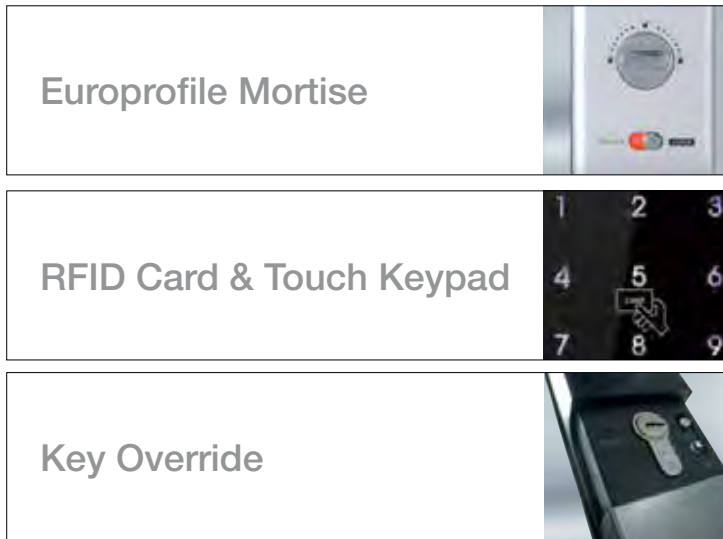
Premium RFID Card Digital Door Lock



- Europrofile Mortise Lock
- RFID Card & Touch Keypad
- Key Override
- Emergency Power Supply Terminal

# YDM3109

Reliable      Convenient      Safe



**YDM3109 (Silver)**  
 Front Body 27(D)X68.6(W)X306.6(H) mm  
 Back Body 37(D)X72.8(W)X306.6(H) mm



### Multiple Access

Yale YDM3109 has three access solutions, PIN Code, RFID card, Key override for your convenience.



### Smart Keypad & Operation Status Notification

Keypad can be seen only when you touch the screen with your palm. Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.



### Fake PIN Code

To prevent the PIN Code from being exposed, it allows you to enter Fake numbers before or after entering your PIN Code.



### Missing Card Invalidation

Once you lose your RFID Card, it has no validation as long as you re-register rest of your keys.



### Automatic Locking

YDM3109 automatically locks the door after checking it is properly closed. (Manual operation is also available.)



### Anti-Panic egress with Safety Handle

For convenience and in case of emergency, the door is automatically unlocked whenever the inner lever handle is used. The safety handle will prevent children or large pets mistakenly open the door.



### Mechanical Key Override

For emergency, it can also be unlocked with a mechanical key.



### Alarm (Break/Damage)

80dB alarm goes off if anyone attempts to damage the lock or force the door open.



### Low Battery and Emergency Power

It warns in case of low battery with alarm and LED. When the batteries are completely discharged, you can easily supply emergency power to the lock with the standard 9V battery.



### Remote Control (Optional)

Remote control type is also available. Wireless Floating ID technology is adopted and works up to 50m.

## Product Specifications

|                 |                          |
|-----------------|--------------------------|
| Type            | Europrofile Mortise Lock |
| RFID Card       | 4 (Max. 40)              |
| Mechanical Keys | 2                        |
| PIN Code        | 6-12 digits              |
| Color           | Silver / Gold            |
| Backset         | 60 / 70 mm               |
| Door Thickness  | 40-80 mm                 |



**YDM3109 (Gold)**



# YDM4109

## Premium Fingerprint Digital Door Lock



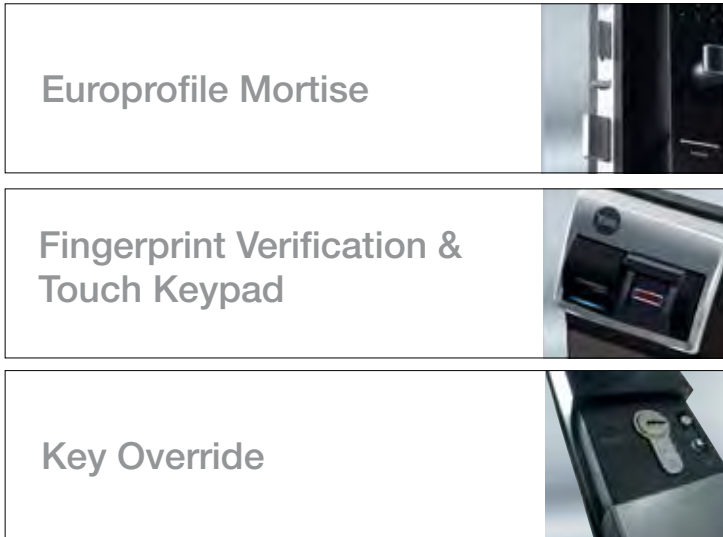
- Europrofile Mortise Lock
- Fingerprint Verification & Touch Keypad
- Key Override
- Emergency Power Supply Terminal



One-touch Fingerprint Verification

# YDM4109

Reliable      Convenient      Safe



**YDM4109 (Black)**  
 Front Body 28.5(D) X 68.6(W) X 320.7(H) mm  
 Back Body 37.0(D) X 72.8(W) X 306.6(H) mm

**Multiple Access**  
 Yale YDM4109 has three access solutions, PIN Code, Fingerprint Verification, Key override for your convenience.

**One-touch Fingerprint Verification Method**  
 Easy Scan technology has been applied to conveniently read a fingerprint in one shot without the need to open or close the cover to enter a fingerprint.

**Voice Guide Feature**  
 As the voice guide is offered that lets you know the operation status and how to set each feature and mode for easier and more convenient use.

**Security / Normal Mode**  
 For multi-user environment, YDM4109 can be turned to Security Mode that master can register and delete each user while Normal Mode controls all the users at one time.

**Smart Keypad & Operation Status Notification**  
 Keypad can be seen only when you touch the screen with your palm. Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.

**Anti-Panic egress with Safety Handle**  
 For convenience and in case of emergency, the door is automatically unlocked whenever the inner lever handle is used. The safety handle will prevent children or large pets mistakenly open the door.

**Mechanical Key Override**  
 For emergency, it can also be unlocked with a mechanical key.

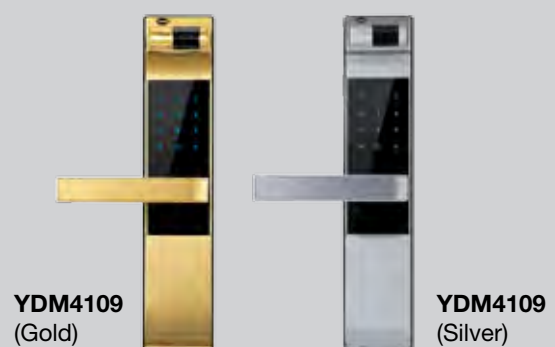
**Alarm (Break/Damage)**  
 80dB alarm goes off if anyone attempts to damage the lock or force the door open.

**Low Battery and Emergency Power**  
 It warns in case of low battery with alarm and LED. When the batteries are completely discharged, you can easily supply emergency power to the lock with the standard 9V battery.

**Remote Control (Optional)**  
 Remote control type is also available. Wireless Floating ID technology is adopted and works up to 50m.

## Product Specifications

|                          |                          |
|--------------------------|--------------------------|
| Type                     | Europrofile Mortise Lock |
| Fingerprint Verification | Up to 20                 |
| Mechanical Keys          | 2                        |
| PIN Code                 | 6-12 digits              |
| Color                    | Black / Silver / Gold    |
| Backset                  | 60 / 70 mm               |
| Door Thickness           | 40-80 mm                 |



**YDM4109 (Gold)**

**YDM4109 (Silver)**



# YDD324

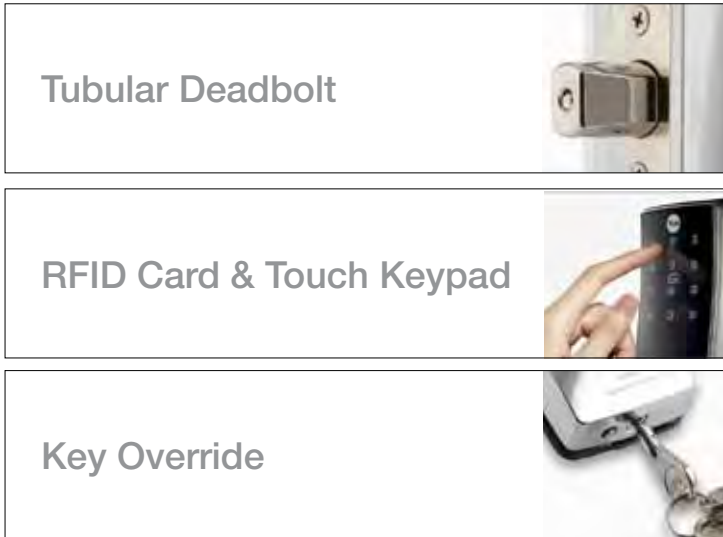
RFID Card Digital Door Lock, Tubular Deadbolt type



- Digital Tubular Deadbolt
- RFID Card & Touch Keypad
- Key Override
- Emergency Power Supply Terminal



## Reliable      Convenient      Safe



**YDD324 (Silver with Black)**  
 Front Body 27(D) X 66(W) X 162(H) mm  
 Back Body 35(D) X 70(W) X 170(H) mm



### Multiple Access

Yale YDD324 has three access solutions, PIN Code, RFID card, Key override for your convenience.



### Smart Keypad

Keypad can be seen only when you touch the screen with your palm.



### Operation Status Notification

Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.



### Missing Card Invalidation

Once you lose your RFID Card, it has no validation as long as you re-register rest of your keys.



### Fake PIN Code

To prevent the PIN Code from being exposed, it allows you to enter Fake numbers before or after entering your PIN Code.



### Automatic Locking

YDD324 automatically locks the door after checking it is properly closed. (Manual operation is also available.)



### Mechanical Key Override

For emergency, it can also be unlocked with a mechanical key.



### Alarm (Break/Damage)

80dB alarm goes off if anyone attempts to damage the lock or force the door open.



### Low Battery and Emergency Power

It warns in case of low battery with alarm and LED. When the batteries are completely discharged, you can easily supply emergency power to the lock with the standard 9V battery.



### Remote Control (Optional)

Remote control type is also available. Wireless Floating ID technology is adopted and works up to 50m.

## Product Specifications

|                 |                   |
|-----------------|-------------------|
| Type            | Tubular Deadolt   |
| RFID Card       | 4 (Max. 40)       |
| Mechanical Keys | 2                 |
| PIN Code        | 4-12 digits       |
| Color           | Silver with Black |
| Backset         | 60 / 70 mm        |
| Door Thickness  | 35-55 mm          |



# YDR818

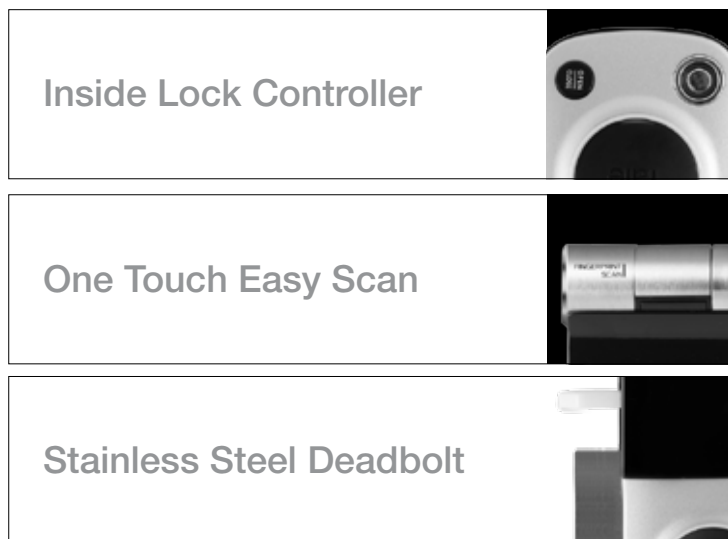
Fingerprint Digital Door Lock, Vertical Rim Lock type



- Digital Vertical Rim Lock
- Fingerprint Verification & Touch Keypad
- Inside Lock Controller
- Emergency Power Supply Terminal



## Reliable      Convenient      Safe



**YDR818 (Silver with Black)**  
 Front Body 31.5(D) X 66(W) X 176(H) mm  
 Back Body 46.0(D) X 76(W) X 201(H) mm



### Multiple Access

Yale YDR818 has three access solutions, PIN Code, Fingerprint Verification, Key override for your convenience.



### One-touch Fingerprint Verification Method

Easy Scan technology has been applied to conveniently read a fingerprint in one shot without the need to open or close the cover to enter a fingerprint.



### Voice Guide Feature

As the voice guide is offered that lets you know the operation status and how to set each feature and mode for easier and more convenient use.



### Smart Keypad & Operation Status Notification

Keypad can be seen only when you touch the screen with your palm. Whenever any operation is made, the keypad informs you what is happened through different alignment of the numbers.



### Fake PIN Code

To prevent the PIN Code from being exposed, it allows you to enter Fake numbers before or after entering your PIN Code.



### Inside Lock Controller

YDR818's Inside lock controller function allows users to unlock the lock internally only when an i-button key is used to activate the Lock.



### Mechanical Key Override

For emergency, it can also be unlocked with a mechanical key.



### Alarm (Break/Damage)

80dB alarm goes off if anyone attempts to damage the lock or force the door open.



### Low Battery and Emergency Power

It warns in case of low battery with alarm and LED. When the batteries are completely discharged, you can easily supply emergency power to the lock with the standard 9V battery.



### Remote Control (Optional)

Remote control type is also available. Wireless Floating ID technology is adopted and works up to 50m.

## Product Specifications

|                          |                   |
|--------------------------|-------------------|
| Type                     | Vertical Rim Lock |
| Fingerprint Verification | Up to 20          |
| Mechanical Keys          | 2                 |
| PIN Code                 | 4-12 digits       |
| Color                    | Silver with Black |
| Backset                  | 70-90 mm          |
| Door Thickness           | 35-55 mm          |

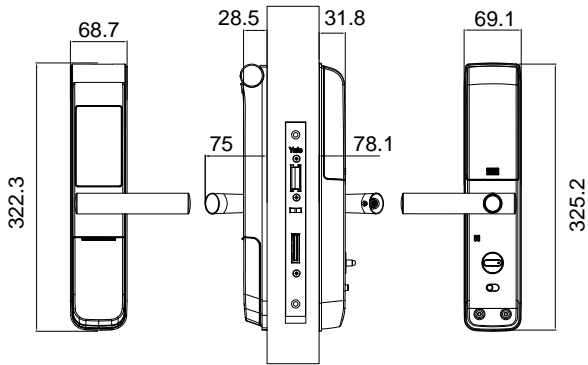


# Product Specifications

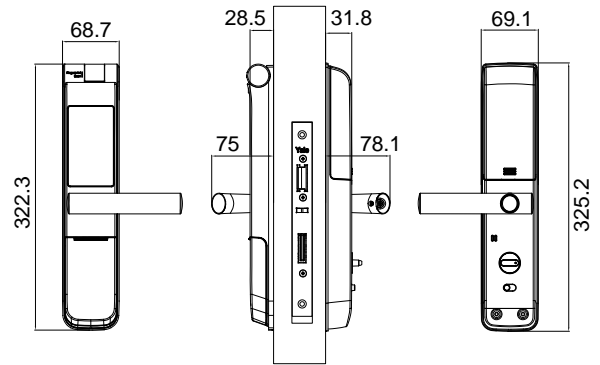
| Model   | Size (mm)                                                                       | Color                 | Type                               | Application         | Suggested Door Thickness Range (mm) | Backset (mm) |
|---------|---------------------------------------------------------------------------------|-----------------------|------------------------------------|---------------------|-------------------------------------|--------------|
| YMF30   | Front: 28.5 (D) X 68.7 (W) X 322.3 (H)<br>Back: 31.8 (D) X 69.1 (W) X 325.2 (H) | Silver with Black     | Europrofile Mortise Lock           | Wooden / Metal Door | 40-80mm                             | 60/70mm      |
| YMF40   | Front: 28.5 (D) X 68.7 (W) X 322.3 (H)<br>Back: 31.8 (D) X 69.1 (W) X 325.2 (H) | Silver with Black     | Europrofile Mortise Lock           | Wooden / Metal Door | 40-80mm                             | 60/70mm      |
| YDM3115 | Front: 29.8 (D) x 72 (W) x 344 (H)<br>Back: 36 (D) x 72 (W) x 344 (H)           | Silver / Gold         | Europrofile Mortise Lock           | Wooden / Metal Door | 40-80mm                             | 60/70mm      |
| YDM4115 | Front: 47.1 (D) x 72 (W) x 364 (H)<br>Back: 36 (D) x 72 (W) x 344 (H)           | Silver / Gold         | Europrofile Mortise Lock           | Wooden / Metal Door | 40-80mm                             | 60/70mm      |
| YDM3109 | Front: 27 (D) x 68.6 (W) x 306.6 (H)<br>Back: 37 (D) x 72.8 (W) x 306.6 (H)     | Silver / Gold         | Europrofile Mortise Lock           | Wooden / Metal Door | 40-80mm                             | 60/70mm      |
| YDM4109 | Front: 28.5 (D) x 68.6 (W) x 320.7 (H)<br>Back: 37 (D) x 72.8 (W) x 306.6 (H)   | Silver / Gold / Black | Europrofile Mortise Lock           | Wooden / Metal Door | 40-80mm                             | 60/70mm      |
| YDD324  | Front: 27(D) X 66(W) X 162(H)<br>Back: 35(D) X 70(W) X 170(H)                   | Silver with Black     | Tubular Deadbolt                   | Wooden / Metal Door | 35-55mm                             | 60/70mm      |
| YDR818  | Front: 31.5(D) X 66(W) X 176(H)<br>Back: 46(D) X 76(W) X 201(H)                 | Silver with Black     | Vertical Rim Lock                  | Wooden / Metal Door | 35-55mm                             | 70-90mm      |
| YDR343  | Front: 11 (D) X 68 (W) X 179 (H)<br>Back: 36 (D) X 72 (W) X 185 (H)             | Black                 | Vertical Rim Lock                  | Wooden / Metal Door | 35-55mm                             | 70-90mm      |
| YDR353  | Front: 11 (D) X 68 (W) X 179 (H)<br>Back: 36 (D) X 158 (W) X 85 (H)             | Black                 | Rim Lock                           | Wooden / Metal Door | 35-55mm                             | 70-90mm      |
| YDG313  | Front: 13 (D) X 66 (W) X 179 (H)<br>Back: 36 (D) X 72 (W) X 185 (H)             | Silver                | Vertical Rim Lock for Glass Door   | Glass Door          | 9-13mm                              | —            |
| YDR323  | Front: 13 (D) X 66 (W) X 179 (H)<br>Back: 36 (D) X 72 (W) X 185 (H)             | Silver                | Vertical Rim Lock                  | Wooden / Metal Door | 35-55mm                             | 70-90mm      |
| YDM3212 | Front: 24.5 (D) X 74 (W) X 200 (H)<br>Back: 30 (D) X 74 (W) X 200 (H)           | Red / Black           | Mortise Lock with Clutch Mechanism | Wooden / Metal Door | 35-55mm                             | 70mm         |
| YDR3110 | Front: 19(D) X 65(W) X 160(H)<br>Back: 36(D) X 158(W) X 85(H)                   | Silver with Black     | Rim Lock                           | Wooden / Metal Door | 35-55mm                             | 60-100mm     |
| YDR4110 | Front: 19(D) X 65(W) X 163(H)<br>Back: 36(D) X 158(W) X 85(H)                   | Silver with Black     | Rim Lock                           | Wooden / Metal Door | 35-55mm                             | 60-100mm     |

| PIN Code    | RFID Card / Fingerprint Verification | Mechanical Key Override | Battery                        | Operating Temperature | Remote Control (Optional)                                                                |
|-------------|--------------------------------------|-------------------------|--------------------------------|-----------------------|------------------------------------------------------------------------------------------|
| 6-12 digits | 4 X RFID Card (Max 40 nos)           | 2 Keys                  | 4 x 1.5V AA alkaline batteries | -15 – 55°C            | Optional Remote Control (Wireless Floating ID technology is adopted and works up to 50m) |
| 6-12 digits | Up to 20 nos Fingerprint             | 2 Keys                  |                                |                       |                                                                                          |
| 6-12 digits | 4 X RFID Card (Max 40 nos)           | 2 Keys                  |                                |                       |                                                                                          |
| 6-12 digits | Up to 20 nos Fingerprint             | 2 Keys                  |                                |                       |                                                                                          |
| 6-12 digits | 4 X RFID Card (Max 40 nos)           | 2 Keys                  |                                |                       |                                                                                          |
| 6-12 digits | Up to 20 nos Fingerprint             | 2 Keys                  |                                |                       |                                                                                          |
| 4-12 digits | 4 X RFID Card (Max 40 nos)           | 2 Keys                  |                                |                       |                                                                                          |
| 4-12 digits | Up to 20 nos Fingerprint             | 2 Keys                  |                                |                       |                                                                                          |
| 4-12 digits | 4 X RFID Card (Max 40 nos)           | —                       |                                |                       |                                                                                          |
| 4-12 digits | 4 X RFID Card (Max 40 nos)           | —                       |                                |                       |                                                                                          |
| 4-12 digits | 4 X RFID Card (Max 40 nos)           | —                       |                                |                       |                                                                                          |
| 4-12 digits | 4 X RFID Card (Max 40 nos)           | —                       |                                |                       |                                                                                          |
| 4-12 digits | 4 X RFID Card (Max 20 nos)           | —                       |                                |                       |                                                                                          |
| 4-12 digits | 4 X RFID Card (Max 20 nos)           | —                       |                                |                       |                                                                                          |
| 4-12 digits | Up to 20 nos Fingerprint             | —                       |                                |                       |                                                                                          |

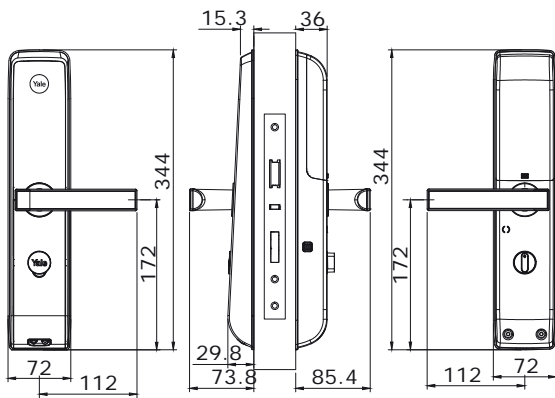
# Dimension Drawings



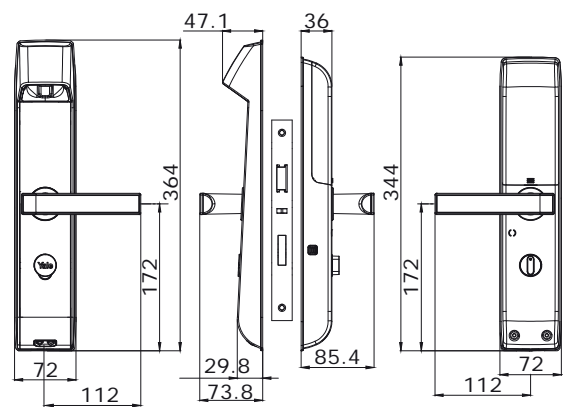
YMF30



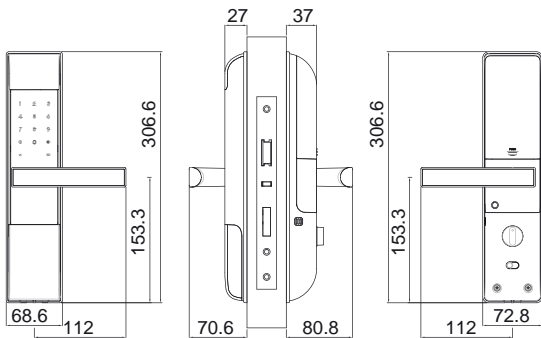
YMF40



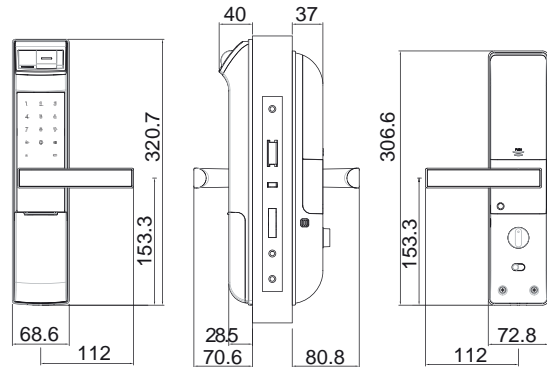
YDM3115



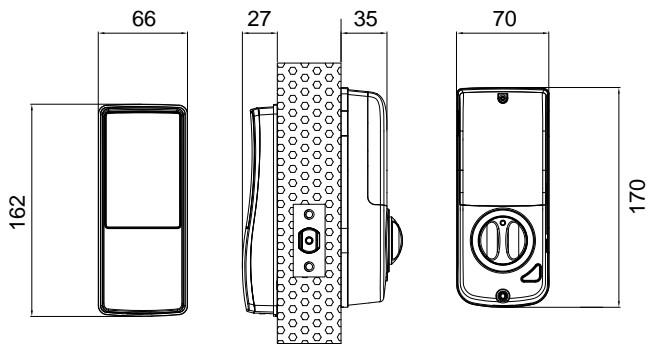
YDM4115



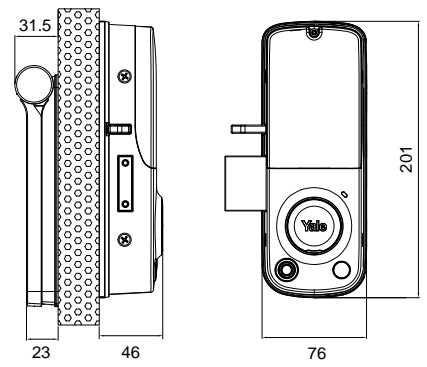
YDM3109



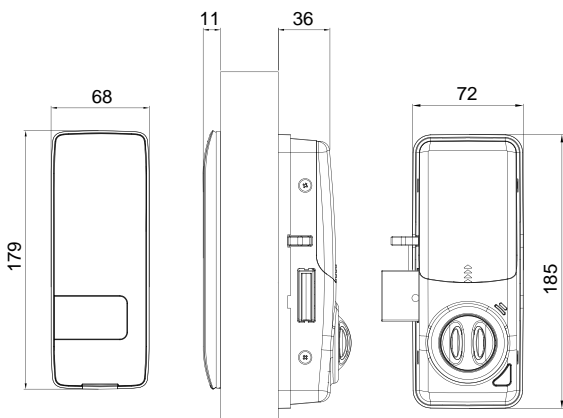
YDM4109



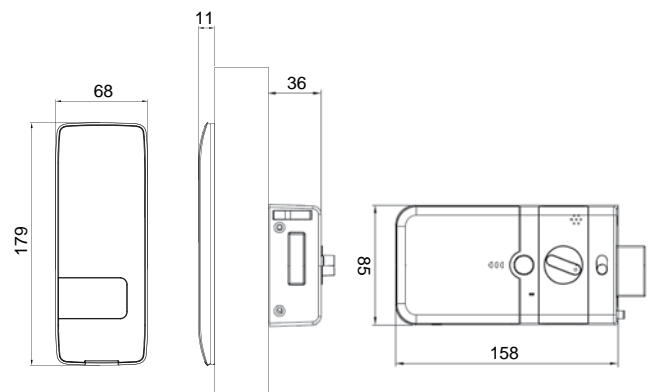
YDD324



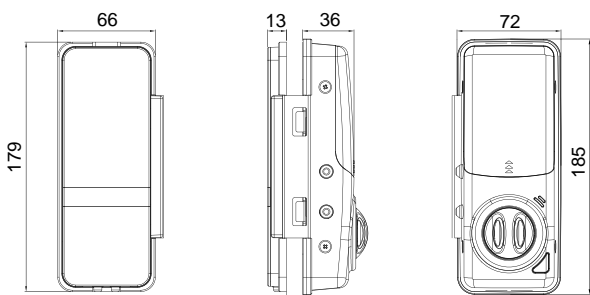
YDR 818



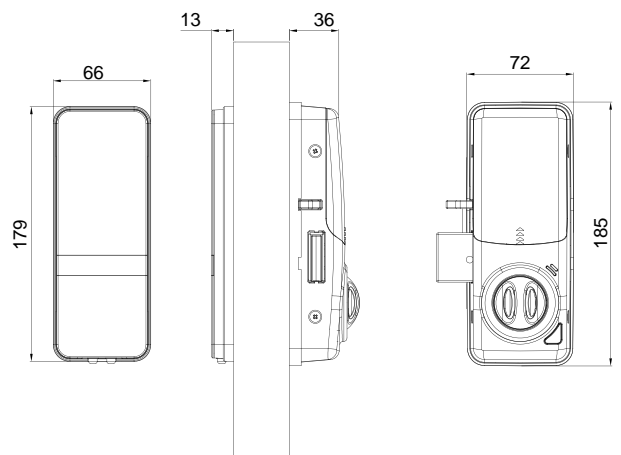
YDR 343



YDR 353

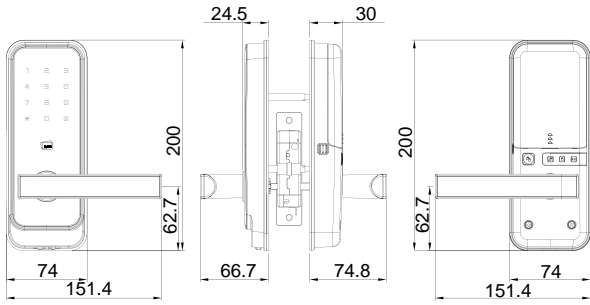


YDG 313



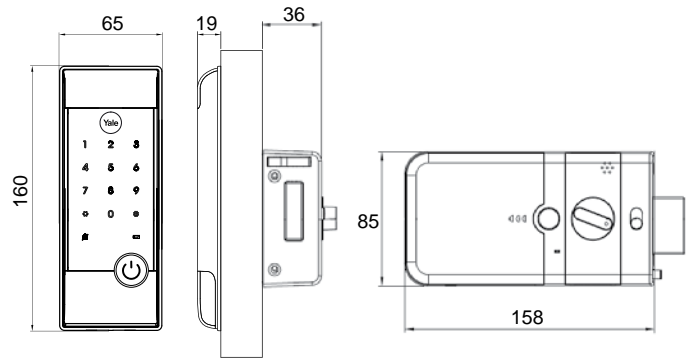
YDR 323

# Dimension Drawings



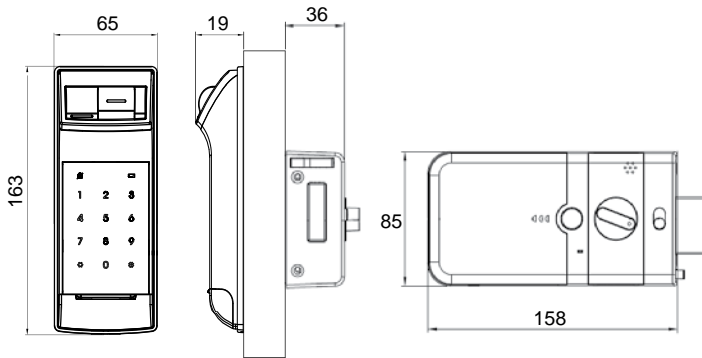
YDR 3212

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YDR 3110

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YDR 4110

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# Testing Standard

| Product Testing                                             | Testing Requirement                                                                                           | Performance |
|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------|
| Actual Installed Digital Door Lock Operational Cycling Test | <b>120,000 Cycles</b>                                                                                         | <b>Pass</b> |
| Vertical Loading to Outside Lever Handle Test               | <b>1 Hour</b><br>(2,700N vertical load to the outside lever and should secured the door up to 5,000N)         | <b>Pass</b> |
| Axial Loading to Outside Lever Handle Test                  | <b>2 Hour</b><br>(2,700N axial load to the outside lever and should secured the door up to 5,000N)            | <b>Pass</b> |
| Deadbolt Side Loading Test                                  | <b>3 Hour</b><br>(Deadbolt side load 2,700N, Deadbolt push in load 1,600N, should secured the door)           | <b>Pass</b> |
| Bumping Test                                                | <b>1 Hour</b><br>(Static Pressure 3,300N)                                                                     | <b>Pass</b> |
| Touch Keypad Durability Test                                | <b>120,000 Cycles</b>                                                                                         | <b>Pass</b> |
| Thumbturn Durability Test                                   | <b>120,000 Cycles</b>                                                                                         | <b>Pass</b> |
| RFID Card Reader Durability Test                            | <b>120,000 Cycles</b>                                                                                         | <b>Pass</b> |
| Registration Key Durability Test                            | <b>120,000 Cycles</b>                                                                                         | <b>Pass</b> |
| Lock Case Durability Test                                   | <b>120,000 Cycles</b>                                                                                         | <b>Pass</b> |
| Lever Handle Durability Test                                | <b>120,000 Cycles</b>                                                                                         | <b>Pass</b> |
| Electric Shock Test                                         | <b>500 Cycles</b><br>(Contact : ± 35KV, Air : ± 30KV, 0.1sec)                                                 | <b>Pass</b> |
| Temperature Variation Test                                  | <b>48 Hours</b><br>(Start from -50°C -> 60°C to -80°C ->160°C, 20°C variation, 30G to 50G vibration increase) | <b>Pass</b> |
| IP Test                                                     | <b>4 Hours</b><br>(15° angle to outside escutcheon, 5 seconds shower / 1minute)                               | <b>Pass</b> |



# Accessories

**ASSA ABLOY**

The global leader in  
door opening solutions







# CONDENSED CATALOG

Push Plates

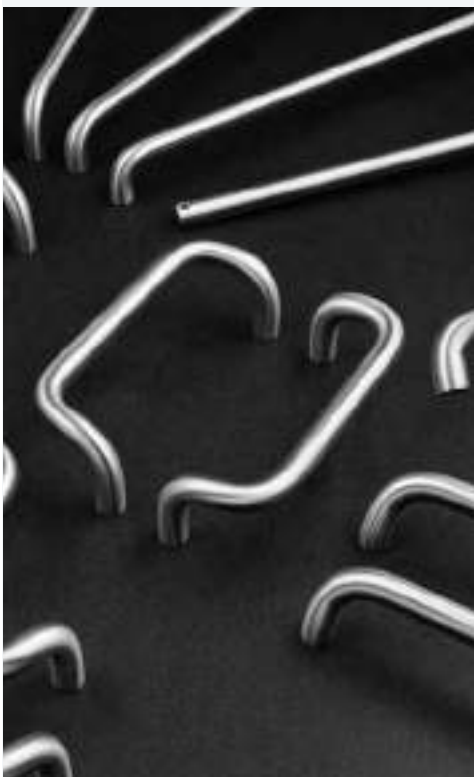
Door Pulls

Door Stops

Bolts & Latches

Kick Plates

Custom Designs



**ROCKWOOD**

**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions.

## Introduction

For over 60 years, Rockwood Manufacturing Company has taken pride in its reputation for producing quality hardware solutions. We carry our high standards of fabrication right through to the finishing process. Strict attention to detail from the selection of top-grade materials to the application of the finest finishes results in a tough, yet handsome product of the highest caliber.

The items shown in this catalog are only a representative selection of our line. We have standard items for hospitals, schools, and other institutions. We also have a wide selection of hardware including door stops, coat and hat hooks, signs and filler plates. Please see our representative in your area or visit our web site at [www.rockwoodmfg.com](http://www.rockwoodmfg.com) to view our Full Line Catalog.

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## Custom Designs

Design your own hardware! Whether it is a modification of a standard product or a completely unique design, Rockwood will quote your requirements and offer suggestions for best mounting applications. We take special pride in our custom products. For more information on custom products, please contact our sales staff or refer to our Full Line Architectural Hardware Catalog.



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## Special Architectural Finishes

US32DMS — use MicroShield antimicrobial coating to help prevent bacterial growth and to help attain LEED credit for Mold Prevention.

US32316 and US32D316 — Alloy 316 stainless steel for superior corrosion resistance.

US3LIFETIME — Never tarnish brass.

WPC, BPC, RPC — Powder coat color finishes (white, black, red).



### MicroShield®

As part of their promise to provide innovative solutions to their customers, certain ASSA ABLOY Group brands offer the MicroShield® technology, a silver-based antimicrobial coating designed to inhibit the growth of bacteria.

MicroShield® is a registered trademark of Yale Security Inc., an ASSA ABLOY Group company.

## Push Plates

Produced from the largest available selection of base metals and finishes. A complete listing may be found in our Full Line Architectural Catalog. The push plates are a standard .050" thick and other thicknesses are available upon request. They meet ANSI 156.6 standards. Plates can be mated with most any door pull of your choice.



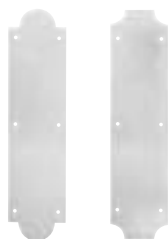
70-73

### .050 Thick Material

| No. | Size      |
|-----|-----------|
| 70A | 3" x 12"  |
| 70B | 3½" x 15" |
| 70C | 4" x 16"  |
| 70E | 6" x 16"  |
| 70F | 8" x 16"  |

### .125 Thick Material

| No. | Size      |
|-----|-----------|
| 73A | 3" x 12"  |
| 73B | 3½" x 15" |
| 73C | 4" x 16"  |
| 73E | 6" x 16"  |
| 73F | 8" x 16"  |



76

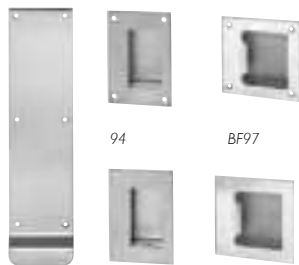
77

### Decorative Push Plates

| No. | Size      |
|-----|-----------|
| 76B | 3½" x 15" |
| 76C | 4" x 16"  |
| 77B | 3½" x 15" |
| 77C | 4" x 16"  |

## Flush Pulls

These flush pulls are available in all architectural finishes. All face plates are fabricated from 1/8" thick material providing a solid appearance and structure. Tamperproof torx or security socket machine screws can be furnished for high security installations. The 94C, 95A, 95B, and 95R are concealed mounted by screws in the side wall of the recess cup area.



91

94C

BF97L



95R



95A



95B

| No.   | Size       | Grip Opening |
|-------|------------|--------------|
| 91    | 3½" x 15¾" | —            |
| 94    | 3½" x 5"   | 1¾" x 3/8"   |
| 94C   | 3½" x 5"   | 1¾" x 3/8"   |
| 95A   | 2¾" x 3¼"  | 7/8" x 2/16" |
| 95B   | 2¼" x 4¾"  | 1¼" x 3/2"   |
| 95R   | 3½" dia.   | 2¾" x 1¼"    |
| BF97  | 5" x 5"    | 2½" x 3/2"   |
| BF97L | 5" x 5"    | 2½" x 3/2"   |

## Pulls

### PULL PLATES

These are just a few of our most popular pull plates and are available in all architectural finishes. They are .050" thick wrought and meet ANSI 156.6 standards.



107x70C



122x70C

| No.     | Pull CTC | Pull Size     |
|---------|----------|---------------|
| 102x70B | 5½"      | ⅝" Diameter   |
| 102x70C | 5½"      | ⅝" Diameter   |
| 105x70B | 5½"      | ¾" Diameter   |
| 105x70C | 5½"      | ¾" Diameter   |
| 106x70B | 6"       | ¾" Diameter   |
| 106x70C | 6"       | ¾" Diameter   |
| 107x70B | 8"       | ¾" Diameter   |
| 107x70C | 8"       | ¾" Diameter   |
| 122x70B | 6"       | ⅜" x 1¼"      |
| 122x70C | 6"       | ⅜" x 1¼"      |
| 125x70B | 6"       | 1" half round |
| 125x70C | 6"       | 1" half round |

### DECORATIVE PULL PLATES

These pull plates are .050" thick wrought, stocked in standard architectural finishes, and meet ANSI 156.6 standards.



147x76B



148x77B

| No.       | Pull CTC | Plate Size |
|-----------|----------|------------|
| 147 x 76B | 6"       | 3½" x 15"  |
| 147 x 76C | 6"       | 4" x 16"   |
| 147 x 77B | 6"       | 3½" x 15"  |
| 147 x 77C | 6"       | 4" x 16"   |
| 148 x 76B | 8"       | 3½" x 15"  |
| 148 x 76C | 8"       | 4" x 16"   |
| 148 x 77B | 8"       | 3½" x 15"  |
| 148 x 77C | 8"       | 4" x 16"   |

# Pulls

## DOOR PULLS

These sturdy pulls will enhance the look of any door. They may be thru bolt singly, or mounted in pairs back to back. They are manufactured from 1" diameter solid bar stock. Because they are fabricated in our own factory, a variety of modifications may easily be made. These door pulls are available in standard and special architectural finishes, and conform to ANSI 156.6 standards.



110

### Straight

| No.    | CTC |
|--------|-----|
| 110    | 8"  |
| 111    | 10" |
| 112    | 12" |
| 110BTB | 8"  |
| 111BTB | 10" |
| 112BTB | 12" |

BF prefix = Barrier Free  
BTB suffix = Set of 2 Back To Back



back to back



BF156

### Offset

| No.       | CTC |
|-----------|-----|
| BF156     | 8"  |
| BF157A    | 9"  |
| BF157     | 10" |
| BF158     | 12" |
| BF156BTB  | 8"  |
| BF157ABTB | 9"  |
| BF157BTB  | 10" |
| BF158BTB  | 12" |



back to back

## POSTMOUNT DOOR PULLS

Shown below is a small selection of our many architectural door pulls. Custom lengths are readily available. Refer to our full color Architectural Hardware Brochure for a large variety of unique and attractive door pulls.



RM3110

### PostMount Straight Pulls

| No.    | Dia.   | CTC           |
|--------|--------|---------------|
| RM3100 | 1"     | 8", 10", 12"  |
| RM3110 | 1 1/4" | 8", 11", 16"  |
| RM3120 | 1 1/2" | 11", 16", 20" |



RM3140

### PostMount Offset Pulls

| No.    | Dia.   | CTC           |
|--------|--------|---------------|
| RM3130 | 1"     | 8", 10", 12"  |
| RM3140 | 1 1/4" | 8", 11", 16"  |
| RM3150 | 1 1/2" | 11", 16", 20" |



RM3210

### NeoTek™ Straight Pulls

| No.    | Dia.   | CTC           |
|--------|--------|---------------|
| RM3200 | 1"     | 8", 10", 12"  |
| RM3210 | 1 1/4" | 8", 11", 16"  |
| RM3220 | 1 1/2" | 11", 16", 20" |



RM3240

### NeoTek™ Offset Pulls

| No.    | Dia.   | CTC           |
|--------|--------|---------------|
| RM3230 | 1"     | 8", 10", 12"  |
| RM3240 | 1 1/4" | 8", 11", 16"  |
| RM3250 | 1 1/2" | 11", 16", 20" |

## the good design studio

The Good Design Studio - your resource for beautiful doors, frames and hardware from ASSA ABLOY Group brands. Visit [www.thegooddesignstudio.com](http://www.thegooddesignstudio.com) to learn more.



Corbin Russwin 107 and SARGENT ME lever



McKinney 2 knuckle hinge with square end tips

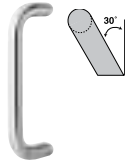


Rockwood closet door pull

## Pulls

### HEAVY DUTY OFFSET DOOR PULLS

These solid 1 1/4" diameter heavy duty pulls are designed for mounting on rough surface areas. The large footprint on door provides stable mounting. Pulls are available in all architectural finishes and conform to ANSI 156.6 standards.



BF258

| No.   | CTC | No.   | CTC |
|-------|-----|-------|-----|
| BF257 | 10" | BF259 | 18" |
| BF258 | 12" | BF260 | 24" |

### SECURITY LOOP DOOR PULL

Choose from brass or stainless steel material. Available in US4, US32D, and US32DMS finishes and conform to ANSI 156.6 standards. Supplied with security torx screws.



DI33

| No.  | CTC    |
|------|--------|
| DI33 | 7 1/2" |

### HEAVY DUTY SECURITY FLUSH PULL

The #D89 is made from cast brass material. Available in US4 and US26D finishes and conform to ANSI 156.6 standards. Supplied with security torx screws.



D89

| No. | Size    |
|-----|---------|
| D89 | 4" x 5" |

### VANDAL RESISTANT TRIM

Heavy duty 1/8" stainless steel construction, thru bolt mounted, and has a tamper resistant design. The VRT22 features a soft black textured grip.



VRT14



VRT16



VRT24



VRT26

| No.   | CTC          |
|-------|--------------|
| VRT14 | 5 7/8" x 12" |
| VRT16 | 5 7/8" x 12" |
| VRT24 | 5 7/8" x 12" |
| VRT26 | 5 7/8" x 12" |

## Pull Bars/Push Bars/Door Pulls

### PUSH AND PULL BARS

Push and pull bar sets are available with an assortment of components and mounting applications which provide ample opportunity for meeting your individual requirements. These push bars are custom made to the center-to-center dimension required to fit your doors.



11047

#### Straight (1" Diameter)

| No.    | CTC Pull/Push |
|--------|---------------|
| 11047  | 8" x specify  |
| 111A47 | 9" x specify  |
| 11147  | 10" x specify |
| 11247  | 12" x specify |

#### Offset (1" Diameter)

| No.      | CTC Pull/Push |
|----------|---------------|
| BF15647  | 8" x specify  |
| BF157A47 | 9" x specify  |
| BF15747  | 10" x specify |
| BF15847  | 12" x specify |



BF15647

#### Straight (1 1/4-1 1/2" Diameter)

| No.   | CTC Pull/Push | Dia.   |
|-------|---------------|--------|
| RM351 | 12" x specify | 1 1/4" |
| RM352 | 18" x specify | 1 1/4" |
| RM371 | 12" x specify | 1 1/2" |
| RM372 | 18" x specify | 1 1/2" |

#### Offset (1 1/4-1 1/2" Diameter)

| No.   | CTC Pull/Push | Dia.   |
|-------|---------------|--------|
| RM251 | 12" x specify | 1 1/4" |
| RM252 | 18" x specify | 1 1/4" |
| RM271 | 12" x specify | 1 1/2" |
| RM272 | 18" x specify | 1 1/2" |

### PUSH BARS

These 1" diameter push bars with base plates are available in standard and special architectural finishes. They meet ANSI 156.6 standards. These push bars are custom made to the center-to-center dimension required to fit your doors.



BP47

#### Straight (1 1/4-1 1/2" Diameter)

| No.    | CTC     | Projection |
|--------|---------|------------|
| BP47   | specify | 2 5/8"     |
| BP47-2 | specify | 2 5/8"     |
| BP47-3 | specify | 2 5/8"     |



BP47-2



BP47-3



## Pull Bars/ Push Bars/ Door Pulls

### MegaTek™ DOOR PULLS

Rockwood uses the latest technology combined with careful craftsmanship giving this line a stable, rugged construction. These pulls come in various shapes, dimensions and in most architectural finishes. Available in 1" solid and 1/4" and 1/2" diameter tubing. Refer to our full color Architectural Hardware Brochure for a large variety of unique and attractive door pulls. Specify CTC of mounting posts and overall length (up to 120").



#### Straight Pulls - Square Ends

| No.    | Diameter | Projection |
|--------|----------|------------|
| RM3300 | 1"       | 2¾"        |
| RM3301 | 1¼"      | 3"         |
| RM3302 | 1½"      | 3¼"        |

RM3301



#### Straight Pulls - Round Ends

| No.    | Diameter | Projection |
|--------|----------|------------|
| RM3320 | 1"       | 2¾"        |
| RM3321 | 1¼"      | 3"         |
| RM3322 | 1½"      | 3¼"        |

RM3321



#### Straight Pulls - Bent Ends

| No.    | Diameter | Projection |
|--------|----------|------------|
| RM3340 | 1"       | 3"         |
| RM3341 | 1¼"      | 3"         |
| RM3342 | 1½"      | 3½"        |

RM3341



#### Offset Pulls - Square End

| No.    | Diameter | Projection |
|--------|----------|------------|
| RM3310 | 1"       | 2½"        |
| RM3311 | 1¼"      | 2¾"        |
| RM3312 | 1½"      | 3"         |

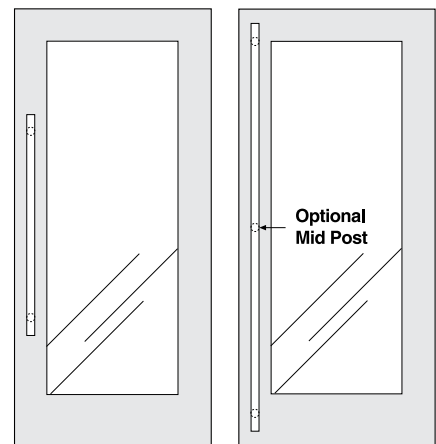
RM3311



#### Offset Pulls - Round Ends

| No.    | Diameter | Projection |
|--------|----------|------------|
| RM3330 | 1"       | 2½"        |
| RM3331 | 1¼"      | 2¾"        |
| RM3332 | 1½"      | 3"         |

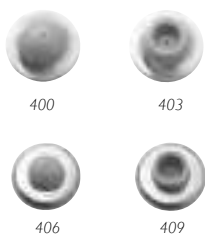
RM3331



## Door Stops & Silencers

### WALL BUMPERS

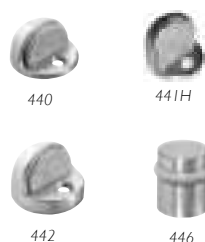
Durable and simple to install and have the added advantage of concealed fastenings. They are readily available from stock in all standard architectural finishes and in both cast and wrought materials. Plastic Toggle mount with SMS.



| No. | Bumper  | Material | Size                                  |
|-----|---------|----------|---------------------------------------|
| 400 | Convex  | Cast     | 2 <sup>7</sup> / <sub>16</sub> " Dia. |
| 403 | Concave | Cast     | 2 <sup>7</sup> / <sub>16</sub> " Dia. |
| 406 | Convex  | Wrought  | 2 <sup>1</sup> / <sub>2</sub> " Dia.  |
| 409 | Concave | Wrought  | 2 <sup>1</sup> / <sub>2</sub> " Dia.  |

### DOMESTOPS

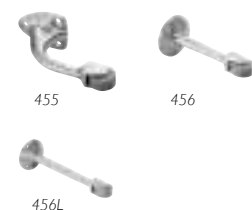
Made from solid cast brass. Risers are also available for use in carpeted/non-carpeted installations and provide a stable base for mounting the dome stop. Available in most architectural finishes.



| No.  | Material   | Base Size             | Height  |
|------|------------|-----------------------|---------|
| 440  | Cast Brass | 1/4" h x 2" Dia.      | 1 1/8"  |
| 441H | Cast Brass | 7/32" h x 1 7/8" Dia. | 1 1/16" |
| 442  | Cast Brass | 1/2" h x 2" Dia.      | 1 1/2"  |
| 446  | Brass      | 1 1/4" Dia.           | 1 1/2"  |

### ROLLER STOPS

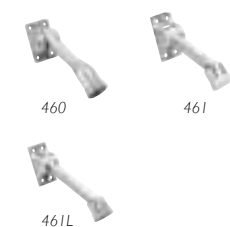
Designed to prevent interfering doors from damaging each other. Available in most architectural finishes.



| No.  | Material   | Base            | Projection |
|------|------------|-----------------|------------|
| 455  | Cast Brass | 1 5/8" x 2 1/4" | 3"         |
| 456  | Cast Brass | 2" Dia.         | 4 3/16"    |
| 456L | Cast Brass | 2" Dia.         | 6 1/4"     |

### KICK DOWN DOOR STOPS

The #461 features a unique patent assembly that allows no axle pin to show in the base and also provides a locating means that holds the door holder arm in the proper position.



| No.  | Material | Base             | Projection |
|------|----------|------------------|------------|
| 460  | Aluminum | 2 1/16" x 1 3/8" | 4"         |
| 461  | Brass    | 2 1/4" x 1 1/4"  | 3 5/8"     |
| 461L | Brass    | 2 1/4" x 1 1/4"  | 4 3/8"     |

## Door Stops & Silencers

### HEAVY DUTY DOOR STOPS

Specially designed for use in rugged situations and security areas. The resilient bumper is fire retardant.



| No. | Size              | No. | Size       |
|-----|-------------------|-----|------------|
| 462 | 2"d x 1½"h        | 466 | 2"d x 1½"h |
| 463 | 2"d x 1¾"h (Torx) | 467 | 2"d x 3½"h |
| 465 | 3⅝"d x 2"h        |     |            |

### DOOR STOPS

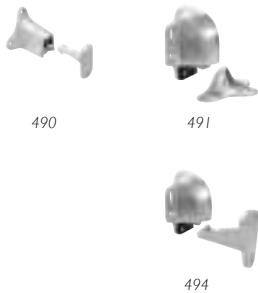
Our clean design and solid casting make these Rockwood door stops a decorative and functional alternative to other styles of stops. They are available in most architectural finishes.



| No.     | Material   | Base                                       | Projection |
|---------|------------|--------------------------------------------|------------|
| 470-471 | Cast Brass | 2½" Dia.                                   | 3"         |
| 472-473 | Cast Brass | 2½" Dia.                                   | 3¾"        |
| 474-475 | Cast Brass | 2¼" Dia.                                   | 3¾"        |
| 476-477 | Cast Brass | 2¼" Dia.                                   | 3¾"        |
| 480-481 | Cast Brass | 2½" x 1¾"                                  | 1⅝"        |
| 482     | Cast Brass | 1½" x 2½"                                  | 2⅝"        |
| 483     | Cast Brass | 1⅝" x 2⅝"                                  | 2¾"        |
| 485     | Cast Brass | 1⅝" x 2⅝"                                  | 3"         |
| 486     | Steel      | 2¾"h x 1½" wide top<br>2"w x 2½" long base |            |
| 487     | Cast Brass | 2⅝" x 2⅝"                                  | 3¾"        |

### AUTOMATIC DOOR HOLDER & STOPS

Designed for use in commercial buildings where it is desirable to hold a door open on a frequent basis.



| No. | Clearance                |
|-----|--------------------------|
| 490 | 3¾" wall-to-door         |
| 491 | ½" or less door-to-floor |
| 494 | 3¾" wall-to-door         |

### DOOR SILENCERS

Rubber door silencers for wood and metal doors.



| No. | Size         | Frame Type |
|-----|--------------|------------|
| 608 | ½" dia. x ⅝" | metal      |
| 609 | ⅜" x ¾"      | wood       |

## Bolts/Coordinators

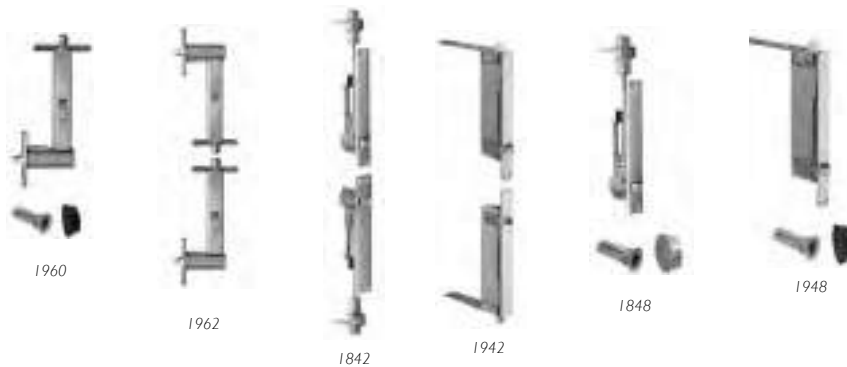
ROCKWOOD

ASSA ABLOY

### UL LISTED AUTOMATIC FLUSH BOLTS

The patented non-handed cam triggering device is the heart of this smooth-acting mechanism; only five pounds of force is required to drive a pair of bolts allowing door closing devices to perform at maximum efficiency. An override feature prevents damage to doors or bolts should the bolt heads be prevented from penetrating either the top or bottom strikes. The bolts are adjustable for unusual clearance or conditions and have a thermal lock that automatically locks the inactive door under high heat conditions due to fire.

- #1960 - for use on fire rated 20-minute wood core and composite doors up to 4'w x 9'h.
- #1962 - for use on fire rated wood core and composite doors up to 1½ hours fire rating up to 4'w x 9'h. Sold in sets.
- #1842 - for use on the inactive leaf of a pair of A, B, C, D, and E labeled metal doors up to 4'w x 9'h. Sold in sets.
- #1942 - for use on the inactive leaf of a pair of B, C, D, and E labeled wood covered composite doors up to 4'w x 9'h. Sold in sets.
- #1848 - for use on fire rated metal doors labeled A, B, C, D, & E up to 4'w x 9'h.
- #1948 - for use on fire rated 20-minute wood core and composite doors up to 4'w x 9'h.



### UL LISTED COMBINATION FLUSH BOLTS

The combination flush bolt uses one automatic flush bolt for the bottom of the door and a constant self-latching flush bolt for the top of the door. When the active leaf is opened, the bottom automatic flush bolt is opened. However the inactive leaf stays latched at the top until it is manually released by depressing the plunger on the bolt face. The top bolt engages each time the inactive door is closed.

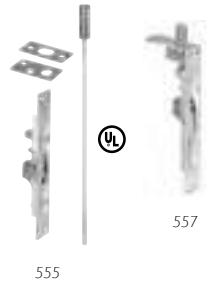
- #1845 - for use on A, B, C, D, and E labeled metal doors up to 4'w x 10'h.
- #1945 - for use on B, C, D, and E labeled wood covered composite doors up to 4'w x 9'h. Sold in sets.
- #1849 - for use on A, B, C, D, and E labeled metal doors up to 4'w x 10'h.
- #1949 - for use on fire rated 20-minute wood core and composite doors up to 4'w x 9'h.



## Bolts/Coordinators

### FLUSH AND SURFACE BOLTS

Smooth acting with sturdy construction.

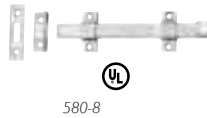


555 Flush Bolts - UL listed for use on A, B, C, D, and E labeled metal doors. Standard rod length is 12". Other lengths are available to order.

| No. | Size                   |
|-----|------------------------|
| 555 | 1" x 6 $\frac{3}{4}$ " |

557 Flush Bolts - UL listed for all types of labeled wood fire doors. Door strength is maintained by a reinforcing plate. Simple installation instructions are enclosed in each box.

| No. | Size                    |
|-----|-------------------------|
| 557 | 1" x 6- $\frac{3}{4}$ " |



580 Series Surface Bolts - Heavy duty and UL listed for use on the inactive leaf of a pair of labeled fire doors.

| No.    | Overall Size |
|--------|--------------|
| 580-8  | 8"           |
| 580-12 | 12"          |
| 580-18 | 18"          |
| 580-24 | 24"          |

630 Series Surface Bolts - Have a unique fiber gasket providing slide resistance without marring surface of bolt.

| No.    | Overall Size                          |
|--------|---------------------------------------|
| 630-4  | 1 $\frac{5}{8}$ " x 4 $\frac{3}{8}$ " |
| 630-8  | 1 $\frac{5}{8}$ " x 8"                |
| 630-12 | 1 $\frac{5}{8}$ " x 12"               |
| 630-24 | 1 $\frac{5}{8}$ " x 24"               |

### COORDINATORS

This non-handed coordinator (with companion filler) is designed to become an integral part of the door frame and when painted with the frame becomes virtually invisible. It is engineered to prevent damage in case of abnormal force against the door that is held open. The 1600 series is manufactured in three different housing lengths to coordinate the full range of door sizes.



| No.  | Opening |
|------|---------|
| 1660 | 60"     |
| 1672 | 72"     |
| 1696 | 96"     |

### DUST PROOF STRIKE

Designed to work with any of our flush bolts. Use of these strikes eliminates the problem of floor strikes being clogged with dirt and debris. This combo unit can be used in any situation with or without the removable face plate.



| No. | Opening                                                                                      |
|-----|----------------------------------------------------------------------------------------------|
| 570 | Face Plate: 1 $\frac{7}{8}$ " x 2 $\frac{7}{8}$ "<br>Barrel: $\frac{7}{8}$ " dia. x 2" depth |

# Door Protectors/Strikes

## DOOR PLATES


Rockwood door plates are available for immediate shipment in all standard sizes and finishes. Standard metal thickness is .050"; however, a thinner economy gauge is available in US32D/630 stainless steel. Other thicknesses are also available. Door plates meet all ANSI A156.6 requirements.



### Metal Door Plates - Standard

| No.    | Material |
|--------|----------|
| K1050  | .050"    |
| K1050F | .050"    |

### Plastic Door Plates - Heavy Duty

| No.       | Material                                                                                                |
|-----------|---------------------------------------------------------------------------------------------------------|
| K2060     | .060"                                                                                                   |
| K2060SA-F | .060" Self-Adhesive  |

Available in Beige, Calcutta Black, Chocolate Brown, and Pewter Gray.

### Metal Door Plates - Extra Heavy Duty

| No.       | Material |
|-----------|----------|
| K1125 DIA | .125"    |



Available in Brass, Bronze, Stainless, and Diamond Plate Aluminum.

### Clear Plastic Door Plates

| No.   | Material |
|-------|----------|
| K4125 | .125"    |

## DOOR EDGES

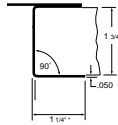
Most door edges are fabricated from .050" thick stainless steel; however, they are available in other metals and finishes. UL fire rated listed for stainless steel non-mortise applications; specify UL when ordering. These door edges are sized for 1 3/4" thick wood or metal doors. 306-AST and 306B-AST include an astragal, providing additional protection against vandalism.



| No.      | Material         | Edge   |
|----------|------------------|--------|
| 306      | .050"            | Square |
| 306-AST  | .050" w/Astragal | Square |
| 306B     | .050"            | Bevel  |
| 306B-AST | .050" w/Astragal | Bevel  |



306



306-AST



306B



306B-AST

## CORNER PROTECTORS

Corner Protectors — Corners of walls often suffer heavy abuse. Rockwood's corner guards are designed to prevent damage. Available in .050" thick stainless steel, brass and bronze. All materials have high impact strength and are easily made to your required size. Standard sizes include: 2" x 2" x 40", 2" x 2" x 48", 3" x 3" x 40", 3" x 3" x 48".



290



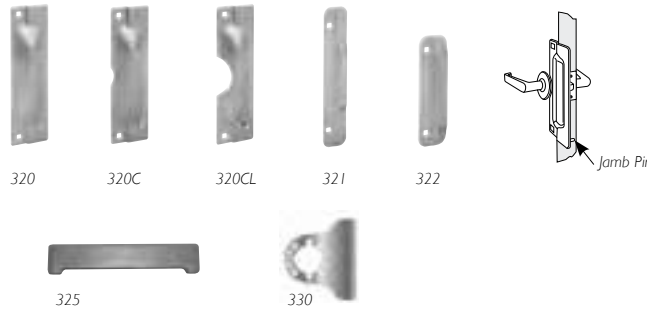
295

| No. | Mounting | Size    |
|-----|----------|---------|
| 290 | Adhesive | Specify |
| 295 | Screw    | Specify |

## Door Protectors/Strikes

### LOCK PROTECTORS

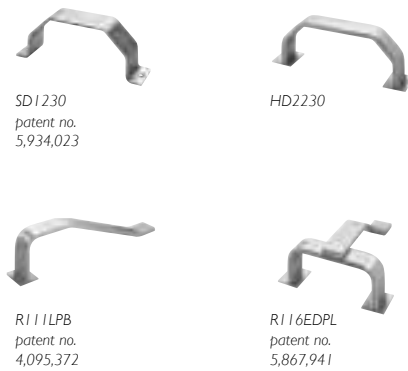
Heavy duty 12 gauge protection for latch bolts available in zinc plated steel or stainless steel. No. 320C and 320CL are notched for cylindrical locksets.



| No.   | Size      |
|-------|-----------|
| 320   | 3" x 11"  |
| 320C  | 3" x 11"  |
| 320CL | 3" x 11"  |
| 321   | 1½" x 10" |
| 322   | 1½" x 6"  |
| 325   | 1⅞" x 9½" |
| 330   | 5⅜" x 6"  |

### TRIM PROTECTOR BARS

Our line of patented trim protector bars is designed to safely deflect traffic away from exit devices, door knobs/levers or other trim. The bars are mounted either directly below, over, or in front of the trim depending on the application. If you require a custom design, our engineering department can work to meet your needs.



| No.      | Projection | CTC |
|----------|------------|-----|
| SD1230   | 3¼"        | 8"  |
| SD1240   | 3¾"        | 8"  |
| SD1250   | 4¼"        | 8"  |
| SD1260   | 3¼"        | 8"  |
| HD2230   | 3¼"        | 8"  |
| HD2240   | 3¾"        | 8"  |
| HD2250   | 4¼"        | 8"  |
| R101LPB  | 3¼"        | 12" |
| R111LPB  | 3¼"        | 12" |
| R115LPB  | 3¼"        | 14" |
| R116EDPL | 3¼"        | 8½" |
| R116EDPH | 4½"        | 8½" |

### CUSTOM STRIKES

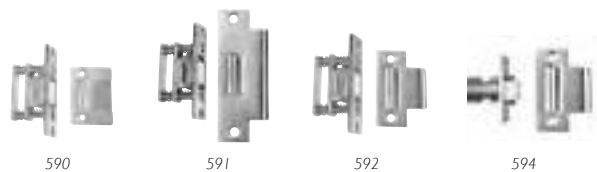
Custom strikes are available by providing us with measurements for your special strike requirements. Lock strikes are .090" thick, unless otherwise specified.



## Latches/Guards/Catches/Viewers/Signs

### ROLLER LATCHES

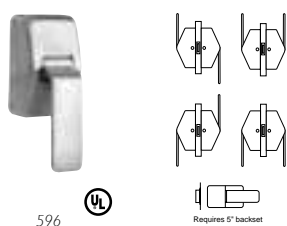
These heavy duty roller latches have a variety of strikes to suit several different conditions. The latches feature heavy duty springs and solid nylon rollers for long life. They are adjustable to compensate for varying door to jamb clearance.



| No. | Size                                                              | Strike                                                             |
|-----|-------------------------------------------------------------------|--------------------------------------------------------------------|
| 590 | 1" x 3 <sup>3</sup> / <sub>8</sub> "                              | 1 <sup>1</sup> / <sub>16</sub> " x 2 <sup>1</sup> / <sub>4</sub> " |
| 591 | 1" x 3 <sup>3</sup> / <sub>8</sub> "                              | 1 <sup>1</sup> / <sub>4</sub> " x 4 <sup>7</sup> / <sub>8</sub> "  |
| 592 | 1" x 3 <sup>3</sup> / <sub>8</sub> "                              | 1 <sup>1</sup> / <sub>8</sub> " x 2 <sup>3</sup> / <sub>4</sub> "  |
| 594 | 1 <sup>1</sup> / <sub>8</sub> " x 2 <sup>1</sup> / <sub>4</sub> " | 1 <sup>1</sup> / <sub>8</sub> " x 2 <sup>3</sup> / <sub>4</sub> "  |

### HOSPITAL LATCH

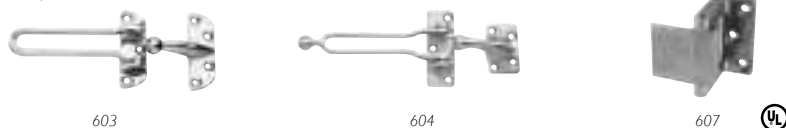
UL listed for use on fire doors. Supplied with standard or ASA strikes. Quality construction provides secure and silent latching action. Simple installation instructions are provided. Field reversible, this device is made to provide years of trouble-free operation.



| No.      | Backset                         |
|----------|---------------------------------|
| 596      | 5"                              |
| 596S     | 2 <sup>3</sup> / <sub>4</sub> " |
| 596 ASA  | 5"                              |
| 596S ASA | 2 <sup>3</sup> / <sub>4</sub> " |

### DOOR GUARDS & PRIVACY LATCH

Our #603 and #604 security door guards are easier to use than a chain door guard and eliminate the marring of the door frame caused by chain door guards. The #607 is designed to enhance privacy and the feeling of safety and security in hotels, residences, dorm rooms and more. UL classified as a fire door accessory.



### EDGE GUARD

The #605 edge guard is designed to protect the door or frame from marring when used in conjunction with a #603 or #604 door guard.



### WALL GUARD

With a clear adhesive mount.



### MAGNETIC CATCHES

The heavy duty #900 catch includes a dual double-pole with self-aligning magnets. The #901 is extra heavy duty and includes a dual triple-pole with self-aligning magnets. Both can be used on pair of doors or single door.





## Latches/Guards/Catches/Viewers/Signs

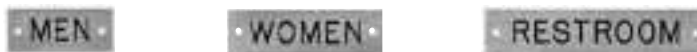
### DOORVIEWERS

The #620 door viewer features undistorted 160° field of vision. The #622 features a wide angle 190° field of vision. The #624 & #626 door viewers features privacy covers to prevent visual intrusion from outside of the room. (#624 is a 160° viewer and #626 is a 190° viewer). They are all UL listed.



### #670 SERIES ENGRAVED SIGNS

These plastic or metal signs are available in .125" thick black or brown plastic or .050" thick aluminum, brass, bronze, or stainless steel. Standard letter size is 1" h x 1/8" w stroke. Sign size is determined by the height and length of the engraving. Conforms to ANSI 156.16 standards.



### BF SERIES ADA TACTILE SIGNS

These 8" x 8" tactile signs are available in .125" thick non-glare plastic or .050" thick aluminum, brass, bronze, or stainless steel. Easy to read lettering with Grade 2 braille translation. Plastic meets ADAAG section 4.30 requirements.



### BFM SERIES ADA MOLDED PLASTIC SIGNS

These 6" x 9" signs have easy to read raised lettering with Grade 2 braille translation. Choice of blue or black background with 1" white lettering. Meets ADAAG section 4.30 requirements.



Rockwood Manufacturing Company  
 P.O. Box 79  
 Rockwood, PA 15557  
 Phone: (800) 458-2424 • Fax: (800) 922-9212  
[www.rockwoodmfg.com](http://www.rockwoodmfg.com) • [info@rockwoodmfg.com](mailto:info@rockwoodmfg.com)

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**ROCKWOOD**



**ASSA ABLOY**

## **Architectural Door Pulls**



ASSA ABLOY, the global leader  
in door opening solutions



Post mounted pulls are smart, clean designs for all kinds of doors. Offset mounting bases allow this group to be used on narrow style doors. Square and round end versions are available as well as custom lengths. The simplicity of this group is an attribute that adds contemporary beauty to even standard entrance doors. See the price list for push pull sets.

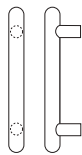
## PostMount

*straight & offset pulls*



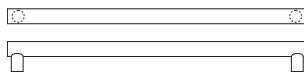
### Straight Pulls - Square Ends

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3100   | 1"       | 8", 10", 12"  |
| RM3110   | 1½"      | 8", 11", 16"  |
| RM3120   | 1½"      | 11", 16", 20" |



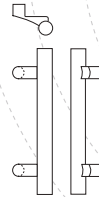
### Straight Pulls - Round Ends

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3104   | 1"       | 8", 10", 12"  |
| RM3114   | 1½"      | 8", 11", 16"  |
| RM3124   | 1½"      | 11", 16", 20" |



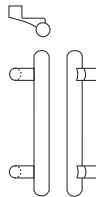
### Push Bars - Square Ends\*

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM3102   | 1"       | Specify |
| RM3112   | 1½"      | Specify |
| RM3122   | 1½"      | Specify |



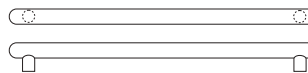
### Offset Pulls - Square Ends

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3130   | 1"       | 8", 10", 12"  |
| RM3140   | 1½"      | 8", 11", 16"  |
| RM3150   | 1½"      | 11", 16", 20" |



### Offset Pulls - Round Ends

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3134   | 1"       | 8", 10", 12"  |
| RM3144   | 1½"      | 8", 11", 16"  |
| RM3154   | 1½"      | 11", 16", 20" |



### Push Bars - Round Ends\*

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM3106   | 1"       | Specify |
| RM3116   | 1½"      | Specify |
| RM3126   | 1½"      | Specify |



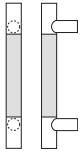
**Base Metals:** Aluminum (except offset pulls), brass, bronze, stainless steel

\*To specify multi-bar sets suffix -2 or -3 to pull number (example: RM3112-3).



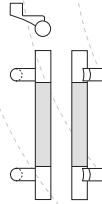
NeoTek post mounted door pulls and push bars meld the durable and attractive GripZone finish with a contemporary post mounted style. Both straight and offset pulls in square and round end versions are available in three diameters. Custom lengths are readily available. See price list for push pull sets.

**NeoTek™**  
*post mounted GripZone™*



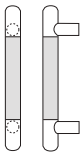
**Straight Pulls - Square Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3200   | 1"       | 8", 10", 12"  |
| RM3210   | 1½"      | 8", 11", 16"  |
| RM3220   | 1½"      | 11", 16", 20" |



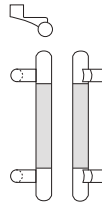
**Offset Pulls - Square Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3230   | 1"       | 8", 10", 12"  |
| RM3240   | 1½"      | 8", 11", 16"  |
| RM3250   | 1½"      | 11", 16", 20" |



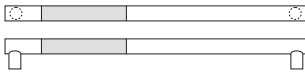
**Straight Pulls - Round Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3204   | 1"       | 8", 10", 12"  |
| RM3214   | 1½"      | 8", 11", 16"  |
| RM3224   | 1½"      | 11", 16", 20" |



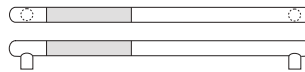
**Offset Pulls - Round Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3234   | 1"       | 8", 10", 12"  |
| RM3244   | 1½"      | 8", 11", 16"  |
| RM3254   | 1½"      | 11", 16", 20" |



**Push Bars - Square Ends\***

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM3202   | 1"       | Specify |
| RM3212   | 1½"      | Specify |
| RM3222   | 1½"      | Specify |



**Push Bars - Round Ends\***

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM3206   | 1"       | Specify |
| RM3216   | 1½"      | Specify |
| RM3226   | 1½"      | Specify |



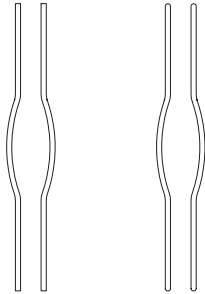
**Base Metals:** Brass, bronze, stainless steel  
**Note:** See price list for information on ordering push pull sets.

\*To specify multi-bar sets suffix -2 or -3 to pull number (example: RM3202-3).



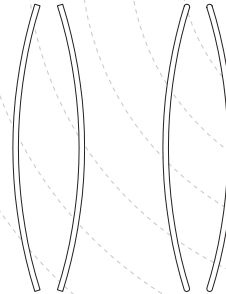
Ever since the discovery of calculus by Sir Isaac Newton and Gottfried Leibniz in the 17th century, man has been fascinated with the building of precise curved surfaces. Rockwood is eager to build the curved pull you envision. Select from the standard shapes shown here in 1½" diameter or send a drawing of your own.

**MegaCurve™**  
long curved pulls



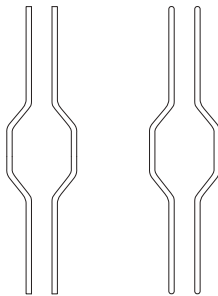
**Mid Bow Pulls**

| Pull No. | End    | Diameter | CTC        |
|----------|--------|----------|------------|
| RM2000   | Square | 1½"      | 72" to 96" |
| RM2004   | Round  | 1½"      | 72" to 96" |



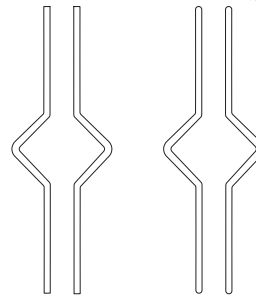
**Long Bow Pulls**

| Pull No. | End    | Diameter | CTC        |
|----------|--------|----------|------------|
| RM2010   | Square | 1½"      | 72" to 96" |
| RM2014   | Round  | 1½"      | 72" to 96" |



**45 Degree Pulls**

| Pull No. | End    | Diameter | CTC        |
|----------|--------|----------|------------|
| RM2020   | Square | 1½"      | 72" to 96" |
| RM2024   | Round  | 1½"      | 72" to 96" |

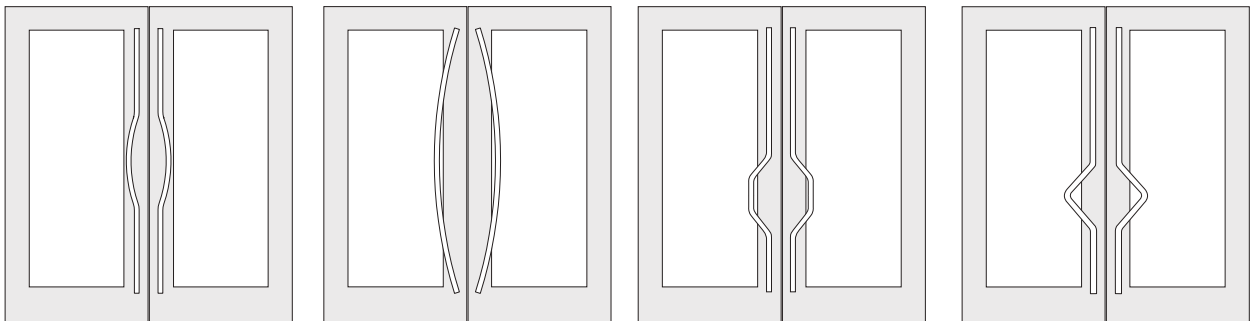


**Triangle Pulls**

| Pull No. | End    | Diameter | CTC        |
|----------|--------|----------|------------|
| RM2030   | Square | 1½"      | 72" to 96" |
| RM2034   | Round  | 1½"      | 72" to 96" |



**Application Suggestions**



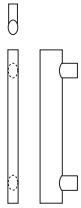
**Base Metals:** Brass, bronze, stainless steel  
**Options:** Over 96" available on select finishes.





The grip of our oval shape conforms to the natural contour of one's hand, defining the standard in comfort for the user. The design is complimented by the oval shaped mounting posts. The pulls are available in regular and full height lengths. The push bar features oval tubing practically positioned to expose the broad pushing surface. Available in two cross section sizes, the oval pulls and push bars are the most ergonomically correct door hardware.

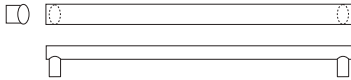
**OvalTek™**  
with true oval grip



**Straight Oval Pulls**

| Pull No. | Size     | CTC           |
|----------|----------|---------------|
| RM2300   | 1" x 1½" | 8", 11", 16"  |
| RM2310   | 1" x 1¼" | 11", 16", 20" |

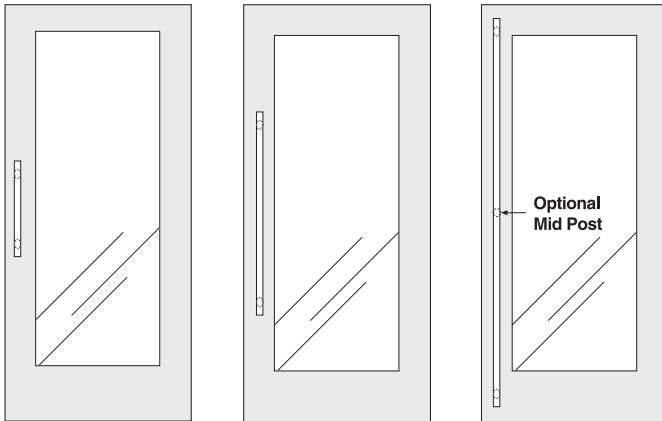
Up to 96" CTC available.



**Push Bars**

| Pull No. | Size     | CTC     |
|----------|----------|---------|
| RM2302   | 1" x 1½" | Specify |
| RM2312   | 1" x 1¼" | Specify |

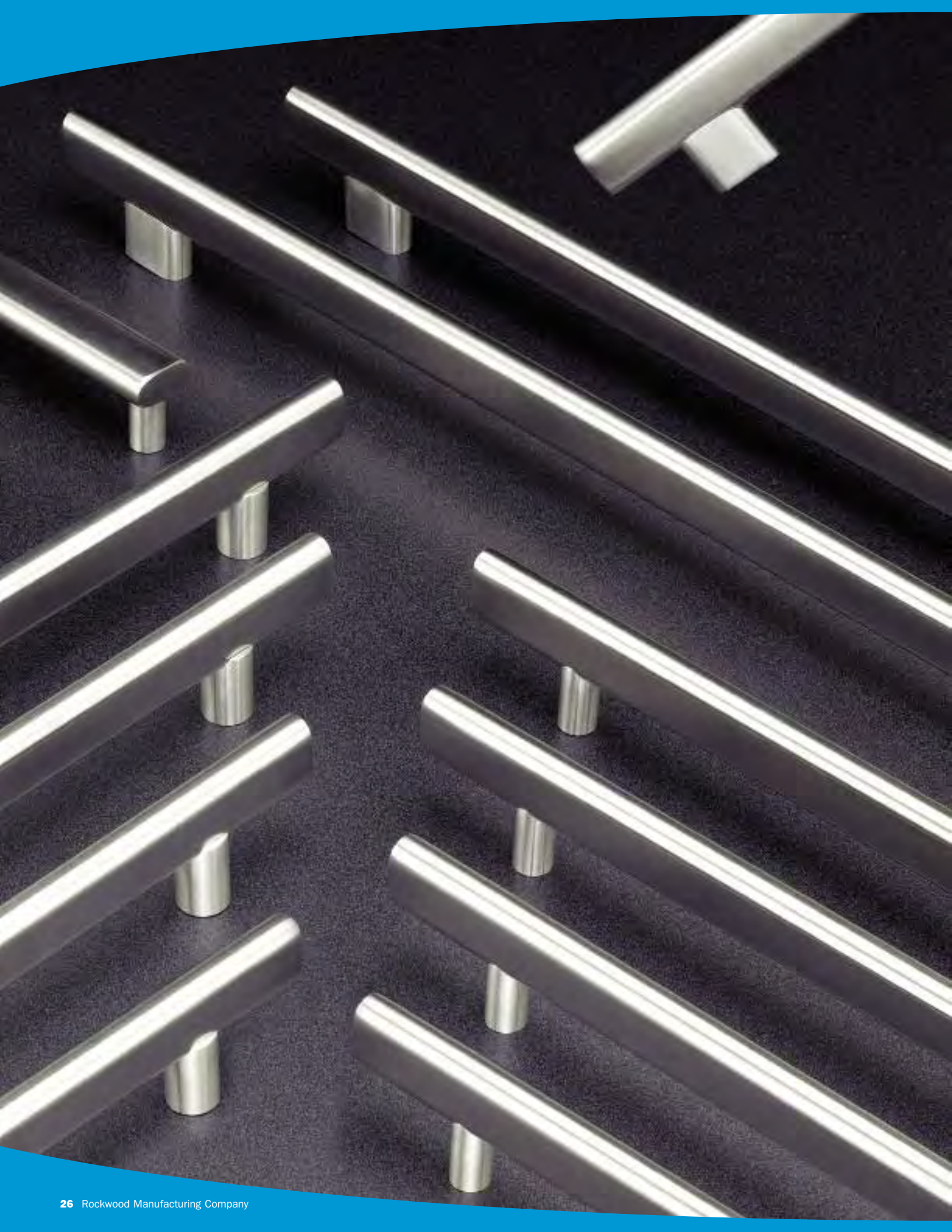
**Application Suggestions**



**Oval Detail**

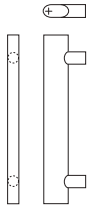
**Base Metal:** Stainless steel

**Options:** • For optional mid-post, suffix the product number with "MP" (example: RM2310MP).  
• Over 96" available on select finishes.



The comfortable and attractive  $\frac{3}{4}$ " x  $1\frac{1}{2}$ " flat oval shape is available with three styles of mounting posts and in full-length versions. This sturdy, sleek shape creates a beautiful pull and is available with a leather cover shown on page 95. Flat oval combines the ergonomics of the true oval with the trim lines of rectangular tubing.

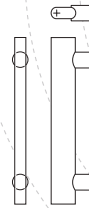
**OvalTek™**  
with flat oval grip



**Straight Pull -  $\frac{3}{4}$ " Round Post**

| Pull No. | Size                               | CTC          |
|----------|------------------------------------|--------------|
| RM2400   | $\frac{3}{4}$ " x $1\frac{1}{2}$ " | 8", 11", 16" |

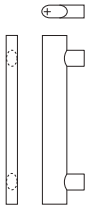
Up to 96" CTC available.



**Straight Pull - 1" Round Post**

| Pull No. | Size                               | CTC          |
|----------|------------------------------------|--------------|
| RM2410   | $\frac{3}{4}$ " x $1\frac{1}{2}$ " | 8", 11", 16" |

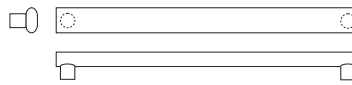
Up to 96" CTC available.



**Straight Pull - Oblong Post**

| Pull No. | Size                               | CTC          |
|----------|------------------------------------|--------------|
| RM2420   | $\frac{3}{4}$ " x $1\frac{1}{2}$ " | 8", 11", 16" |

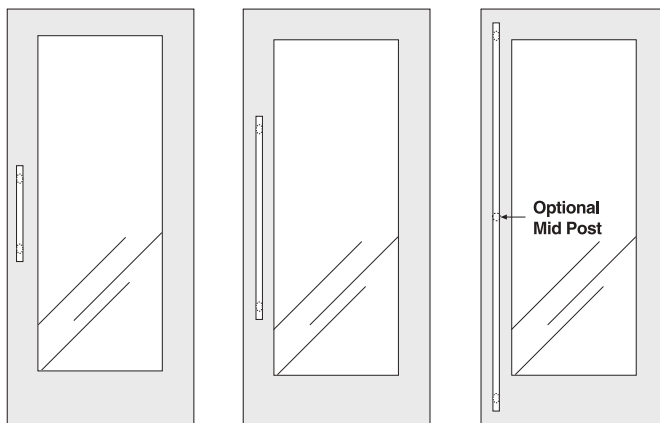
Up to 96" CTC available.



**Push Bar**

| Pull No. | Size                               | CTC     |
|----------|------------------------------------|---------|
| RM2402   | $\frac{3}{4}$ " x $1\frac{1}{2}$ " | Specify |

**Application Suggestions**



**Base Metal:** Stainless steel

**Options:**

- For optional mid-post, suffix the product number with "MP" (example: RM2420MP).
- Over 96" available on select finishes.



Rockwood mitre pulls are fabricated by a precise process that accomplishes the joint without any sign of welding residue. The GripZone feature of NeoMitre adds appeal to the design. Beyond providing an attractive contrast, the satin finish contact area conceals small scratches caused by routine use. Available in three diameters and custom lengths.

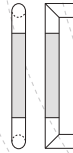
**NeoMitre™**  
with or without GripZone™



**Straight Pulls**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM7300   | 1"       | 8", 11", 16"  |
| RM7310   | 1½"      | 11", 16", 20" |
| RM7320   | 1½"      | 11", 16", 20" |

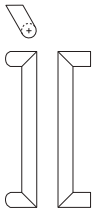
Up to 36" CTC available.



**Straight Pulls**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM7400   | 1"       | 8", 11", 16"  |
| RM7410   | 1½"      | 11", 16", 20" |
| RM7420   | 1½"      | 11", 16", 20" |

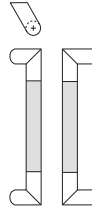
Up to 36" CTC available.



**Offset Pulls**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM7330   | 1"       | 8", 11", 16"  |
| RM7340   | 1½"      | 11", 16", 20" |
| RM7350   | 1½"      | 11", 16", 20" |

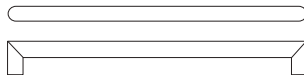
Up to 36" CTC available.



**Offset Pulls**

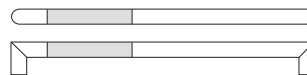
| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM7430   | 1"       | 8", 11", 16"  |
| RM7440   | 1½"      | 11", 16", 20" |
| RM7450   | 1½"      | 11", 16", 20" |

Up to 36" CTC available.



**Push Bars\***

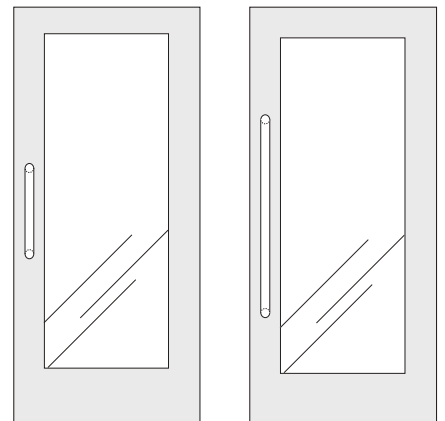
| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM7302   | 1"       | Specify |
| RM7312   | 1½"      | Specify |
| RM7322   | 1½"      | Specify |



**Push Bars\***

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM7402   | 1"       | Specify |
| RM7412   | 1½"      | Specify |
| RM7422   | 1½"      | Specify |

**Application Suggestions**



**Base Metal:** Stainless steel

\*To specify multi-bar sets suffix -2 or -3 to pull number (example: RM7302-2).



The fresh design of our Cylinder Pull is available in straight and offset versions. The 1¼" tubing blends seamlessly into the terminating flat end posts. NeoCylinder Pulls are available with our popular GripZone finish.

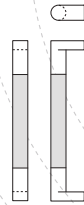
**NeoCylinder™**  
*with or without GripZone™*



**Straight Pull**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM7210   | 1¼"      | 11", 16", 20" |

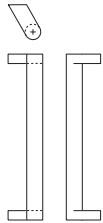
Up to 36" CTC available.



**Straight Pull**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM7230   | 1¼"      | 11", 16", 20" |

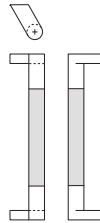
Up to 36" CTC available.



**Offset Pull**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM7220   | 1¼"      | 11", 16", 20" |

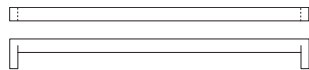
Up to 36" CTC available.



**Offset Pull**

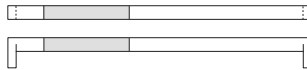
| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM7240   | 1¼"      | 11", 16", 20" |

Up to 36" CTC available.



**Push Bar**

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM7212   | 1¼"      | Specify |



**Push Bar**

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM7232   | 1¼"      | Specify |

**Base Metal:** Stainless steel

© 2006 Rockwood Manufacturing Company





The becoming subtle luster of the satin black hard coat anodized aluminum grip forms a striking contrast to the selected finish of the end sections. We show mirror polished stainless steel, but many alternative finishes are available. This compelling design is also practical due to its durability and high visibility. Available in three diameters and a variety of lengths.

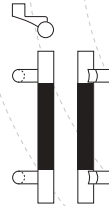
**NoirMet™**  
*black anodized grip*



**Straight Pulls - Square Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3800   | 1"       | 8", 10", 12"  |
| RM3810   | 1¼"      | 8", 11", 16"  |
| RM3820   | 1½"      | 11", 16", 20" |

Up to 36" CTC available.



**Offset Pulls - Square Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3830   | 1"       | 8", 10", 12"  |
| RM3840   | 1¼"      | 8", 11", 16"  |
| RM3850   | 1½"      | 11", 16", 20" |

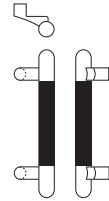
Up to 36" CTC available.



**Straight Pulls - Round Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3804   | 1"       | 8", 10", 12"  |
| RM3814   | 1¼"      | 8", 11", 16"  |
| RM3824   | 1½"      | 11", 16", 20" |

Up to 36" CTC available.



**Offset Pulls - Round Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3834   | 1"       | 8", 10", 12"  |
| RM3844   | 1¼"      | 8", 11", 16"  |
| RM3854   | 1½"      | 11", 16", 20" |

Up to 36" CTC available.



**Push Bars - Square Ends\***

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM3802   | 1"       | Specify |
| RM3812   | 1¼"      | Specify |
| RM3822   | 1½"      | Specify |



**Push Bars - Round Ends\***

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM3806   | 1"       | Specify |
| RM3816   | 1¼"      | Specify |
| RM3826   | 1½"      | Specify |



**Base Metals:** Aluminum, brass, bronze, stainless steel  
**Note:** See price list for information on ordering push pull sets.

\*To specify multi-bar sets suffix -2 or -3 to pull number (example: RM3802-2).



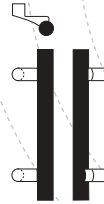
NoirTek pulls stand out on light colored entrances for a quick identity and bold statement. The durable black hard coat anodized grips compliment many design schemes and are an appealing finish on their own. Choose from an array of contrasting finishes for the mounting posts. Available in three diameters and a variety of lengths.

**NoirTek™**  
*black anodized grip*



**Straight Pulls - Square Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3900   | 1"       | 8", 10", 12"  |
| RM3910   | 1¼"      | 8", 11", 16"  |
| RM3920   | 1½"      | 11", 16", 20" |



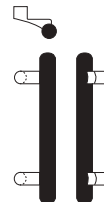
**Offset Pulls - Square Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3930   | 1"       | 8", 10", 12"  |
| RM3940   | 1¼"      | 8", 11", 16"  |
| RM3950   | 1½"      | 11", 16", 20" |



**Straight Pulls - Round Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3904   | 1"       | 8", 10", 12"  |
| RM3914   | 1¼"      | 8", 11", 16"  |
| RM3924   | 1½"      | 11", 16", 20" |



**Offset Pulls - Round Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM3934   | 1"       | 8", 10", 12"  |
| RM3944   | 1¼"      | 8", 11", 16"  |
| RM3954   | 1½"      | 11", 16", 20" |



**Push Bars - Square Ends\***

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM3902   | 1"       | Specify |
| RM3912   | 1¼"      | Specify |
| RM3922   | 1½"      | Specify |



**Push Bars - Round Ends\***

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM3906   | 1"       | Specify |
| RM3916   | 1¼"      | Specify |
| RM3926   | 1½"      | Specify |



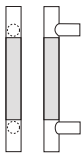
**Base Metals (for Posts):** Brass, bronze, stainless steel  
**Note:** See price list for information on ordering push pull sets.

\*To specify multi-bar sets suffix -2 or -3 to pull number (example: RM3902-2).



The ArborMet group combines the alluring warmth of wood with the unrivaled strength of solid brass and stainless steel. The exceptionally sturdy wood grip consists of select dyed hardwood veneers impregnated with resin and laminated to produce a strong wood element. The gripping surface actually feels warmer to the touch than metal based pulls. A variety of natural wood species is available on special order; please contact the factory with your requirement.

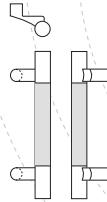
**ArborMet™**  
wood grip pulls



**Straight Pulls - Square Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM4000   | 1"       | 8", 10", 12"  |
| RM4010   | 1½"      | 8", 11", 16"  |
| RM4020   | 1½"      | 11", 16", 20" |

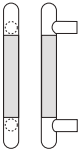
Up to 96" CTC available with mid-post.



**Offset Pulls - Square Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM4030   | 1"       | 8", 10", 12"  |
| RM4040   | 1½"      | 8", 11", 16"  |
| RM4050   | 1½"      | 11", 16", 20" |

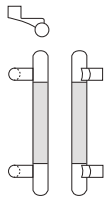
Up to 96" CTC available with mid-post.



**Straight Pulls - Round Ends**

| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM4004   | 1"       | 8", 10", 12"  |
| RM4014   | 1½"      | 8", 11", 16"  |
| RM4024   | 1½"      | 11", 16", 20" |

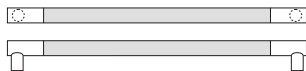
Up to 96" CTC available with mid-post.



**Offset Pulls - Round Ends**

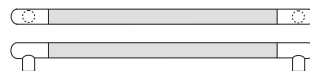
| Pull No. | Diameter | CTC           |
|----------|----------|---------------|
| RM4034   | 1"       | 8", 10", 12"  |
| RM4044   | 1½"      | 8", 11", 16"  |
| RM4054   | 1½"      | 11", 16", 20" |

Up to 96" CTC available with mid-post.



**Push Bars - Square Ends\***

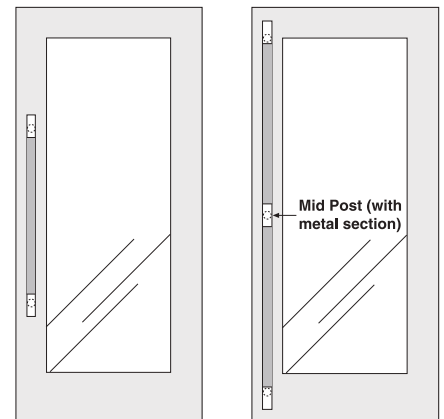
| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM4002   | 1"       | Specify |
| RM4012   | 1½"      | Specify |
| RM4022   | 1½"      | Specify |



**Push Bars - Round Ends\***

| Pull No. | Diameter | CTC     |
|----------|----------|---------|
| RM4006   | 1"       | Specify |
| RM4016   | 1½"      | Specify |
| RM4026   | 1½"      | Specify |

**Application Suggestions**



**Base Metals:** Brass, bronze, stainless steel  
**Options:** Over 96" available on select finishes.  
**Note:** See price list for information on ordering push pull sets.

\*To specify multi-bar sets suffix -2 or -3 to pull number (example: RM4012-3).

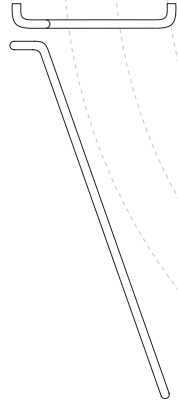


The CenTek Series is a collection of 1" diameter pulls for entry doors. The shapes create an attractive symmetry at an entrance and will work in conjunction with standard 1" diameter push bars. Custom center to center and diameters are available.

**CenTek™**  
*1" radius pulls*



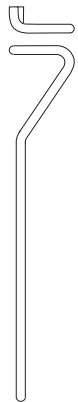
**Pull No.** **CTC**  
 RM4300 42"



**Pull No.** **CTC**  
 RM4301 42"



**Pull No.** **CTC**  
 RM4302 42"



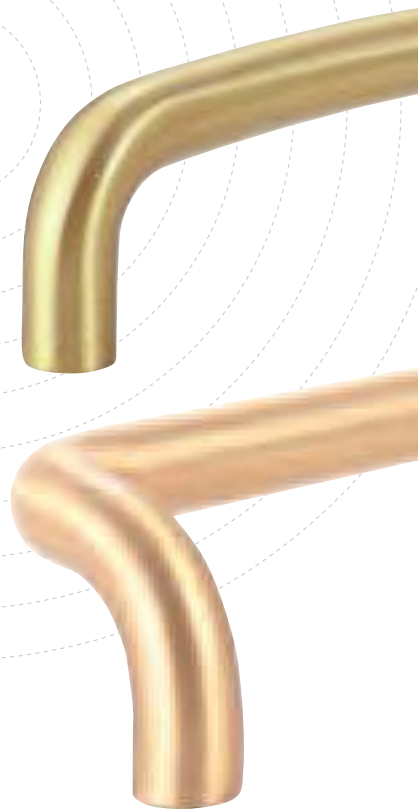
**Pull No.** **CTC**  
 RM4303 42"



**Pull No.** **CTC**  
 RM4304 42"



**Pull No.** **CTC**  
 RM4305 42"



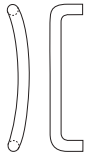
**Base Metals:** Aluminum, brass, bronze, stainless steel





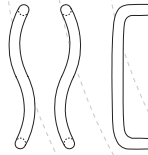
CentTrex Door Pulls and Push Bars are gracefully curved 1" diameter solid rods that provide a subtly distinctive look to any door. The shapes are sleek and comfortable to grasp. Combine pulls with bars to make a unique set.

**CentTrex™**  
*1" radius pulls*



**Curved Pulls**

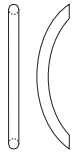
| Pull No.  | CTC |
|-----------|-----|
| RM4400-12 | 12" |
| RM4400-20 | 20" |



RH LH

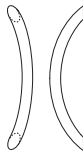
**Double Curved Pulls**

| Pull No.  | CTC |
|-----------|-----|
| RM4402LH* | 12" |
| RM4402RH* | 12" |



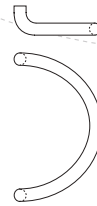
**Straight Pull**

| Pull No. | CTC           |
|----------|---------------|
| RM4410   | 12", 18", 24" |



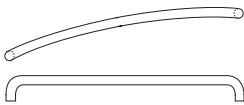
**Offset Pull**

| Pull No. | CTC           |
|----------|---------------|
| RM4412   | 12", 18", 24" |



**Semi-Circular Pulls**

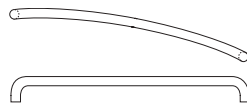
| Pull No. | CTC |
|----------|-----|
| RM4420   | 9"  |
| RM4422   | 12" |



LH

**Push Bar**

| Pull No.   | CTC     |
|------------|---------|
| RM4440LH** | Specify |



RH

**Push Bar**

| Pull No.   | CTC     |
|------------|---------|
| RM4440RH** | Specify |



LH

**Push Bar**

| Pull No.   | CTC     |
|------------|---------|
| RM4450LH** | Specify |



RH

**Push Bar**

| Pull No.   | CTC     |
|------------|---------|
| RM4450RH** | Specify |

**Base Metals:** Aluminum, brass, bronze, stainless steel

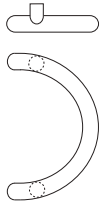
\*Handing illustrated for PULL side of door.

\*\*Handing illustrated for PUSH side of door.



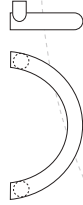
These CentTrex Door Pulls and Push Bars are composed of sturdy 1¼" tubes, rods or heavy castings. The smooth expanse of metal in a pair of these circular shape pulls creates an inviting focal point to an entrance. Large radius pulls provide comfortable gripping. All pulls can be used in conjunction with push bars from this or other groups. Specify the pull number x the push bar number.

**CentTrex™**  
*large radius pulls*



**Semi-Circular Pull**

| Pull No. | CTC |
|----------|-----|
| RM4500   | 11" |



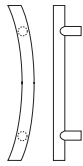
**Semi-Circular Pull**

| Pull No. | CTC |
|----------|-----|
| RM4502   | 11" |



**Semi-Circular Pull**

| Pull No. | CTC |
|----------|-----|
| RM4506   | 12" |



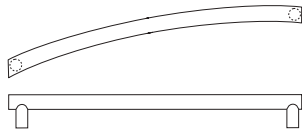
**Offset Pull**

| Pull No. | CTC |
|----------|-----|
| RM4510   | 12" |



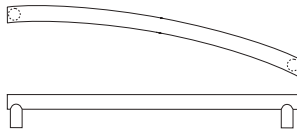
**Straight Pull**

| Pull No. | CTC |
|----------|-----|
| RM4512   | 12" |



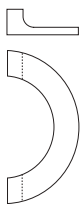
**Push Bar**

| Pull No.  | CTC     |
|-----------|---------|
| RM4516LH* | Specify |



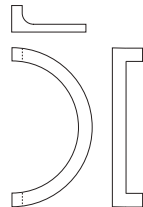
**Push Bar**

| Pull No.  | CTC     |
|-----------|---------|
| RM4516RH* | Specify |



**Semi-Circular Pull**

| Pull No. | CTC |
|----------|-----|
| RM4550   | 12" |

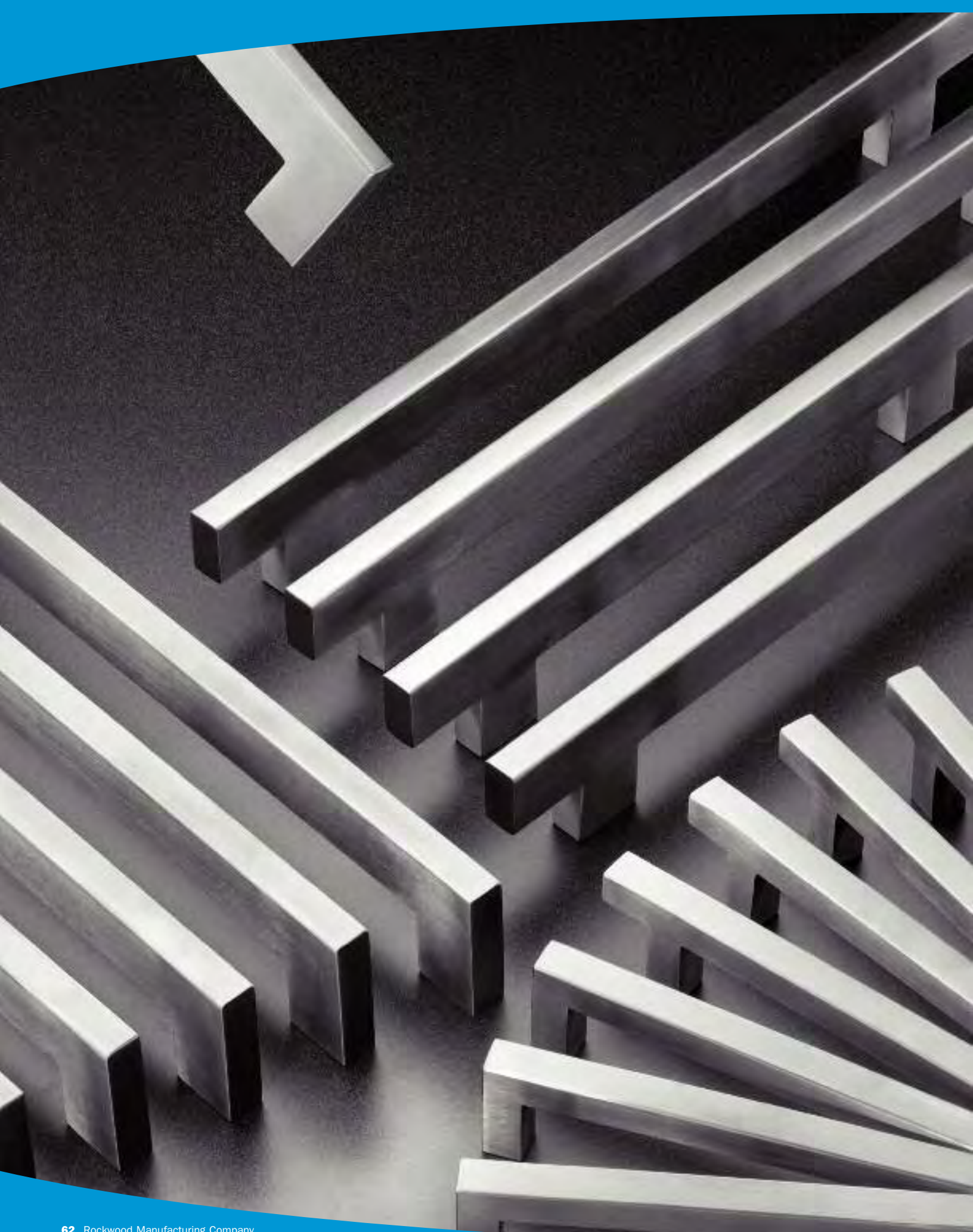


**Semi-Circular Pull**

| Pull No. | CTC |
|----------|-----|
| RM4552   | 14" |

**Base Metals:** Aluminum, brass, bronze, stainless steel (select products - see price list for availability)

\*Handing illustrated for PULL side of door.



These tubular square and rectangular pulls offer a narrow profile and clean lines. Two shapes in two designs allow one to scale a pull to any size opening. Custom sizes available.

**GeoMetek™**  
*narrow profile pulls*



**Square End Pull**

| Pull No. | Material | CTC              |
|----------|----------|------------------|
| RM7900   | ¾" x ¾"  | 6", 8", 11", 16" |

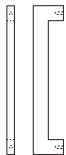
Up to 48" CTC available.



**Square Bridge Pull**

| Pull No. | Material | CTC              |
|----------|----------|------------------|
| RM7902   | ¾" x ¾"  | 6", 8", 11", 16" |

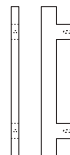
Up to 48" CTC available.



**Rectangular End Pull**

| Pull No. | Material | CTC           |
|----------|----------|---------------|
| RM7910   | ¾" x 1½" | 11", 16", 20" |

Up to 96" CTC available.

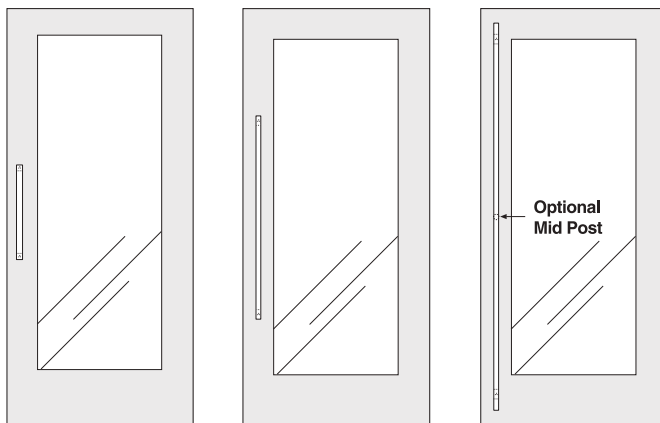


**Rectangular Bridge Pull**

| Pull No. | Material | CTC           |
|----------|----------|---------------|
| RM7912   | ¾" x 1½" | 11", 16", 20" |

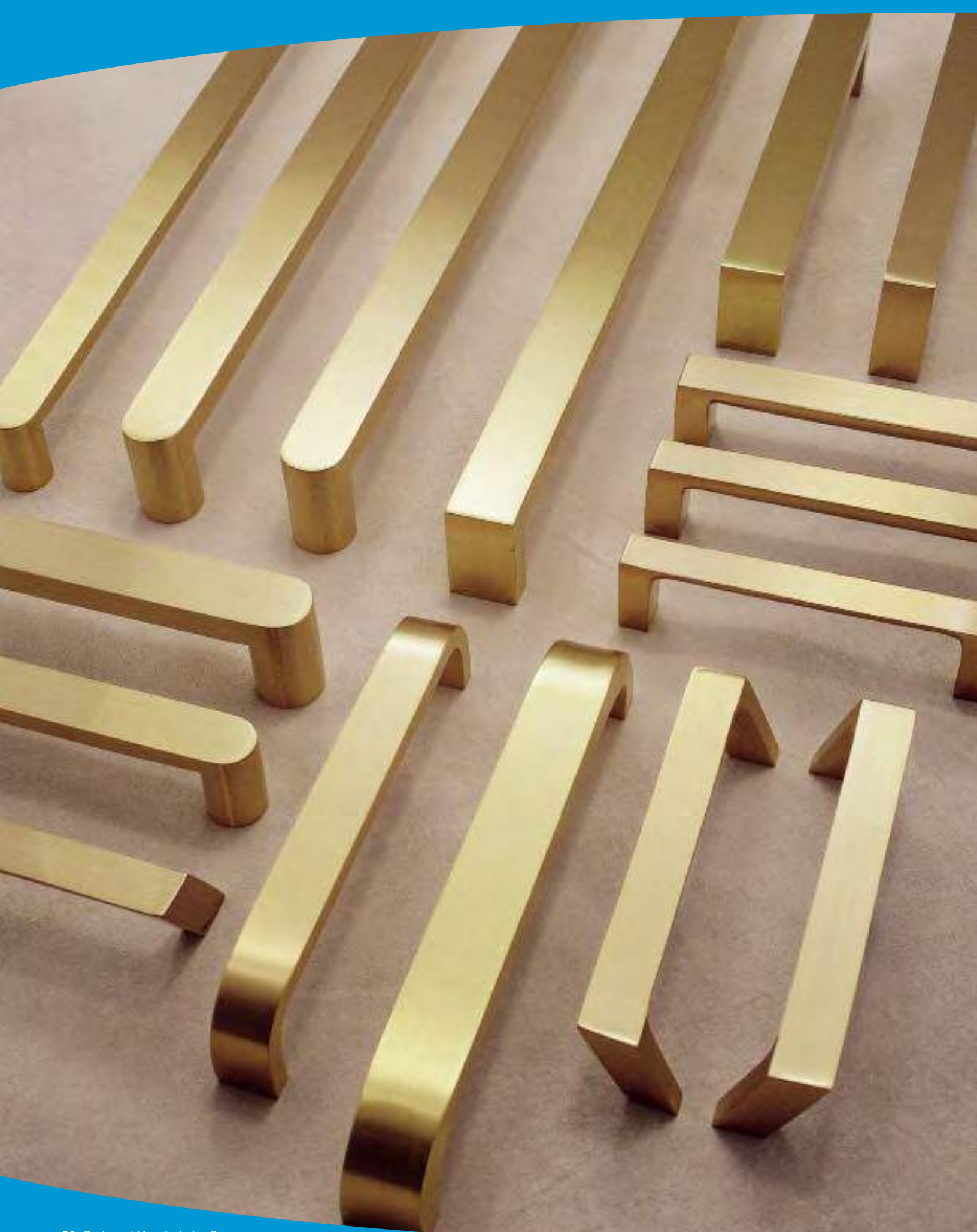
Up to 96" CTC available.

**Application Suggestions**



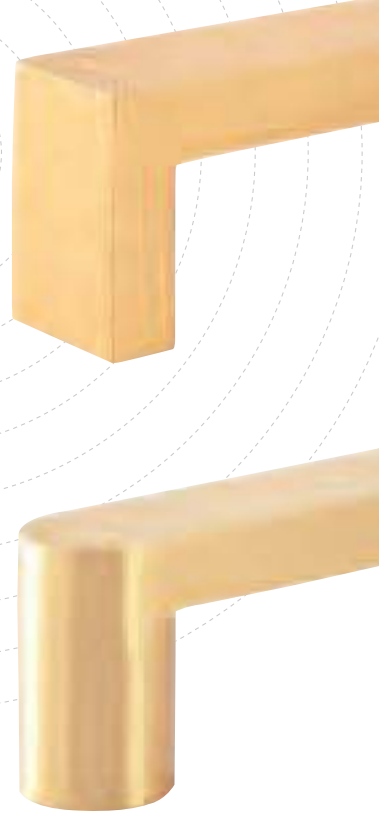
**Base Metal:** Stainless steel

**Options:** • For optional mid-post, suffix the product number with MP" (example: RM7910MP).  
 • Over 96" available on select finishes.



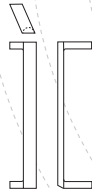
The PlanTek group consists of pulls made from a range of sizes of flat and rectangular bar stock or castings. The cast pulls feature a contour area underneath the grip for a comfortable ergonomic feel. Pulls made from bar stock are available in any length to order. A large variety of bar, rod, and tubing sizes are stocked so alternative designs may be readily made.

**PlanTek™**  
*flat front pulls*



**Straight Cast Pulls**

| Pull No.  | CTC | Width |
|-----------|-----|-------|
| RM5200-7  | 7"  | 1"    |
| RM5200-12 | 12" | 1"    |
| RM5202    | 12" | 1½"   |



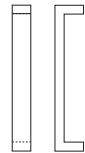
**Offset Cast Pulls**

| Pull No.  | CTC | Width |
|-----------|-----|-------|
| RM5204-8  | 8"  | 1"    |
| RM5204-12 | 12" | 1"    |



**Radius End Pulls**

| Pull No.  | Material | CTC |
|-----------|----------|-----|
| RM5210-10 | ½" x 1¼" | 10" |
| RM5210-12 | ½" x 1¼" | 12" |
| RM5220-12 | ¾" x 1½" | 12" |
| RM5220-18 | ¾" x 1½" | 18" |



**Square End Pulls**

| Pull No.  | Material | CTC |
|-----------|----------|-----|
| RM5230-10 | ½" x 1¼" | 10" |
| RM5230-12 | ½" x 1¼" | 12" |
| RM5240-12 | ¾" x 1½" | 12" |
| RM5240-18 | ¾" x 1½" | 18" |



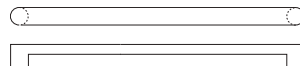
**Bent End Pulls**

| Pull No.  | Material | CTC |
|-----------|----------|-----|
| RM5250-10 | ½" x 1¼" | 10" |
| RM5250-12 | ½" x 1¼" | 12" |
| RM5260-12 | ¾" x 1½" | 12" |
| RM5260-18 | ¾" x 1½" | 18" |



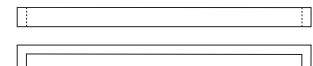
**Straight Cast Pull**

| Pull No. | Material | CTC |
|----------|----------|-----|
| RM5280   | ½" x ½"  | 9"  |



**Radius End Push Bars**

| Pull No. | Material | CTC     |
|----------|----------|---------|
| RM5212   | ½" x 1¼" | Specify |
| RM5222   | ¾" x 1½" | Specify |



**Square End Push Bars**

| Pull No. | Material | CTC     |
|----------|----------|---------|
| RM5232   | ½" x 1¼" | Specify |
| RM5242   | ¾" x 1½" | Specify |

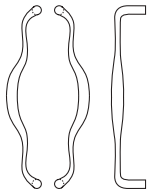
**Base Metals:** Brass, bronze, stainless steel (select products - see price list for availability)



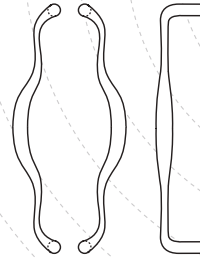


Convey a sense of sophisticated quality with a SculpTrex pull.  
 The group consists of flowing designs in cast brass and bronze.  
 The inviting shapes are as comfortable to the hand as they are  
 appealing to the eye. A variety of finishes are available.

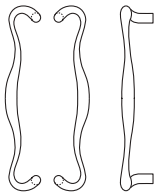
**SculpTrex™**  
*shaped cast pulls*



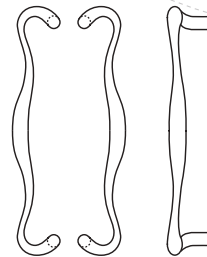
|                 |            |
|-----------------|------------|
| <b>Pull No.</b> | <b>CTC</b> |
| RM5000          | 12"        |



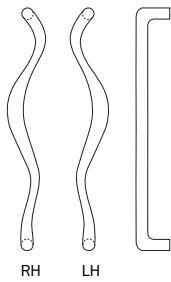
|                 |            |
|-----------------|------------|
| <b>Pull No.</b> | <b>CTC</b> |
| RM5002          | 20"        |



|                 |            |
|-----------------|------------|
| <b>Pull No.</b> | <b>CTC</b> |
| RM5010          | 12"        |



|                 |            |
|-----------------|------------|
| <b>Pull No.</b> | <b>CTC</b> |
| RM5012          | 20"        |



|                 |            |
|-----------------|------------|
| <b>Pull No.</b> | <b>CTC</b> |
| RM5020LH*       | 20"        |
| RM5020RH*       | 20"        |



**Base Metal:** Brass, bronze, white bronze

\*Handing illustrated for PULL side of door.

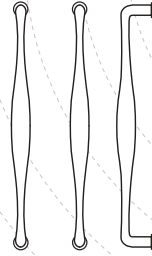


The SculpTrex group includes these graceful curved designs that feel as good as they look. Cast in brass and bronze, they are available in a variety of finishes. Please refer to the price list for further details.

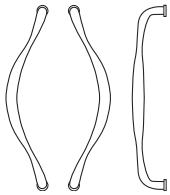
**SculpTrex™**  
*shaped cast pulls*



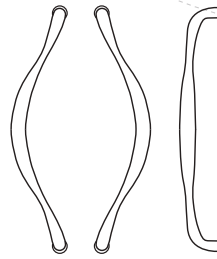
| <u>Pull No.</u> | <u>CTC</u> |
|-----------------|------------|
| RM5030          | 12"        |



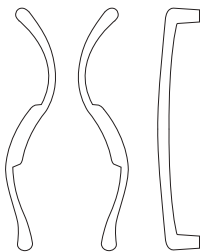
| <u>Pull No.</u> | <u>CTC</u> |
|-----------------|------------|
| RM5032          | 20"        |



| <u>Pull No.</u> | <u>CTC</u> |
|-----------------|------------|
| RM5040          | 12"        |



| <u>Pull No.</u> | <u>CTC</u> |
|-----------------|------------|
| RM5042          | 20"        |



| <u>Pull No.</u> | <u>CTC</u> |
|-----------------|------------|
| RM5050LH*       | 20"        |
| RM5050RH*       | 20"        |

**Base Metal:** Brass, bronze, white bronze

\*Handing illustrated for PULL side of door.

## Leather Craftsmanship General Information

**Custom Manufacturing:** The leather craftsmanship shown in the photographs opposite expresses our capabilities in leather covering. We apply equal expertise to our door pull fabrication. Rockwood is dedicated to making the door hardware you want. Please don't hesitate to ask for minor design or size changes to existing products or completely custom creations.

**Maintenance:** Upholstery Leather has a breathable protective finish that is best cleaned by wiping with a cool damp cloth. For tougher soiling, use a pH balanced soap on a cloth and rinse. Always use cool water. Repeat if necessary. Do not use wax, mink oil, saddle soap or polishes on upholstery leather. Leather Maintenance Kits are available from the factory.

English Bridle Leather leaves our factory with a coat of Sedgwick Leathercare Product, a mixture of natural oils, fats and beeswax. Clean the leather as necessary with a damp cloth and allow to dry. Apply a light coat of leather care product, allow to dry and buff with a soft cloth. Additional Sedgwick Leathercare Product is available from the factory.

**Finishes:** This catalog features product photographs of leather wrapped stainless steel door pulls. We also make many of these products in brass and bronze base material with a variety of architectural finishes.

### Standard Color Selections

#### English Bridle Leather



**B-LBRN**  
(Light Brown)



**B-BUR**  
(Burgundy)



**B-MBRN**  
(Medium Brown)

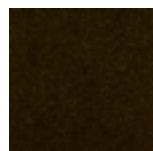


**B-DBRN**  
(Dark Brown)



**B-BLK**  
(Black)

#### Upholstery Leather



**U-DBRN**  
(Dark Brown)



**U-BLK**  
(Black)

**Leather:** Rockwood uses Bridle leather produced by J & E Sedgwick & Co., Ltd., Walsall, England. Founded in 1900, Sedgwick is renowned for its high quality leather products. Their 8-ounce hand-colored vegetable tanned English Bridle leather enjoys the reputation of being the finest in the world; you can be assured of a beautiful, durable leather door pull. For more information on Sedgwick leathers visit their website at [www.je-sedgwick.co.uk](http://www.je-sedgwick.co.uk).

In addition to our selection of fine English Bridle and Upholstery leathers, you may specify a custom leather application. We recommend Spinneybeck as a source for custom leather applications; see [www.spinneybeck.com](http://www.spinneybeck.com). Minimum charges apply for special order leather.

## Leather Craftsmanship

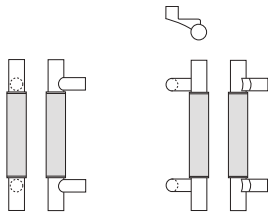




English Bridle leather pulls are beautifully crafted in a variety of colors and styles. Detail end stitching compliments the tight fitting leather cover. The sewn seam on the back of the pull is a work of art itself. Typically used for saddles and other equestrian products, this smooth durable leather is suitable for both interior and exterior applications. A full wrap version is available on square end pulls. See page 86 for leather color selection and more information.

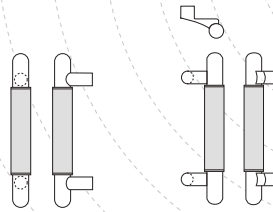
## English Bridle Leather

*straight & offset pulls*



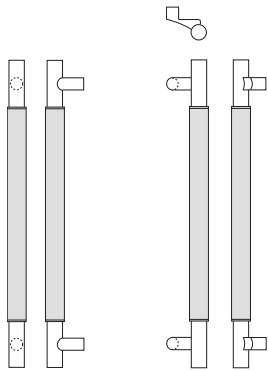
**Pulls - Square Ends**

| Pull No. | Post     | Diameter* | CTC      |
|----------|----------|-----------|----------|
| RM6000   | Straight | 1"        | 10", 12" |
| RM6010   | Straight | 1½"       | 12", 16" |
| RM6020   | Straight | 1½"       | 12", 16" |
| RM6030   | Offset   | 1"        | 10", 12" |
| RM6040   | Offset   | 1½"       | 12", 16" |
| RM6050   | Offset   | 1½"       | 12", 16" |



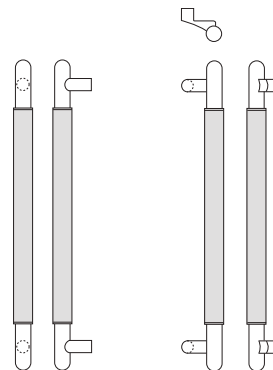
**Pulls - Round Ends**

| Pull No. | Post     | Diameter* | CTC      |
|----------|----------|-----------|----------|
| RM6004   | Straight | 1"        | 10", 12" |
| RM6014   | Straight | 1½"       | 12", 16" |
| RM6024   | Straight | 1½"       | 12", 16" |
| RM6034   | Offset   | 1"        | 10", 12" |
| RM6044   | Offset   | 1½"       | 12", 16" |
| RM6054   | Offset   | 1½"       | 12", 16" |



**Long Pulls - Square Ends**

| Pull No. | Post     | Diameter* | Overall    |
|----------|----------|-----------|------------|
| RM6060   | Straight | 1"        | 36" to 96" |
| RM6061   | Straight | 1½"       | 36" to 96" |
| RM6062   | Straight | 1½"       | 36" to 96" |
| RM6070   | Offset   | 1"        | 36" to 96" |
| RM6071   | Offset   | 1½"       | 36" to 96" |
| RM6072   | Offset   | 1½"       | 36" to 96" |



**Long Pulls - Round Ends**

| Pull No. | Post     | Diameter* | Overall    |
|----------|----------|-----------|------------|
| RM6080   | Straight | 1"        | 36" to 96" |
| RM6081   | Straight | 1½"       | 36" to 96" |
| RM6082   | Straight | 1½"       | 36" to 96" |
| RM6090   | Offset   | 1"        | 36" to 96" |
| RM6091   | Offset   | 1½"       | 36" to 96" |
| RM6092   | Offset   | 1½"       | 36" to 96" |



Optional FW

**Base Metal:** Brass, bronze, stainless steel

**Options:**


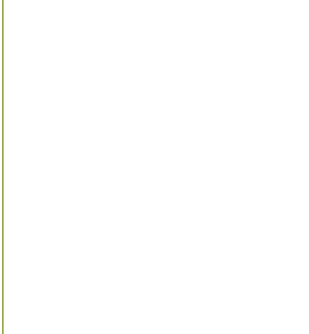
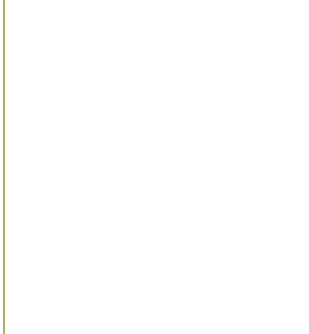
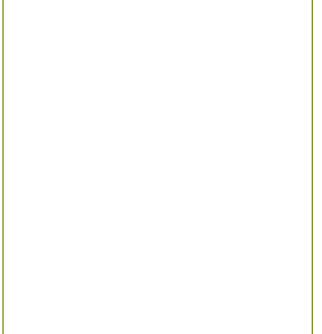
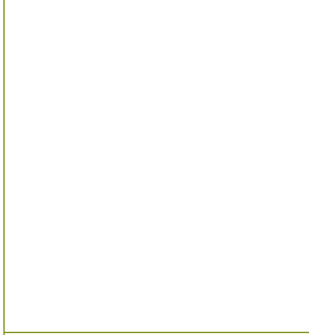
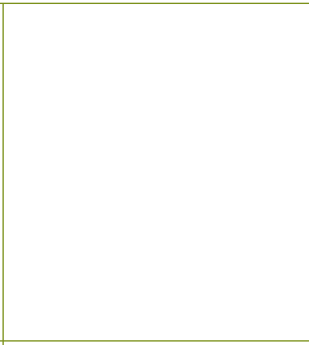
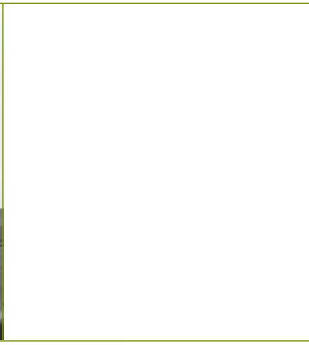
- For optional mid-post, suffix the product number with "MP" (example: RM6061MP).
- Full wrap option is available up to 72" long (example: RM6061FW).
- Over 96" available on select finishes.

**Note:** Maximum leather length is 72".

\* Diameter of metal grip, leather thickness is about ⅛" additional.







**PEMKO**  
**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

# Condensed Catalog

A Selection of Featured PEMKO Products

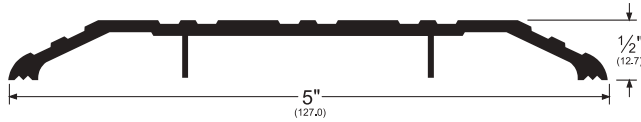
# Commercial Thresholds

- Unless exact net cut is specified, thresholds less than 48" are supplied 1/2" over length, and thresholds 48" and over are supplied 1" over length to allow for fitting.
- Unless otherwise specified, all thresholds are pre-drilled on the center line and are supplied with fasteners.
- Extruded bronze (brass) thresholds are supplied with solid brass screws.
- For corrosive environments, stainless steel screws are available at an extra cost.
- Available with PemKote™ non-skid coating. Please specify PemKote™ when ordering. Please furnish drilling instructions when ordering with PemKote™ as it is difficult to drill through.

## Saddle Thresholds

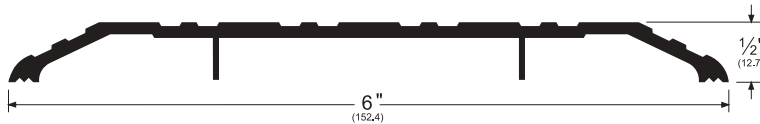
### 171\_

AVAILABLE FINISHES:  
A, B, BDG, D, G, SN



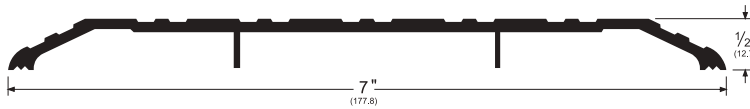
### 172\_

AVAILABLE FINISHES:  
A, B, D, G, SN



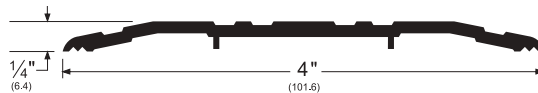
### 176\_

AVAILABLE FINISHES:  
A, B, D, G



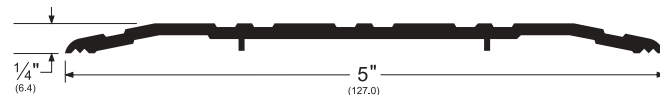
### 270\_

AVAILABLE FINISHES:  
A, B, D, G



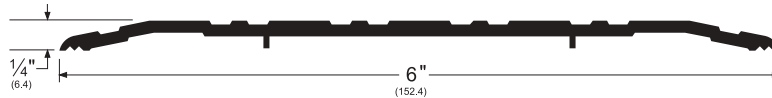
### 271\_

AVAILABLE FINISHES:  
A, B, D, G, SN



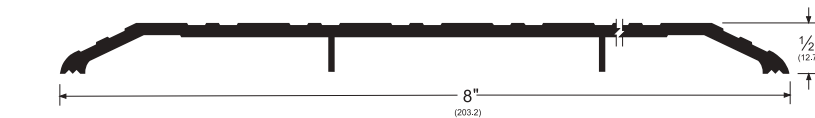
### 272\_

AVAILABLE FINISHES:  
A, B, D, G, SN



### 2548\_

AVAILABLE FINISHES:  
A, D, G



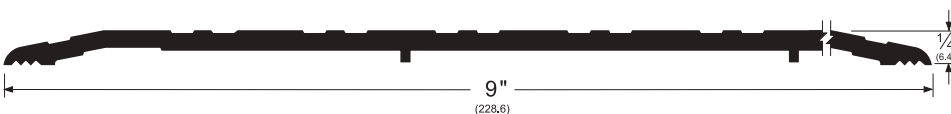
### 2748\_

AVAILABLE FINISHES:  
A, D, G



### 2749\_

AVAILABLE FINISHES:  
A, D, G



AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see FULL LINE CATALOG or WEBSITE for finish chart)

A (Mill Finish Aluminum) • AK (Mill Finish Aluminum w/PemKote™ Non-Slip Coating) • B (Mill Finish Extruded Bronze [Brass])  
BDG (Bright Dip Gold Anodized) • D (Dark Bronze Anodized) • G (Gold Anodized) • SN (Satin Nickel Anodized)

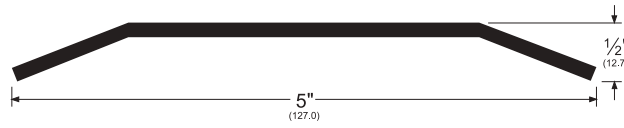
NOTE: BDG, G, SN are available with limited inventory

## Commercial Thresholds (C ont.)

### Stainless Steel Saddle Thresholds

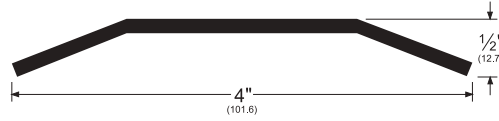
**154SS\_**

AVAILABLE  
FINISHES:  
SS (#4 Finish)



**175SS**

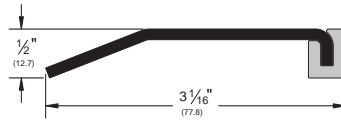
AVAILABLE  
FINISHES:  
SS (#4 Finish)



Available in 36", 48", 72", and 98" lengths only.

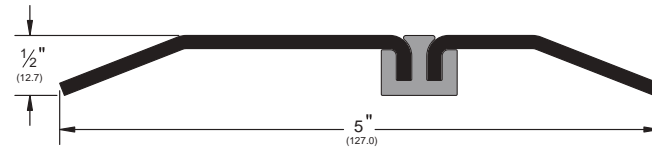
**253SSFG**

AVAILABLE  
FINISHES:  
SS (#4 Finish)



**252x3SSFG**

AVAILABLE  
FINISHES:  
SS (#4 Finish)

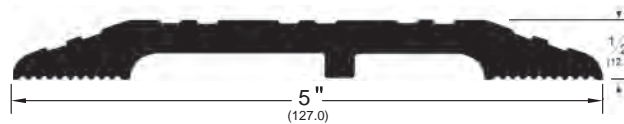


### Heavy Duty Thresholds

- Ideal for heavy-duty, high-traffic and high weight-bearing applications, such as industrial facilities, schools, cafeterias, manufacturing buildings and hospitals
- Withstands coastal and high-humidity conditions
- Ultra-durable, extra thick extruded nickel-aluminum construction is guaranteed for ten (10) years

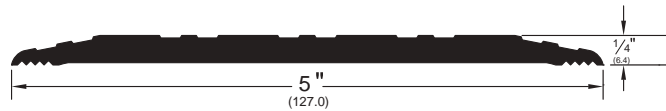
**1715\_**

AVAILABLE  
FINISHES:  
A, AK, D



**2715\_**

AVAILABLE  
FINISHES:  
A, AK, D



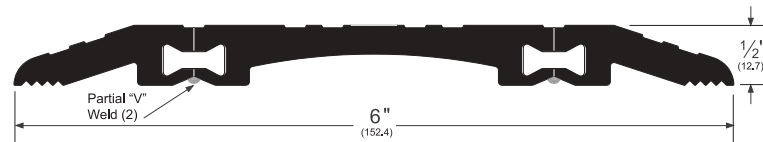
### Modular Heavy Duty Thresholds

Modular construction without the expense of custom cast thresholds. There is no restriction on width additions (in 1" increments)

**1716\_**

AVAILABLE  
FINISHES:  
A, AK, D

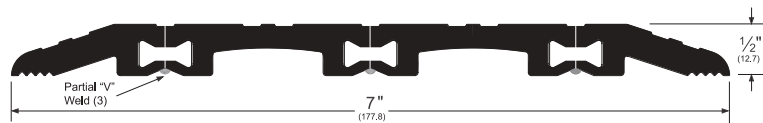
Allow 5/8" door clearance.



**1717\_**

AVAILABLE  
FINISHES:  
A, AK, D

Allow 5/8" door clearance.



AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see FULL LINE CATALOG or WEBSITE for finish chart)

A (Mill Finish Aluminum) • AK (Mill Finish Aluminum w/PemKote™ Non-Slip Coating) • D (Dark Bronze Anodized) • SS (Stainless Steel)

# Commercial Thresholds (Cont.)



ASSA ABLOY

## Thermal Barrier Saddles

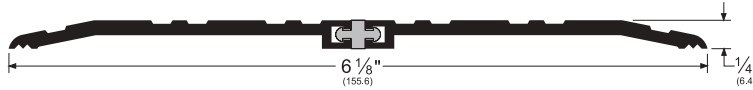
Black rigid polypropylene key between extrusions provides a thermal barrier (designated by "FG" Frost Guard following finish code)

### 273x3\_FG

AVAILABLE

FINISHES:

A, B, D, G

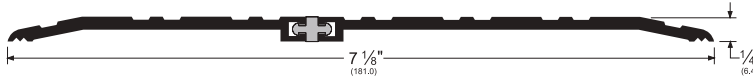


### 273x4\_FG

AVAILABLE

FINISHES:

A, B, D, G



### 254x4\_FG

AVAILABLE

FINISHES:

A, B, D, G

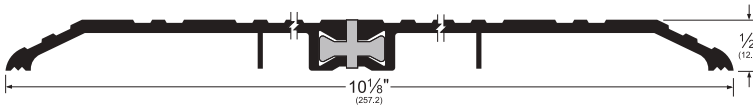


### 255x5\_FG

AVAILABLE

FINISHES:

A, B, D, G

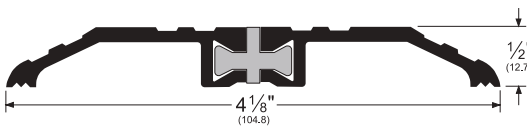


### 252x2\_FG

AVAILABLE

FINISHES:

A, B, D, G

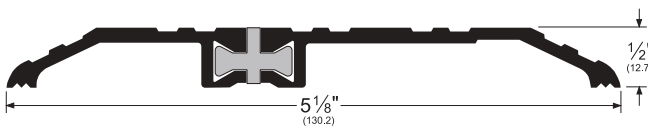


### 252x3\_FG

AVAILABLE

FINISHES:

A, B, D, G

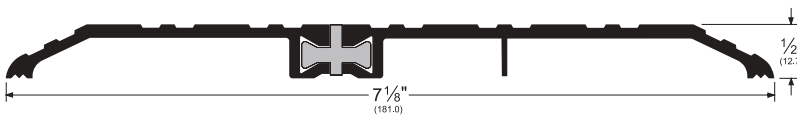


### 253x4\_FG

AVAILABLE

FINISHES:

A, B, D, G



AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see FULL LINE CATALOG or WEBSITE for finish chart)

A (Mill Finish Aluminum) • B (Mill Finish Extruded Bronze [Brass]) • D (Dark Bronze Anodized) • G (Gold Anodized)

NOTE: G is available with limited inventory

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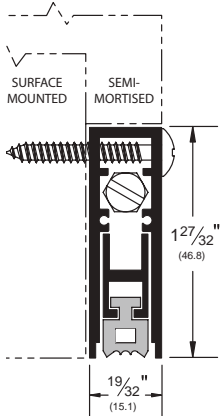
[www.pemko.com](http://www.pemko.com)

# Door Bottoms

## Automatic Door Bottoms

### 4131\_RL

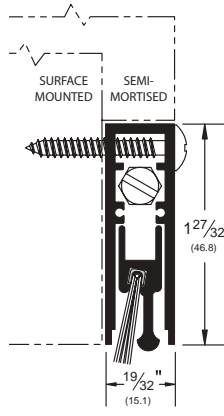
AVAILABLE FINISHES:  
BDG, C, D, SN



Sponge EPDM (R)

### 4131\_NBL

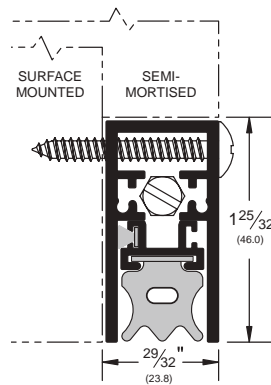
AVAILABLE FINISHES:  
BDG, C, D, SN



nylon brush (NB)

### 4301\_RL

AVAILABLE FINISHES:  
C, D



Sponge EPDM (R)

**ALTERNATE INSERTS FOR 4131**

**4131\_PKL**  
AVAILABLE FINISHES:  
BDG, C, D, SN

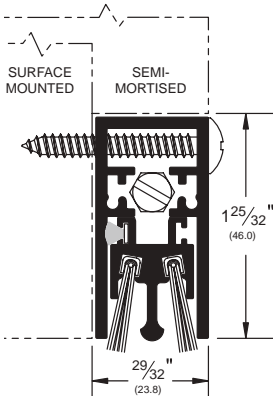
**4131\_SL**  
AVAILABLE FINISHES:  
BDG, C, D, SN

**ALTERNATE INSERT FOR 4301**

**4301\_PKL**  
AVAILABLE FINISHES:  
C, D

### 4301\_NBL

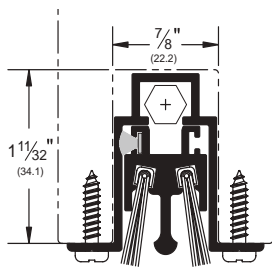
AVAILABLE FINISHES:  
C, D,



nylon brush (NB)

### 434\_NBL

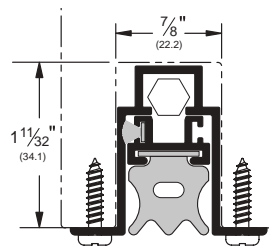
AVAILABLE FINISHES:  
A



nylon brush (NB)

### 434\_RL

AVAILABLE FINISHES:  
A



Sponge EPDM (R)

**ALTERNATE INSERT FOR 434**

**434\_PKL**  
AVAILABLE FINISH:  
A

AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see FULL LINE CATALOG or WEBSITE for finish chart)

A (Mill Finish Aluminum) • BDG (Bright Dip Gold Anodized) • C (Clear Anodized) • D (Dark Bronze Anodized) • SN (Satin Nickel Anodized)

Special finishes available upon request.

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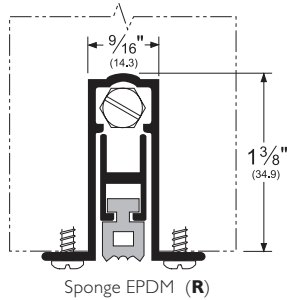
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## Door Bottoms (Cont.)

### Automatic Door Bottoms

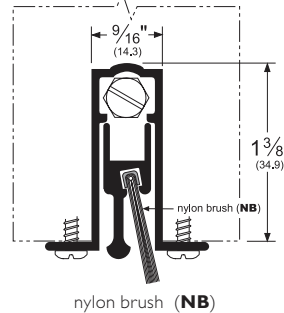
#### 411\_RL

AVAILABLE FINISHES:  
A



#### 411\_NBL

AVAILABLE FINISHES:  
A

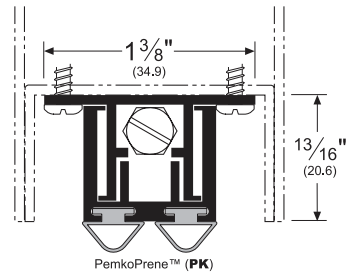


#### 420\_PKL

AVAILABLE FINISHES:  
A



For hollow metal doors.  
Maximum drop is 1/2".



#### ALTERNATE INSERTS FOR 411



#### ALTERNATE INSERTS FOR 420



## Acoustic Automatic Door Bottoms: PDB Series

**NEW!**

- Unique design creates uniform seal pressure across the entire door bottom resulting in superior acoustic performance
- PDB Series has "sealed-in-place" type performance, achieving zero drop in STC ratings in many typical wood and hollow metal door applications.
- Patent Pending
- Adjustment is 1/8" to 1/2". Maximum dimension from bottom of door to sealing surface is 1/2"

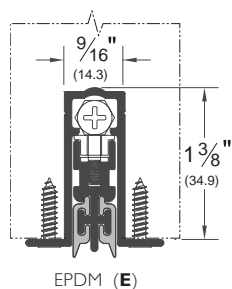
#### Full-Mortise Application

#### PDB411\_E

AVAILABLE FINISHES:  
A



AVAILABLE LENGTHS:  
26" to 48"



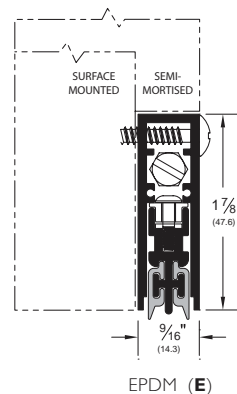
#### Surface Mounted or Semi-Mortised Application

#### PDB4131\_E

AVAILABLE FINISHES:  
C, D



AVAILABLE LENGTHS:  
26" to 48"



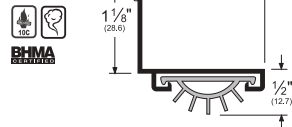
# Door Bottoms (Cont.)

## Door Shoes

- Now available with PemkoPrene™ (PK) thermo-plastic elastomer, an excellent cold weather seal which stays flexible between -70°F and +250°F
- Also available with vinyl (V); both seals are the same shape and size
- Slotted holes for easy adjustment. Provided with stainless steel fasteners
- Rain drip model is ideal for deflecting rain away from the bottom of door

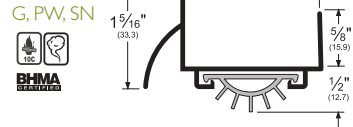
### 211\_V 211\_PK

AVAILABLE FINISHES:  
A, D, G



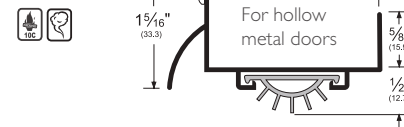
### 215\_V 215\_PK

AVAILABLE FINISHES:  
A, BDG, D, G, PW, SN



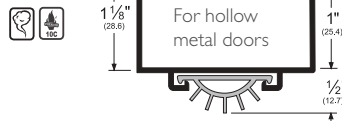
### 216HM\_V 216HM\_PK

AVAILABLE FINISHES:  
A, D, G



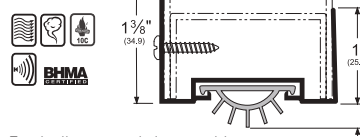
### 217HM\_V 217HM\_PK

AVAILABLE FINISHES:  
A, D, G



### 222\_V 222\_PK

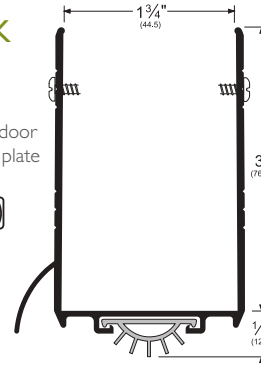
AVAILABLE FINISHES:  
A, D, G



### 2211\_V 2211\_PK

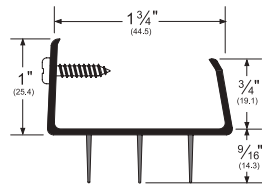
AVAILABLE FINISHES:  
A, D, G

Combination door shoe and kick plate with rain drip.



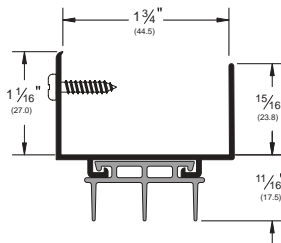
### 2170\_V

AVAILABLE COLORS: D, W  
AVAILABLE LENGTHS: 36\", 48\"  
All Vinyl



### 2173\_V

AVAILABLE FINISHES:  
A, BDG, D, G, PW  
Also available with unnotched insert:  
2173\_V36UN  
2173\_V48UN

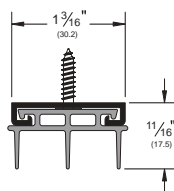


Also available with unnotched insert:  
2170\_V36UN  
2170\_V48UN



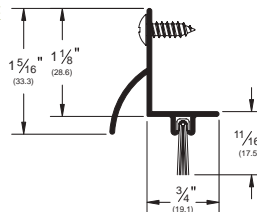
### 2343\_V

AVAILABLE FINISHES:  
A, D, G  
Also available with unnotched insert:  
2343\_V36UN  
2343\_V48UN



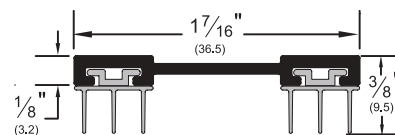
### 2230\_NB

AVAILABLE FINISHES:  
A, D, G



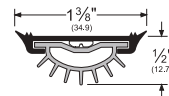
### 3692\_PK773

AVAILABLE FINISHES: A  
AVAILABLE LENGTHS: 36\", 48\"



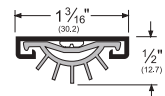
### 209\_V

AVAILABLE FINISHES:  
A, D, G



### 234\_V 234\_PK

AVAILABLE FINISHES:  
A, D, G



AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see FULL LINE CATALOG or WEBSITE for finish chart)

A (Mill Finish Aluminum) • BDG (Bright Dip Gold Anodized) • D (Dark Bronze Anodized) • G (Gold Anodized) • PW (Painted White)  
SN (Satin Nickel Anodized)



## Door Bottoms (Cont.)

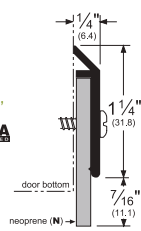
### Door Bottom Sweeps

#### 315\_N

AVAILABLE

FINISHES:

B, BDG, C, D, G,

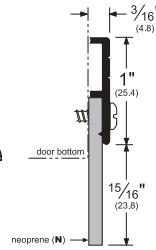


#### 321\_N

AVAILABLE

FINISHES:

C, D, G

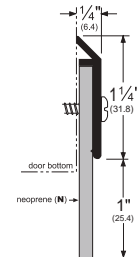


#### 3151\_N

AVAILABLE

FINISH:

C, D, G

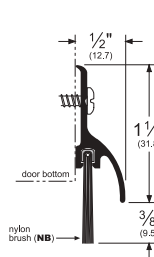


#### 3452\_NB

AVAILABLE

FINISHES:

BDG, C, D, G,  
PW, SN

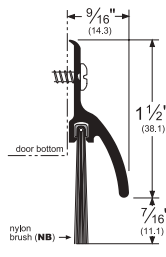


#### 345\_NB

AVAILABLE

FINISHES:

A, BDG, D, G,  
PW

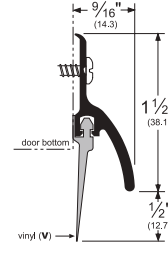


#### 345\_V

AVAILABLE

FINISHES:

A, BDG, D, G,  
PW



A (Mill Finish Aluminum) • B (Mill Finish Extruded Bronze [Brass]) • BDG (Bright Dip Gold Anodized) • C (Clear Anodized)  
D (Dark Bronze Anodized) • G (Gold Anodized) • PW (Painted White) • SN (Satin Nickel Anodized)

## Astragals and Meeting Stiles

### Split Astragals and Meeting Stile Gasketing

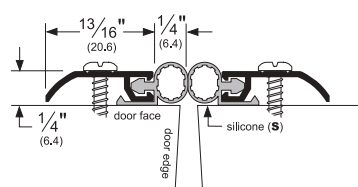
- Astragals and meeting stiles with a fire label may be mounted on pairs of doors wherein the gap meets the requirements of NFPA 80, "The clearance between the meeting edges of doors swinging in pairs on the pull side shall be  $\frac{1}{8}'' \pm \frac{1}{16}''$  (3.18mm  $\pm$  1.59mm) for steel doors and shall not exceed  $\frac{1}{8}''$  (3.18mm) for wood doors."
- When used as split astragals on double doors, two lengths must be ordered: one for each door
- Punched with slotted holes for adjustment
- All clear anodized brush products are supplied with gray brush (available with black brush upon request)

#### 297\_S

AVAILABLE

FINISHES:

A, BDG, D, G,  
PW, SN

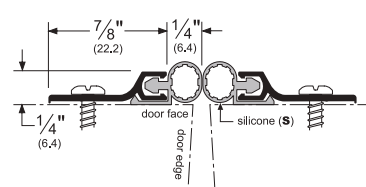


#### 303\_S

AVAILABLE

FINISHES:

A, BDG, C, D,  
G, PW, SN



#### ALTERNATE INSERTS

297\_PK



297\_V



PemkoPrene™ (PK)

vinyl (V)



#### ALTERNATE INSERTS

303\_PK



303\_V



PemkoPrene™ (PK)

vinyl (V)

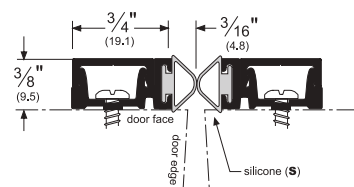


#### 29310\_S

AVAILABLE

FINISHES:

C, D, G



#### ALTERNATE INSERTS

29310\_PK



29310\_P



29310\_V



PemkoPrene™ (PK)

pipe (P)

vinyl (V)

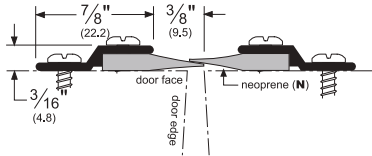
vinyl (V)

A (Mill Finish Aluminum) • BDG (Bright Dip Gold Anodized) • C (Clear Anodized) D (Dark Bronze Anodized) • G (Gold Anodized)  
PW (Painted White) • SN (Satin Nickel Anodized)

## Astragals and Meeting Stiles (Cont.)

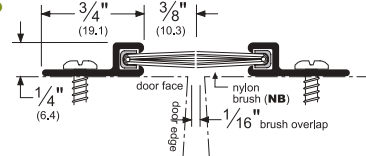
### 305\_N

AVAILABLE FINISHES:  
B, C, D, G



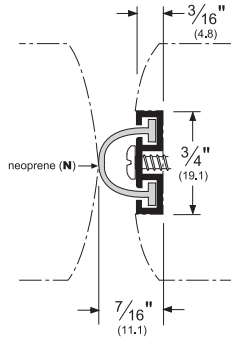
### 18041\_NB

AVAILABLE FINISHES:  
C, D, G, SN



### 313\_N

AVAILABLE FINISHES:  
A, D, G



PEMKO offers a broad line of nylon brush weatherstripping including the 18062\_NB and 18100\_NB, which are suitable for split astragal applications.

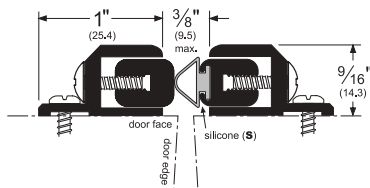
## Adjustable Astragals

- When used as split astragals on double doors, two lengths must be ordered: one for each door
- Available in 84", 96" and 120" lengths
- 351 is surface applied

**NOTE:** If you require split astragals in a metal-to-gasket configuration, you must order each leaf separately with your choice of insert.

### 351\_/351\_S

AVAILABLE FINISHES:  
B, C, D, G



#### ALTERNATE INSERTS

351\_P



351\_V



351\_PK

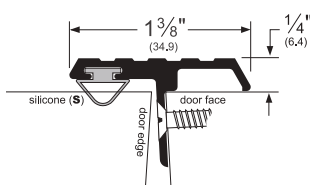


PemkoPrene™ (PK)

## Overlapping Astragals

### 355\_S

AVAILABLE FINISHES:  
B, BDG, C, D, G, PW, SN



#### ALTERNATE INSERTS

355\_V

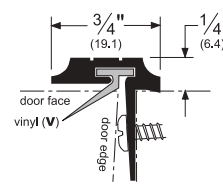


355\_P



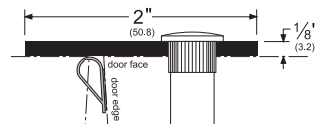
### 356\_V

AVAILABLE FINISHES:  
A, BDG, D, PW, SN



### 357\_ with S88\_

AVAILABLE FINISHES:  
SP, SS



If specifications state that an astragal is required to satisfy a fire and / or smoke rated opening, then a thru-bolted 357SP or SS in conjunction with S88 seal is the only configuration that can be used.

AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see FULL LINE CATALOG or WEBSITE for finish chart)

A (Mill Finish Aluminum) • B (Mill Finish Extruded Bronze [Brass]) • BDG (Bright Dip Gold Anodized) • C (Clear Anodized)

D (Dark Bronze Anodized) • G (Gold Anodized) • PW (Painted White) • SN (Satin Nickel Anodized) • SP (Galvannealed Steel) • SS (Stainless Steel)

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## Adhesive Gasketing

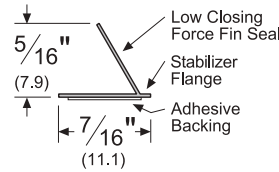
### MicroShield® Antimicrobial Gasketing: **NEW!**

- Extruded from high-temperature silicone with MicroShield®, a silver-based antimicrobial additive
- Effective between -58°F and 450°F
- Adhesive Backed

- Self-extinguishing and non-toxic
- Unaffected by sunlight, ozone and ultraviolet rays
- Exceeds the requirements for Antimicrobial Test JIS-Z-2801

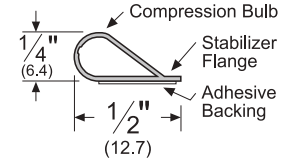
#### AM44\_

AVAILABLE FINISHES:  
BL, C, D, W  
AVAILABLE LENGTHS:  
17', 18', 20', 21', 25', 30',  
510'



#### AM88\_

AVAILABLE FINISHES:  
BL, C, D, W  
AVAILABLE LENGTHS:  
17', 18', 20', 21', 25', 30',  
510'



#### MicroShield®

As part of their promise to provide innovative solutions to their customers, certain ASSA ABLOY Group brands offer the MicroShield® technology, a silver-based antimicrobial additive designed to inhibit the growth of bacteria.

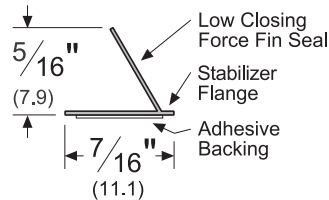
MicroShield® is a registered trademark of Yale Security Inc., an ASSA ABLOY Group company.

## SiliconSeal™ - Adhesive Backed Fire/Smoke Gasketing

S44 is designed for tighter frames and demonstrates extremely low closing force

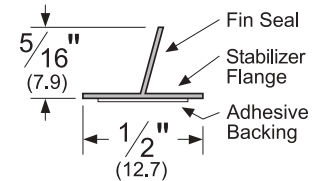
#### S44\_

AVAILABLE FINISHES:  
BL, D, GR, W  
AVAILABLE LENGTHS:  
17', 18', 20', 21', 25',  
30', 510'



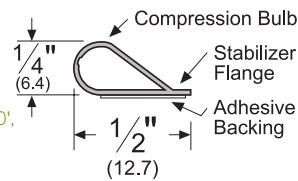
#### S77\_

AVAILABLE FINISHES:  
BL, C, D, W  
AVAILABLE LENGTHS:  
17', 18', 20', 21', 25'



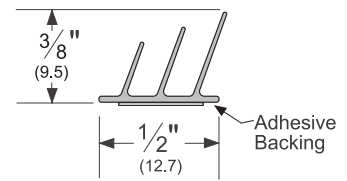
#### S88\_

AVAILABLE FINISHES:  
BL, C, D, GR, TAN, W  
AVAILABLE LENGTHS:  
17', 18', 20', 21', 25', 30',  
204', 510'



#### S773\_

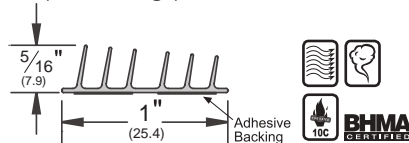
AVAILABLE FINISHES:  
BL, D, GR, W  
AVAILABLE LENGTHS:  
17', 18',  
20', 21', 25', 30', 250'



#### S771x6\_

AVAILABLE FINISHES: **BL, C**  
AVAILABLE LENGTHS: 7, 8, 10, 17, 18, 20, 21, 25

- Designed for hollow metal and wood meeting stile applications
- Seal begins compressing at 5/16"; compresses to seal up to a 1/16" gap

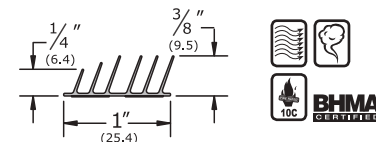


**NEW!**

#### S776\_

AVAILABLE FINISHES: **BL**  
AVAILABLE LENGTHS: 17', 18', 20', 21'

- Designed for hollow metal and wood meeting stile applications
- Seal begins compressing at 3/8"; compresses to seal up to a 1/16" gap



**NEW!**

AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see FULL LINE CATALOG or WEBSITE for finish chart)

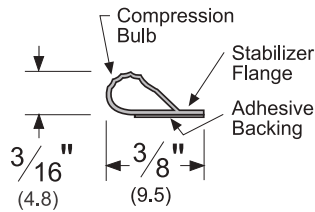
BL (Black) • C (Clear) • D (Dark Brown) • GR (Gray/Light Gray) • TAN (Tan) • W (White)

## Adhesive Gasketing (Cont.)

### PemkoPrene™ - Adhesive Backed Fire/Smoke Gasketing

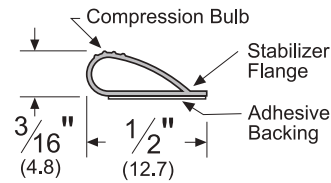
#### PK33\_

AVAILABLE FINISHES:  
BL, D, W  
AVAILABLE LENGTHS:  
17', 18', 20', 21',  
25', 30', 510'



#### PK55\_

AVAILABLE FINISHES:  
BL, D, W  
AVAILABLE LENGTHS:  
17', 18', 20', 21',  
25', 30', 510'

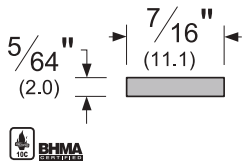


### PemkoPrene™ Hot Smoke Seal Edge Sealing for Category B Doors

HSS1000\_ is a non-adhesive backed (mortise applied) intumescent

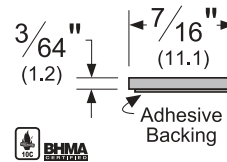
#### HSS1000\_

AVAILABLE FINISHES:  
Graphite (no code), W  
AVAILABLE LENGTHS:  
7', 8', 10', 18', 21', 24'



#### HSS2000\_

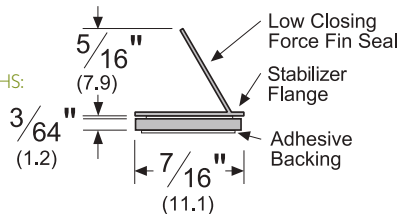
AVAILABLE FINISHES:  
Graphite (no code), W  
AVAILABLE LENGTHS:  
7', 8', 10', 18', 21', 24'



### Hot Smoke Seal™/SiliconSeal Combination Fire/Smoke Gasketing

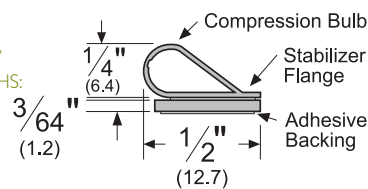
#### HSS2000xS44\_

AVAILABLE FINISHES:  
BL, D, W  
AVAILABLE LENGTHS:  
18', 20', 21', 24'



#### HSS2000xS88\_

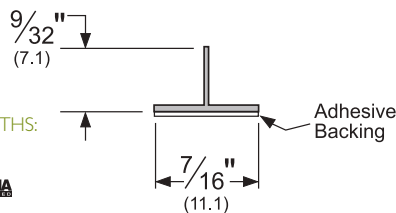
AVAILABLE FINISHES:  
BL, C, D, GR, TAN, W  
AVAILABLE LENGTHS:  
18', 20', 21', 24', 30'



### Adhesive Astragal/Meeting Stile Seals

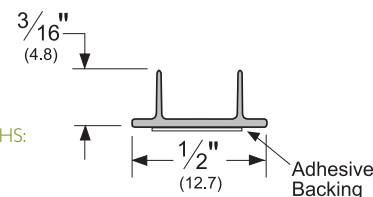
#### S771\_

AVAILABLE FINISHES:  
BL, C, D, GR, W  
AVAILABLE LENGTHS:  
7', 8', 9', 10'



#### S772\_

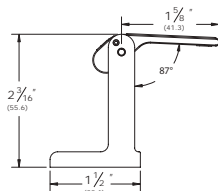
AVAILABLE FINISHES:  
BL, D, W  
AVAILABLE LENGTHS:  
7', 8', 10'



### Specialized Products

#### Privacy Door Latch

- Easy to install, simple to operate
- ADA compliant
- Enhanced room privacy
- UL classified as a fire door accessory

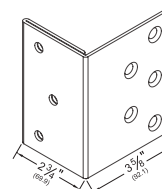


#### Privacy Door Latch Bracket

- For use on Dunbartan, Reddiframe, and Timely Frames
- Powder Coated

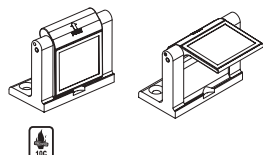
#### PDLBRKT\_

AVAILABLE COLORS:  
OW (Off White),  
DB (Dark Brown)



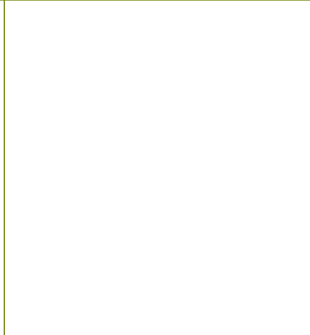
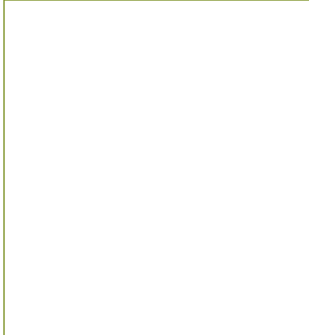
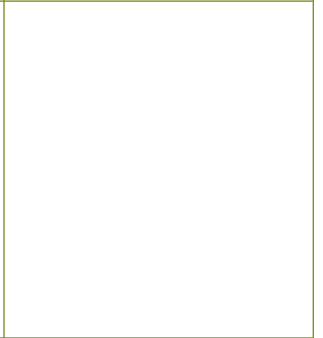
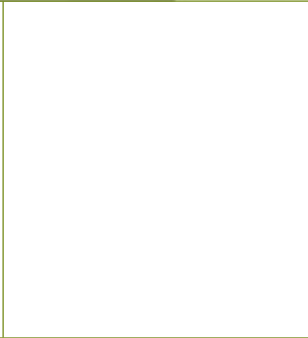
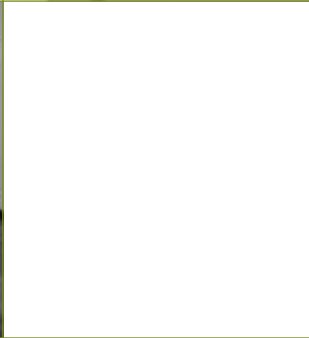
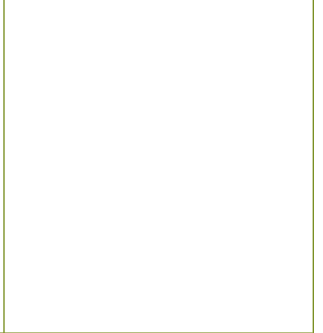
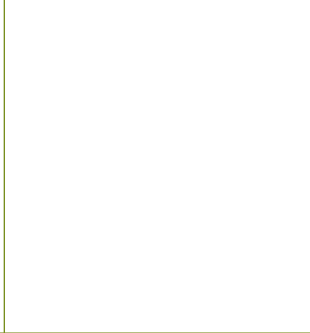
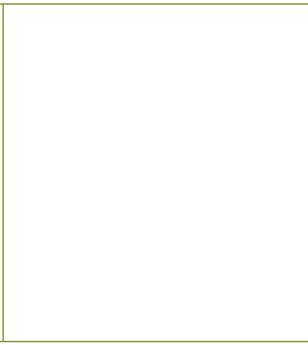
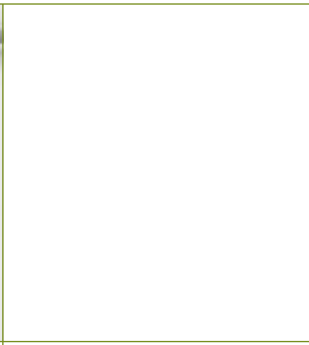
#### PDL\_


AVAILABLE FINISHES:  
3 (Polished Brass),  
4 (Satin Brass),  
10B (Dark Bronze),  
26 (Polished Chrome),  
26D/15 (Satin Chrome/Nickel)



AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see FULL LINE CATALOG or WEBSITE for finish chart)

Gasketing: **BL** (Black) • **C** (Clear) • **D** (Dark Brown) • **GR** (Gray/Light Gray) • **W** (White) Thresholds: **BL** (Black Vinyl)



  
**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

# PEMKO Catalog

## Sliding & Folding Hardware

## About PEMKO:

PEMKO manufactures an extensive range of quality products for many applications. This catalog is focused on Sliding and Folding Hardware. There are many products manufactured by PEMKO that are not included in this catalog. Please visit our website [www.pemko.com](http://www.pemko.com) to view PEMKO's complete product line. Call PEMKO Customer Service at 1-800-824-3018 for additional information and technical service.

## SLIDING & FOLDING HARDWARE

Sliding & Folding Hardware allows space previously required for swing clearance can now be better utilized for decor or to give a more open feel.

PEMKO is the North American distributor for sliding and folding door hardware manufactured by P.C. Henderson. PEMKO has created hardware solution kits with all the components needed to complete a project, except for the actual door. The warranty on P.C. Henderson products is 2 years.

PEMKO also provides several solution kits of its own including the Pocket Frame Kit, Side Wall Track System, Bypass Track System H180, and SHS80. The warranty on PEMKO manufactured products is 5 years.

Select your solution kit based on the door weight, size, mounting (overhead or side wall), sliding or folding, and any special characteristics of the particular opening such as the need for a low profile system. Sliding Kits are offered for doors weighing 180 lbs up to 1100 lbs. Folding Kits are offered for doors weighing up to 275 lbs each.

**Sliding & Folding Hardware Cross Reference Chart**

|                                     | PEMKO                  | HAGER                  | GRANT - HETTICH                                                                  | JOHNSON                        | HAFELE                                         |
|-------------------------------------|------------------------|------------------------|----------------------------------------------------------------------------------|--------------------------------|------------------------------------------------|
| <b>Four Panel Folding Door</b>      | HF4/100/_ , HF4/100A/_ | 9570, 9100             | 1500, 1600                                                                       | 100FD, 111FD, 1700             | HAWA FOLDING                                   |
| <b>Sliding Panel, up to 200 lbs</b> | H200A_                 | C-103-4 & C-104        | 6013, 6023, 6053, 71-034, 71-111, 7-034, 7-138, 71-222, 1210, 5150               | 2800                           | HAWA JUNIOR                                    |
| <b>Bypass Track</b>                 | HBP200A/_              | 9602, 9603             | 6034, 6064, 72-034, 72-118, 72-222, 72-134, 72-138, 6065, 73-134, 73-138, 73-034 | 1166, 1138, 2200, 100SD, 111SD | N/A                                            |
| <b>Side Wall Track</b>              | 280_-SWTKIT/_          | N/A                    | N/A                                                                              | 2610                           | N/A                                            |
| <b>Sliding Panel, up to 180 lbs</b> | H180A/_                | N/A                    | N/A                                                                              | N/A                            | HAWA MEDIA                                     |
| <b>Pocket Frame Kit</b>             | PF28200A_____          | 9628, 9629, 9630, 9631 | N/A                                                                              | 100-111, 1560, 2711            | HAWA JUNIOR<br>POCKET FRAME KIT                |
| <b>Sliding Hardware Pack</b>        | H100/200PACK           | 9814, 9540, 9575       | 6013, 6330, 6360, 7000, 1202                                                     | 1166, 1138, 2200, 10311        | 407.14.903, 407.65.035, 940.40.012, 942.17.012 |

### Sales & Support

Customer Service Representatives are available from 7am to 7pm Central time at 1-800-824-3018 or visit the website for the current catalogs, sell sheets, and the most up-to-date templates.

### Need a Sales Rep?

For representation information in Washington State, Alaska, Oregon, Northern California, Northern Nevada, and Hawaii, please visit [www.pemko.com](http://www.pemko.com) to locate and view the sales contact for your area or call PEMKO Customer Service at 1-800-824-3018.

PEMKO is largely represented by the ASSA ABLOY Door Security Solutions team (except, WA, AK, OR, N CA, N NV, HI) Contact your local ASSA ABLOY Door Security Solution Representative via e-mail by going to [www.assaabloydss.com](http://www.assaabloydss.com) and clicking on "Sales Support" or call 1-800-DSS-EZ4U (800-377-3948).

**Website:** [www.pemko.com](http://www.pemko.com)

**Facebook:** [www.facebook.com/pemkomfg](http://www.facebook.com/pemkomfg)

**Twitter:** <http://twitter.com/#!/PemkoMfg>

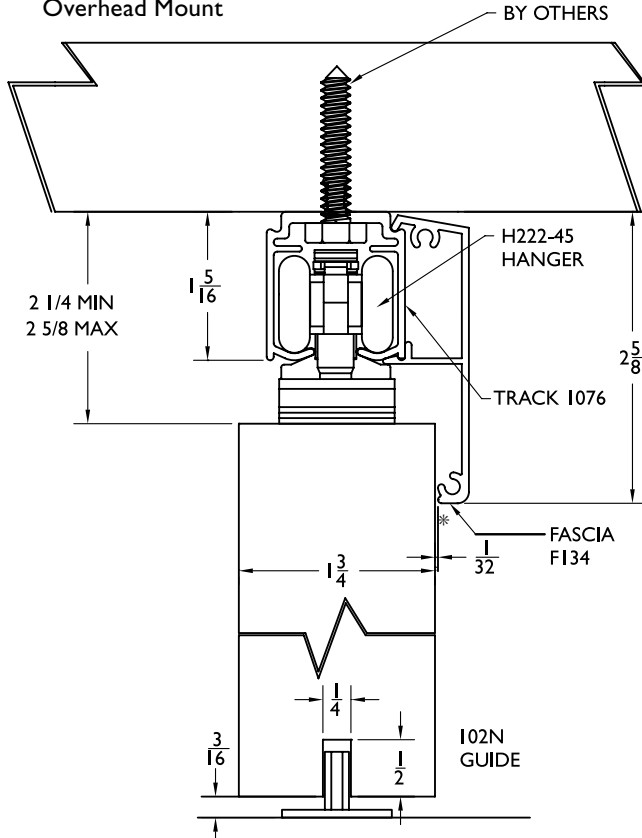
PEMKO has manufacturing and warehouse locations in Memphis TN and Ventura CA as well as warehouse locations in Toronto ON and Vancouver BC.

## H180A Series

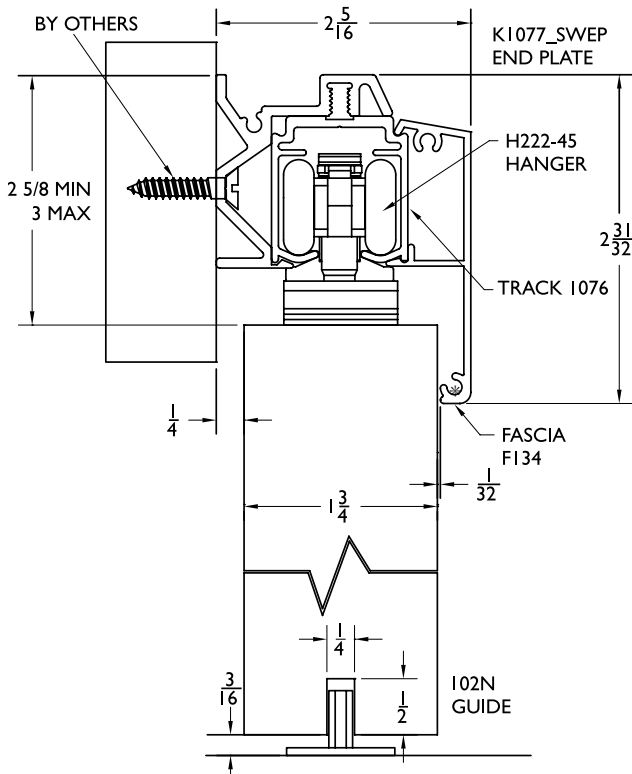
For Sliding Panels up to 180 lbs.

Manufactured by PEMKO

### Overhead Mount



### Side Wall Mount



### Configurations: Installations:

- Single
- Bi-parting
- Overhead Mount
- Side Wall Mount

### Features:

- Hanger body is made of nickel plated zinc alloy for durability and long life
- Zinc alloy ball bearing wheels coated in nylon for smooth operation
- 180 lb. panel capacity
- Optional side wall bracket reduces the amount of wall space needed to mount the track

### H180A Kits Include:

- 1 ea **1076A** Mill Finished Aluminum Track
- 2 ea **H222-45** Hanger - Nickel Plated Zinc Alloy Body  
Zinc Alloy Wheels Coated in Nylon
- 2 ea **287HD** Rubber Bumper In-Track Stop
- 1 ea **102N** White Nylon Mortise Guide

### Standard Kit Sizes

| Part Number     | Material | Track Length | Door Width |
|-----------------|----------|--------------|------------|
| <b>H180A/6</b>  | Aluminum | 72"          | 36"        |
| <b>H180A/8</b>  | Aluminum | 96"          | 48"        |
| <b>H180A/10</b> | Aluminum | 120"         | 60"        |
| <b>H180A/12</b> | Aluminum | 144"         | 72"        |

### Options: See page SF-25

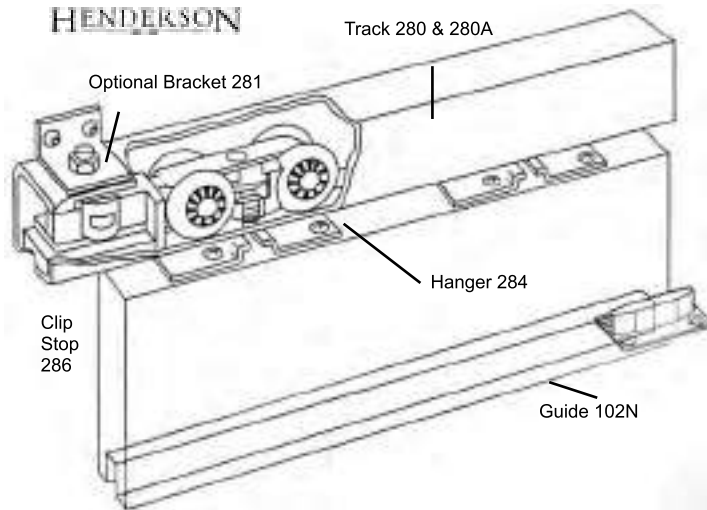
- Fascia **F134C**
- Side Wall Track Bracket **1075C** Clear anodized aluminum bracket- order same length as track
- End Plate Kit **K1077C-SWEP** (Use with F134C Fascia and 1075C Side Wall Bracket only)
- Bottom Channel **94A**
- Roller Guide **106R/94**
- Threshold **971A**
- Side Wall Mount **102WN** (nylon) and **102WA** (steel)
- Mortise Guides

\* When using fascia, offset hanger foot 1/8" closer to fascia face of the door.

## Sliding 200 Series

For Sliding Panels up to 200 lbs.  
Manufactured by P.C. Henderson

**HENDERSON**



### Configurations: Installations:

- Single
- Bi-parting
- Overhead Mount
- Side Wall Mount
- Face/Face Fixed Mount with Fascia

### Features:

- Needle bearing hangers for smooth operation
- 200 lb. panel capacity
- Galvanized steel track 280
- Aluminum track 280A

### H200A Kits Include:

- 1 ea 280A Aluminum Track
- 2 ea 284 Hangers
- 1 ea 102N Nylon Guide
- 2 ea 286 Stops
- 1 ea Adjusting Wrench and Mounting Hardware

### H200 Kits Include:

- 1 ea 280 Steel Track
- 2 ea 284 Hangers
- 1 ea 102N Nylon Guide
- 2 ea 286 Stops
- 1 ea Adjusting Wrench and Mounting Hardware

Options: See page SF-25

Hardware Kit  
Mounting Bracket

### H100/200 PACK

281 available as 5 pack only, 2815  
Note: Need one at each end and no more than 3 feet in between.  
Fasteners included

Track Stop (bumper)  
Bottom Channel  
Fascia, Snap-On  
Roller Guide  
Side Wall Mortise Guide  
Threshold  
End Plate

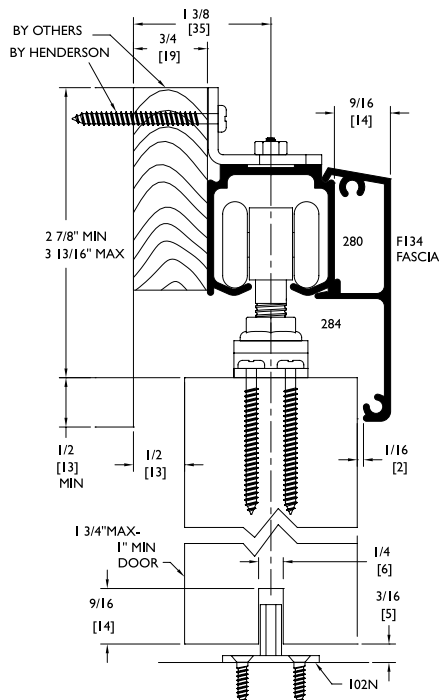
287HD  
94A  
F134C in clear anodized (280A only)  
106R/94  
102WA (steel) and 102WN (nylon)  
971A  
K134EP (Use with F134C and 280A only)

### Standard Kit Sizes

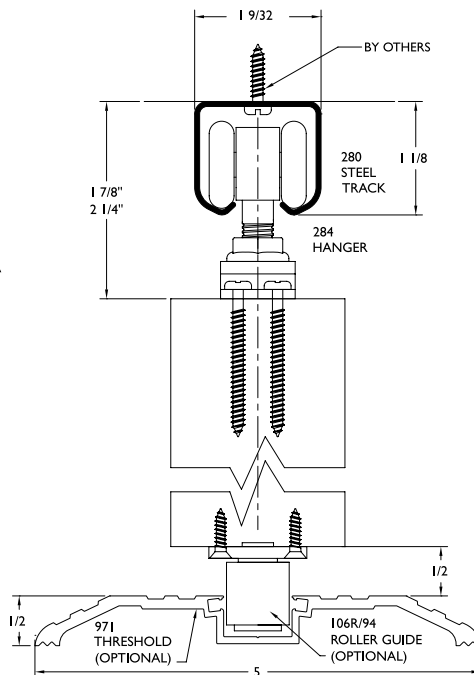
| Part Number | Material | Track Length | Door Width |
|-------------|----------|--------------|------------|
| H200A/4     | Aluminum | 48"          | 24"        |
| H200A/5'4   | Aluminum | 64"          | 32"        |
| H200A/6     | Aluminum | 72"          | 36"        |
| H200A/7     | Aluminum | 84"          | 42"        |
| H200A/8     | Aluminum | 96"          | 48"        |
| H200A/10    | Aluminum | 120"         | 60"        |
| H200A/12    | Aluminum | 144"         | 72"        |
| H200/6      | Steel    | 72"          | 36"        |
| H200/8      | Steel    | 96"          | 48"        |

### 280A Side Wall Mounted

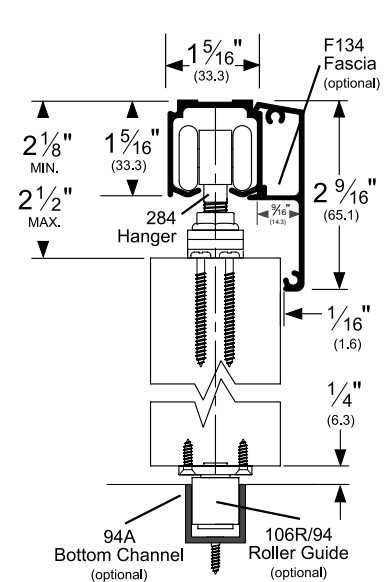
3/4" shim by others



### 280 Overhead Mounted



### 280A Soffit Mounted with Fascia

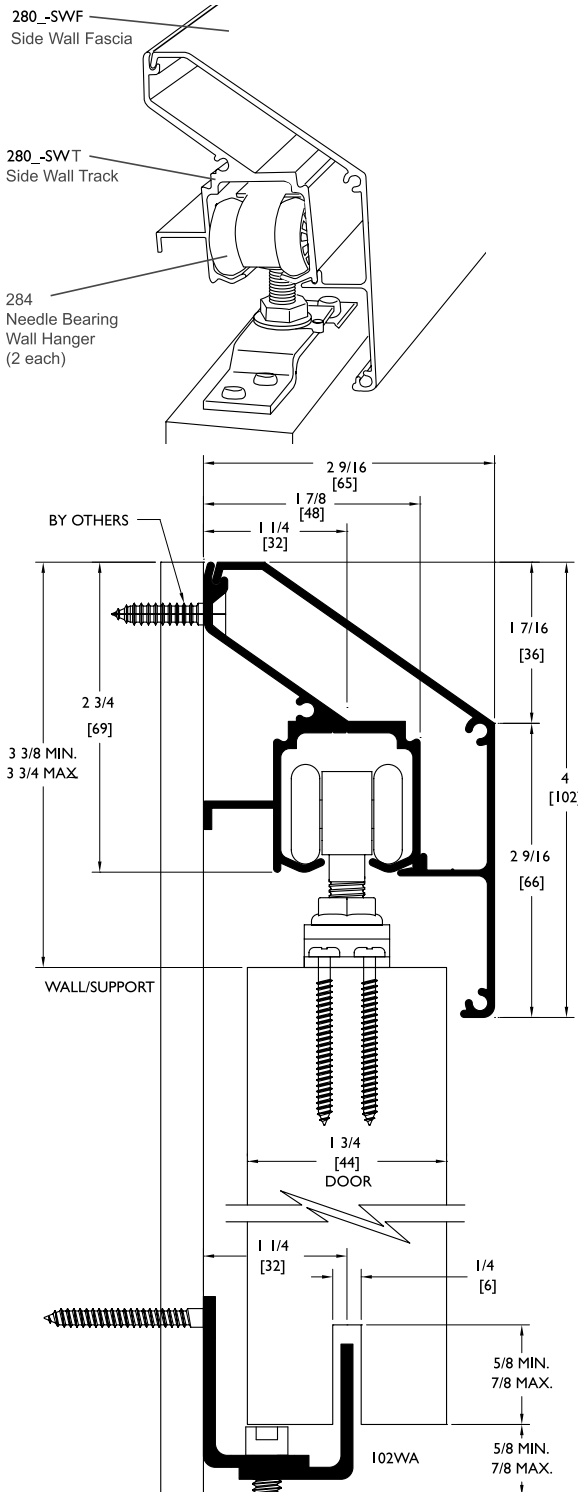




## Side Wall Track (SWT) System

Manufactured by PEMKO

The PEMKO Side Wall Track System has a unique mounting bracket that is extruded with the track. An innovative wall mounted bottom guide assembly allows carpet to be replaced without removing the door.



### Configurations:

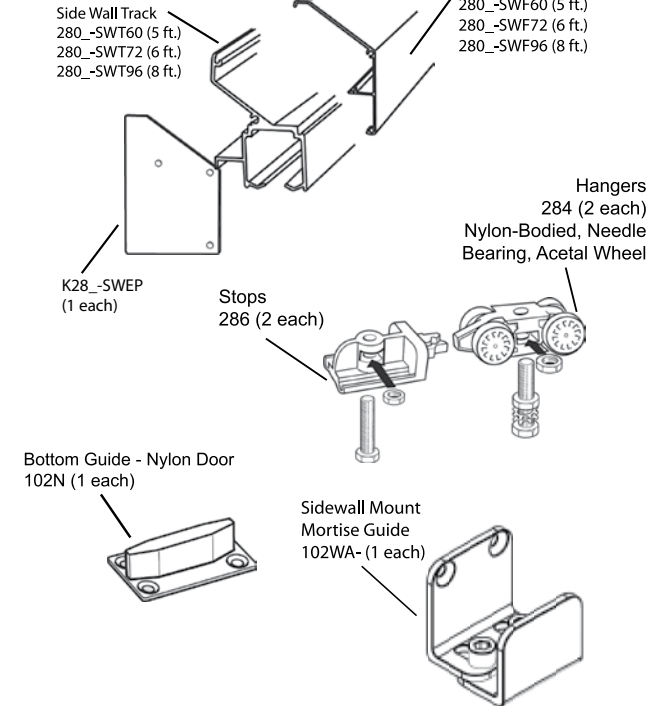
- Single
- Bi-parting

### Features:

- Unique mounting bracket extruded into track
- Supports up to 200 lbs per door
- Quick, easy attachment
- No additional shims needed
- New construction or retrofit

### 280SWT Kits

#### Include:



### Standard Kit Sizes

| Part Number                                            | Track Length | Door Width |
|--------------------------------------------------------|--------------|------------|
| (Mill Finished Track/Clear Anodized Fascia/End Plates) |              |            |
| <b>280C-SWTKIT/5</b>                                   | 60"          | 30"        |
| <b>280C-SWTKIT/6</b>                                   | 72"          | 36"        |
| <b>280C-SWTKIT/8</b>                                   | 96"          | 48"        |
| <b>280C-SWTKIT/12*</b>                                 | 144"         | 2 @ 36"    |
| (Dark Bronze Anodized Track/Fascia/End Plates)         |              |            |
| <b>280D-SWTKIT/5</b>                                   | 60"          | 30"        |
| <b>280D-SWTKIT/6</b>                                   | 72"          | 36"        |
| <b>280D-SWTKIT/8</b>                                   | 96"          | 48"        |
| <b>280D-SWTKIT/12*</b>                                 | 144"         | 2 @ 36"    |

\*NOTE: 280\_-SWTKIT/12 comes with enough hardware for two doors.

### Options: See page SF-25

- Hardware Kit (one door) **H100/200 pack**
- Roller Guide **106R/94**
- Bottom Channel **94A**
- Nylon Mortise Guide **102WN**

AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see General Information section for finish chart)  
A (Mill Finish Aluminum) C (Anodized Aluminum) D (Dark Bronze Anodized)

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ASSA ABLOY, the global leader  
in door opening solutions

## Bypass Track Series

For Bypass Panels up to 200 lbs.  
Manufactured by PEMKO

- Fits 1 $\frac{3}{8}$ " and 1 $\frac{3}{4}$ " doors
- Needle-bearing wheels for ultra smooth performance
- Load capacity 200 lbs. per door panel (2 hangers)
- Extruded aluminum track

### HBP200A Kits Include:

- 1 ea 2802A Mill Finished Aluminum Track
- 4 ea 284 White Hangers
- 2 ea 102N White Nylon Mortise Guide
- 4 ea 286 Stops
- 1 ea Adjusting Wrench and Mounting Hardware



2802A Track



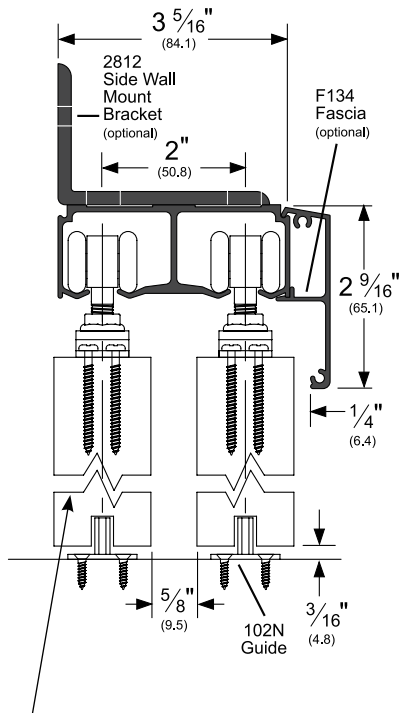
2812

Mounting Brackets\*  
(Fasteners not included)

\* Side Wall mounting: use one  
(1) 2812 Kit per 3 ft. of track.

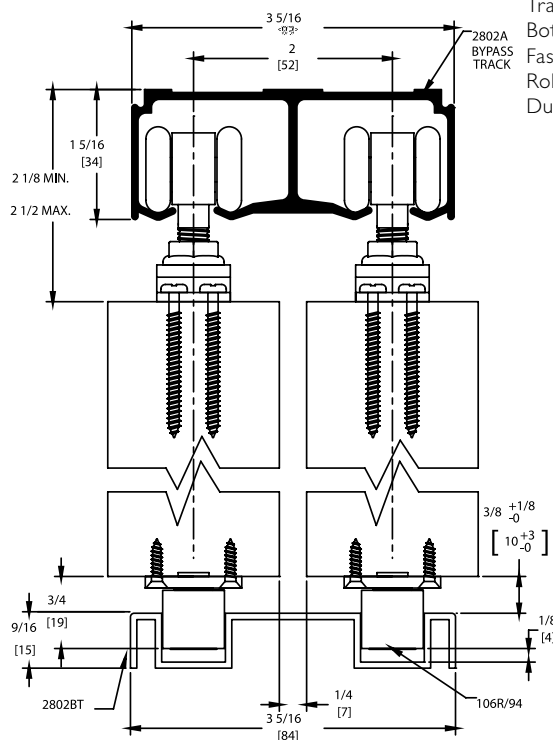
| Standard Kit Sizes |              |            |
|--------------------|--------------|------------|
| Part Number        | Track Length | Door Width |
| HBP200A/4          | 48"          | 2 @ 24"    |
| HBP200A/5'4        | 64"          | 2 @ 32"    |
| HBP200A/6          | 72"          | 2 @ 36"    |
| HBP200A/7          | 84"          | 2 @ 42"    |
| HBP200A/8          | 96"          | 2 @ 48"    |
| HBP200A/10         | 120"         | 2 @ 60"    |
| HBP200A/12         | 144"         | 2 @ 72"    |

### 1 $\frac{3}{8}$ " Thick Doors Side Wall Mount



NOTE: Route door  $\frac{3}{16}$ " deep by  $\frac{1}{4}$ " wide to receive 102N Guide.

### 1 $\frac{3}{4}$ " Thick Doors Overhead Mount



### Options: See page SF-25

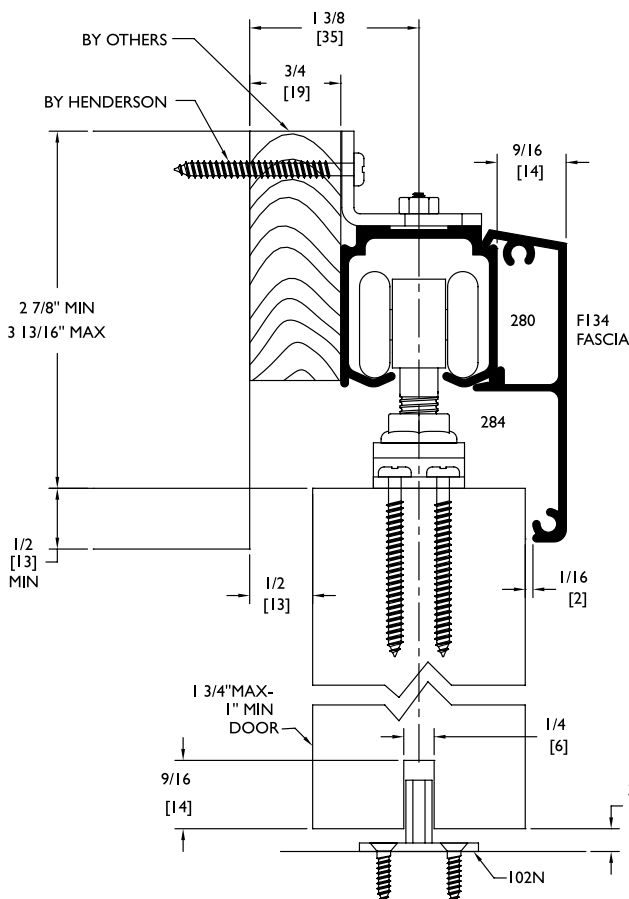
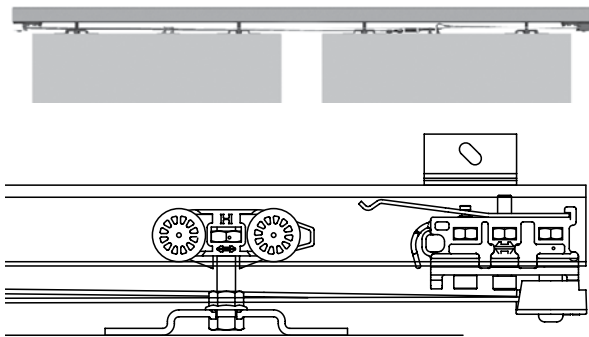
- Hardware Kit H100/200 pack
- Mounting Bracket 2812
- Track Stop (bumper) 287HD
- Bottom Channel 94A
- Fascia, Snap-On F134
- Roller Guide 106R/94
- Dual Guide Channel 2802BT

AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see General Information section for finish chart)  
A (Mill Finish Aluminum) C (Clear Anodized)

## SIM200A Series

For Sliding Doors up to 48" wide and 200 lbs.  
Manufactured by P.C. Henderson

**HENDERSON**



Simultaneous Action Unit (SIM) allows the simultaneous operation of two doors.

**Configurations: Installations:**

- Bi-parting
- Overhead Mount
- Side Wall Mount

**Features:**

- Allows individual bi-part doors to act as a single operating unit. When one door is opened or closed, the second door operates simultaneously
- 200 lb. panel capacity
- Needle bearing nylon wheels for smooth operation
- Mill finished aluminum track 280A

**SIM200A Kits Include:**

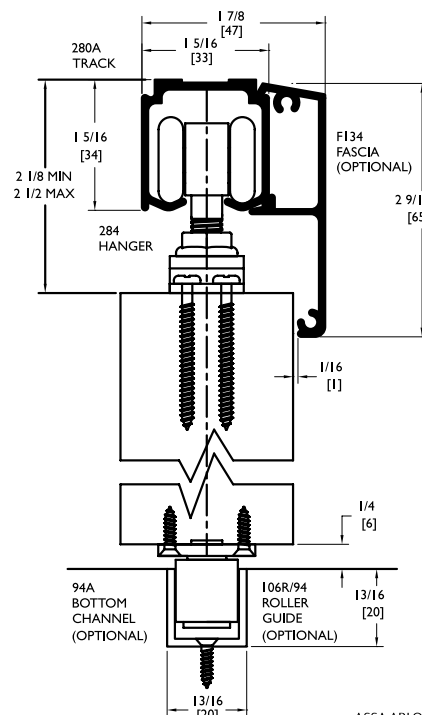
- 1 ea 280A Mill Finished Aluminum Track
- 4 ea 284 White Nylon Hangers
- 4 ea 601H Nylon In-Track Clip Stop
- 2 ea 102N White Nylon Mortise Guide
- 1 ea SIM100 Cable and Pulley Kit

**Standard Kit Sizes**

| Part Number | Material | Track Length | Door Width |
|-------------|----------|--------------|------------|
| SIM200A/6   | Aluminum | 72"          | 2 @ 18"    |
| SIM200A/8   | Aluminum | 96"          | 2 @ 24"    |
| SIM200A/12  | Aluminum | 2 @ 72"      | 2 @ 36"    |
| SIM200A/16  | Aluminum | 2 @ 96"      | 2 @ 48"    |

**Options:** See page SF-25

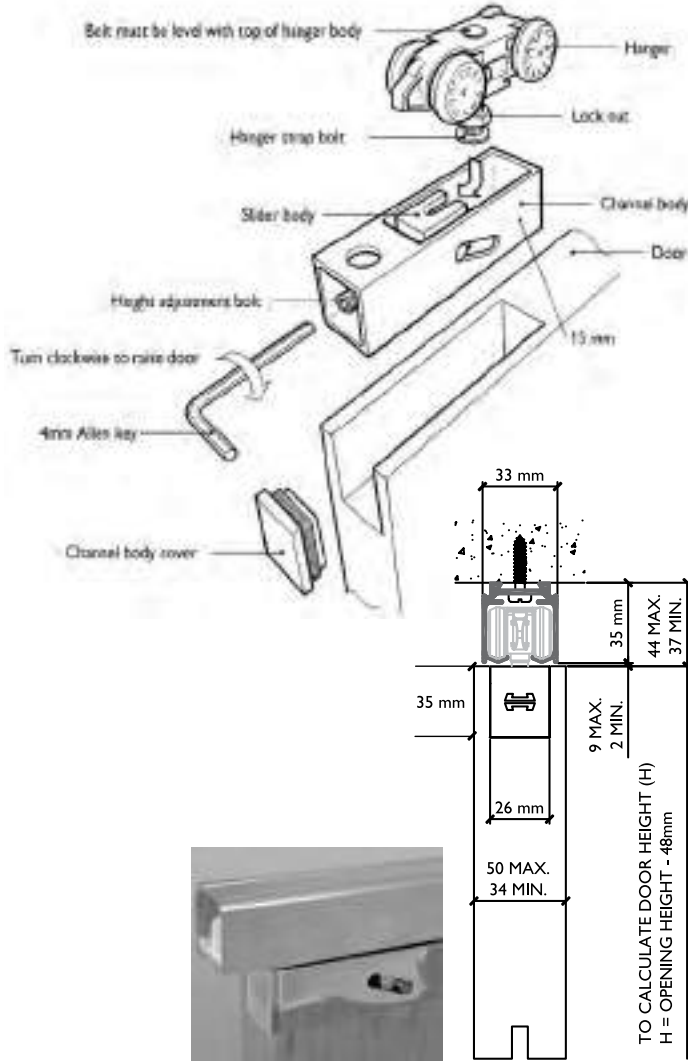
- Fascia **F134C**
- Side Wall Track Brackets **281** available as 5 pack only, 2815  
Note: Need one at each end and no more than 3 feet in between. Fasteners included.
- End Plates **K134EP** (Use with F134C only)
- Bottom Channel **94A**
- Roller Guide **106R/94**
- Threshold **971A**
- Side Wall Mortise Guides **102WN** (nylon) and **102WA** (steel)



## LP200 Series

For Sliding Panels up to 200 lbs.  
Manufactured by P.C. Henderson

**HENDERSON**



Low profile design for use where space is limited.

**Configurations:**    **Installations:**

- Bi-parting
- Single
- Overhead Mount
- Side Wall Mount

**Features:**

- Used to maximize door height
- Designed to give a modern clean finish with all parts concealed. Ideal for applications where minimal clearance between track and door is required
- Easy installation and adjustment
- 200 lb. panel capacity
- Needle bearing nylon wheels for smooth operation
- Mill finished aluminum track 280AN

**LP200A Kits Include:**

- 1 ea 280AN Aluminum Track
- 1 ea LH100 Hardware Kit

**LH100 Hardware Kits Include:**

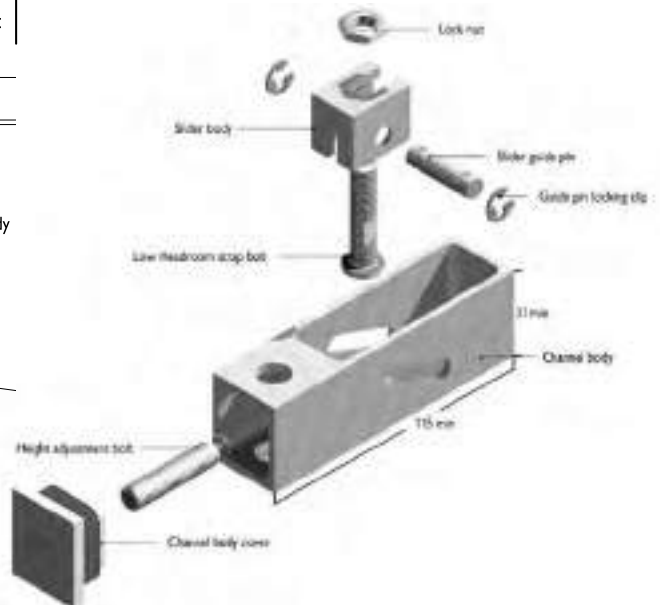
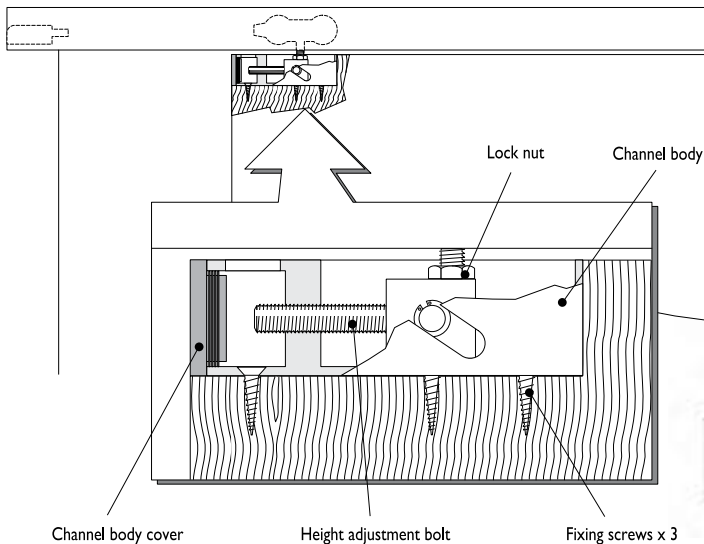
- 2 ea Low Head Room Units
- 2 ea End Caps
- 2 ea In-Track Clip Stops
- 1 ea Screw Pack
- 2 ea Low Head Room Hangers
- 1 ea 102N White Nylon Mortise Guide
- 1 ea Small Spanner and 4mm Allen Key

**Standard Kit Sizes**

| Part Number | Material | Track Length | Door Width |
|-------------|----------|--------------|------------|
| LP200A/6    | Aluminum | 72"          | 36"        |
| LP200A/8    | Aluminum | 96"          | 48"        |
| LP200A/10   | Aluminum | 120"         | 60"        |

**Options:** See page SF-25

- Side Wall Track Bracket **281A**
- Bottom Channel **94A**
- Roller Guide **106R/94**
- Threshold **971A**



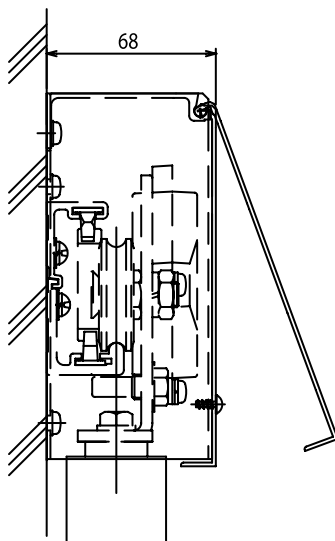
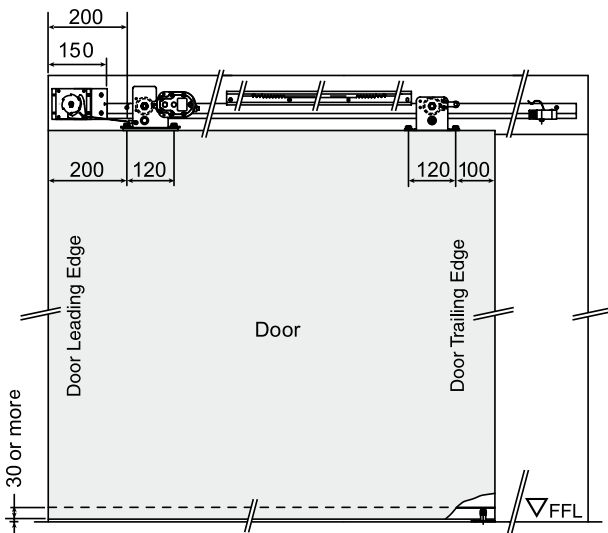
## Sirocco Series

For Sliding Panels up to 200 lbs  
Manufactured by P.C. Henderson

**HENDERSON**



Right Hand SIRRH Shown Above and Below



The Sirocco system is a quiet, user friendly self closing system which brings the door gently to a close.

The integrated hydraulic soft stop brings the door to a safe and cushioned close making it ideal for disabled access systems or public areas. The internal door brake can also be adjusted to allow the user to dictate the speed of opening preventing damage to the door and system.

### Configurations: Installations:

- Single
- Side Wall Mount

### Features:

- Self closing system for a single door from 31½" to 47¼" wide and up to 200lbs
- Interior applications only
- Comes complete with a hydraulically controlled soft close feature
- Adjustable closing speed
- Door brake to reduce opening speed to prevent damage to the door and system
- Optional hold open unit giving adjustable time delay before self closing
- Operational between temperature ranges of 50 to 104 degrees Fahrenheit

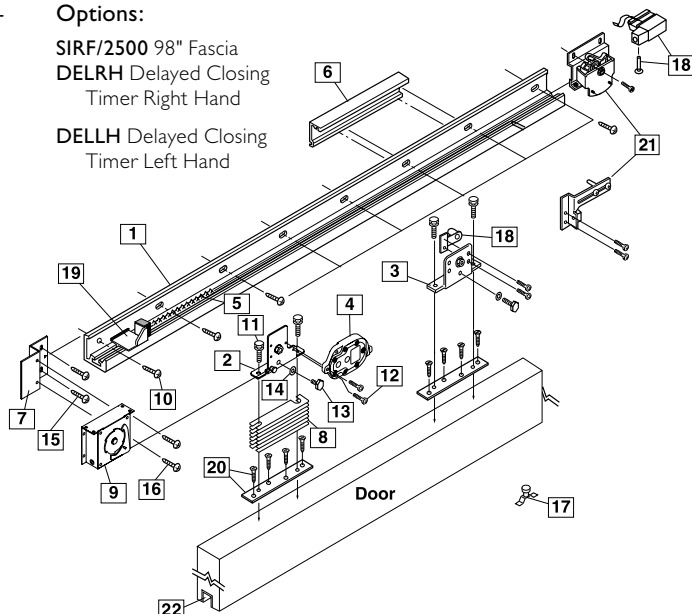
- SIRRH Right Hand Opening Kit
- SIRLH Left Hand Opening Kit

### Sirocco Series Kits Include:

- 1 ea Track 86.61" long
- 1 ea Leading hanger
- 1 ea Trailing hanger
- 1 ea Hydraulic Control Unit
- 1 ea Closing brake rack
- 1 ea Opening brake rack
- 1 ea Power spring mounting bracket
- 7 ea Height adjustment plates
- 1 ea Power spring unit
- 1 ea Guide roller
- 1 ea Opening door stop
- 1 ea Door stop roller
- 1 ea Closing door stop
- 2 ea Wooden door plate. All required screws and bolts

### Options:

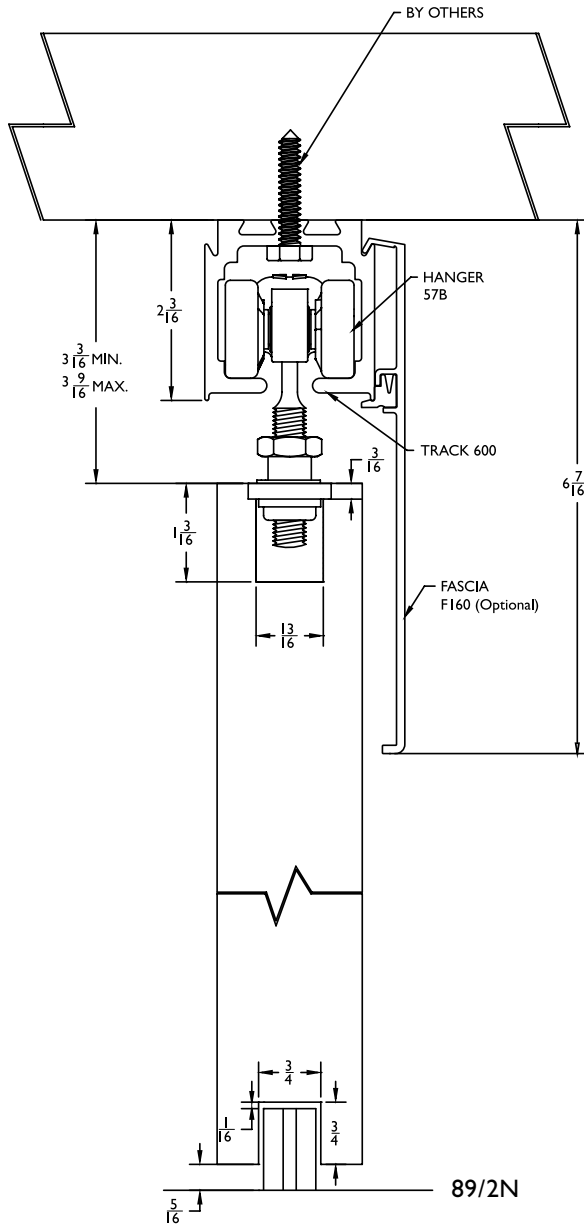
- SIRF/2500 98" Fascia
- DELRH Delayed Closing Timer Right Hand
- DELLH Delayed Closing Timer Left Hand



## H440A-OH Series

For Sliding Panels up to 440 lbs.  
Manufactured by P.C. Henderson

**HENDERSON**



### Configurations: Installations:

- Bi-parting
- Single
- Overhead Mount

### Features:

- Overhead mount system
- Nylon body and steel ball bearing nylon wheels for smooth operation
- 440 lb. panel capacity
- Mill finished aluminum track 600A

### H440A-OH Kits Include:

- 1 ea **600A** Mill Finished Aluminum
- 2 ea **57B** Hangers: Gray Nylon Body, Zinc Coated Steel Pendant Bolt, Steel Ball Bearing Nylon Wheels
- 2 ea **601P** Nylon In-Track Clip Stop
- 1 ea **89/2N** Gray Nylon Mortise Guide

| Standard Kit Sizes |          |              |            |
|--------------------|----------|--------------|------------|
| Part Number        | Material | Track Length | Door Width |
| <b>H440A-OH/6</b>  | Aluminum | 72"          | 36"        |
| <b>H440A-OH/8</b>  | Aluminum | 96"          | 48"        |
| <b>H440A-OH/10</b> | Aluminum | 120"         | 60"        |
| <b>H440A-OH/12</b> | Aluminum | 144"         | 72"        |

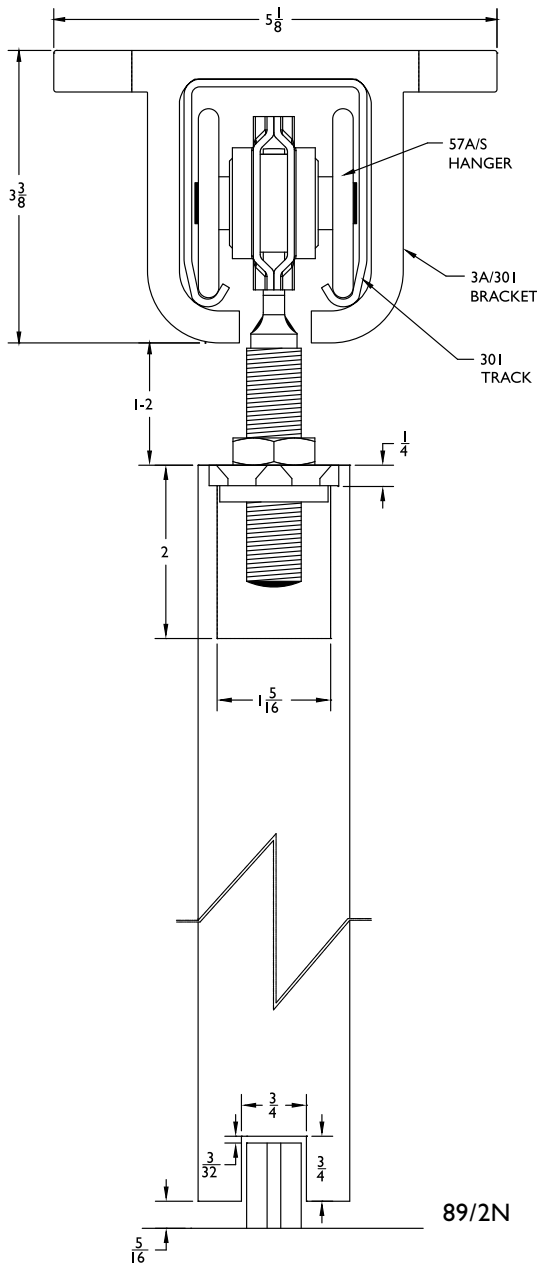
### Options: See page SF-25

- Fascia **F160C**
- Bottom Channel **94A**
- Roller Guide **106R/94**
- Threshold **971A**
- Mortise Guides **102N**
- End Plate Kit **F160ECP** (Used With **F160C** Fascia and **600A** Track Only)

## H600S-OH Series

For Sliding Panels up to 600 lbs.  
Manufactured by P.C. Henderson

**HENDERSON**



### Configurations: Installations:

- Bi-parting
- Single
- Overhead Mount

### Features:

- Overhead mount system
- Heavy duty zinc coated steel
- Ball bearing wheels
- 600 lb. panel capacity
- Galvanized steel track 301

### H600S-OH Kits Include:

- 1 ea **301** Galvanized Steel Track
- **3A/301** Aluminum Alloy Overhead Mount Track Brackets (One at each end and no more than three feet in between)
- 2 ea **1A/301/EC** Aluminum Alloy End Caps
- 2 ea **57A/S** Zinc Coated Steel Body, Wheels, and Pendant Bolt Hangers
- 2 ea **HH3/301** Galvanized Steel In-Track Stops
- 1 ea **89/2N** Gray Nylon Mortise Guide

### Standard Kit Sizes

| Part Number        | Material | Track Length | Door Width |
|--------------------|----------|--------------|------------|
| <b>H600S-OH/6</b>  | Steel    | 72"          | 36"        |
| <b>H600S-OH/8</b>  | Steel    | 96"          | 48"        |
| <b>H600S-OH/10</b> | Steel    | 120"         | 60"        |
| <b>H600S-OH/12</b> | Steel    | 144"         | 72"        |

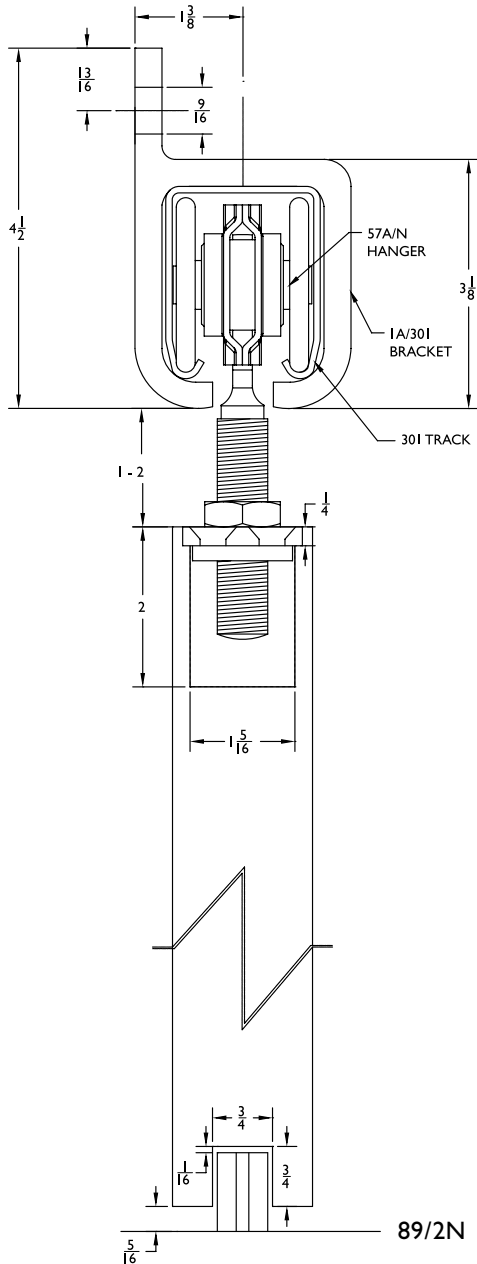
### Options: See page SF-25

- Bottom Channel **94A**
- Roller Guide **106R/94**
- Mortise Guides **102N**
- Threshold **971A**

## H800S-SW Series

For Sliding Panels up to 800 lbs.  
Manufactured by P.C. Henderson

**HENDERSON**



### Configurations: Installations:

- Bi-parting
- Single
- Side Wall Mount

### Features:

- Side wall mount system
- Heavy duty zinc coated steel body
- Heavy ball bearing nylon wheels for smooth operation
- 800 lb. panel capacity
- Galvanized steel track 301

### H800S-SW Kits Include:

- 1 ea **301** Galvanized Steel Track
- **1A/301** Aluminum Alloy Side Wall Mount Track Brackets  
One at each end and no more than three feet in between)
- 2 ea **1A/301/EC** Aluminum Alloy End Caps
- 2 ea **57A/N** Zinc Coated Steel Body, Nylon Wheels, and  
Pendant Bolt Hangers
- 2 ea **HH3/301** Galvanized Steel In-Track Stops
- 1 ea **89/2N** Gray Nylon Mortise Guide

### Standard Kit Sizes

| Part Number        | Material | Track Length | Door Width |
|--------------------|----------|--------------|------------|
| <b>H800S-SW/6</b>  | Steel    | 72"          | 36"        |
| <b>H800S-SW/8</b>  | Steel    | 96"          | 48"        |
| <b>H800S-SW/10</b> | Steel    | 120"         | 60"        |
| <b>H800S-SW/12</b> | Steel    | 144"         | 72"        |

### Options: See page SF-25

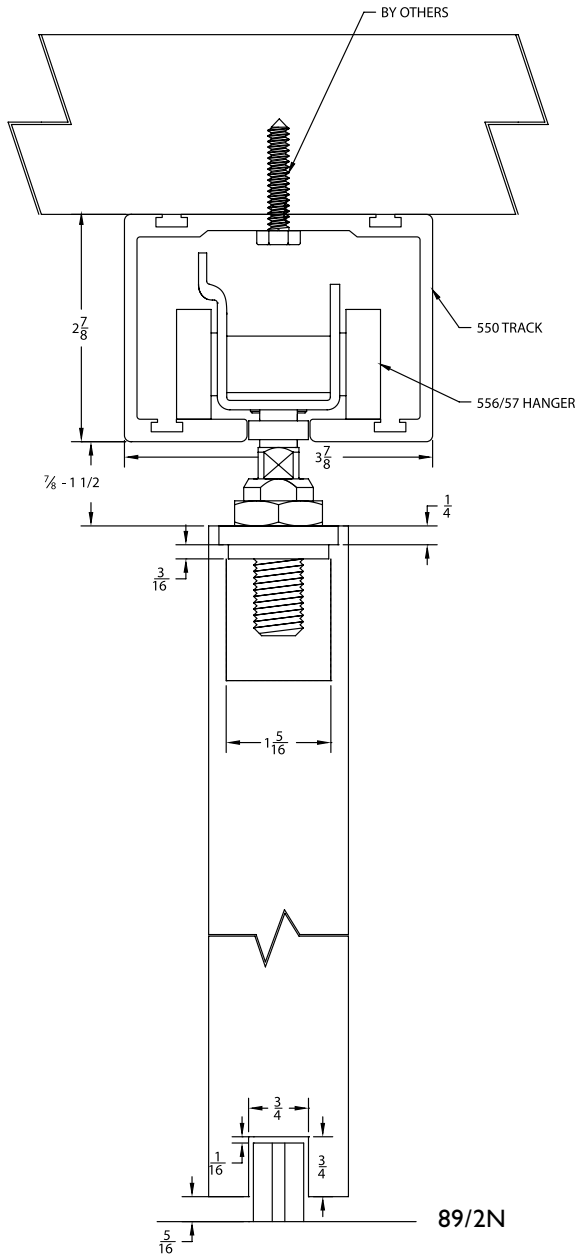
- Bottom Channel **94A**
- Roller Guide **106R/94**
- Mortise Guides **102N**
- Side Wall Mortise Guides **102WN** (nylon) and **102WA** (steel)



## H1100A-OH Series

For Sliding Panels up to 1100 lbs.  
Manufactured by P.C. Henderson

**HENDERSON**



Ideally suited for large doors that require high performance and an attractive finish.

Typical applications are hotels, conference centers, shop-fronts and showrooms.

### Configurations: Installations:

- Bi-parting
- Single
- Overhead Mount

### Features:

- For top hung wood and metal doors
- Heavy duty black painted steel body
- Ball bearing steel wheels
- 1100 lb. panel capacity
- Mill finished aluminum track 550A

### H1100A-OH Kits Include:

- 1 ea **550A** Mill Finished Aluminum Track
- 2 ea **556/57** Painted Black Steel Body - Zinc Coated Steel  
Wheels and Pendant Bolt Hangers
- 2 ea **HH3/301** Galvanized Steel In-Track Stops
- 1 ea **89/2N** Gray Nylon Mortise Guide

### Standard Kit Sizes

| Part Number         | Material | Track Length | Door Width |
|---------------------|----------|--------------|------------|
| <b>H1100A-OH/6</b>  | Aluminum | 72"          | 36"        |
| <b>H1100A-OH/8</b>  | Aluminum | 96"          | 48"        |
| <b>H1100A-OH/10</b> | Aluminum | 120"         | 60"        |
| <b>H1100A-OH/12</b> | Aluminum | 144"         | 72"        |
| <b>H1100A-OH/16</b> | Aluminum | 197"         | 98"        |

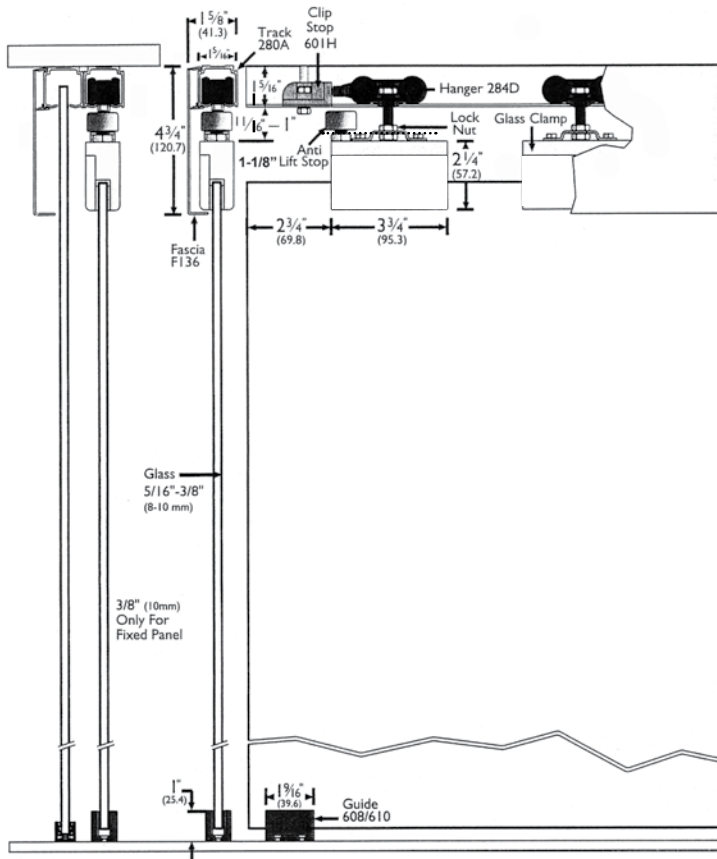
### Options: See page SF-25

- Bottom Channel **94A**
- Roller Guide **106R/94**
- Threshold **971A**

## Sliding Glass Series

Manufactured by P.C. Henderson

**HENDERSON**



For lightweight glass applications such as office doors and small glass partitions.

### Capacity:

|                  |                           |
|------------------|---------------------------|
| Max. door weight | 165 lbs. (75kg)           |
| Max. door height | 7' 10" (2400mm)           |
| Max. door width  | 4' 1" (1250mm)            |
| Glass thickness  | 5/16" (8mm) & 3/8" (10mm) |

### Door Types:

Glass panels of 5/16" (8mm) or 3/8" (10mm) thickness in tempered or laminated glass.

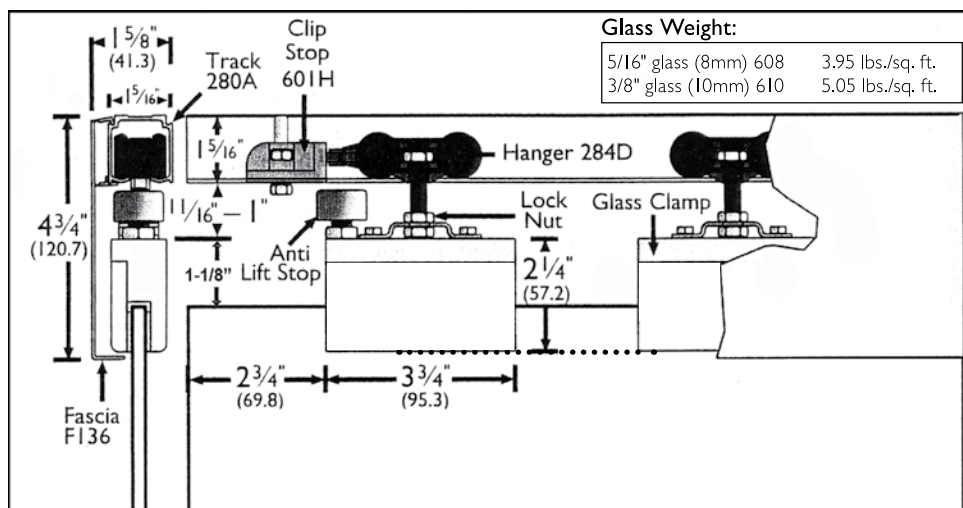
### 8/10/75 HUSKY Glass Clamp Kit:

- 2 ea **284D** Hangers
- 2 ea **GLASS** Clamps w/anti-lift stop
- 2 ea **601H** End stops
- 1 ea **610** Guide
- 1 ea **608** Guide

NOTE: When using glass clamps in combination with protective coatings for glass surfaces, ensure that the portion of the glass surface to be clamped is not treated.

### Options: See page SF-25

- Track: **280A** (extruded aluminum)  
Available in 6', 8', 10' & 12' lengths
- Face mount bracket: **281** available as 5 pack only, **2815**  
NOTE: Need one on each end, and no more than 3 feet in between each bracket. Fasteners included.
- Fascias: **F136** Soffit Fixed Track
- Guides: **608** and **610** glass guides
- Accessories: **601H** retaining stop mounted within the track



AVAILABLE FINISHES FOR PRODUCTS SHOWN ON THIS PAGE (see General Information section for finish chart)

A (Mill Finish Aluminum) C (Clear Anodized)



# Checkmate® Stops & Holders

Absolute Door Control and  
Entire Opening Protection

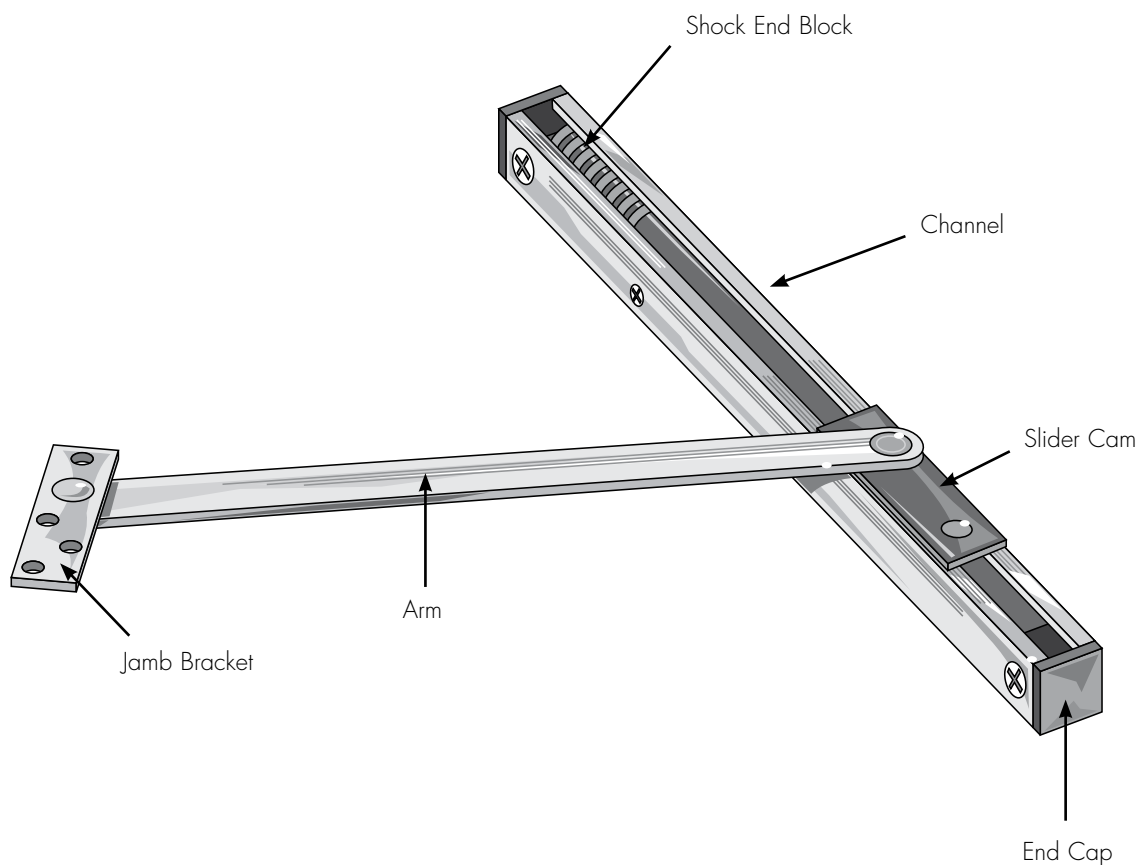


**RIXSON®**  
**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

Checkmate® overhead stops and holders are used to extend the life of the door, frame and any door closing devices. They may be necessary if there are strong winds, high traffic or abuse.

- When used in conjunction with a floor closer, you have absolute door control, top and bottom
- Provides positive deadstop at selected degree
- There are three functions, four ways to order
  - Friction Stay – used on doors without closers to keep doors open
  - Hold Open – door remains held open near deadstop location
  - Stops – door deadstops at a particular degree of opening
  - Multi Function – adaptable as hold open and/or stops
- Available as surface mounted or concealed
- Standard mount on push side of door (see model descriptions for pull side installations)
- Thru bolts are furnished with all surface models and must be used for installation.



### Less Spring – Suffix LS

Heavy-duty slide track type stops have a spring in the end of the channel that keeps the slider from deadstopping. If these units are being used with electromechanical closer, where the door, must deadstop, the LS option is needed. Available only with models 1 and 9.

### Angle Jamb Bracket Adapter

**Standard-duty models suffix 5258 (non-handed)**

**Heavy-duty models suffix 5458 (LH) or 5459 (RH)**

When surface mounted units are mounted on a rabbeted door on the push side, flush door and transom on the push side, or in a reverse installation on the pull side of the door, a special bracket is needed.

Note: not all models can be mounted on the pull side of the door (see specific model numbers in catalog.)



5258



5458/5459

### Security Screws – Suffix Torx®

Security screws can be supplied for exposed fasteners.

## CERTIFICATIONS



All Rixson Checkmate® overhead stops and holders are in compliance with ANSI/BHMA A156.8, Grade 1 and 2 Standards. See individual products for sub sections. See individual models for UL Listing.

## LIMITED WARRANTY

Rixson Checkmate® stops and holders are warranted for 2 years for defect. See Rixson price book for specific details of the limited warranty.

## SPECIFICATIONS

All overhead stops and holders shall be from a single manufacturer.

Standard-duty models used for interior or low to moderate traffic doors.

Heavy-duty models used for exterior or high traffic doors or doors subject to abuse.

For extremely abusive areas or high winds use double lever arm type.

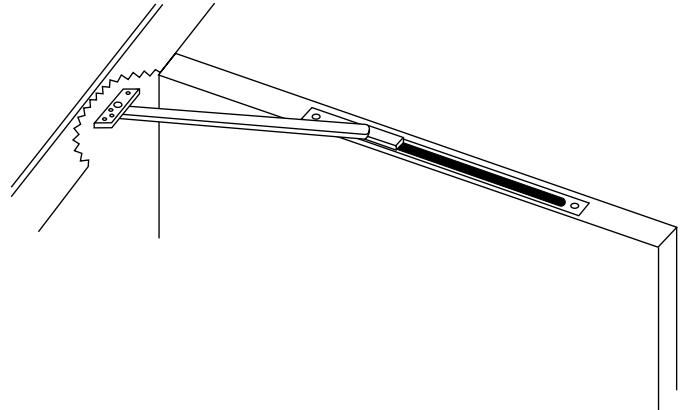
Coordinate deadstop and/or hold open location with concealed floor closers.

Checkmate products provide hold open and/or deadstop.

## 1ADJ SERIES

### Product Description & Features

- Adjustable, heavy-duty
- Interior or exterior doors
- Doors may be single or double acting
- Non-handed
- Slide track design
- Recommended for high traffic, heavy abuse situations
- Heavy shock absorber spring provides 5-7° compression before dead stop
- Order specifically as a stop or hold open
- Degree of opening is fully adjustable and can be adapted to changing needs
- Complete screw packet kit for installation in wood or metal door and frame
- For security areas, Torx® screws available for exposed fasteners
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening (except 1ADJ for center hung 30-36" door which is 105°)
- 1-3/4" minimum door thickness, for thicker doors consult factory
- 1-3/16" square channel
- Stop function UL listed for fire door assemblies
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



### Door Opening Chart (in inches)

| Butts<br>Offset<br>Pivots | Center<br>Hung<br>Pivots | Model Number |          |
|---------------------------|--------------------------|--------------|----------|
|                           |                          | H.O.         | Stop     |
| *24 - 28                  | —                        | 1ADJ-126     | 1ADJ-136 |
| 28-1/16 - 33              | 30 - 36                  | 1ADJ-226     | 1ADJ-236 |
| 33-1/16 - 38              | 36-1/16 - 41             | 1ADJ-326     | 1ADJ-336 |
| 38-1/16 - 43              | 41-1/16 - 46             | 1ADJ-426     | 1ADJ-436 |
| 43-1/16 - 48              | 46-1/16 - 50             | 1ADJ-526     | 1ADJ-536 |

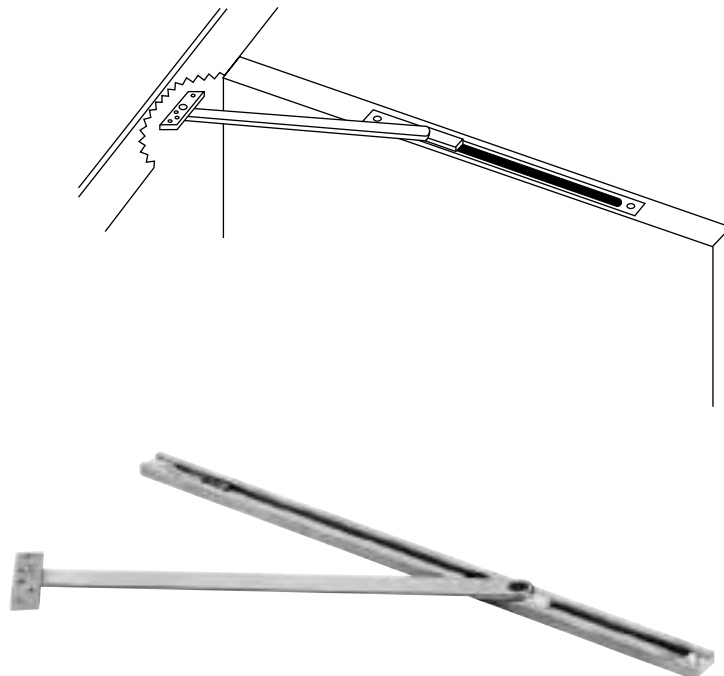
| ANSI No.                       |        |        |
|--------------------------------|--------|--------|
| Shipping<br>Weight<br>4.5 lbs. | H.O.   | Stop   |
|                                | C01511 | C01541 |

**\*Butt hung only on this size door. No swing clear hinges.**

6ADJ SERIES

**Product Description & Features**

- Adjustable low profile
- Interior or exterior doors
- Doors may be single or double acting
- Non-handed
- Recommended for moderate traffic, medium weight doors
- Low profile concealed channel design for installation in aluminum doors
- Heavy shock absorber spring provides 5-7° compression before dead stop
- Degree of opening is fully adjustable and can be adapted to changing needs
- Complete screw packet for installation in wood or metal door and frame
- For security areas, Torx® screws available for exposed fasteners
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening (except 6ADJ for center hung 30-36" door which is 105°)
- 1-3/4" minimum door thickness, for thicker doors consult factory
- Channel is 1-1/4" wide x 1/2" deep
- UL listed for fire door assemblies
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory.
- Available in stop function only



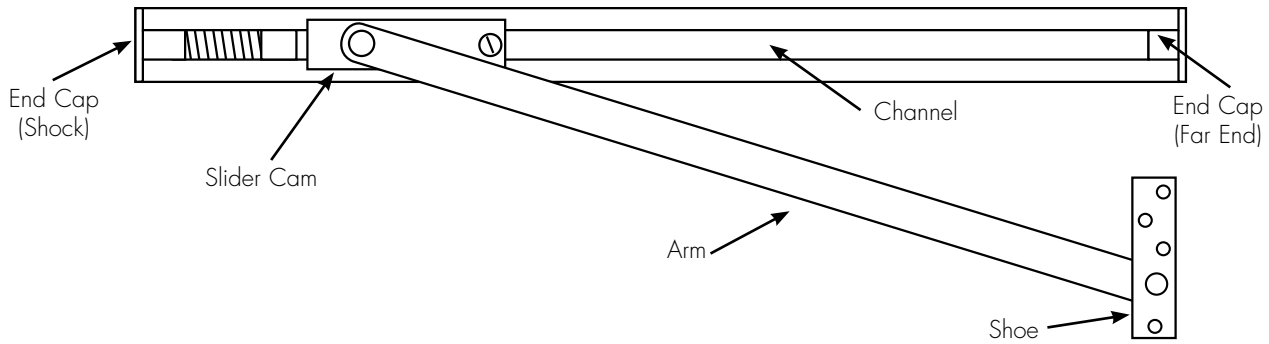
**Chart (in inches)**

| Butts<br>Offset<br>Pivots | Center<br>Hung<br>Pivots | Model Number |
|---------------------------|--------------------------|--------------|
|                           |                          | Stop         |
| *24 - 28                  | —                        | 6ADJ-136     |
| 28-1/16 - 33              | 30 - 36                  | 6ADJ-236     |
| 33-1/16 - 38              | 36-1/16 - 41             | 6ADJ-336     |
| 38-1/16 - 43              | 41-1/16 - 46             | 6ADJ-436     |
| 43-1/16 - 48              | 46-1/16 - 50             | 6ADJ-536     |

|                                |        |
|--------------------------------|--------|
| ANSI No.                       |        |
| Shipping<br>Weight<br>4.5 lbs. | Stop   |
|                                | C01541 |

**\*Butt hung only on this size door. No swing clear hinges.**





| End Caps #1, 2, 9 & 10 only |                  |               |
|-----------------------------|------------------|---------------|
| #1 & #9                     | Shock End Block  | 6003          |
|                             | Far End Block    | 6004          |
| #2 & #5                     | Far End Block    | 5059 (2 req.) |
| #10                         | Far End Block    | 5011 (2 req.) |
| Screw Kits                  |                  |               |
| #1                          | Stop             | 6487-*        |
|                             | Hold Open        | 6998N*        |
| #1ADJ                       | Stop and Holder  | 6487-*        |
| #2                          | Friction or Stop | 5999-*        |
| #6                          | Stop             | 6487-*        |
| #7                          | Friction or Stop | 3880-XXXXA    |
| #8                          | Friction or Stop | 5897-*        |
| #9                          | Friction or Stop | 6468-*        |
|                             | Hold Open        | 6997N*        |
| #9ADJ                       | Stop and Holder  | 6468-*        |
| #10 & #55                   | Friction or Stop | 5998-*        |

**Arm Assemblies** (includes arm, shoe and slider cam)  
List as noted in charts below.

eg. 1-236 in 630 would be 1-236R in 630  
55-426 in 652 would be 55-426R in 652

**Components for arm assemblies may not be ordered separately**

|      |      |      |          |   |        |
|------|------|------|----------|---|--------|
| 1    | Dash | Size | Function | R | Finish |
| 1ADJ | Dash | Size | Function | R | Finish |
| 2    | Dash | Size | Function | R | Finish |
| 5    | Dash | Size | Function | R | Finish |
| 6    | Dash | Size | Function | R | Finish |
| 6ADJ | Dash | Size | Function | R | Finish |
| 9    | Dash | Size | Function | R | Finish |
| 9ADJ | Dash | Size | Function | R | Finish |
| 10   | Dash | Size | Function | R | Finish |
| 55   | Dash | Size | Function | R | Finish |

**Adapter Kits**

|    |                             |          |
|----|-----------------------------|----------|
| 2  | Hold Open, Friction Adapter | 5012-PKG |
| 10 | Hold Open, Friction Adapter | 5012-PKG |

\*specify finish

# Electromagnetic Door Holder/Releases

Door Control for Fire and Smoke Barrier Doors and Other Remote Door Release Applications



**RIXSON®**  
**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

# ELECTROMAGNETIC DOOR HOLDER/RELEASES

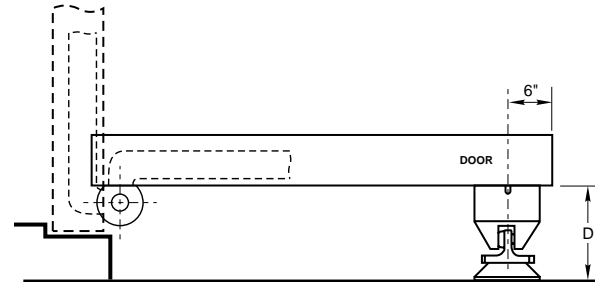
## HOW TO SELECT PRODUCT

Prior to determining the product you will need to use, begin by looking at the door and perpendicular wall relationship.

- Measure the distance. That will give you the "D" dimension. Select from chart A.

### CHART A

| If the distance from wall to door is: "D" | Use         |
|-------------------------------------------|-------------|
| 7/16" (11)                                | 989         |
| 1-13/16" (46)                             | 990         |
| 2-5/8" (67)                               | 997         |
| 3-5/8" (92)                               | 998         |
| 3-3/4" (95)                               | 994         |
| 4-1/8" (105)                              | 996         |
| 4-3/8" (111)                              | 999         |
| 5-1/8" (130)                              | 998 x XK996 |
| 6-5/8" (168) min. distance from wall      | 980         |
| 6-3/4" distance between doors             | 981         |



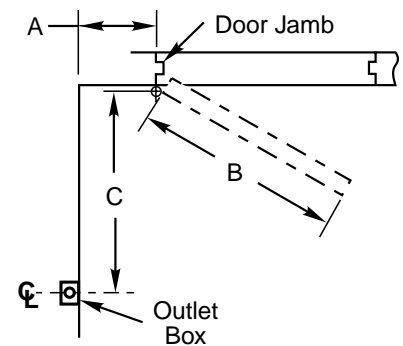
900 base has a minimum: 1-1/2" (38mm) extension. Maximum: 10" using combination of spacers [1/2" (13mm), 3/4" (19mm), etc.] Longer armature projections may encourage abuse and/or the weight of the extended rods will pull off the face of the door.

### CHART B

Junction box location should always be as close as possible to the door pull/lever/knob.

A position horizontally farther toward the hinge edge will dramatically lessen the hold open force of the magnet.

A mounting too high on the vertical plane (top of door) will make it more difficult to pull out of hold open.




Refer to Diagram B

- How far is the centerline of the pivot/hinge from the wall? "A" dimension
- What is width of door? "B" dimension
- At what degree is the door opening? If this dimension is more than 100° consult template. The armature has a few degrees of adjustment but, before proceeding verify with the product template
- Dimension "C" is from pivot point to junction box centerline

## FEATURES

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- 25 to 40 pounds holding power, except where noted
- Fail-safe operation; power failure releases door to close
- Positive release button initiates closing motion
- Tri-volt coils on most models see 
- Spotting template included
- For stronger holding forces (50-55 lbs.) specify model and voltage. Not available in tri-volt coils

## CERTIFICATIONS

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All Rixson® electromagnetic door holder/releases are in compliance with ANSI/BHMA A156.15 Standards. See individual products for sub sections.

- All units UL/ULC listed
- All units listed by California State Fire Marshal

## LIMITED WARRANTY

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Rixson® electromagnetic door holder/releases are warranted for 2 years for defect. See Rixson® Price Book for specific details of the limited warranty.

## SPECIFICATIONS

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All electromagnetic door holder/releases shall be supplied by architectural hardware supplier. All units shall have a single coil to accommodate 12VDC, 24VAC, 24VDC and 120VAC. The coils shall be independently wound, employing a fuse. Armatures will have positive release button.

# ELECTROMAGNETIC DOOR HOLDER/RELEASES FLOOR MOUNTED

## MODEL 980

### Application

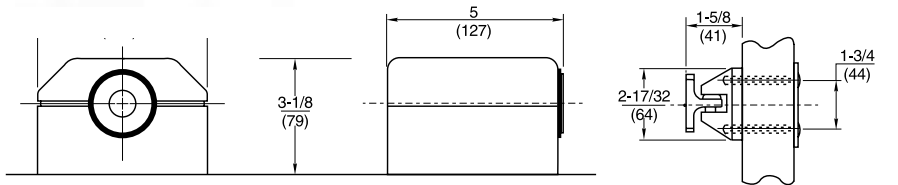
- Floor Mount
- Single Door
- ANSI/C00021

### Product Description & Features

- Concealed Wiring
- Total Floor Space Required: 6-5/8" (168mm)
- Mounting Requirements: Conduit connects directly to floor plate

### Technical Information

- Voltage and Current:
  - 120VAC, 60 Hz., .020 amp
  - 24VAC/DC, 60 Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .017 amp
  - 24VAC, 60Hz .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp
- Shipping Weight: 4 lbs. (1.8 kg)



## MODEL 981

### Application

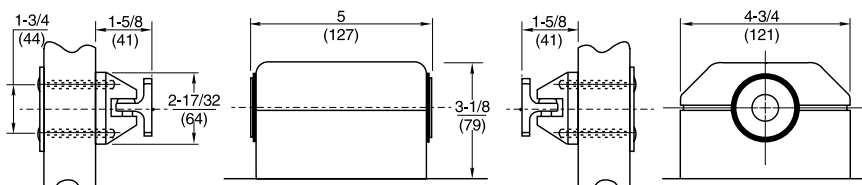
- Floor Mount
- 2 Back-to-Back Doors
- ANSI/C00031

### Product Description & Features

- Concealed Wiring
- Floor Space Required: 8-1/4" (210mm)
- Mounting Requirements: Conduit connects directly to floor plate

### Technical Information

- Voltage and Current:
  - 120VAC, 60Hz., .040 amp
  - 24VAC/DC, .040 amp
  - 12VDC, .080 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .034 amp
  - 24VAC, 60Hz .016 amp
  - 24VDC, .036 amp
  - 12VDC, .360 amp
  - 240VAC, 50/60Hz. .018 amp
- Shipping Weight: 4-3/4 lbs. (2.2 kg)



MODEL 989

**Application**

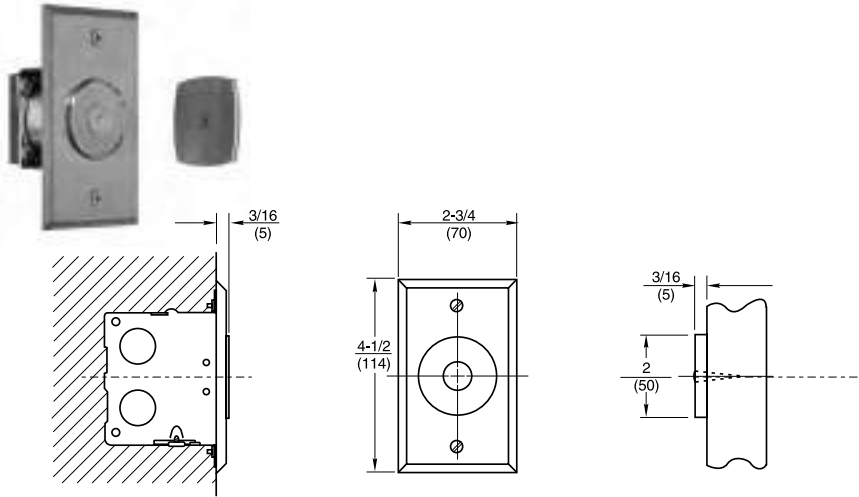
- Wall Mount
- Low Profile
- Concealed Wiring
- ANSI/C00011

**Product Description & Features**

- Total Projection: 7/16" (11mm)
- Mounting Requirements: 2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened

**Technical Information**

- Voltage and Current:
  - 120VAC, 60Hz., .020 amp
  - 24VAC/DC, 60Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz. .017 amp
  - 24VAC, 60Hz. .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2 lbs. (0.9 kg)



MODEL 990

**Application**

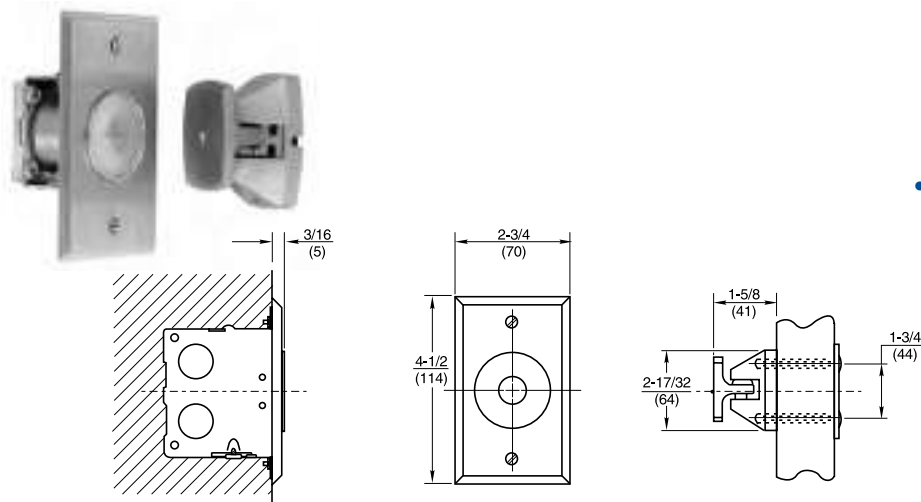
- Wall Mount
- Low Profile
- Concealed Wiring
- ANSI/C00011

**Product Description & Features**

- Total Projection: 1-13/16" (46mm)
- Mounting Requirements: 2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened

**Technical Information**

- Voltage and Current:
  - 120VAC, 60Hz., .020 amp
  - 24VAC/DC, 60Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz. .017 amp
  - 24VAC, 60Hz. .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2 lbs. (0.9 kg)



MODEL 994

**Application**

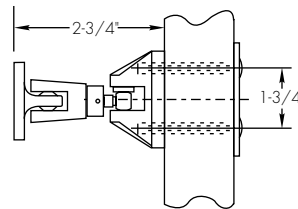
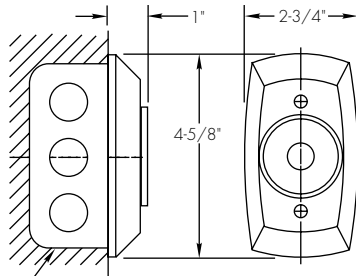
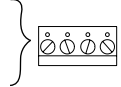
- Wall Mount
- Adjustable Armature
- Concealed Wiring
- ANSI/C00011

**Product Description & Features**

- Total Projection: 3-3/4" (95mm)
- Adjustable armature rotation up and down, back and forth for better alignment.
- Cannot be use with 900 base or spacers.
- Can be used without adjustment piece making it a model 997
- Mounting Requirements:  
2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened

**Technical Information**

- Voltage and Current:
  - 120VAC, 60Hz., .020 amp
  - 24VAC/DC, 60Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz. .017 amp
  - 24VAC, 60Hz. .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2 lbs. (0.9 kg)



MODEL 996

**Application**

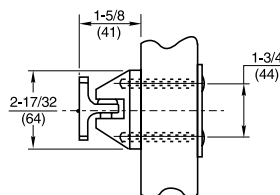
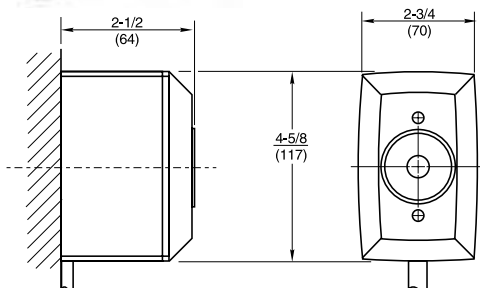
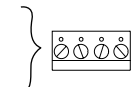
- Wall Mount
- Surface Wiring
- ANSI/C00011

**Product Description & Features**

- Total Projection: 4-1/8" (105mm)
- Mounting Requirements:  
1-1/2" (38mm) deep adapter housing
- Wall must be properly reinforced

**Technical Information**

- Voltage and Current:
  - 120VAC, 60Hz., .020 amp
  - 24VAC/DC, 60Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz. .017 amp
  - 24VAC, 60Hz. .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp
- Shipping Weight: 3 lbs. (1.4 kg)



# ELECTROMAGNETIC DOOR HOLDER/RELEASES WALL MOUNTED

## MODEL 997

### Application


- Wall Mount
- Concealed Wiring
- ANSI/C00011

### Product Description & Features

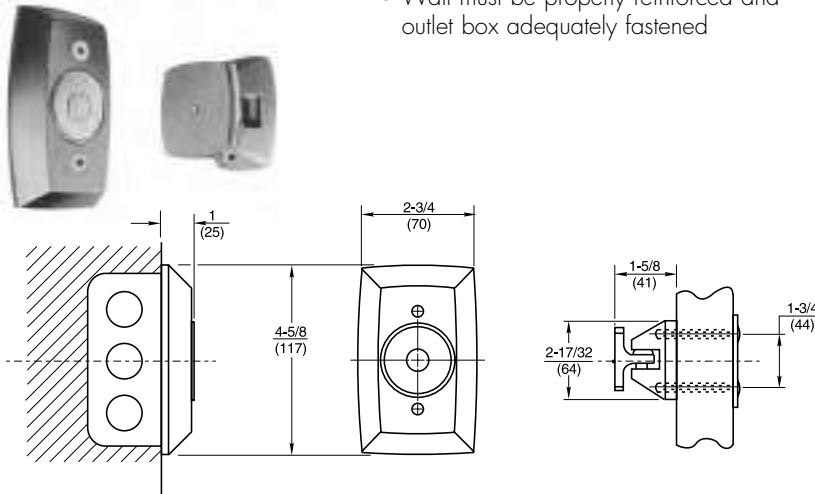
- Total Projection: 2-5/8" (67mm)
- Mounting Requirements: 2" x 4" x 1-3/4" (51 x 102 x 45mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened

### Technical Information

- Voltage and Current:
 

|                           |                                                                                       |
|---------------------------|---------------------------------------------------------------------------------------|
| 120VAC, 60Hz., .020 amp   | }  |
| 24VAC/DC, 60Hz., .020 amp |                                                                                       |
| 12VDC, .040 amp           |                                                                                       |
- For 50-55 lbs. of holding force, specify voltage
 

|                           |
|---------------------------|
| 120VAC, 60Hz .017 amp     |
| 24VAC, 60Hz .080 amp      |
| 24VDC, .068amp            |
| 12VDC, .180amp            |
| 240VAC, 50/60Hz. .009 amp |
- Shipping Weight: 2 lbs. (0.9 kg)



## MODEL 998

### Application


- Wall Mount
- Concealed Wiring
- ANSI/C00011

### Product Description & Features

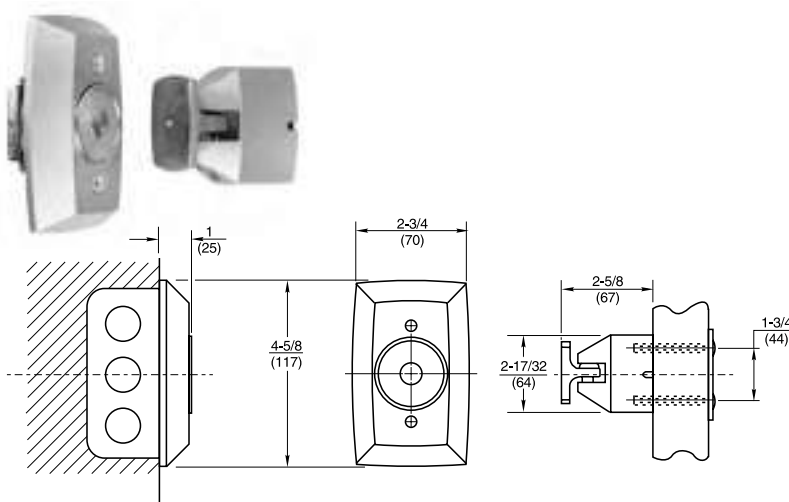
- Total Projection: 3-5/8" (92mm)
- Mounting Requirements: 2" x 4" x 1-3/4" (51 x 102 x 45mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened

### Technical Information

- Voltage and Current:
 

|                           |                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------|
| 120VAC, 60Hz., .020 amp   | }  |
| 24VAC/DC, 60Hz., .020 amp |                                                                                         |
| 12VDC, .040 amp           |                                                                                         |
- For 50-55 lbs. of holding force, specify voltage
 

|                           |
|---------------------------|
| 120VAC, 60Hz .017 amp     |
| 24VAC, 60Hz .080 amp      |
| 24VDC, .068amp            |
| 12VDC, .180amp            |
| 240VAC, 50/60Hz. .009 amp |
- Shipping Weight: 2-1/2 lbs. (1.1 kg)







# ACCESS CONTROL » PRODUCTS

MAG LOCKS

ELECTROMECH  
LOCKS

SPECIALTY LOCKS

EXIT DEVICES

ENTRY DEVICES

ACCESS CONTROL  
ACCESSORIES

POWER SUPPLIES

POWER TRANSFER

POWER  
ACCESSORIES

RESOURCES

**SECURITRON®**  
ASSA ABLOY

ASSA ABLOY, the global leader in door opening solutions



## PRODUCT FEATURES

- Redundant switches
- Release triggered by either 1/8" mechanical movement or reliable touch sense technology
- Optional MicroShield Anti-microbial coating ideal for infection control in health care environments
- Resistant to interference from radio frequency or electromagnetic frequency and external impact/bounce attempts
- All metal construction
- Can be field cut to fit non-standard door widths
- 16 ft. [4.8m] 22AWG 6 conductor cable and armored door cord included
- Automatic dual voltage 12VDC or 24VDC
- Resists electrostatic discharge up to 27,000 volts
- MagnaCare Lifetime Replacement No Fault Warranty

## PRODUCT OPTIONS

- 36" Length
- 42" Length
- 48" Length

- **EL-** Prefix any model for ElectroLynx® ready
- **-I** Add to any model for Illuminated via fiber optics
- **-A** Add to any model for MicroShield Anti-microbial coating
- Through-bolt kit for doors 1-3/4" to 2-1/4" thick

## SPECIFICATIONS

- CAN/ULC-S533 Listed
- ANSI/UL 294 Listed
- CSA-C22.2 No.205 Listed
- NFPA 101
- Patent pending

### Electrical:

Dual Sense Bar Only - 24mA at 12VDC or 24VDC

Dual Sense Bar with Illumination - 44mA at 12VDC or 24VDC

### Operating Temperature:

+32 to +120F [0 to +49C]  
Recommended for indoor use only

### Shipping Weight:

6lbs [2.72kg] to 8lbs [3.63kg]  
depending on length

### Finishes:

**BK** - Black anodized  
**CL** - Clear anodized



# DSB

## Dual Sense Bar

### Dependable Touch and Mechanical Release for Superior Safety and Redundancy

The dependable DSB Dual Sense Bar is the most reliable exit device available for magnetically locked, non-fire-rated doors. Its unique design delivers superior fault tolerance with two independent, redundant switch circuits for releasing the lock. The DSB can be installed on all types of interior metal, aluminum or wood doors. Meets "no special tools or knowledge" criteria required by code.

## MODELS

PART # | Description

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| <b>DSB-BK</b>     | DSB - 36", Black Anodized                                |
| <b>DSB-BK42</b>   | DSB - 42", Black Anodized                                |
| <b>DSB-BK48</b>   | DSB - 48", Black Anodized                                |
| <b>DSB-BKA</b>    | DSB - 36", Black Anodized, Anti-Microbial                |
| <b>DSB-BKA42</b>  | DSB - 42", Black Anodized, Anti-Microbial                |
| <b>DSB-BKA48</b>  | DSB - 48", Black Anodized, Anti-Microbial                |
| <b>DSB-BKI</b>    | DSB - 36", Illuminated, Black Anodized                   |
| <b>DSB-BKI42</b>  | DSB - 42", Illuminated, Black Anodized                   |
| <b>DSB-BKI48</b>  | DSB - 48", Illuminated, Black Anodized                   |
| <b>DSB-BKIA</b>   | DSB - 36", Illuminated, Black Anodized, Anti-Microbial   |
| <b>DSB-BKIA42</b> | DSB - 42", Illuminated, Black Anodized, Anti-Microbial   |
| <b>DSB-BKIA48</b> | DSB - 48", Illuminated, Black Anodized, Anti-Microbial   |
| <b>DSB-CL</b>     | DSB - 36", Clear Anodized                                |
| <b>DSB-CL42</b>   | DSB - 42", Clear Anodized                                |
| <b>DSB-CL48</b>   | DSB - 48", Clear Anodized                                |
| <b>DSB-CLA</b>    | DSB - 36", Clear Anodized, Anti-Microbial                |
| <b>DSB-CLA42</b>  | DSB - 42", Clear Anodized, Anti-Microbial                |
| <b>DSB-CLA48</b>  | DSB - 48", Clear Anodized, Anti-Microbial                |
| <b>DSB-CLI</b>    | DSB - 36", Illuminated, Clear Anodized                   |
| <b>DSB-CLI42</b>  | DSB - 42", Illuminated, Clear Anodized                   |
| <b>DSB-CLI48</b>  | DSB - 48", Illuminated, Clear Anodized                   |
| <b>DSB-CLIA</b>   | DSB - 36", Illuminated, Clear Anodized, Anti-Microbial   |
| <b>DSB-CLIA42</b> | DSB - 42", Illuminated, Clear Anodized, Anti-Microbial   |
| <b>DSB-CLIA48</b> | DSB - 48", Illuminated, Clear Anodized, Anti-Microbial   |
| <b>DSB-TDM</b>    | Through Door Mounting Kit for DSB                        |
| <b>EL-DSB-CL</b>  | Dual Sense Bar - 36", Clear Anodized, ElectroLynx        |
| <b>EL-DSB-CLA</b> | Dual Sense Bar - 36", Clear, ElectroLynx, Anti-Microbial |
| <b>TCP-BK</b>     | Touch Bar Cover Plates - Set of 2, Black Anodized        |
| <b>TCP-CL</b>     | Touch Bar Cover Plates - Set of 2, Clear Anodized        |



DUAL VOLTAGE

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### PRODUCT FEATURES

- Can be field cut to accommodate non-standard openings up to 48"
- Activates a DPST 2 Amp rated relay when touched (no mechanical movement) which will allow free egress, or initiates the delay on an exit delay timer
- Backup push button
- 16 ft. [4.8m] 22AWG 6 conductor cable and armored door cord included
- Automatic dual voltage 12VDC/24VDC
- Available ElectroLynx® ready
- MagnaCare Lifetime Replacement No Fault Warranty

### PRODUCT OPTIONS

- 36" Length
- 42" Length
- 48" Length
- EL- Prefix any model for ElectroLynx® ready
- D- Prefix any model for dummy bar with no release function

- Through-bolt kit works on doors up to 2-1/4" thick
- Cover plates for retrofit of competitor products
- Trailing edge timer

### SPECIFICATIONS

- ANSI/UL 294 Listed
- CSA-C22.2 No.205 Listed
- CSFM – California State Fire Marshal Approved
- MEA- City of New York Approved
- CE: EN 50091-1, EN 61000-6-2 Approved

#### Electrical:

40mA at rest; 25mA releasing at 12VDC or 24VDC

#### Operating Temperature:

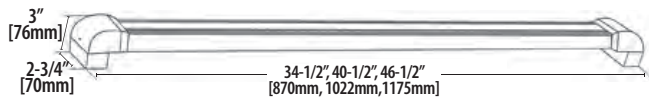
+32 to +110F [0 to +43C]  
Recommended for indoor use

#### Shipping Weight:

7lbs [3.18kg] to 9lbs [4.08kg]  
depending on length

#### Finishes:

BK - Black anodized  
CL - Clear anodized



TCP covers unwanted mounting holes from previously installed exit bars



# TSB

## Touch Sense Bar

### Touch-Triggered Release for Reliable Egress

The TSB Touch Sense Bar provides touch-triggered release of magnetically locked, non-fire-rated doors. Touching the bar, even through light gloves or clothing, triggers an electronic sensor that releases the lock. For indoor use only, the TSB installs easily on all types of metal, aluminum or wood frame doors. Meets "no special tools or knowledge" criteria in code requirements.

### » MODELS

PART # | Description

|                     |                                                             |
|---------------------|-------------------------------------------------------------|
| <b>TSB-BK</b>       | TSB - 36", Black Anodized                                   |
| <b>TSB-BK-42</b>    | TSB - 42", Black Anodized                                   |
| <b>TSB-BK-48</b>    | TSB - 48", Black Anodized                                   |
| <b>TSB-BKT</b>      | TSB - 36" w/ Trailing Edge Timer [3 sec], Black Anodized    |
| <b>TSB-BKT-48</b>   | TSB - 48" w/ Trailing Edge Timer [3 sec], Black Anodized    |
| <b>TSB-CL</b>       | TSB - 36", Clear Anodized                                   |
| <b>TSB-CL-42</b>    | TSB - 42", Clear Anodized                                   |
| <b>TSB-CL-48</b>    | TSB - 48", Clear Anodized                                   |
| <b>TSB-CLT</b>      | TSB - 36" w/ Trailing Edge Timer [3 sec], Clear Anodized    |
| <b>TSB-CLT-42</b>   | TSB - 42" w/ Trailing Edge Timer [3 sec], - Clear Anodized  |
| <b>DTSB-BK</b>      | Dummy TSB Bar - 36" w/ End Caps & Fasteners, Black Anodized |
| <b>DTSB-BK-42</b>   | Dummy TSB Bar - 42" w/ End Caps & Fasteners, Black Anodized |
| <b>DTSB-BK-48</b>   | Dummy TSB Bar - 48" w/ End Caps & Fasteners, Black Anodized |
| <b>DTSB-CL</b>      | Dummy TSB Bar - 36" w/ End Caps & Fasteners, Clear Anodized |
| <b>DTSB-CL-42</b>   | Dummy TSB Bar - 42" w/ End Caps & Fasteners, Clear Anodized |
| <b>DTSB-CL-48</b>   | Dummy TSB Bar - 48" w/ End Caps & Fasteners, Clear Anodized |
| <b>EL-TSB-BK</b>    | TSB - 36", Black Anodized, ElectroLynx                      |
| <b>EL-TSB-BK-42</b> | TSB - 42", Black Anodized, ElectroLynx                      |
| <b>EL-TSB-BK-48</b> | TSB - 48", Black Anodized, ElectroLynx                      |
| <b>EL-TSB-CL</b>    | TSB - 36", Clear Anodized, ElectroLynx                      |
| <b>EL-TSB-CL-42</b> | TSB - 42", Clear Anodized, ElectroLynx                      |
| <b>EL-TSB-CL-48</b> | TSB - 48", Clear Anodized, ElectroLynx                      |
| <b>TCP-BK</b>       | Touch Bar Cover Plates - Set of 2, Black Anodized           |
| <b>TCP-CL</b>       | Touch Bar Cover Plates - Set of 2, Clear Anodized           |
| <b>TSB-TDM</b>      | Through Door Mounting Kit for TSB-3                         |



DUAL VOLTAGE

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### PRODUCT FEATURES

- DPST 2 Amp rated relay
- Internal 0-25 second timer
- Built-in redundant button
- MagnaCare Lifetime Replacement No Fault Warranty

#### Dimensions:

3-3/16" L x 1-1/2" D x 5-3/4" H

#### Electrical:

40mA at rest; 25mA releasing at 12VDC or 24VDC

#### Operating Temperature:

+32 to +110F [0 to +43C]  
Indoor use only

#### Shipping Weight:

1.5lbs [0.68kg]

#### Finish:

US32D/630 - Satin Stainless Steel



# SP-1

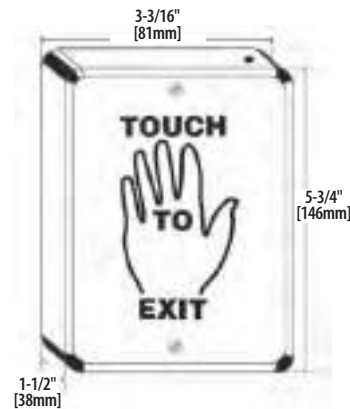
## Touch Sense Plate

### Touch Sense Technology in a Wall-Mount Request to Exit Plate

The SP-1 uses touch sensing technology to create a push plate with no moving parts. For indoor use only, the unit is oversized to cover a single gang cutout. Ideal to assist with ADA compliance, the unit includes a three-part vinyl "Touch to Exit" decal. A red LED is incorporated into the backbox.

### » MODELS

| PART # | Description                               |
|--------|-------------------------------------------|
| SP-1   | Touch Sensor Plate                        |
| SP-1L  | Label Touch Plate [SP-1]                  |
| SP-1LH | Label Touch Plate [SP-1] - Handicap Decal |



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### PB SERIES » MEDIUM ROUND ILLUMINATED

- 7 Amp rated contacts
- Includes interchangeable green and red lenses
- Red LED on plate
- Stainless Steel single gang plate: 4-1/2" x 2-3/4" [114mm x 70mm]
- UL outdoor rated
- MagnaCare Lifetime Replacement No Fault Warranty

#### » MODELS

PART # | Description

|            |                                                       |
|------------|-------------------------------------------------------|
| <b>PB</b>  | PB - Momentary, SG, DPST, Illuminated w/ Red/Grn Lens |
| <b>PBA</b> | PB - Alternate, SG, DPST, Illuminated w/ Red/Grn Lens |



LISTED



### PB2 SERIES » LARGE SQUARE

- Easy to read 2" size
- 5 Amp rated contacts
- Includes interchangeable green, red and blue ADA lenses
- Stainless steel single gang plate: 4-1/2" x 2-3/4" [114mm x 70mm]
- MagnaCare Lifetime Replacement No Fault Warranty

#### Product Options

- Standard or Illuminated
- Single Pole-Double Throw
- Double Pole-Double Throw
- Red LED on plate

#### » MODELS

PART # | Description

|               |                                                            |
|---------------|------------------------------------------------------------|
| <b>PB2</b>    | PB - Momentary, Single Gang, Illuminated, Grn/Red/Handicap |
| <b>PB22</b>   | PB - 2", Sq Grn Mom, DP w/Light - SG, Green/Red/Handicap   |
| <b>PB2E</b>   | PB - Momentary, Single Gang, Green/Red/Handicap            |
| <b>PB2-LK</b> | Illumination Kit for PB2E, PB5E, EEB2 Series Push Buttons  |

# PB

## Push Buttons

### Securiton® Quality with a Wide Range of Options for Size, Color and Function

High-quality Securiton Push Buttons are available in a broad selection of colors, sizes, switch types and outputs. With a wide range of options for interchangeable lenses and field convertible outputs, Securiton push buttons can release any maglock, alone or in conjunction with door closers and other hardware.



PB3

PB3E

PB3EN

PB3N

### PB3 SERIES » ASSORTED SIZES AND COLORS WITH A UNIFORM LOOK

- 3 Amp rated contacts
- Includes interchangeable green and red lenses
- Field convertible from DPST to DPDT
- Stainless steel single gang plate: 4-1/2" x 2-3/4" [114mm x 70mm]
- Stainless steel narrow stile plate: 4-1/2" x 1-3/4" [114mm x 44mm]
- Surface mount: 3-7/8" x 2" [98mm x 51mm]
- Red LED on plate
- MagnaCare Lifetime Replacement No Fault Warranty

#### » MODELS

PART # | Description

|               |                                                          |
|---------------|----------------------------------------------------------|
| <b>PB3</b>    | PB - Momentary, Single Gang, Illuminated, Green/Red Lens |
| <b>PB3A</b>   | PB - Alternate, Single Gang, Grn/Red Lens                |
| <b>PB3AN</b>  | PB - Alternate, Narrow, Grn/Red Lens                     |
| <b>PB3E</b>   | PB - Momentary, Single Gang, Grn/Red Lens                |
| <b>PB3EA</b>  | PB - Alternate, Single Gang, Grn/Red Lens                |
| <b>PB3EAN</b> | PB - Alternate Narrow, Grn/Red Lens                      |
| <b>PB3EAR</b> | PB - Remote Alternate, Surface Mount Green/Red Lens      |
| <b>PB3EN</b>  | PB - Momentary, Narrow Grn/Red Lens                      |
| <b>PB3ER</b>  | PB - Remote Momentary, Surface Mount Grn/Red Lens        |
| <b>PB3-LK</b> | Illumination Kit, Grn/Red for PB3E/EEB3N Series          |
| <b>PB3N</b>   | PB - Momentary Narrow, Green/Red Lens                    |

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# PB

## Push Buttons Continued



### PB4L SERIES » VANDAL-RESISTANT STAINLESS BUTTON WITH ILLUMINATED HALO

- 4 Amp rated contacts
- Illuminated green Halo-style button
- Bi-color LED
- Vandal and tamper resistant
- Stainless steel single gang plate: 4-1/2" x 2-3/4" [114mm x 70mm]
- Stainless steel narrow stile plate: 4-1/2" x 1-3/4" [114mm x 44mm]
- MagnaCare Lifetime Replacement No Fault Warranty

#### » MODELS

PART # | Description

|                 |                                                          |
|-----------------|----------------------------------------------------------|
| <b>PB4L-2</b>   | PB [DP], Momentary, Single Gang, Green Illuminated Halo  |
| <b>PB4LA-2</b>  | PB [DP], Alternate, Single Gang, Green Illuminated Halo  |
| <b>PB4LAN-2</b> | PB [DP], Alternate, Narrow Stile, Green Illuminated Halo |
| <b>PB4LN-2</b>  | PB [DP], Momentary, Narrow Stile, Green Illuminated Halo |



### PB5 SERIES » EASY TO READ LARGE ROUND

- 5 Amp rated contacts
- Includes interchangeable green, red and blue ADA lenses
- Stainless Steel single gang plate: 4-1/2" x 2-3/4" [114mm x 70mm]
- Field convertible from DPST to DPDT
- MagnaCare Lifetime Replacement No Fault Warranty

#### » MODELS

PART # | Description

|               |                                                                 |
|---------------|-----------------------------------------------------------------|
| <b>PB5</b>    | PB - 2" Round, Momentary, DPST, w/Light, SG, Red/Grn/Handicap   |
| <b>PB5E</b>   | PB - 2" Round, Momentary, DPST, w/o Light, SG, Red/Grn/Handicap |
| <b>PB2-LK</b> | Illumination Kit for PB2E, PB5E, EEB2 Series Push Buttons       |

# MAGNACARE® LIFETIME REPLACEMENT WARRANTY

## The Industry's Best Warranty

LIFETIME - NO FAULT - TOMORROW

- MagnaCare covers every product that Securitron® manufactures. No product registration is required.
- Your product will be replaced FOREVER, for any reason, including but not limited to installation error, vandalism or act of God.
- Replacement product is shipped next day air at Securitron's expense if needed.

At Securitron®, we pay special attention to the needs of our customers. Our 1-800-MAGLOCK sales and service support line puts you in touch with our knowledgeable and friendly team to assist you with the smallest detail, or the most difficult application, including wiring diagrams. In 1999, Securitron introduced the first "no strings attached" warranty program called MagnaCare. MagnaCare replaces any product that we manufacturer, for any failure reason, for the life of the installation.

*Vista Series maglocks are covered by VistaCare One Year No Fault Warranty.  
BPSS and R100-1H are protected by SecuriCare Three Year No Fault Warranty.*

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### PRODUCT FEATURES

- Active microwave motion sensing using Doppler radar—more reliable than infrared sensors
- Adjustable sensing zone from 4" to 24" helps screen out incidental traffic
- Microwave sensing FCC certified for use in general and medical environments
- Touchless activation for hands-free operation, reduces transmission of germs
- Pulse mode to initiate action or toggle mode to provide on/off switch
- Offered in a single-gang or double-gang model
- Mounting ring included or install in standard plastic or metal gang box
- Water resistant—foam gasket included
- Compatible with Securiton WBB Weather Back Box and WCC Weather Cover-Clear
- MagnaCare Lifetime Replacement No Fault Warranty

### SPECIFICATIONS

- Electromagnetic compatibility according to 2004/108/EC
- FCC: G9B-MS08
- IC: 4680A-MS08

#### Dimensions:

Single gang faceplate:

4-1/2" x 2-3/4"

Double gang faceplate:

4-1/2" x 4-1/2"

#### Current:

Self-sensing 12 or 24V DC or AC input (± 10%)

Maximum power consumption: less than 1.5 Watts

1 amp SPDT contact can be operated in toggle or pulse mode

Pulse output: 0.5 seconds

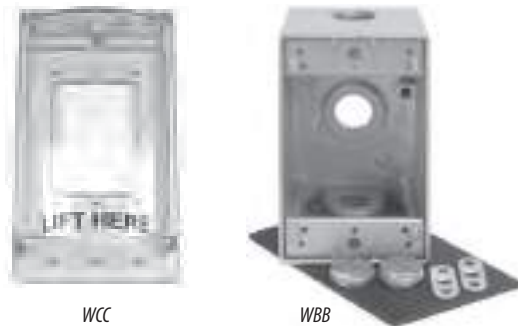
#### Operating Temperature:

-4 to +131F [-20 to +55C]

#### Shipping Weight:

0.5 lbs

## Need an Outdoor Solution?



WCC and WBB allow the Wave Sense Switch to be mounted in outdoor locations not directly exposed to rain or snow

# WSS

## Wave Sense® Switch

### No-Touch Switch for Hands-Free Activation

The Wave Sense Switch features a new class of motion sensing technology for hands-free, contactless switch activation. Use for request to exit (REX), activation or on/off switching to trigger a variety of access control devices in place of a push plate or push button.

### » MODELS

PART # | Description

|        |                                                     |
|--------|-----------------------------------------------------|
| WSS-W1 | Wave Sense Switch—with white, single gang faceplate |
| WSS-W2 | Wave Sense Switch—with white, double gang faceplate |
| WBB    | Weather Back Box                                    |
| WCC    | Weather Cover-Clear                                 |



DUAL VOLTAGE

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### PRODUCT FEATURES

- Single gang, stainless steel plate with low voltage mounting ring
- 12 key illuminated 3x4 keypad
- True 10-digit operation (10 digits plus \* and # keys)
- 99 user code capability
- Easy programming from the keypad
- Passage mode and Lockout mode
- Configurable audible keystroke echo
- Red, green and yellow LEDs for status and programming feedback
- Fail secure or fail safe-capable
- Easy to install with simple hand tools
- Accepts 12V or 24VAC or DC current
- 5 Amp SPDT timed, control relay output
- Request to Exit (REX) input
- MagnaCare Lifetime Replacement No Fault Warranty

### PRODUCT OPTIONS

- Weather-resistant cover
  - Weather-resistant backbox
- Dimensions:**  
2-3/4"W x 4-1/2"H x 5/32"D
- Electrical:**  
70mA at 12VDC or 24VDC  
Maximum 30VDC or 300VAC switched voltage
- Operating Temperature:**  
-10 to +140F [-23 to +60C]  
Primarily for indoor applications
- Shipping Weight:**  
1lb [0.45kg]
- Finishes:**  
US32B/630 - Satin Stainless Steel

## Need an Outdoor Solution?



WCC



WBB

WCC and WBB allow DK-12 keypad to be mounted in outdoor locations not directly exposed to rain or snow

# DK-12

## Digital Keypad

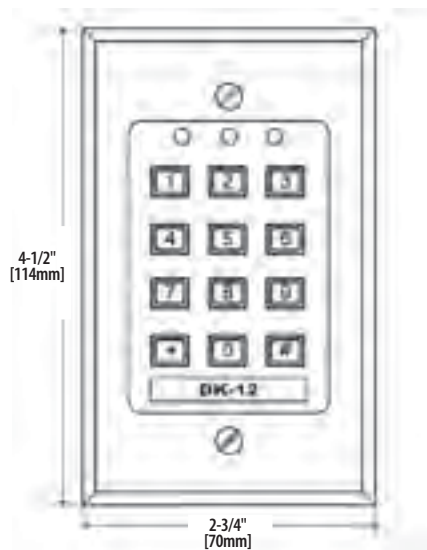
### All-in-One Keypad System for Single-Door Traffic Control

The DK-12 standalone keypad and controller is ideal for lower security requirements such as traffic control. Easy to install and easy to program, the one-piece DK-12 supports 99 user codes, including Passage mode and Lockout mode.

### » MODELS

PART # | Description

|              |                                                         |
|--------------|---------------------------------------------------------|
| <b>DK-12</b> | Digital Keypad System w/ Illuminated Keys - Single Gang |
| <b>WBB</b>   | Weather Back Box                                        |
| <b>WCC</b>   | Weather Cover - Clear                                   |



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## PRODUCT FEATURES

- 12 key 3x4 keypad with engraved and paint filled numbers
- Stainless steel plate
- Red, green and yellow LEDs for status and programming feedback
- Audible keystroke echo
- Controller mounted in plastic enclosure
- 59 users, expandable to 119
- User code and/or hard code disable feature
- 5 Amp DPDT relay output
- Request-to-exit (REX) input
- True 10 digit operation (keys are not paired), 3 LEDs and a beeper
- 16 ft. [4.8m], 12 conductor, 22 gauge keypad cable
- MagnaCare Lifetime Replacement No Fault Warranty

## PRODUCT OPTIONS

- Wiegand output
- Expansion board to expand users to 119

- Weather-resistant cover
- Weather-resistant back box
- Keypad available as system or separately

### Dimensions:

**Keypad:**  
2-3/4"W x 4-1/2"H x 5/32"D

**Enclosure:**  
6"W x 8"H x 3"D

### Electrical:

7mA at rest; 160mA active at 12VAC or 12VDC

20mA at rest; 190mA active at 24VAC or 24VDC

### Operating Temperature:

**CPU:**  
+32 to +158F [0 to +70C]

**Keypad:**  
+32 to +110F [0 to +43C]

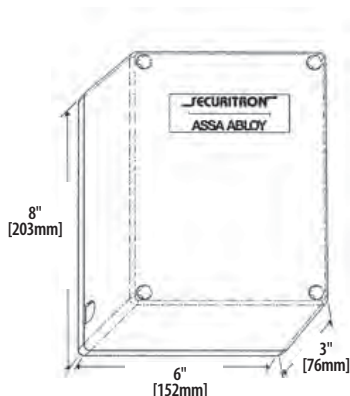
Primarily for indoor use

### Shipping Weight:

4.2lbs [1.91kg]

### Finishes:

US32D/630 – Satin Stainless Steel



# DK-16

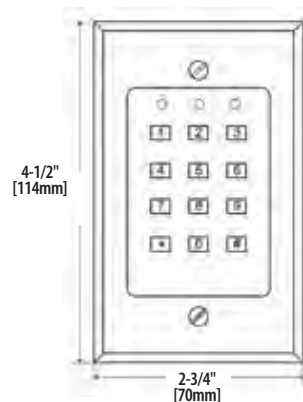
## Digital Keypad

### Secure, Easy-to-Program Single Door Control System

The DK-16 digital keypad system provides medium/high security control of electric locks in a one- or two-door application where both doors have the same control needs. The tamper-resistant 3x4 keypad provides true 10-key operation for use and programming. Encased in a separate enclosure for secure installation in a protected area, the controller offers REX input and relay output for lock control, alarm shunt or other interfaces.

## MODELS

|         | PART # | Description                                          |
|---------|--------|------------------------------------------------------|
| DK-16   |        | Digital Keypad System - Indoor, Single Gang          |
| DK-16P  |        | Digital Keypad Pad - Indoor, Single Gang             |
| DK-16W  |        | Digital Keypad System - Wiegand, Indoor, Single Gang |
| DK-16XB |        | DK-16 w/ Expansion Board - Indoor, Single Gang       |
| WBB     |        | Weather Back Box                                     |
| WCC     |        | Weather Cover - Clear                                |



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### PRODUCT FEATURES

- Cast stainless steel with 11 EPDM rubber keys
- Weatherproof and vandal resistant
- 12V or 24V/ AC or DC current
- Mounts on a narrow mullion
- Audible keystroke echo
- True 10 digit operation (keys are not paired)
- 59 users with multiple entry codes
- Expansion board adds users, real time calendar, more relays and outputs
- User code and hard code disable feature
- Passage Mode and Lockout Mode
- 5 Amp DPDT relay
- Request-to-exit (REX) input
- 16 ft. [4.8m], 12 conductor, 22 gauge keypad cable
- 3 LEDs and a bell button
- MagnaCare Lifetime Replacement No Fault Warranty

### PRODUCT OPTIONS

- "W" indicates Wiegand output
- Expansion board for up to 119 users
- Spy Shield
- Cover plate
- Keypad available as system or separately

### SPECIFICATIONS

- CE: EN 50091-1, EN 61000-6-2 Approved

#### Dimensions:

**Keypad:** 1-1/2"W x 7"H x 7/8"D

**Enclosure:** 6"W x 8"H x 3"D

#### Electrical:

7mA at rest; 160mA active at 12VAC or 12VDC

20mA at rest; 190mA active at 24VAC or 24VDC

#### Operating Temperature:

**CPU:** +32 to +158F [0 to +70C]

**Keypad:** -22 to +158F [-30 to +70C]

Indoor or Outdoor use

#### Shipping Weight:

5lbs [2.27kg]

#### Finishes:

US32D/630 - Satin Stainless Steel

BK - Black

# DK-26

## Digital Keypad

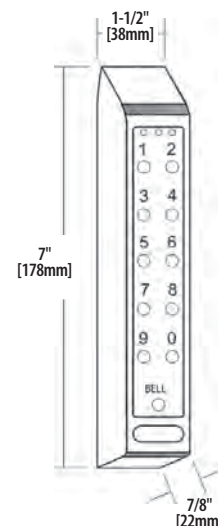
### Digital Control System for Narrow Stile Applications

The DK-26 digital keypad system provides medium/high security control of electric locks in one or two door applications where doors have the same control needs. The fully weatherproof, rugged stainless steel keypad can be mounted in most outdoor environments. Encased in a separate enclosure for secure installation, the full-featured, easy to program, DK-26 is ideal for narrow stile applications.

### » MODELS

PART # | Description

|                  |                                                                    |
|------------------|--------------------------------------------------------------------|
| <b>DK-26BK</b>   | Digital Keypad System - Narrow Stile, Black Anodized               |
| <b>DK-26BKXB</b> | DK-26 w/ Expansion Board - Narrow Stile, Black Anodized            |
| <b>DK-26PBK</b>  | Digital Keypad Pad - Narrow Stile, Black Anodized                  |
| <b>DK-26PSS</b>  | Digital Keypad Pad - Narrow Stile, Stainless Steel                 |
| <b>DK-26SS</b>   | Digital Keypad System - Narrow Stile, Satin Stainless              |
| <b>DK-26SSXB</b> | Digital Keypad System - Narrow Stile w/ Expansion, Satin Stainless |
| <b>DK-26WBK</b>  | Digital Keypad System - Wiegand, Narrow Stile, Black Anodized      |
| <b>DK-26WSS</b>  | Digital Keypad System - Wiegand, Narrow Stile, Satin Stainless     |



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# MK

## Mortise Keyswitch

### Turns Standard Mortise Cylinder into Full Featured Key Switch

The MK keyswitch supports electric lock control, alarm panel arming, reset and override when paired with any mortise cylinder 1-1/8" to 1-1/2".



#### PRODUCT FEATURES

- Standard with momentary SPDT switch
- 12 or 24VDC
- Bi-color LED
- Backing bracket permits integration with any 1-1/4" [32mm] or 1-1/8" [28mm] mortise cylinder (not included)
- Support for 1-1/2" cylinder using spacer ring and backset
- Additional switch position on backing bracket allows another switch to be activated by turning the key in the opposite direction
- 5 Amp rated plunger switch
- Includes anti-tamper screws
- MagnaCare Lifetime Replacement No Fault Warranty

#### PRODUCT OPTIONS

- Momentary or Alternate
- SPDT or DPDT
- Narrow Stile, Single- or Double-Gang
- Local annunciation via Piezo sounder
- Additional switch add on
- 1-1/8" Key Cylinder, 26D Finish, SC keyway

#### SPECIFICATIONS

- ANSI/UL 294
- CSFM - California State Fire Marshal Approved
- MEA - City of New York Approved

#### » MODELS

PART # | Description

|               |                                              |
|---------------|----------------------------------------------|
| <b>MK</b>     | MK - Momentary, Single Gang                  |
| <b>MK2</b>    | MK - DPDT Momentary, Single Gang             |
| <b>MKA</b>    | MK - Alternate, Single Gang                  |
| <b>MKA2</b>   | MK - DPDT Alternate, Single Gang             |
| <b>MKAN</b>   | MK - Alternate - Narrow                      |
| <b>MKAN2</b>  | MK - DPDT Alternate, Narrow                  |
| <b>MKAPZ</b>  | MK w/ Audible - Alternate, Double Gang       |
| <b>MKC</b>    | Mortise Cylinder for MK Series               |
| <b>MKC-KA</b> | Mortise Cylinder for MK Series - Keyed Alike |
| <b>MKN</b>    | MK - Momentary, Narrow                       |
| <b>MKN2</b>   | MK - DPDT Momentary, Narrow                  |
| <b>MKPZ</b>   | MK w/ Audible Momentary - Double Gang        |
| <b>MKS</b>    | MK - Momentary, Switch Only                  |
| <b>MKS2</b>   | MK - DPDT Momentary, Switch Only             |
| <b>MKSA</b>   | MK - Alternate, Switch Only                  |
| <b>MKSA2</b>  | MK - DPDT Alternate, Switch Only             |

# KP1

## Tubular Keyswitch

### Simple Solution for Exit, Door Release, Manual Override or Reset



#### PRODUCT FEATURES

- For less demanding applications
- Stainless steel face plates
- 12/24VDC bi-color LED, tubular style keyswitches
- 7 Amp rated SPDT switch
- Momentarily turning the key changes the state of the contacts

- Includes anti-tamper screws
- Includes two keys
- MagnaCare Lifetime Replacement No Fault Warranty

#### PRODUCT OPTIONS

- Momentary or Alternate switch
- Single gang or narrow stile

#### » MODELS

PART # | Description

|              |                                           |
|--------------|-------------------------------------------|
| <b>KP1</b>   | Tubular Keyswitch Momentary - Single Gang |
| <b>KP1A</b>  | Tubular Keyswitch Alternate - Single Gang |
| <b>KP1AN</b> | Tubular Keyswitch Alternate - Narrow      |
| <b>KP1N</b>  | Tubular Keyswitch Momentary - Narrow      |



**SECURITRON**  
**ASSA ABLOY**

# DPS

## Door Position Switches

DPS-W and DPS-M door position switches enable access control systems to monitor the open or closed state of a door. These switches can transmit an initiate signal to Securitron's XDT delayed exit logic timers and DPA door prop logic timers.



### DPS-W

#### Concealed Door Position Switch for Wood Doors

- Mated magnetic switch and cylindrical magnetic contact
- Recesses into door and frame
- 3/4" [19mm] round installation, 15/16" deep
- Provides Normally Closed SPST switch
- Works with door gap up to 3/4" [18mm]
- MagnaCare Lifetime Replacement No Fault Warranty

### DPS-M

#### Concealed Door Position Switch for Metal Doors

- Mated magnetic switch and magnetic contact

- Recessed into door and frame
- 3/4" [19mm] round installation, 1/2" deep
- Larger cylindrical magnet counters shielding effect of steel
- Provides Normally Closed SPST switch
- Works with door gap up to 3/4" [18mm]
- MagnaCare Lifetime Replacement No Fault Warranty

### PRODUCT OPTIONS

- Available in white, gray or black

#### Electrical:

Switching Current AC/DC (max): 0.4A

#### Operating Temperature:

-40 to +150F [-40 to +65C]

### » MODELS

PART # | Description

|          |                             |
|----------|-----------------------------|
| DPS-M-BK | DPS for Metal Doors - Black |
| DPS-M-GY | DPS for Metal Doors - Grey  |
| DPS-M-WH | DPS for Metal Doors - White |
| DPS-W-BK | DPS for Wood Doors - Black  |
| DPS-W-GY | DPS for Wood Doors - Grey   |
| DPS-W-WH | DPS for Wood Doors - White  |

# J-1055-04F

## Door Position Switch

### Compact Concealed Door Position Switch for Wood Doors

This economical, versatile door position switch fits into smaller spaces. Its compact, concealed design is ideal for wood door installations.



### PRODUCT FEATURES

- Mated magnetic switch and magnetic contact
- Recessed into door and frame
- 1/4" round installation, approximately 1-1/4" deep
- Provides Normally Closed SPST switch

- Can be field modified to provide Normally Open contact
- MagnaCare Lifetime Replacement No Fault Warranty

#### Electrical:

Switching Current AC/DC (max): 0.5A

#### Operating Temperature:

-40 to +150F [-40 to +65C]

### » MODELS

PART # | Description

|            |                      |
|------------|----------------------|
| J-1055-04F | Door Position Switch |
|------------|----------------------|

**SECURITRON**  
ASSA ABLOY

# Project References

**ASSA ABLOY**

The global leader in  
door opening solutions



## Project References



### A. Government (ASD)

- 1 WEST KOWLOON LAW COURT (ASD)
- 2 CUSTOM HEADQUARTER, NORTH POINT (ASD)
- 3 SIU SAI WAN COMPLEX (ASD)
- 4 ICAC HEADQUARTER, NORTH POINT (ASD)
- 5 MONGKOK AMBULANCE DEPOT (ASD)
- 6 JORDAN VALLEY SENIOR CITIZEN RESIDENCES
- 7 FIRE STATION IN TKO AREA 87
- 8 TKO SENIOR CITIZEN RESIDENCES
- 9 TAI LUNG LAB AT SHEUNG SHUI
- 10 TUNG YICK & YEUNG UK MARKET
- 11 STANLEY PRISON
- 12 NGAI TAM MEI TREATMENT WORK
- 13 ESTATE OFFICE REDEVELOPMENT
- 14 10-12 STANTON STREET
- 15 FIRE SERVICE QUARTER-NGAU CHI WAN
- 16 19 HUNG TO ROAD
- 17 464 JUNIOR DISCIPLINED, WONG TAI SIN
- 18 HONG KONG POLICE HEADQUARTER



### B. Public Utility

- 1 TUEN MUN CHEK LAP KOK TEMP CLP SUBSTATION
- 2 TSEUNG KWAN O SPORT CENTRE & LIBRARY
- 3 MTRC EXPRESS RAILWAY MAI PO TO NGAU TAM MEI TUNNELS
- 4 PO LEUNG KUK DAY CARE CENTRE FOR THE ELDERLY, KWAI YUET HOUSE
- 5 TAMAR GOVERNMENT HEADQUARTERS
- 6 MTRC KOWLOON STATION
- 7 MTRC TUNG CHUNG STATION
- 8 MTRC MA ON SHAN LINE MODIFICATION WORKS
- 9 MTRC TSING YI STATION
- 10 MTRC CUSTOMER SERVICES CENTER
- 11 MTRC AIRPORT EXPRESS TUNG CHUNG LINE
- 12 MTRC C6575.01-11C OCC TSING YI STATION
- 13 MTRC HONG KONG STATION
- 14 MTRC TSIM SHA TSUI EAST STATION
- 15 MTRC AUSTIN STATION
- 16 KCRC EAST & WEST RAIL
- 17 HAECO AIRPORT MAINTENANCE OFFICE
- 18 MTRC ADMIRALTY BUILDING
- 19 MTRC NORTH POINT STATION
- 20 MTRC KOWLOON STATION-AIRPORT RAILWAY
- 21 ROUTE 8 EAGLE NEST TUNNEL
- 22 HONG KONG ELECTRIC MARSH ROAD SUBSTATION - WANCHAI
- 23 IMPRO. WORK AT MEMBER STRAND AT HAPPY VALLEY
- 24 WEST KOWLOON RECLAMATION
- 25 TAI PO COMPLEX
- 26 SHUN LEE ESTATE SHOPPING CENTRE
- 27 HONG KONG ELECTRIC SUBSTATION



- 28 H.K. JOCKEY CLUB
- 29 HONG KONG INTERNATIONAL AIRPORT
- 30 SHATIN HERITAGE MUSEUM
- 31 MTRC OLYMPIC STATION
- 32 MA ON SHAN SWIMMING POOL
- 33 HUNG SHUI KIU MARKET
- 34 CHESHIRE HOME
- 35 KO SHAN THEATRE
- 36 HAPPY VALLEY RECREATION GROUND
- 37 SAM KA CHUEN UC COMPLEX

## C. Commercial

- 1 CHING CHUNG KOON, TUEN MUN
- 2 CITYPLAZA REDEVELOPMENT
- 3 PRINTING WORKSHOP, GOVERNMENT LOGISTICS CENTRE
- 4 NTT DATA CENTRE PHASE 2
- 5 HOI BUN ROAD, COMMERCIAL DEVELOPMENT - HENDERSON
- 6 RED CROSS HEADQUARTERS
- 7 HARBOUR CITY RENOVATION
- 8 15-21 SHARP EAST STREET COMMERCIAL BUILDING
- 9 50-59 CONNAUGHT ROAD CENTRAL
- 10 HONG KONG CLEARANCE AND EXCHANGE DATA CENTRE
- 11 ONE ISLAND SOUTH COMMERCIAL BUILDING
- 12 DEUTSCHE BANK - INTERNATIONAL COMMERCE CENTRE

- 13 MACQUARIE BANK - INTERNATIONAL COMMERCE CENTRE
- 14 RITZ CARTON- INTERNATIONAL COMMERCE CENTRE
- 15 LEIGHTON CENTRE RENOVATION
- 16 52-54 WELLINGTON STREET
- 17 HK SCIENCE PARK INCUBATION CENTRE
- 18 BANK OF CHINA - OLYMPIC
- 19 SHANGHAI COMMERCIAL BANK
- 20 NANYANG COMMERCIAL BANK
- 21 144-148 WELLINGTON ST. COMM DEVELOPMENT
- 22 DBS BANK RATAIL BRANCHES
- 23 1 BEKING ROAD
- 24 H.K. ELECTRIC HEAD OFFICE
- 25 BANK OF CHINA RETAIL BRANCHES
- 26 HKCEC
- 27 HKIS OFFICE
- 28 GERMAN CONSULATE
- 29 CATHAY PACIFIC HEAD QUARTER
- 30 SUNSHINE PLAZA
- 31 SHELL HOUSE, 22-28 QUEEN'S ROAD
- 32 ST. GEORGE BLDG
- 33 HANG SENG BANK
- 34 NEWTON TOWER
- 35 NO. 5 QUEENS ROAD CENTRAL
- 36 HONG KONG AIR CARGO TERMINALS LIMITED
- 37 51 PLANTION ROAD
- 38 80-87 RED HILL ROAD



## D. Hotel & Entertainment

- 1 HONG KONG DISNEYLAND HOLLYWOOD HOTEL
- 2 HONG KONG DISNEYLAND H03 HOTEL
- 3 HONG KONG DISNEYLAND - THEME PARK
- 4 GRAND WALDO RENOVATION A&A WORKS AT COTAI MACAU
- 5 119 WO YI HOP ROAD HOTEL DEVELOPMENT
- 6 WYNN PALACE





- 7 JW MARITTO HOTEL (MACAU)
- 8 RITZ CALTRON HOTEL (MACAU)
- 9 INDIGO HOTEL (WANCHAI)
- 10 GALAXY HOTEL (MACAU)
- 11 BANYAN TREE HOTEL (MACAU)
- 12 OKURA HOTEL (MACAU)
- 13 THE MERCER, 27-31 JERVOIS STREET
- 14 GRAND LISBOA HOTEL (MACAU)
- 15 VENETIAN (MACAU)
- 16 LANGHAM PLACE MONGKOK
- 17 SHERATON HK HOTEL & TOWERS
- 18 EATON HOTEL
- 19 REGENT HOTEL
- 20 HARBOUR VIEW INT'L HOTEL
- 21 PRUDENTIAL HOTEL
- 22 SHEKO, GOLF CLUB
- 23 AMERICAN CLUB, SSF OFFICE
- 24 BUTTERFIELD'S CLUB
- 25 NGAU CHI WAN CLUB HOUSE
- 26 TUNG CHUNG NEW FOUND WORLD CLUB HOUSE
- 27 SOUTH BAY CLUB HOUSE

## E. Hospital

- 1 RENOVATION WORKS TO CANOSSA HOSPITAL
- 2 THE NORTH LANTAU ISLAND HOSPITAL (ASD)
- 3 ST. PAUL HOSPITAL
- 4 SANATORIUM HOSPITAL PHASE 3 DEVELOPMENT
- 5 ST. TERESA HOSPITAL PHASE 2
- 6 PRINCESS MARGRET HOSPITAL - INFECTIOUS DISEASE CENTRE
- 7 PRINCESS MARGRET HOSPITAL -RADIOTHERAPY CENTRE & ACCIDENT EMERGENCY DEPT.
- 8 ST. TERESA HOSPITAL PHASE 1
- 9 SANATORIUM HOSPITAL
- 10 UNITED CHRISTIAN HOSPITAL





## F. Church

- 1 THE LUTHERAN CHURCH
- 2 YAN FOOK CHURCH, LAI CHI KOK
- 3 INTERNATIONAL CHRISTIAN ASSEMBLY



## G. Education

- 1 THE POLYTECHNICAL UNIVERSITY OF HK
- 2 THE CITY UNIVERSITY OF HK - ACADEMY & ADMINISTRATION BUILDING
- 3 ENGLISH SCHOOL FOUNDATIONS AT MA ON SHAN
- 4 YEUN LONG MODERATE MENTAL HANDICAPPED SCHOOL
- 5 INTERNATIONAL MUSIC SCHOOL, PO KONG ESTATE
- 6 BAPTIST UNIVERSITY
- 7 TUEN MUN AREA 56 PRIMARY SCHOOL
- 8 NGAI CHI EAN SPEICAL SCHOOL
- 9 HK BAPTIST U. COMMUNITY CENTRE
- 10 TUNG CHUNG PRIMARY SCHOOL
- 11 EXAMINATION AUTHORITY
- 13 HEEP YUNN PRIMARY SCHOOL
- 14 HKUST
- 15 VTC POK FU LAM
- 16 HKU-3/F ADMIRALTY CENTRE
- 17 VTC HAKING WONG
- 18 HKU BIOLOGICAL BUILDING

## H. Housing

- 1 SHATIN 4C 4D AREA 31
- 2 SAN PO KONG BUILDING
- 3 TUEN MUN AREA 54
- 4 CHAI WAN INDUSTRIAL BUILDING

- 5 PUBLIC RENTAL HOUSING DEVELOPMENT AT ANDERSON ROAD SITE A&B
- 6 LEI YUE MUN PH3
- 7 SHEUNG SHUI AREA 36
- 8 TUNG TAU COTTAGE AREA EAST
- 9 KWAI LEUN ROAD (PUBLIC HOUSING)
- 10 PUBLIC RENTAL HOUSING DEVELOPMENT AT ANDERSON ROAD SITE E
- 11 PUBLIC RENTAL HOUSING DEVELOPMENT AT HUNG SHUI KIU AREA 13 PHASE 3
- 12 KAI TAK SITE B
- 13 CHEUNG SHA WAN
- 14 TUEN MUN AREA 18
- 15 NGAN TAU KWOK ESTATE
- 16 EASTERN HARBOUR CROSSING SITE PH5&6
- 17 TSEUNG KWAN O AREA 73B
- 18 KWAI LUEN ROAD
- 19 CHOI WAN ROAD DEVELOPMENT SITE 3B PHASE 1
- 20 CHOI WAN ROAD DEVELOPMENT SITE 2 PHASE 1
- 21 TIN SHUI WAI 104
- 22 SHATIN AREA 11 SHEK MUN
- 23 TKO AREA 73A PHASE 4

## I. Residential

- 1 MAYFAIR BY THE SEA I & II (9 BLOCK ) - 21 FOOK CHUN RD, PAK SHEK KOK - SINO , HOUSING SOCIETY
- 2 PROVIDENCE BAY (15 BLOCK) - PAK SHEK KOK - NAM FUNG , SINO , USI (WING TAI)
- 3 THE AVENUE PHASE 1,2 &3 - SPRING GARDEN LANE - SINO , HOP WO , HOUSING SOCIETY
- 4 179 MA WO, TAI PO - SINO
- 5 VIVA - NO 77-87 MA TAU WAI ROAD, TO KWA WAN - CHEUNG KONG HOLDINGS
- 6 THE DIVA - NO.133-138 ELECTRIC ROAD , HONG KONG- CHEUNG KONG HOLDINGS
- 7 DRAGONS RANGE - STTL 525 AREA 56A, KAU TO SHAN, SHATIN - KOWLOON DEVELOPMENT
- 8 CADOGAN, 1-9 KWAN YICK STREET, SAI WAN - KOWLOON DEVELOPMENT
- 9 3 BLACK LINKS - KOWLOON DEVELOPMENT
- 10 6-12 MAIN STONE RD - YU TAI HING
- 11 HARBOUR NORTH - IL 9027 , JAVA ROAD , NORTH POINT- SUN HUNG KAI

- 12 COHO - 18 SCHOOL STREET , CAUSEWAY BAY  
-SOUNDWILL
- 13 102 ARGYLE STREET - WING TAI
- 14 SEVILLA CREST - NO.287-293 SAI YEUNG CHOI ST  
NORTH - FAR EAST
- 15 BAYVIEW - 9 YUK YAT ST., TOKAWAN - KERRY  
PROPERTY
- 16 40-42 STANTON STREET, CENTRAL - HENDERSON
- 17 8-18 CATCHICK STREET - K. WAH PROPERTIES
- 18 77 BEDFORD ROAD - K. WAH PROPERTIES
- 19 BONHAN STRAND , SHEUNG WAN -K. WAH  
PROPERTIES
- 20 PROPOSED RES. DEV AT STTL 510 , TUNG LAW WAN  
SHAN , SHATIN - K. WAH PROPERTIES
- 21 SHUM TSENG RESIDENTIAL DEVELOPMENT - K. WAH  
PROPERTIES
- 22 83 WATERLOO ROAD - K. WAH PROPERTIES
- 23 OCEAN ONE - 6 SHUNG SHUN STREET - LAI SUN  
DEVELOPMENT
- 24 20-28 TAI PO ROAD - LAI SUN DEVELOPMENT
- 25 9-12 CHUN FAI TERRACE - NEW WORLD PROPERTY  
DEVELOPMENT
- 26 THE PRAIA -MACAU PSI NO.1 - AV. MARGINAL DO LAM  
MAU - NEW WORLD PROPERTY DEVELOPMENT
- 27 53 STUBBS ROAD - SWIRE PROPERTIES LTD
- 28 33 CONSORT RISE, POK FU LAM - MACAULAND  
DEVELOPMENT
- 29 URA'S PROJECT H17, I.L. 9006, 235-245 QUEEN'S  
ROAD EAST, WANCHAI - NAN FUNG DEVELOPMENT
- 30 KIL 11162 , CHERRY ST, KOWLOON - NAN FUNG  
DEVELOPMENT
- 31 ANTIGA ESTRADA NOVA DO MIRADOURO , NO 1 TAIPA  
(MACAU)
- 32 THE RESIDENCIA MACAU - AREIA PRETA LOT U & U1  
( MACAU ) - SAN YAU DEVELOPMENT
- 33 DD 12 , TING KOK RD , TAIPO
- 34 SHATIN AREA 11 SHEK MUN
- 35 HENDERSON - 72 STANTON STREET , CENTRAL
- 36 TUNG CHUNG TOWN LOT NO. 37 YING HEI ROAD
- 37 361-367 PORTLAND STREET
- 38 12-18 HAU WONG ROAD
- 39 42-44 BELCHER'S STREET
- 40 256-258 TUNG CHOW ST, KLN
- 41 FONTANA VILLA, 21 LOK CHUI ST., SIU LAM, N.T.



- 42 LAI YIU ESTATE
- 43 KADORIE'S MANSION
- 44 DISCOVERY BAY PH. 11 - HONG KONG RESORT
- 45 VILLA ESPLANADA, PH. 3

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience

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