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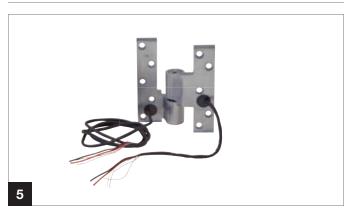
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## THINKING AHEAD IN PROJECT BUSINESS







It's always our goal to be an invaluable partner to you every step of the way. We want to inspire you in all of your projects to bring something new and innovative. Within these pages we seek to bring you everything you need for your next commercial project. Turn to us, the experts, whether you're an architect, developer, designer, project manager or general contractor.

Hardware, lighting or anything in between—your project can be designed down to the last detail with us. This selection of products and components instantly add uniformity and functionality to the space.

Häfele is the right partner for planning and implementing commercial projects of any scale and scope. The breadth of products and services offered also makes purchasing and accounting easy with one vendor billing and fulfillment.

From concept to completion, Häfele is your one-stop-shop for all your project needs.

AHAS III

HXFELE

# 1

## HINGES



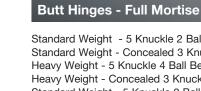
#### **Contents**

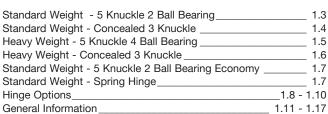
























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Dimensional data not binding. We reserve the right to alter specifications without notice.



#### **Standard Weight Hinges**

> Area of application: Full mortise hinge for medium weight doors that have medium to high frequency service,

suitable for hollow metal or wood doors

> Certification: ANSI/BHMA A156.1 and A156.7

> Optional Finishes: US26, US10B (minimum quantity required)

#### LH179BB 5 Knuckle 2 Ball Bearing Hinge



> Material: Steel

> Finish: 652 satin chrome-plated (US26D)

| WxD                            | Thickness      | Removable Pin | Non-removable Pin |
|--------------------------------|----------------|---------------|-------------------|
| 4 1/2" x 4" (114 x 102 mm)     | .134" (3.4 mm) | 926.39.684    | 926.39.694        |
| 4 1/2" x 4 1/2" (114 x 114 mm) | .134" (3.4 mm) | 926.39.704    | 926.39.714        |
| 5" x 4" (127 x 102 mm)         | .146" (3.7 mm) | 926.39.724    | 926.39.734        |
| 5" x 4 1/2" (127 x 114 mm)     | .146" (3.7 mm) | 926.39.744    | 926.39.754        |
| 5" x 5" (127 x 127 mm)         | .146" (3.7 mm) | 926.39.764    | 926.39.774        |

#### **Standard Weight Hinges**

> Area of application: Full mortise hinge for medium weight doors that have medium to high frequency service,

suitable for hollow metal or wood doors

#### LH191BB 5 Knuckle 2 Ball Bearing Hinge



> Material: Stainless Steel

reserve the right to alter specifications without notice

Wel

Dimensional data not binding.

> Finish: 630 satin stainless steel (US32D)

| WxD                            | Thickness      | Removable Pin | Non-removable Pin |
|--------------------------------|----------------|---------------|-------------------|
| 4 1/2" x 4" (114 x 102 mm)     | .134" (3.4 mm) | 926.39.780    | 926.39.790        |
| 4 1/2" x 4 1/2" (114 x 114 mm) | .134" (3.4 mm) | 926.39.800    | 926.39.810        |
| 5" x 4" (127 x 102 mm)         | .146" (3.7 mm) | 926.39.820    | 926.39.830        |
| 5" x 4 1/2" (127 x 114 mm)     | .146" (3.7 mm) | 926.39.840    | 926.39.850        |
| 5" x 5" (127 x 127 mm)         | .146" (3.7 mm) | 926.39.860    | 926.39.870        |



#### **Standard Weight Hinges**

> Area of application: Full mortise hinge for medium weight doors that have medium to high frequency service,

suitable for hollow metal or wood doors. ANSI/BHMA A156.1 and A156.7

Certification: ANSI/BHMA A156.1 and A156.7
 Optional Finishes: US26, US10B (minimum quantity required)

#### LH1379CB Concealed Bearing 3 Knuckle Hinge



> Material: Steel

> Finish: 652 satin chrome-plated (US26D)

| WxD                            | Thickness      | Removable Pin | Non-removable Pin |
|--------------------------------|----------------|---------------|-------------------|
| 4 1/2" x 4" (114 x 102 mm)     | .134" (3.4 mm) | 926.39.900    | 926.39.901        |
| 4 1/2" x 4 1/2" (114 x 114 mm) | .134" (3.4 mm) | 926.39.902    | 926.39.903        |
| 5" x 4" (127 x 102 mm)         | .146" (3.7 mm) | 926.39.904    | 926.39.905        |
| 5" x 4 1/2" (127 x 114 mm)     | .146" (3.7 mm) | 926.39.906    | 926.39.907        |
| 5" x 5" (127 x 127 mm)         | .146" (3.7 mm) | 926.39.908    | 926.39.909        |

#### **Standard Weight Hinges**

> Area of application: Full mortise hinge for medium weight doors that have medium to high frequency service,

suitable for hollow metal or wood doors

#### LH1391CB Concealed Bearing 3 Knuckle Hinge



> Material: Stainless Steel

> Finish: 630 satin stainless steel (US32D)

| / I II |                |               |                   |
|---|----------------|---------------|-------------------|
| WxD                                     | Thickness      | Removable Pin | Non-removable Pin |
| 4 1/2" x 4" (114 x 102 mm)              | .134" (3.4 mm) | 926.39.936    | 926.39.937        |
| 4 1/2" x 4 1/2" (114 x 114 mm)          | .134" (3.4 mm) | 926.39.938    | 926.39.939        |
| 5" x 4" (127 x 102 mm)                  | .146" (3.7 mm) | 926.39.940    | 926.39.941        |
| 5" x 4 1/2" (127 x 114 mm)              | .146" (3.7 mm) | 926.39.942    | 926.39.943        |
| 5" x 5" (127 x 127 mm)                  | .146" (3.7 mm) | 926.39.944    | 926.39.945        |



#### **Heavy Weight Hinges**

> Area of application: Full mortise hinge for heavy weight doors that have high frequency service, suitable for hollow metal or wood doors.

> Certification: ANSI/BHMA A156.1 and A156.7

> Optional Finishes: US26, US10B (minimum quantity required)

#### L168BB 5 Knuckle 4 Ball Bearing Hinge



> Material: Steel

> Finish: 652 satin chrome-plated (US26D)

| WxD                            | Thickness      | Removable Pin | Non-removable Pin |
|--------------------------------|----------------|---------------|-------------------|
| 4 1/2" x 4" (114 x 102 mm)     | .180" (4.6 mm) | 926.39.880    | 926.39.881        |
| 4 1/2" x 4 1/2" (114 x 114 mm) | .180" (4.6 mm) | 926.39.882    | 926.39.883        |
| 5" x 4" (127 x 102 mm)         | .190" (4.8 mm) | 926.39.884    | 926.39.885        |
| 5" x 4 1/2" (127 x 114 mm)     | .190" (4.8 mm) | 926.39.886    | 926.39.887        |
| 5" x 5" (127 x 127 mm)         | .190" (4.8 mm) | 926.39.888    | 926.39.889        |

#### **Standard Weight Hinges**

> Area of application: Full mortise hinge for medium weight doors that have medium to high frequency service,

suitable for hollow metal or wood doors

#### LH199BB 5 Knuckle 4 Ball Bearing Hinge



> Material: Stainless Steel

> Finish: 630 satin stainless steel (US32D)

| WxD                            | Thickness      | Removable Pin | Non-removable Pin |
|--------------------------------|----------------|---------------|-------------------|
| 4 1/2" x 4" (114 x 102 mm)     | .180" (4.6 mm) | 926.39.890    | 926.39.891        |
| 4 1/2" x 4 1/2" (114 x 114 mm) | .180" (4.6 mm) | 926.39.892    | 926.39.893        |
| 5" x 4" (127 x 102 mm)         | .190" (4.8 mm) | 926.39.894    | 926.39.895        |
| 5" x 4 1/2" (127 x 114 mm)     | .190" (4.8 mm) | 926.39.896    | 926.39.897        |
| 5" x 5" (127 x 127 mm)         | .190" (4.8 mm) | 926.39.898    | 926.39.899        |



#### **Heavy Weight Hinges**

> Area of application: Full mortise hinge for heavy weight doors that have high frequency service,

suitable for hollow metal or wood doors

> Certification: ANSI/BHMA A156.1 and A156.7

> Optional Finishes: US26, US10B (minimum quantity required)

#### LH1368CB Concealed Bearing 3 Knuckle Hinge



> Material: Steel

> Finish: 652 satin chrome-plated (US26D)

| WxD                            | Thickness      | Removable Pin | Non-removable Pin |
|--------------------------------|----------------|---------------|-------------------|
| 4 1/2" x 4" (114 x 102 mm)     | .134" (3.4 mm) | 926.39.926    | 926.39.927        |
| 4 1/2" x 4 1/2" (114 x 114 mm) | .134" (3.4 mm) | 926.39.928    | 926.39.929        |
| 5" x 4" (127 x 102 mm)         | .146" (3.7 mm) | 926.39.930    | 926.39.931        |
| 5" x 4 1/2" (127 x 114 mm)     | .146" (3.7 mm) | 926.39.932    | 926.39.933        |
| 5" x 5" (127 x 127 mm)         | .146" (3.7 mm) | 926.39.934    | 926.39.935        |

#### **Heavy Weight Hinges**

> Area of application: Full mortise hinge for heavy weight doors that have high frequency service, suitable for hollow metal

or wood doors

#### LH1399CB Concealed Bearing 3 Knuckle Hinge



> Material: Stainless Steel

> Finish: 630 satin stainless steel (US32D)

| WxD                            | Thickness      | Removable Pin | Non-removable Pin |
|--------------------------------|----------------|---------------|-------------------|
| 4 1/2" x 4" (114 x 102 mm)     | .134" (3.4 mm) | 926.39.916    | 926.39.917        |
| 4 1/2" x 4 1/2" (114 x 114 mm) | .134" (3.4 mm) | 926.39.918    | 926.39.919        |
| 5" x 4" (127 x 102 mm)         | .146" (3.7 mm) | 926.39.920    | 926.39.921        |
| 5" x 4 1/2" (127 x 114 mm)     | .146" (3.7 mm) | 926.39.922    | 926.39.923        |
| 5" x 5" (127 x 127 mm)         | .146" (3.7 mm) | 926.39.924    | 926.39.925        |

#### **Full Mortise Hinges**

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#### **Standard Weight - Economy Hinge**

> Area of application: Full mortise hinge for medium weight doors that have medium frequency service,

suitable for hollow metal or wood doors

> Certification: A156.7 > Material: Steel

> Finish: 652 matt chrome-plated (US26D)

#### LH603BB 5 Knuckle 2 Ball Bearing Hinge



| WxD                            | Thickness      | Removable Pin | Non-removable Pin |
|--------------------------------|----------------|---------------|-------------------|
| 4 1/2" x 4" (114 x 102 mm)     | .134" (3.4 mm) | 926.39.912    | 926.39.913        |
| 4 1/2" x 4 1/2" (114 x 114 mm) | .134" (3.4 mm) | 926.39.914    | 926.39.915        |

#### Standard Weight - Spring Hinge

> Area of application: For use in apartments, hotel rooms, condominiums and office buildings or anywhere self-closing doors are

required, Use 2 spring hinges on fire doors, center and bottom location

All other applications: up to 70 lbs., 1 spring hinge with 2 ball bearing hinges, spring hinge in center, up to 90 lbs., 2 spring hinges with 1 ball bearing hinge, spring hinge in center and bottom, up to 120 lbs., 3 spring hinges

> Features: Fully adjustable; spring tension may be increased or decreased during installation.

> Certification: ANSI/BHMA A156.17

> Material: Steel

> Finish: 652 matt chrome-plated (US26D)

#### **LH606SH Spring Hinge**



| WxD                           | Thickness      | Item No.   |
|-------------------------------|----------------|------------|
| 4 1/2" x 4" (114 x 102 mm)    | .134" (3.4 mm) | 926.39.910 |
| 4 1/2" x 4/12" (114 x 114 mm) | .134" (3.4 mm) | 926.39.911 |

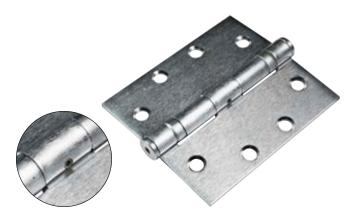


#### None Removable Pin (NRP)

NRP: Set screw in barrel lock in loose pin as shown.

Set screw is not accessible when door is closed.

Specify "NRP" (non-removable pin) when ordering.



#### **Electric Through Wire (ETW)**

- > Electric through wire: for use when power is required to the door
- > Applications include electrified panics such as electric latch retraction or push pad and/or latchbolt monitoring
- > Other applications include electrically locked or electrically unlocked, card readers and request to exit functions
- > Specify: "ETW" hinge and the number of wires required
- > Normally this feature is available with (2@18AWG), (4@28AWG), (8@28AWG) or (12@28AWG) wire
- > Standard length is 12" x 48" (305 x 1219 mm)
- > Hinges should be installed in center hinge location

#### Note

Other wire lengths availability by special order.



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#### Plug in Connector (PIC)

- > Makes connection in field faster and creates a postive interlock between the hinge side of door and the device the hinge is connected to
- > Specify: "PIC" and wire guage, and number of wires when ordering



#### Radius Corner (RC)

- > Primarly for use on aluminum doors and frames
- > Available in both 1/4" (6 mm) and 5/8" (16 mm) radius
- > Specify: "RC" and radius when ordering.





#### **Hospital Tip (HT)**

- > Barrel ends are sloped, making it easier to clean and making it difficult to attach rope, clothing or other ligatures
- > The pin is held in place by a cross pin for security reasons
- > Specify "HT" when ordering; not available on all models



#### Fire Rated (cUL Marked)

> Full mortise, butt hinges, 3-knuckle and 5 knuckle standard and heavy weight for use on swinging-type fire doors rated up to and including 3 hour

| > Available for the following models: | Standard weight | Heavy weight |
|---------------------------------------|-----------------|--------------|
|---------------------------------------|-----------------|--------------|

LH179BB LH168BB LH191BB LH199BB LH1379CB LH1368CB LH1391CB LH1399CB







#### Factors determining selection for the proper hinge

- A) Type of door and frame
- B) Size, thickness and weight of door with all hardware accessories
- C) Clearance required
- D) Exterior or interior use and frequency
- E) Exposure (sea air, dust, corrosive atmosphere, etc.)
- F) Quality desired
- G) Special application or use
- H) Door accessories (overhead holders, closers, stops, lock plates, etc.) which affect hinge performance
- I) Hinge edge of door beveled or square

#### Requirements for selection of proper hinge specification

- 1. Kind of hinge
  - Primary consideration is given to the type of door and jamb for selection of a definite kind of hinge.
- 2. Type of hinge Ball bearing, plain, etc.
  - The weight of the door and frequency of use determine whether a heavy weight, standard weight, ball bearing or plain bearing hinge should be used heavy weight hinges should always be used on heavy doors and doors where high frequency service is expected use ball bearing hinges on doors equipped with closers and on fire doors.
- 3. Size of hinge
  - Determined by width, thickness and weight of door and trim to clear
- 4. Kind of metal
  - Determined by considerations such as atmospheric conditions, location of doors, or special conditions as in chemical laboratories, sewage disposal plants, etc. Non-ferrous metal must always be used for rust resistance.
- 5. Quality of finish
  - Finish on hinges is always furnished to our standard and government standard finishes. When an exact match of another manufacturer's finish is desired, submit sample (minimum quantity required).
- 6. Location of hinges on doors and maintenance
  - Improper maintenance or wrong installation of hinges can affect the life of the product and cancel the guarantee.
- 7. Number of hinges required on doors and maintenance
  - Always specify at least three hinges to a door; the third hinge shares the load with the other two hinges, increases the life of the installation and prevents warpage of doors.
  - Doors with closers, holders and stops are subject to forces and stresses not encountered in free hanging and free swinging doors. These doors require a hinge with particularly good lateral load capacities to be able to take such stresses. The top hinge suffers severe abuse, and to the extent that it loosens, the center hinge takes up the load.
- 8. Hand of door
  - Anchor type, raised barrel hinges, etc. are handed and should be specified right or left hand
- 9. Industrial
  - Hinges described in this catalog, can be modified to meet the requirements of industry. Requests with detailed drawing of requirements, are cordially invited by our technical department (minimum quantity required).
- 10. Packing
  - Our products are packed and protected in strong approved containers. All hinges are individually wrapped to protect the finish and packed one and a half pair (1 1/2) per box with full machine and full wood screws.
- Screws

Dimensional data not binding. We reserve the right to alter specifications without notice

Packed with minimum full machine and half wood.

#### Application determines different kind of hinges

Fig. A
Full mortise
Wood Doors
Wood Jamb

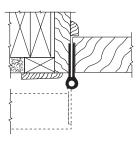


Fig. D Half mortise Hollow Metal Doors Channel Iron Jamb

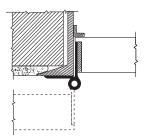


Fig. G Full surface Kalamein Doors Channel Iron Jamb

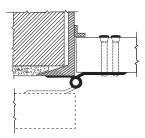
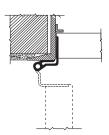


Fig. J
"Swing Clear" half mortise
Wood Doors
Channel Iron Jamb



Dimensions in mm Inches are approximate

Fig. B
Full mortise
Wood Doors
Hollow Metal Jamb

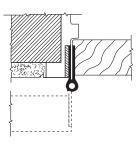


Fig. E
Half Surface
Wood Doors
Wood Jamb

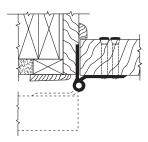


Fig. H
Full surface
Hollow Metal Doors
Channel Iron Jamb

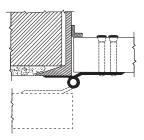


Fig. K
"Swing Clear" half mortise
Kalamein Doors
Hollow Metal Jamb

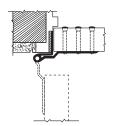


Fig. C
Full surface
Hollow Metal Doors
Hollow Metal Jamb

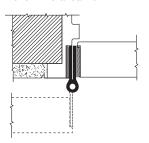


Fig. F Half Surface Kalamein Doors Hollow Metal Jamb

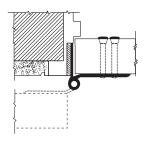


Fig. I "Swing Clear" full mortise Wood Doors Hollow Metal Jamb

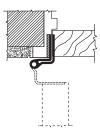
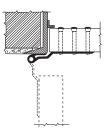


Fig. L
"Swing Clear" full mortise
Kalamein Doors
Channel Iron Jamb





#### Recommendations for sizes of hinges

| Door<br>Thickness | Door<br>Width | Hinge<br>Height | Hinge<br>Width |  |  |
|-------------------|---------------|-----------------|----------------|--|--|
| Inches            | Inches        | Inches          | Inches         |  |  |
| 1 3/8"            | Up to 32"     | 3 1/2"          | 3 1/2"         |  |  |
|                   | Over 32"      | 4"              | 3 1/2"         |  |  |
| 1 3/4"            | Up to 36"     | 4 1/2"          | 4"             |  |  |
|                   | Over 36"      | 5"              | 4 1/2"         |  |  |
|                   | Up to 48"     | 5"              | 5"             |  |  |
| 2"                | Up to 42"     | 5"              | 4 1/2"         |  |  |
| 2 1/4"            | Up to 42"     | 5"              | 5"             |  |  |
| 2 1/2"            | Up to 42"     | 5"              | 5"             |  |  |

| Door<br>Thickness | Door<br>Width | Hinge<br>Height | Hinge<br>Width |
|-------------------|---------------|-----------------|----------------|
| mm                | mm            | mm              | mm             |
| 35                | Up to 800     | 88              | 88             |
|                   | Over 800      | 101             | 88             |
| 44                | Up to 900     | 114             | 101            |
|                   | Over 900      | 127             | 114            |
|                   | Up to 1200    | 127             | 127            |
| 50                | Up to 1050    | 127             | 114            |
| 57                | Up to 1050    | 127             | 127            |
| 63                | Up to 1050    | 127             | 127            |

#### Formula to determine hinge width under normal conditions

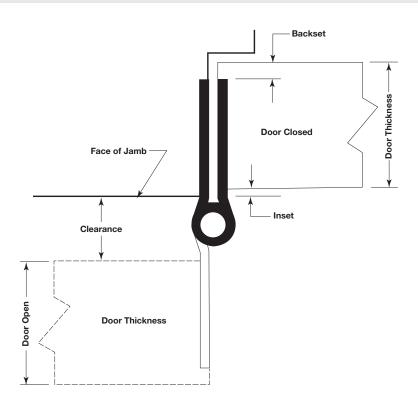
Known factors: 1) Door thickness

2) Backset

3) Clearance required

4) Inset

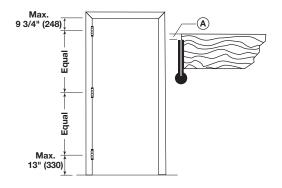
(Door thickness - Backset) x 2 plus clearance required + inset (if any) EQUALS hinge width (if not standard width - use next larger standard hinge width)





#### Location of hinges on doors

- > For doors up to 2 1/4" (57 mm) thick, hinges are applied 1/4" (6 mm) from edge.
- > For doors over 2 1/4" (57 mm) thick, hinges are applied 3/8" (10 mm) from edge.



#### Hinge maintenance

- > For general maintenance of Architectural grade hinges, we recommend that the pins be removed and liberally coated with general purpose grease, then re-inserted and the excess wiped off
- > It is highly recommend that all attaching screws be checked for tightness

#### Number of hinges per door

The following quantity of hinges are recommended for doors of various heights: 2 hinges: Doors up to 60" (1500 mm)

3 hinges: Doors up to 90" (2500 mm)

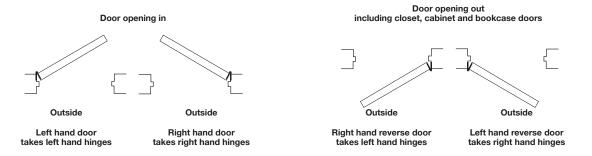
4 hinges: Doors up to 120" (3000 mm)

#### Note

For doors over 120" (3000 mm) add one hinge for each additional 30" (750 mm) or fraction thereof.

#### How to determine hand of hinges

- > The hand of a butt hinge is determined from the door to which it is applied.
- > The outside of a cabinet, bookcase or closet door is the room side. For other doors, the outside is usually the "push" or jamb side.
- > If standing outside of a door which opens from you to the right, it takes right hand butt hinges. If to the left, it takes left hand butt hinges.
- > If standing outside of a door which opens towards you to the right, it takes left hand butt hinges. If to the left, it takes right hand butt hinges.
- > Reversed bevel doors are doors opening out.
- > In ordering butt hinges that are not reversible, the hand must always be specified.





#### Hinge requirements for fire doors

> National Fire Protection Association, pamphlet no. 80 (NFPA-80) lists the guidelines for hinge uses with fire doors.

#### Attaching hinges to doors

> Mortise hinges shall be secured to reinforcements in the doors with steel machine screws and surface hinges shall be attached with steel through-bolts.

#### Exception

> Mortise hinges shall be secured to wood and plastic covered composite or wood core doors with No. 12 by 1 1/4" (31.75 mm) flat threaded-to-the-head, steel wood screws.

#### Attaching hinges to frame

- > Hinges shall be secured to frames with steel screws. Types of screws will vary depending on material used for the manufacture of labeled door frames. Refer to labeled door frame manufacturers instructions and published listings for specific screw requirements.
- > Hardware shall be examined frequently and any parts found to be inoperative shall be replaced immediately.

#### **Builder's Hardware**

#### Mortise and surface hinges for swinging doors including spring hinges

> Doors up to 60" (1.522 m) high shall be provided with two hinges and an additional hinge for each additional 30" (0.762 m).

|   |       |         |          |     |     | For 1 3/4" (44.5 mm) or thicker doors |                |                 | _                  |                   |
|---|-------|---------|----------|-----|-----|---------------------------------------|----------------|-----------------|--------------------|-------------------|
|   |       | Door ra | iting, H | r   |     | Maximum                               | door size      | Minimum         | hinges size        | Type<br>Hinge     |
|   |       |         |          |     |     | Width ft. (m)                         | Height ft. (m) | Height in. (mm) | Thickness in. (mm) | Tillige           |
| 3 | 1 1/2 | 1       | 3/4      | 1/2 | 1/3 | 4' (1.22)                             | 10' (3.05)     | 4 1/2" (114.3)  | 0.180" (4.57)      |                   |
| 3 | 1 1/2 | 1       | 3/4      | 1/2 | 1/3 | 4' (1.22)                             | 8' (2.44)      | 4 1/2" (114.3)  | 0.134" (3.40)      |                   |
|   | 1 1/2 | 1       | 3/4      | 1/2 | 1/3 | 3' (0.91)                             | 5' (1.52)      | 4" (101.6)      | 0.130" (3.30)      | Steel,<br>Mortise |
|   | 1 1/2 | 1       | 3/4      | 1/2 | 1/3 | 2' (0.61)                             | 3' (0.91)      | 3" (76.2)       | 0.092" (2.34)      | or Surface        |
|   |       |         |          |     |     | For 1 3/8" (34.93 mm) Doors           |                |                 |                    |                   |
| 3 | 1 1/2 |         | 3/4      | 1/2 | 1/3 | 3' (0.91)                             | 7' (2.13)      | 3 1/2" (88.9)   | 0.123" (3.12)      |                   |

#### Note 1

All hinges except spring hinges, shall be of the ball bearing type. Hinges employing other anti-friction bearing surfaces are permitted if they meet the test requirements of standard for butts hinges (ANSI A 156.1).

#### Note 2

4 1 /2" (114 mm) high, 0.180" (4.57 mm) thick hinges should be used on doors which are unusually wide and heavy or which will receive high frequency use or unusual stresses.

#### Note 3

Dimensional data not binding. We reserve the right to alter specifications without notice

Some manufacturers may provide fire doors with light weight hinges which are not ball bearing if they are part of a listed assembly and meet the test requirements of ANSI A 156.1, and have been tested to a minimum of 350,000 cycles.



#### These template butt hinges are made in size, gauge and with screw holes located to conform to government and ANSI standards.

#### Note

Fully adjustable; spring tension may be increased or decreased during installation.

Dimensions Inches mm 4 1/2" x 4" 114.30 x 101.60 4 1/2" x 4 1/2" 114.30 x 114.30

| Dimensions | Inches | mm     |
|------------|--------|--------|
| L          | 4.5"   | 114.30 |
| M          | 0.508" | 12.90  |
| N          | 1.125" | 28.58  |
| Р          | 1"     | 25.40  |
| Q          | 1.234" | 31.34  |
| R          | 0.375" | 9.53   |
| S          | 0.063" | 1.59   |

Machine Screws: 12-24 x 1/2 F.H., 12-24 x 13 F.H Wood Screws: 1 1/4 x no. 12 F.H., 32 x no. 12 F.H. 1 1/2 x no. 12 F.H., \*38 x no. 12 F.H.

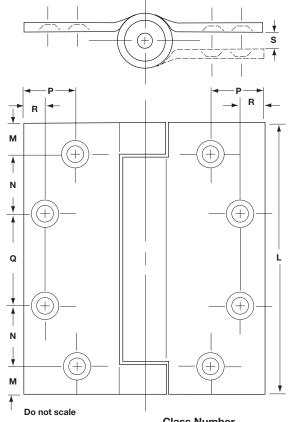
| _ | +     |              | ±<br>★s  |
|---|-------|--------------|----------|
|   |       |              |          |
|   |       | +            | <u>M</u> |
|   | 1     | ,<br>        | N        |
|   |       | +            | <b>†</b> |
|   |       |              | Q        |
|   |       | <b>→</b> R   | <b>-</b> |
|   |       | +            | <b>V</b> |
|   | - + - |              | N        |
| • |       | +            | M        |
|   |       | <b>←</b> P → |          |

Do not scale

| Dimensions | Inches          | mm              |
|------------|-----------------|-----------------|
|            | 4 1/2" x 4"     | 114.30 x 101.60 |
|            | 4 1/2" x 4 1/2" | 114.30 x 114.30 |

| Dimensions      | Inches | mm     |
|-----------------|--------|--------|
| L               | 4.5"   | 114.30 |
| M               | 0.508" | 12.90  |
| N               | 1.125" | 28.58  |
| Р               | 1"     | 25.40  |
| Q               | 1.234" | 31.34  |
| R               | 0.375" | 9.53   |
| S               | 0.063" | 1.59   |
| Metal Thickness | 0.134" | 3.40   |

Machine Screws: 12-24 x 1/2 F.H., 12-24 X 13 F.H Wood Screws: 1 1/4 x no. 12 F.H., 32 x no. 12 F.H.



**Class Number** 

Steel LH606SH



#### Hinges for fire doors

6.4.3\* Builders Hardware

**6.4.3.1** Hinges shall be as specified in individual door manufacturer's published listings or Table 6.4.3.1.

**6.4.3.1.1** Doors up to 60" (1.52 m) in height shall be provided with two hinges and an additional hinge for each additional 30" (0.762 m) of door height or fraction thereof.

**6.4.3.1.1.1** The distance between hinges shall be permitted to exceed 30" (0.762 m).

**6.4.3.1.1.2** Where spring hinges are used, at least two shall be provided.

**6.4.3.1.2** All hinges or pivots, except spring hinges, shall be of the ball bearing type.

**6.4.3.1.2.1** Hinges or pivots employing other anti-friction bearing surfaces shall be permitted if they meet the requirements of ANSI/BHMA A156.1, Standard for Butts and Hinges.

**6.4.3.1.2.2** Spring hinges shall be labeled and shall meet the requirements of ANSI/BHMA A156.17, Standard for self-closing Hinges & Pivots, Grade 1.

Table 6.4.3.1 Builders Hardware Mortise, Surface, and Full Length Hinges, Pivots, or Spring Hinges for Swinging Doors

|                                       | Maximum       | Door Size   | Minimum I      | Hinge Size    |  |
|---------------------------------------|---------------|-------------|----------------|---------------|--|
|                                       | Width         | Height      | Height         | Thickness     |  |
| Door Rating (hr)                      | ft (m)        | ft (m)      | in. (mm)       | in. (mm)      |  |
| For 1 3/4" (44.5 mm) or Thicker Doors |               | Type Hinge  |                |               |  |
| 3, 1 1/2, 1, 3/4, 1/2, 1/3            | 4" (1.22)     | 10" (3.05)  | 4 1/2" (114.3) | 0.180" (4.57) | Steel, mortise or surface                                      |
| 3, 1 1/2, 1, 3/4, 1/2, 1/3            | 4" (1.22)     | 8" (2.44)   | 4 1/2" (114.3) | 0.134" (3.40) | Steel, mortise or surface                                      |
| 1 1/2, 3/4, 1/2, 1/3                  | 3 1/6" (0.96) | 8" (2.44)   | 6" (152.4)     | 0.225" (5.72) | Steel, olive knuckle or paumelle                               |
| 3, 1 1/2, 3/4, 1/2, 1/3               | 4" (1.22)     | 10" (3.05)  | 4" (101.6)     | 0.225" (5.72) | Steel pivots (including top, bottom, and intermediate)         |
| 1 1/2, 1, 3/4, 1/2, 1/3               | 3" (0.91)     | 5" (1.52)   | 4" (101.6)     | 0.130" (3.30) | Steel, mortise or surface                                      |
| 1 1/2, 1, 3/4, 1/2, 1/3               | 2" (0.61)     | 3" (0.91)   | 3" (76.2)      | 0.092" (2.34) | Steel, mortise or surface                                      |
| 3, 1 1/2, 1, 3/4, 1/2, 1/3            | 3" (0.91)     | 7" (2.13)   | 4 1/2" (114.3) | 0.134" (3.40) | Steel mortise or surface (labeled, self-closing, spring type)  |
| 3, 1 1/2, 1, 3/4, 1/2, 1/3            | 3" (0.91)     | 7" (2.13)   | 4" (101.6)     | 0.105" (2.67) | Steel, mortise or surface (labeled, self-closing, spring type) |
|                                       | For 1 3/8" (3 | 34.93 mm) D | oors           |               | Type Hinge   |
| 3, 11/2, 3/4, 1/2, 1/3                | 3" (0.91)     | 7" (2.13)   | 3 1/2" (88.9)  | 0.123" (3.12) | Steel, mortise or surface                                      |
| 3, 11/2, 1, 3/4, 1/2, 1/3             | 2 2/3" (0.81) | 7" (2.13)   | 3 1/2" (88.9)  | 0.105" (2.67) | Steel, mortise or surface (labeled, self-closing, spring type) |

- **6.4.3.1.3** Hinges 4 1/2" (114 mm) high and 0.180" (4.57 mm) thick shall be permitted for use on wide and heavy doors or doors that are subjected to heavy use or unusual stress.
- **6.4.3.1.4** Fire doors with hinges of lighter weight that are not of the ball beaing type shall be permitted under the following conditions:
  - 1. They are part of a listed assembly.
  - 2. They meet the test requirements of ANSI/BHMA A156.1, Standard for Butts and Hinges.
  - 3. They have been tested to a minimum of 350,000 cycles.
- **6.4.3.1.5** Pivot sets made up of components that are smaller or of a lighter gauge than shown in Table 6.4.3.1 shall be permitted to be used, provided they meet the requirements of ANSI/BHMA A156.4, Standard for Door Controls (Closers), and are in accordance with the manufacturer's label service procedures.
- 6.4.3.2 Attaching Hinges to Doors
- **6.4.3.2.1** Hinges shall be secured in accordance with the listing and the manufacturer's installation instructions.
- **6.4.3.2.2** Mortise hinges shall be secured to reinforcements in the doors with steel machine screws.
- 6.4.3.2.3 Mortise hinges shall be secured to wood and plastic-covered composite doors or wood core doors with No. 12 x 1 1/4" (31.75 mm) flat, threaded-to-the-head, steel wood screws. Pilot holes shall be drilled that are 5/32" (4 mm) in diameter.
- **6.4.3.2.4** Surface hinges shall be attached with steel through-bolts.
- **6.4.3.3** Attaching Hinges to Frames Hinges shall be secured to frames with steel screws.
- **6.4.3.3.1** Types of screws shall be permitted to vary depending on material use for the manufacture of labeled door frames.
- **6.4.3.3.2** The manufacturer's instructions and published listings for labeled door frames shall be referenced for specific screw requirements
- **6.4.3.3.4 Shimming** When required to meet the clearances stated in 6.3.1.7, the shimming of hinges using steel shims shall be permitted.



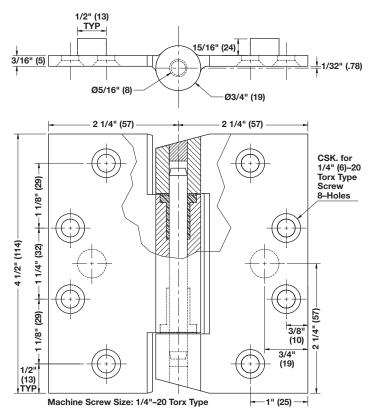
Material: Cast Stainless Steel, Type 304Finish: 630 satin stainless steel (US32D)

## LH918 Full Mortise Butt Hinge with Shear Resistant Stud with Slopped Tips



W x D x H: 4 1/2" x 4 1/2" x 3/16" (114 x 114 x 5 mm)

| Item No.   |
|------------|
| 926.39.946 |





> Material: Cast Stainless Steel

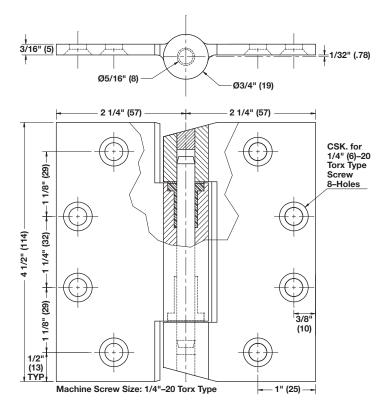
> Finish: 630 satin stainless steel (US32D)

## LH919 Full Mortise Butt Hinge with Slopped Tips



W x D x H: 4 1/2" x 4 1/2" x 3/16" (114 x 114 x 5 mm)

| , | •          |
|---|------------|
|   | Item No.   |
|   | 926.39.947 |





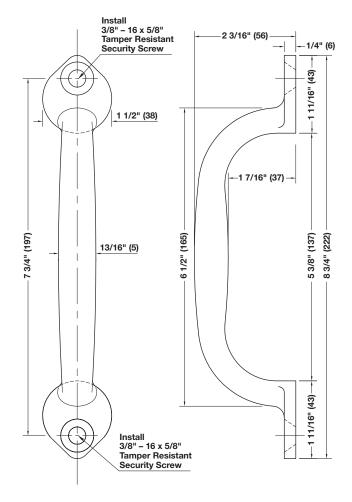
> Material: Cast Stainless Steel

> Finish: 630 satin stainless steel (US32D)

#### LH920 Cast Surface Pull



| Item No.   |
|------------|
| 104.69.000 |





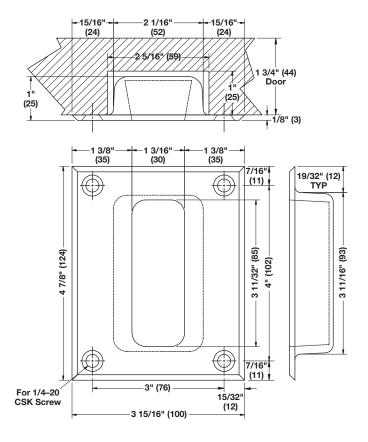
> Material: Cast Stainless Steel

> Finish: 630 satin stainless steel (US32D)

#### LH921 Cast Flush Pull



| Item No.   |
|------------|
| 104.69.010 |





> Handing: Non-handed
> Inset: 1/8" (3 mm)
> Maximum door width: 48" (1219 mm)
> For door weights: Up to 600 lbs.

> Mounting hardware: #10 x 1/2" self-drilling and tapping screws, #10 x 1" wood screws

> Fire rated: ULC up to 3 hours

#### **Full Mortise Pin and Barrel Hinge**



CH951 Shown

#### CH941

> Material: Cold Rolled Steel

> Finish: 600 prime coated (USP)

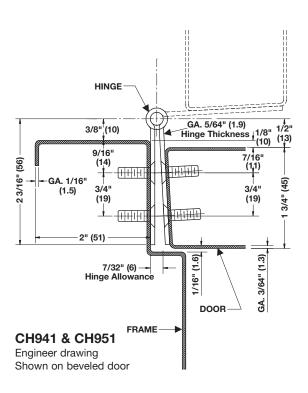
| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.000 |
| 8' (2.4 m) | 351.23.001 |
| 10' (3 m)  | 351.23.002 |

#### CH951

> Material: 14 Gauge 304 Stainless Steel

> Finish: 630 satin stainless steel (US32D)

| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.003 |
| 8' (2.4 m) | 351.23.004 |
| 10' (3 m)  | 351.23.005 |



Dimensional data not binding. We reserve the right to alter specifications without notice.

Handing: Non-handed
Maximum door width: 48" (1219 mm)
For door weights: Up to 600 lbs.

> Mounting hardware: #10 x 1/2" self-drilling and tapping screws, #10 x 1" wood screws

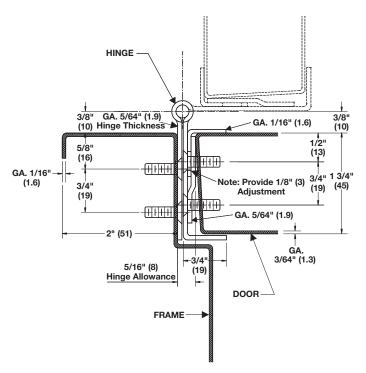
> Fire rated: ULC up to 3 hours
> Material: 14 Gauge 304 Stainless Steel
> Finish: 630 satin stainless steel (US32D)

## CH952 Full Wrap Edge Guard Hinge (Edge Mount)





| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.013 |
| 8' (2.4 m) | 351.23.014 |
| 10' (3 m)  | 351.23.015 |



Dimensional data not binding. We reserve the right to alter specifications without notice.

Handing: Non-handed
Maximum door width: 48" (1219 mm)
For door weights: Up to 600 lbs.

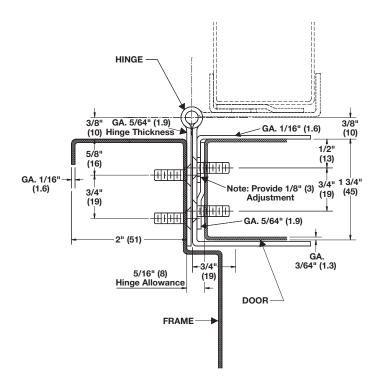
> Mounting hardware: #10 x 1/2" self-drilling and tapping screws, #10 x 1" wood screws

> Fire rated: ULC up to 3 hours
> Material: 14 Gauge 304 Stainless Steel
> Finish: 630 satin stainless steel (US32D)

## CH952E Extended Full Wrap Edge Guard Hinge (Edge Mount)



| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.023 |
| 8' (2.4 m) | 351.23.024 |
| 10' (3 m)  | 351.23.025 |



Dimensional data not binding. We reserve the right to alter specifications without notice.

#### **Continuous Hinges**



> Area of application: Bevel or square edge doors

Handing: Non-handed
Maximum door width: 48" (1219 mm)
For door weights: Up to 600 lbs.

> Mounting hardware: #10 x 1/2" self-drilling and tapping screws, #10 x 1" wood screws

> Fire rating: ULC up to 3 hours

#### Half Wrap Edge Guard Hinge (Edge Mount)



#### **CH943**

> Material: Cold Rolled Steel

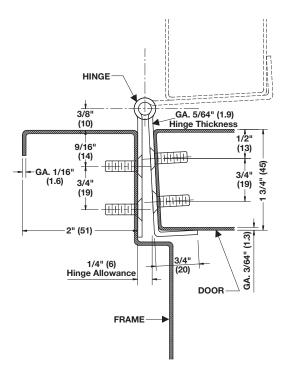
> Finish: 600 prime coated (USP)

| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.010 |
| 8' (2.4 m) | 351.23.011 |
| 10' (3 m)  | 351.23.012 |

#### **CH953**

- > Material: 14 Gauge 304 Stainless Steel
- > Finish: 630 satin stainless steel (US32D)

| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.033 |
| 8' (2.4 m) | 351.23.034 |
| 10' (3 m)  | 351.23.035 |





Handing: Non-handed
Maximum door width: 48" (1219 mm)
For door weights: Up to 600 lbs.

> Mounting hardware: #10 x 1/2" self-drilling and tapping screws, #10 x 1" wood screws

> Fire rating: ULC up to 3 hours

#### Half Mortise Pin and Barrel Hinge



#### **CH944**

> Material: Cold Rolled Steel

> Finish: 600 prime coated (USP)

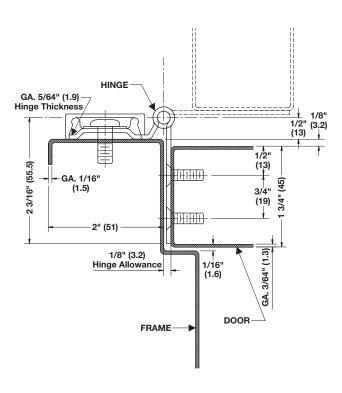
| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.020 |
| 8' (2.4 m) | 351.23.021 |
| 10' (3 m)  | 351.23.022 |

#### CH954

> Material: 14 Gauge 304 Stainless Steel

> Finish: 630 satin stainless steel (US32D)

| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.006 |
| 8' (2.4 m) | 351.23.007 |
| 10' (3 m)  | 351.23.008 |



Dimensional data not binding. We reserve the right to alter specifications without notice.

HAFELE

> Area of application: Bevel or square edge doors

> Handing: Non-handed > Maximum door width: 48" (1219 mm) > For door weights: Up to 600 lbs.

> Mounting hardware: #10 x 1/2" self-drilling and tapping screws, #10 x 1" wood screws

> Fire rating: ULC up to 3 hours

#### Half Mortise with Guard Pin and Barrel Hinge



#### **CH945**

> Material: Cold Rolled Steel

> Finish: 600 prime coated (USP)

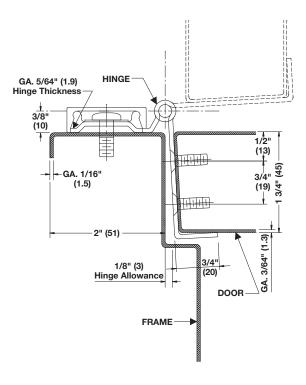
| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.030 |
| 8' (2.4 m) | 351.23.031 |
| 10' (3 m)  | 351.23.032 |

#### **CH955**

> Material: 14 Gauge 304 Stainless Steel

> Finish: 630 satin stainless steel (US32D)

| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.016 |
| 8' (2.4 m) | 351.23.017 |
| 10' (3 m)  | 351.23.018 |





Handing: Non-handed
Maximum door width: 48" (1219 mm)
For door weights: Up to 600 lbs.

> Mounting hardware: #10 x 1/2" self-drilling and tapping screws, #10 x 1" wood screws

> Fire rating: ULC up to 3 hours

#### **Swing Clear Pin and Barrel Hinge**



#### **CH946**

> Material: Cold Rolled Steel

> Finish: 600 prime coated (USP)

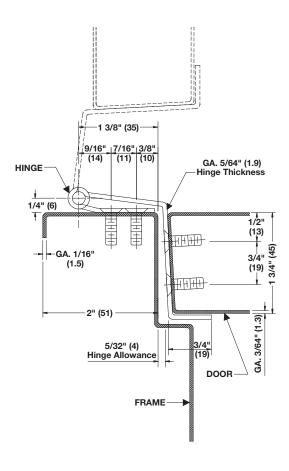
| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.040 |
| 8' (2.4 m) | 351.23.041 |
| 10' (3 m)  | 351.23.042 |

#### **CH956**

> Material: 14 Gauge 304 Stainless Steel

> Finish: 630 satin stainless steel (US32D)

| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.026 |
| 8' (2.4 m) | 351.23.027 |
| 10' (3 m)  | 351.23.028 |



Handing: Non-handed
Maximum door width: 48" (1219 mm)
For door weights: Up to 600 lbs.

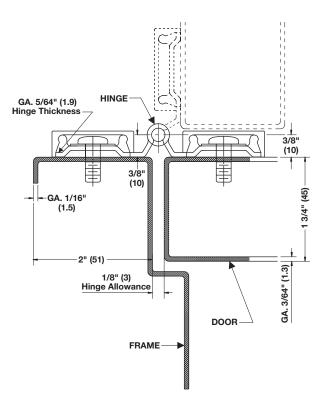
> Mounting hardware: #10 x 1/2" self-drilling and tapping screws, #10 x 1" wood screws

> Fire rating: ULC up to 3 hours
> Material: 14 Gauge 304 Stainless Steel
> Finish: 630 satin stainless steel (US32D)

#### CH957 Full Surface Hinge (Flush)



| Length     | Item No.   |
|------------|------------|
| 7' (2.1 m) | 351.23.036 |
| 8' (2.4 m) | 351.23.037 |
| 10' (3 m)  | 351.23.038 |



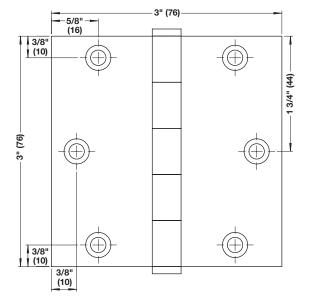


- > Extruded
- > Plain bearing
- > Material: Brass

#### LH3030



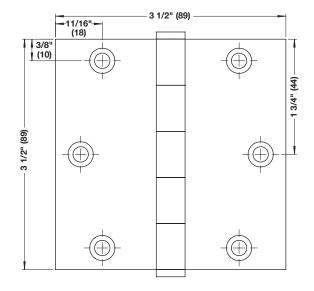
| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.948 |
| 633 satin brass (US4)                | 926.39.949 |
| 609 satin brass, blackened (US5)     | 926.39.950 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.951 |
| 618 bright nickel-plated (US14)      | 926.39.952 |
| 619 satin nickel-plated (US15)       | 926.39.953 |
| gun metal (US15B)                    | 926.39.954 |
| 612 nickel-plated, blackened (US17A) | 926.39.955 |
| 622 flat black (US19)                | 926.39.956 |
| 625 bright chrome-plated (US26)      | 926.39.957 |



#### LH3535



| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.958 |
| 633 satin brass (US4)                | 926.39.959 |
| 609 satin brass, blackened (US5)     | 926.39.960 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.961 |
| 618 bright nickel-plated (US14)      | 926.39.962 |
| 619 satin nickel-plated (US15)       | 926.39.963 |
| gun metal (US15B)                    | 926.39.964 |
| 612 nickel-plated, blackened (US17A) | 926.39.965 |
| 622 flat black (US19)                | 926.39.966 |
| 625 bright chrome-plated (US26)      | 926.39.967 |

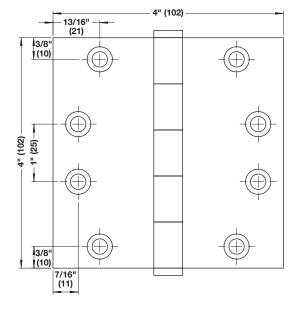


- > Extruded
- > Plain bearing
- > Material: Brass

#### LH4040



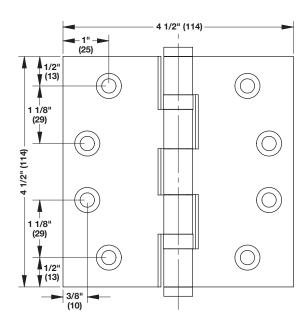
| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.968 |
| 633 satin brass (US4)                | 926.39.969 |
| 609 satin brass, blackened (US5)     | 926.39.970 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.971 |
| 618 bright nickel-plated (US14)      | 926.39.972 |
| 619 satin nickel-plated (US15)       | 926.39.973 |
| gun metal (US15B)                    | 926.39.974 |
| 612 nickel-plated, blackened (US17A) | 926.39.975 |
| 622 flat black (US19)                | 926.39.976 |
| 625 bright chrome-plated (US26)      | 926.39.977 |



#### LH4545



| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.978 |
| 633 satin brass (US4)                | 926.39.979 |
| 609 satin brass, blackened (US5)     | 926.39.980 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.981 |
| 618 bright nickel-plated (US14)      | 926.39.982 |
| 619 satin nickel-plated (US15)       | 926.39.983 |
| gun metal (US15B)                    | 926.39.984 |
| 612 nickel-plated, blackened (US17A) | 926.39.985 |
| 622 flat black (US19)                | 926.39.986 |
| 625 bright chrome-plated (US26)      | 926.39.987 |



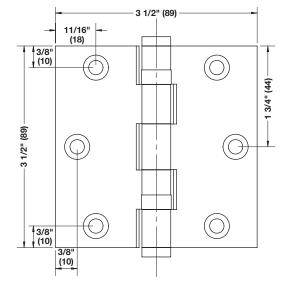


- > Extruded
- > Ball bearing> Material: Brass

#### **LH3535 BB**



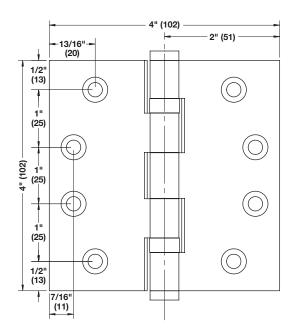
| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.988 |
| 633 satin brass (US4)                | 926.39.989 |
| 609 satin brass, blackened (US5)     | 926.39.990 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.991 |
| 618 bright nickel-plated (US14)      | 926.39.992 |
| 619 satin nickel-plated (US15)       | 926.39.993 |
| gun metal (US15B)                    | 926.39.994 |
| 612 nickel-plated, blackened (US17A) | 926.39.995 |
| 622 flat black (US19)                | 926.39.996 |
| 625 bright chrome-plated (US26)      | 926.39.997 |



#### LH4040 BB



| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.672 |
| 633 satin brass (US4)                | 926.39.673 |
| 609 satin brass, blackened (US5)     | 926.39.674 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.675 |
| 618 bright nickel-plated (US14)      | 926.39.676 |
| 619 satin nickel-plated (US15)       | 926.39.677 |
| gun metal (US15B)                    | 926.39.678 |
| 612 nickel-plated, blackened (US17A) | 926.39.679 |
| 622 flat black (US19)                | 926.39.680 |
| 625 bright chrome-plated (US26)      | 926.39.681 |



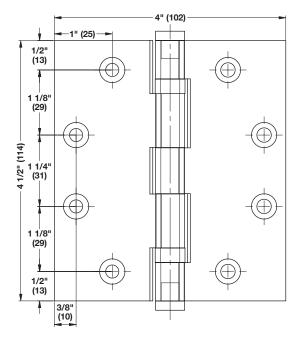


- > Extruded
- > Ball bearing
- > Material: Brass

# **LH4540 BB**



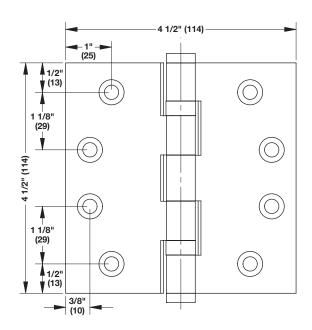
| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.631 |
| 633 satin brass (US4)                | 926.39.632 |
| 609 satin brass, blackened (US5)     | 926.39.633 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.634 |
| 618 bright nickel-plated (US14)      | 926.39.635 |
| 619 satin nickel-plated (US15)       | 926.39.636 |
| gun metal (US15B)                    | 926.39.637 |
| 612 nickel-plated, blackened (US17A) | 926.39.638 |
| 622 flat black (US19)                | 926.39.639 |
| 625 bright chrome-plated (US26)      | 926.39.640 |



# LH4545 BB



| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.611 |
| 633 satin brass (US4)                | 926.39.612 |
| 609 satin brass, blackened (US5)     | 926.39.613 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.614 |
| 618 bright nickel-plated (US14)      | 926.39.615 |
| 619 satin nickel-plated (US15)       | 926.39.616 |
| gun metal (US15B)                    | 926.39.617 |
| 612 nickel-plated, blackened (US17A) | 926.39.618 |
| 622 flat black (US19)                | 926.39.619 |
| 625 bright chrome-plated (US26)      | 926.39.620 |



Dimensions in mm Inches are approximate

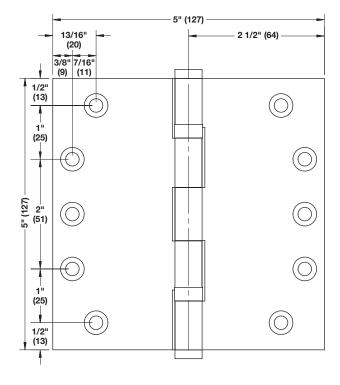


- > Extruded
- > Ball bearing > Material: Brass

# LH5050 BB



| Finish                               | Item No.   |
|--------------------------------------|------------|
| 632 bright brass (US3)               | 926.39.590 |
| 633 satin brass (US4)                | 926.39.591 |
| 609 satin brass, blackened (US5)     | 926.39.592 |
| 641 satin bronze, oil-rubbed (US10B) | 926.39.593 |
| 618 bright nickel-plated (US14)      | 926.39.594 |
| 619 satin nickel-plated (US15)       | 926.39.595 |
| gun metal (US15B)                    | 926.39.596 |
| 612 nickel-plated, blackened (US17A) | 926.39.597 |
| 622 flat black (US19)                | 926.39.598 |
| 625 bright chrome-plated (US26)      | 926.39.599 |





# 2

# DOOR CLOSERS



2





| Closers           |     |
|-------------------|-----|
| Ctandard Duty     | 2.3 |
| Standard Duty     | =:0 |
| Medium Duty       | 2.4 |
| Medium/Heavy Duty | 2.5 |
| Heavy Duty        | 2.6 |
| Extra Heavy Duty  | 2.7 |

HAFELE

| Accessories   |                           |
|---|---------------------------|
| 8000 Series (Arms, Drop Plates and Covers)800 Series (Arms, Drop Plates and Covers) | 2.8 - 2.11<br>2.12 - 2.14 |

# **Grade 2 Standard Duty Closer**



2

> Area of application:
 Features:
 Adjustment:
 Certification:
 Ideal for suite entry doors and light commercial use
 Tri-packed (regular, top jamb and parallel arm mount)
 Two valves regulate closing and latching speed
 UL/cUL listed; BHMA Certified ANSI A156.4

> H x W: 1 5/8" x 7 1/8" (41 x 181 mm)

> Projection: 2 3/8" (60 mm) > Material: Cast Aluminum

## LH303



| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.547 |
| bronze (DU)   | 931.65.552 |
| brass (PB)    | 931.65.557 |

## Note

See template for the hole dimensions.

> H x W: 1 5/8" x 8 7/8" (41 x 225 mm)

> Projection: 2 7/8" (73 mm) > Material: Cast Aluminum



| Model        | Finish        | Item No.   |
|--------------|---------------|------------|
|              | aluminum (AL) | 931.65.548 |
| 503 (size 3) | bronze (DU)   | 931.65.553 |
|              | brass (PB)    | 931.65.558 |
|              | aluminum (AL) | 931.65.549 |
| 534 (size 4) | bronze (DU)   | 931.65.554 |
|              | brass (PB)    | 931.65.559 |

#### Note

See template for the hole dimensions.

2

# **Medium/Heavy Duty Closer**



2

> Area of application: Ideal for commercial use

> Sizes: 1-6

> Features: Tri-packed (regular, top jamb and parallel arm mount)
> Adjustment: Three valves regulate closing, latching speed and back check

> Certification: UL/cUL listed; BHMA Certified ANSI A156.4 Grade 1 to 2,000,000 cycles

> H x W: 1 5/8" x 9 5/8" (41 x 244 mm)

> Projection: 2 3/4" (70 mm) > Material: Cast Aluminum

# LH5016



| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.550 |
| bronze (DU)   | 931.65.555 |

#### Note

See template for the hole dimensions.



> Area of application: Suitable for schools, hospitals and other high traffic applications

> Sizes: 1-6

> Features: Tri-packed (regular, top jamb and parallel arm mount)
> Adjustment: Three valves regulate closing, latching speed and back check

> Certification: UL/cUL listed; BHMA Certified ANSI A156.4 Grade 1 to 2,000,000 cycles

> H x W: 2 7/8" x 13 1/16" (73 x 332 mm)

> Projection: 2 1/8" (54 mm)

> Optional cover finishes: 630 (US32D), 625 (US26)

> Material: Cast Aluminum

## **LH816**



| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.551 |
| bronze (DU)   | 931.65.556 |

### Note

See template for the hole dimensions. Track arm, hold open and cush stop available. Additional DA and BC values are standard.

Dimensions in mm Inches are approximate

# **Extra Heavy Duty Closer, with Cover**



2

> Area of application: Suitable for schools, hospitals, main entrances and other high traffic applications

where maximum door control is required

> Sizes: 1-6

> Features: Tri-packed (regular, top jamb and parallel arm mount)
> Adjustment: Three valves regulate closing, latching speed and back check

> Certification: UL/cUL listed; BHMA Certified ANSI A156.4 Grade 1 to 2,000,000 cycles

> H x W: 3 1/2" x 12 1/4" (89 x 311 mm)

> Projection: 2 1/4" (57 mm)

> Optional cover finishes: 630 (US32D) and 625 (US26) and 632 (US3)

> Material: Cast Aluminum

## LH8016



| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.200 |
| bronze (DU)   | 931.65.201 |

#### Note

See template for the hole dimensions. Track arm, hold open and cush stop are available; other options include long rod and shoe. Additional DA and BC values are standard. Optional cover finishes: 630 (US32D), 625 (US26) and 632 (US3).



# **ARM41 Hold Open Arm**



- > Optional arm provides hold open function with templated stop/hold open points
- > Handle controls hold open function

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.215 |
| bronze (DU)   | 931.65.216 |

# **CSA40 Cush Stop Arm**



> Optional, non-handed parallel arm features solid main arm and forearm with stop in soffit shoe

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.228 |
| bronze (DU)   | 931.65.229 |

# HAFELE

# **DPPA35 Drop Plate**



- > Required for parallel arm mounting where top rail is less than 5 1/2" (140 mm), measured from the stop
- > Plate requires 2" (50 mm) minimum top rail

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.245 |
| bronze (DU)   | 931.65.246 |

# **DPSS32 Drop Plate**



- > Required for hinge side mount where top rail is less than 3 3/4" (94 mm)
- > Plate requires 2" (50 mm) minimum top rail

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.247 |
| bronze (DU)   | 931.65.248 |



# **DPSS34 Drop Plate**



- > Centers top jamb mounted closer vertically on head frame where face is less than 3 1/2" (90 mm)
- > Plate requires 1 3/4" (44 mm) minimum head frame

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.251 |
| bronze (DU)   | 931.65.252 |

# **SNBAL Sex Nuts**



> Supplied standard on 8016 closer; optional for 816 and 5000 series closers

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.281 |
| bronze (DU)   | 931.65.282 |



# LH044 Hold Open Arm



> Optional, non-handed with friction hold open

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.217 |
| bronze (DU)   | 931.65.218 |

# **LHHD42 Heavy Duty Arm**



> Non-handed parallel arm features forged, solid steel main and forearm for abusive installations

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.213 |
| bronze (DU)   | 931.65.214 |

# **Stainless Steel Cover**



# > Optional, non-handed

| Finish                            | Item No.   |
|-----------------------------------|------------|
| 630 satin stainless steel (US32D) | 931.65.931 |
| 632 bright brass (US3)            | 931.65.938 |

Dimensions in mm Inches are approximate



# **DP816 Drop Plate**



- > Required for hinge side mount where top rail is less than 2 1/2" (65 mm)
- > Required for top jamb mounting where head frame is less than 1 3/4" (44 mm) or flush ceiling exists
- > Plate requires minimum 1 1/2" (38 mm) top rail or 1 1/4" (31 mm) head frame

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.241 |
| bronze (DU)   | 931.65.242 |

## **DPPA816 Drop Plate**



- > Required for parallel arm mounting where top rail is less than 4 3/8" (111 mm), measured from the stop
- > Plate requires 1 3/4" (45 mm) minimum top rail

|               | •          |
|---------------|------------|
| Finish        | Item No.   |
| aluminum (AL) | 931.65.243 |
| bronze (DU)   | 931.65.244 |

# HAFELE

## **Extended Rod and Shoe**



> For top jamb mounts with deep reveals

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.291 |
| bronze (DU)   | 931.65.292 |

# **LHCHST816 Cush Stop Arm**



> Optional, non-handed parallel arm features solid forged steel main arm and forearm with stop in soffit shoe

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.224 |
| bronze (DU)   | 931.65.225 |

# LHCHSTHD816 Cush Stop Hold Arm



- > Optional, non-handed parallel arm features solid forged steel main and forearm
- > Provides hold open function with templated stop/hold open points
- > Handle controls hold open function

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.226 |
| bronze (DU)   | 931.65.227 |

Dimensions in mm Inches are approximate



# LHHOA816 Hold Open Arm



> Optional non-handed arm with hold open adjustable at shoe

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.219 |
| bronze (DU)   | 931.65.221 |

# LH816 Track Arm (pull side only)



> Universal slim line single lever track arm designed for interior use on narrow head frames and top rails

| Finish        | Item No.   |
|---------------|------------|
| aluminum (AL) | 931.65.211 |
| bronze (DU)   | 931.65.212 |

## 800 Series Stainless Steel Cover



> Optional, non-handed stainless steel cover provides complete enclosure

| Finish                            | Item No.   |
|-----------------------------------|------------|
| 630 satin stainless steel (US32D) | 931.65.980 |

Dimensional data not binding. We reserve the right to alter specifications without notice.

Dimensions in mm Inches are approximate



# 3

# EXIT DEVICES



# **Contents**

3







# **Exit Devices 8000 Series**

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|---|-------------|
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| Trims                    | 3.40 - 3.44 |
|--------------------------|-------------|
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## **Applications**

Exit Device (also known as panic device or panic hardware) is terminology used in architectural hardware. It is a type of lock having a push bar (also known as a push pad, push rail or touch bar). When the push bar is depressed it will retract the latch bolt (s) permitting the door to be opened in the direction of travel. An Exit device is a critical part of the Fire, Life Safety and Security in all types of buildings.

Exit devices have two classifications: Panic hardware and Fire exit hardware. Both are designed to provide immediate egress. All Exit devices are tested and listed by an authorized, nationally recognized independent test laboratory. All Exit devices meet or exceed ANSI/BHMA A156.3 specifications.

8000 Series exit devices are suitable for use in the following types of buildings:

Offices
 Apartments
 Retail Stores
 Multi-Family
 Factories
 Gymnasiums
 Education
 Parking Garages
 Restaurants

8000 Series exit devices are of superior quality and performance. These heavy duty devices are designed to exceed standards. The 8000 series has a modern look and are suitable for heavy traffic applications. The 8000 Series are Underwriters Laboratories (UL, and cUL) listed for Panic exit hardware or Fire exit hardware and certified as ANSI/BHMA Grade 1.

## **Features**

- > All devices are non-handed
- > The center case is multi-functional
- > Pressure along any part of the touch pad will retract latch bolt
- > Auxiliary guarded latch deadlocks automatically when door closes
- > High shock resistant latching mechanism designed for protection from vandalism or forced entry
- > All inside components are made of rust resistant alloy or zinc dichromate plated steel
- > Panic hardware users have the option of hex key (standard) or cylinder dogging (special order); allowing for convenient push pull operation during peak traffic times

# HXFELE

The 8000 Series is a heavy duty modern push bar design that offers two external surface styles: smooth device body (optional) and grooved device body (standard). The 8500 and 8600 Series feature a smooth device body. The 8700 and 8800 Series are grooved device bodies.

These two styles feature rugged performance and elegant appearance. The two styles are uniform in dimensions and mechanical construction. The two different styles provide a choice for architects and end users.



8500 Series (narrow stile)

Smooth device body



8600 Series (wide stile)

Smooth device body



8700 Series (narrow stile)

Grooved device body



8800 Series (wide stile)

Grooved device body

# **Rim Exit Devices**



> Area of application: 8610S/8810S devices are used for all types of single and double door applications with mullion

8610F/8810F devices are used for listed fire labeled single doors up to 4' x 8' (1219 mm x 2438 mm)

or 8' x 8' (2438 mm x 2438 mm) double doors with mullion. 36" (914 mm) actual end to end length 33 1/2" (850 mm)

> Device lengths: 36" (914 mm) actual end to end length 33 1/2" > Door widths: For 29" to 36" (736 mm to 914 mm) doors

> Minimum stile width: 4 1/4" (107 mm)

> Latch bolt: 3/4" (19 mm) throw, deadlocking design

> Strikes: 801 (panic), 802 (fire)

> Dogging: Panic device: Hex key dogging (RD) standard; Fire exit device: No dogging (ND)

> Dogging options: Cylinder dogging (CD); Less dogging (LD)

> Fasteners: Panic device: Machine screws supplied standard for HMD, sex nuts and bolts (SNB) can be ordered

separately for wood doors; Fire exit device: Sex nuts and bolts (SNB) supplied standard

> Mounting height: Standard device centerline from finished floor is 40" (1016 mm)

Projection: Push bar neutral 3 1/16" (78 mm); Push bar depressed 2 19/32" (66 mm)
 Certifications: UL/cUL listed for Panic exit hardware and 3 hour rating for Fire exit hardware

ANSI/BHMA certified: Devices are A156.3 Grade 1

> Finish: 626 satin chrome-plated (US26D)



| Version             | Item No.   |
|---------------------|------------|
| 8810S - panic-rated | 911.79.950 |
| 8810F – fire-rated  | 911.79.951 |
| 8610S - panic-rated | 911.51.180 |
| 8610F – fire-rated  | 911 51 181 |

# HXFELE

> Area of application: 8620S/8820S devices are used for all types of single and double door applications with mullion

8620F/8820F devices are used for listed fire labeled single doors up to 4' x 8' (1219 mm x 2438 mm)

or 8' x 8' (2438 mm x 2438 mm double doors with mullion 36" (914 mm) actual end to end length 33 1/2" (850 mm)

> Device lengths: 36" (914 mm) actual end to end length 33 1. > Door widths: For 29" to 36" (736 mm to 914 mm) doors

> Minimum stile width: 4 1/4" (107 mm)

> Latch bolt: Stainless Steel two piece mechanical 3/4" (19 mm) with anti-friction insert and auxiliary deadlocking latch
> Strikes: Universal curved lip, non-handed, 818 (Panic), 828 (Fire). Optional 831 (panic) or 832 (fire) flat ANSI strike

> Dogging: Panic device: Hex key dogging (RD) standard; Fire exit device: No dogging (ND)

> Dogging options: Cylinder dogging (CD); Less dogging (LD)

> Fasteners: Panic device: Machine screws supplied standard for HMD, sex nuts and bolts (SNB) can be ordered

separately for wood doors; Fire exit device: Sex nuts and bolts (SNB) supplied standard

> Mounting height: Standard device centerline from finished floor is 40" (1016 mm)

Projection: Push bar neutral 3 1/16" (78 mm); Push bar depressed 2 19/32" (66 mm)
 Certifications: UL/cUL listed for Panic exit hardware and 3 hour rating for Fire exit hardware

ANSI/BHMA certified: devices are A156.3 Grade 1

> Finish: 626 satin chrome-plated (US26D)



| Version             | Item No.   |
|---------------------|------------|
| 8820S - panic-rated | 911.79.952 |
| 8820F – fire-rated  | 911.79.953 |
| 8620S - panic-rated | 911.51.182 |
| 8620F - fire-rated  | 911.51.183 |

> Area of application: 8630S/8830S devices are used primarily for double door applications

8630F/8830F devices are used for listed fire labeled double doors up to 8' x 8' (2438 mm x 2438 mm)

> Device lengths: 36" (914 mm) actual end to end length 33 1/2" (850 mm)

> Door widths: For 29" to 36" (736 mm to 914 mm) doors

> Minimum stile width: 4 1/4" (107 mm)

> Latch bolt: Top latch - 5/8" (16 mm) throw. Bottom latch - 5/8" (16 mm) throw, held in retracted position during door swing

> Strikes: Top - 812 (panic), 822 (fire); Bottom - 815 (panic), 825 (fire)

Panic device: Hex key dogging (RD) standard; Fire exit device: No dogging (ND) > Dogging:

> Dogging options: Cylinder dogging (CD); Less dogging (LD)

Panic device: Machine screws supplied standard for HMD, sex nuts and bolts (SNB) can be ordered > Fasteners:

separately for wood doors; Fire exit device: Sex nuts and bolts (SNB) supplied standard

> Mounting height: Standard device centerline from finished floor is 40" (1016 mm) > Door opening height: Available for standard door height of 7' or 8' (2133 or 2438 mm)

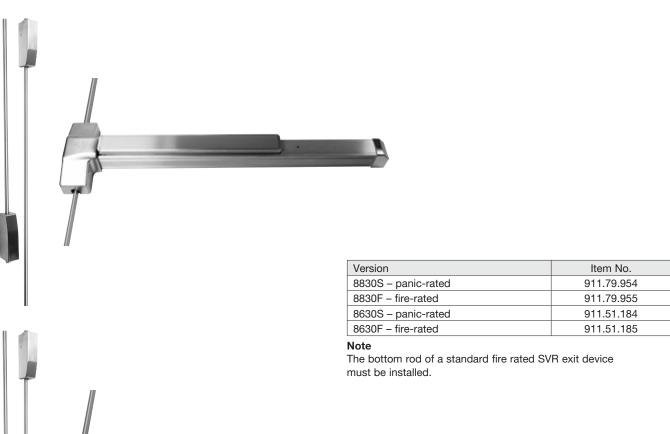
1/2" (13 mm) diameter tubular with rod guides, top rod has two pieces to accommodate 7' or 8' > Vertical rods:

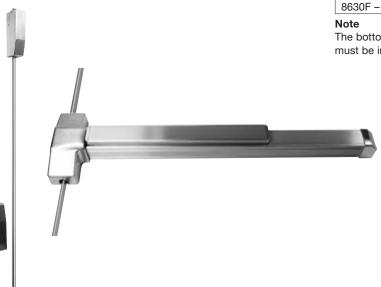
(2133 or 2438 mm) doors; Bottom rod is one piece with a length of 31 1/4" (794 mm)

> Projection: Push bar neutral 3 1/16" (78 mm); Push bar depressed 2 19/32" (66 mm) UL/cUL listed for Panic exit hardware and 3 hour rating for Fire exit hardware > Certifications:

ANSI/BHMA certified: devices are A156.3 Grade 1

> Finish: 626 satin chrome-plated (US26D)





Dimensions in mm Inches are approximate

We reserve the right to alter specifications without notice

Dimensional data not binding.

# Concealed Vertical Rod Exit Devices (CVR)



> Area of application: 8650S/WD8650S/8850S/WD8850S devices are used primarily for double door applications.

8650F/WD8650F/8850F/WD8850F devices are used for listed fire labeled double doors up to

8' x 8' (2438 mm x 2438 mm).

WD8850S/8850F furnished with 2 reinforced plates to strengthen top and bottom edge of wood door.

> Device lengths: 36" (914 mm) actual end to end length 33 1/2" (850 mm)

> Door widths: For 29" to 36" (736 mm to 914 mm) doors

> Minimum stile width: 4 1/4" (107 mm)

> Latch bolt: Top latch - 5/8" (16 mm) throw; Bottom latch - 5/8" (16 mm) throw, held in retracted position during door swing

> Strikes: Top - 813 (panic), 823 (fire); Bottom - 815 (panic), 825 (fire)

> Dogging: Panic device: Hex key dogging (RD) standard; Fire exit device: No dogging (ND)

> Dogging options: Cylinder dogging (CD); Less dogging (LD)

Panic device: Machine screws supplied standard for HMD; Fire exit device: Sex nuts and bolts (SNB) > Fasteners:

supplied standard

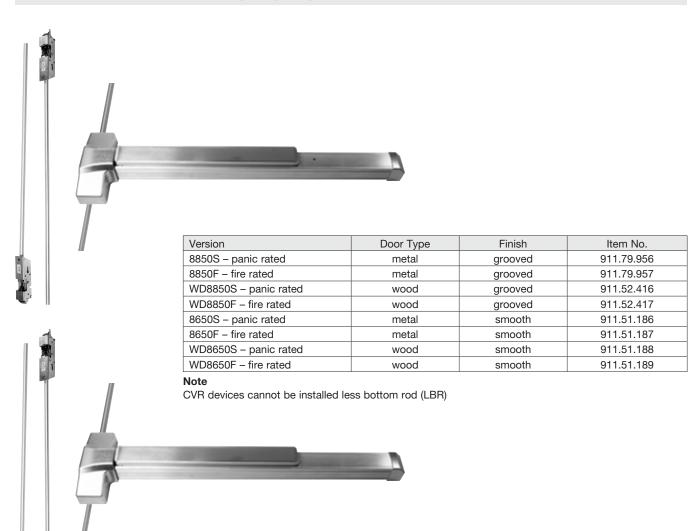
> Mounting height: Standard device centerline from finished floor is 40" (1016 mm) > Door opening height: Available for standard door height of 7' or 8' (2133 or 2438 mm)

> Vertical rods: Ø1/2" (13 mm) tubular with rod guides; Top rod has two pieces to accommodate 7' or 8' (2133 or 2438 mm) doors; Bottom rod is one piece 31 1/4" (794 mm) long

> Projection: Push bar neutral 3 1/16" (78 mm); Push bar depressed 2 19/32" (66 mm) > Certifications: UL/cUL listed for Panic exit hardware and 3 hour rating for Fire exit hardware

ANSI/BHMA certified: devices are A156.3 Grade 1

> Finish: 626 satin chrome-plated (US26D)



Dimensions in mm Inches are approximate



> Area of application: 8510S/8710S devices are used for narrow stile aluminum door applications. Narrow stile devices may also be

used on wide stile doors for appearance.

8510F/8710F devices are used for listed fire labeled single doors up to 4' x 8' (1219 mm x 2438 mm)

or 8' x 8' (2438 mm x 2438 mm) double doors with mullion. 36" (914 mm)actual end to end length 33 1/2" (850 mm)

> Device lengths: 36" (914 mm)actual end to end length 33 1/ > Door widths: For 29" to 36" (736 mm to 914 mm) doors

> Minimum stile width: 2 19/16" (66 mm)

Latch bolt: 3/4" (19 mm) throw, deadlocking design; Bottom - 801 (panic), 802 (fire)
 Dogging: Panic device: Hex key dogging (RD) standard; Fire exit device: No dogging (ND)

> Dogging options: Cylinder dogging (CD); Less dogging (LD)

> Fasteners: Panic device - Machine screws furnished standard, sex nuts and bolts (SNB) can be ordered separately

for wood doors; Fire Exit Device - Sex nuts and bolts (SNB) supplied standard

> Mounting height: Standard device centerline from finished floor is 40" (1016 mm)

Projection: Push bar neutral 3 1/16" (78 mm). Push bar depressed 2 19/32" (66 mm)
 Certifications: UL/cUL listed for Panic exit hardware and 3 hour rating for Fire exit hardware

ANSI/BHMA certified: devices are a156.3 Grade 1

> Finish: 626 satin chrome-plated (US26D)



| Version             | Item No.   |
|---------------------|------------|
| 8710S - panic-rated | 911.79.958 |
| 8710F – fire-rated  | 911.79.959 |
| 8510S - panic-rated | 911.51.190 |
| 8510F – fire-rated  | 911 51 191 |

# Narrow Surface Vertical Rod Exit Devices (SVR)



> Area of application: 8530S/8730S devices are used primarily for double door applications on glass aluminum doors.

8530F/8730F devices are used for appearance on listed fire labeled double doors up to

8' x 8' (2438 mm x 2438 mm).

> Device lengths: 36" (914 mm) actual end to end length 33 1/2" (850 mm)

> Door widths: For 29" to 36" (736 mm to 914 mm) doors

> Minimum stile width: 2 19/16" (66 mm)

> Latch bolt: Top latch - 5/8" (16 mm) throw; Bottom latch - 5/8" (16 mm) throw. Held in retracted position during door swing.

> Strikes: Top - 812 (panic), 822 (fire); Bottom - 815 (panic), 825 (fire)

> Dogging: Panic device: Hex key dogging (RD) standard; Fire exit device: No dogging (ND)

> Dogging options: Cylinder dogging (CD); Less dogging (LD)

> Fasteners: Panic device - Machine screws furnished standard for HMD and SNB furnished for top and bottom latches

Optional (SNB) can be ordered separately for device; Fire exit device - Sex nuts and bolts (SNB)

supplied standard

Mounting height: Standard device centerline from finished floor is 40" (1016 mm)
 Door opening height: Available for standard door height of 7' or 8' (2133 or 2438 mm)

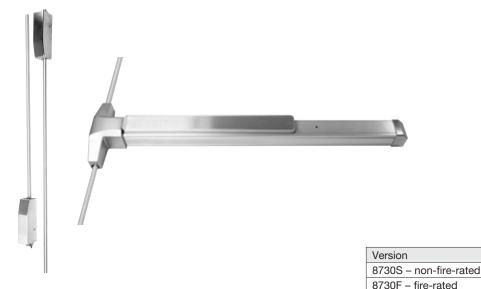
> Vertical rods: Ø1/2" (13 mm) tubular with rod guides; Top rod has two pieces to accommodate

7' or 8' (2133 or 2438 mm) doors; Bottom rod is one piece 31 1/4" (794 mm) long > Projection: Push bar neutral 3 1/16" (78 mm); Push bar depressed 2 19/32" (66 mm)

> Certifications: UL/cUL listed for Panic exit hardware and 3 hour rating for Fire exit hardware

ANSI/BHMA certified: devices are A156.3 Grade 1

> Finish: 626 satin chrome-plated (US26D)



| n 🗐 |  | 8530S - panic-rated |
|-----|--|---------------------|
|     |  | 8530F - fire-rated  |
|     |  |                     |
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Dimensions in mm Inches are approximate Dimensional data not binding. We reserve the right to alter specifications without notice

Item No.

911.79.960

911.79.961 911.51.192

911.51.193

# Narrow Concealed Vertical Rod Exit Devices (CVR)



> Area of application: 8550S/8750S devices are used primarily for double door applications on glass aluminum doors

8550F/8750F devices are used for appearance on listed fire labeled double doors up to

8' x 8' (2438 mm x 2438 mm).

36" (914 mm) actual end to end length 33 1/2" (850 mm) > Device lengths:

> Door widths: For 29" to 36" (736 mm to 914 mm) doors

> Minimum stile width: 2 19/16" (66 mm)

> Latch bolt: Top latch - 5/8" (16 mm) throw; Bottom latch - 5/8" (16 mm) throw, held in retracted position during door swing

Top - 813 (panic), 823 (fire); Bottom - 815 (panic), 825 (fire) > Strikes:

> Dogging: Panic device: Hex key dogging (RD) standard; Fire exit device: No dogging (ND)

Cylinder dogging (CD); Less dogging (LD) > Dogging options:

Panic device - Machine screws furnished standard for HMD and SNB furnished for top and bottom latches > Fasteners:

Optional (SNB) can be ordered separately for device; Fire exit device - Sex nuts and bolts (SNB)

supplied standard

Standard device centerline from finished floor is 40" (1016 mm) > Mounting height: > Door opening height: Available for standard door height of 7' or 8' (2133 or 2438 mm)

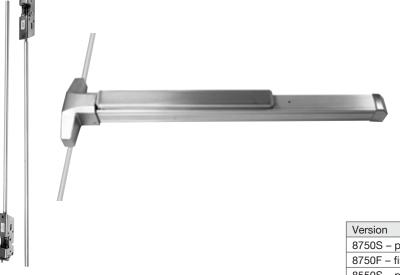
> Vertical rods: Ø1/2" (13 mm) tubular with rod guides; Top rod has two pieces to accommodate 7' or 8' (2133 or 2438 mm) doors; Bottom rod is one piece 31 1/4" (794 mm) long

Push bar neutral 3 1/16" (78 mm); Push bar depressed 2 19/32" (66 mm)

> Projection: > Certifications: UL/cUL listed for Panic exit hardware and 3 hour rating for Fire exit hardware

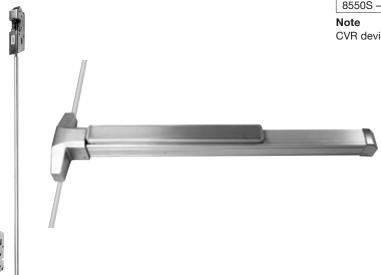
ANSI/BHMA certified: devices are A156.3 Grade 1

> Finish: 626 satin chrome-plated (US26D)



| Version             | Item No.   |
|---------------------|------------|
| 8750S - panic-rated | 911.79.962 |
| 8750F – fire-rated  | 911.79.963 |
| 8550S - panic-rated | 911.51.194 |
| 8550S – fire-rated  | 911.51.195 |

CVR devices cannot be installed less bottom rod (LBR)



Dimensions in mm Inches are approximate

Jimensional data not binding. We reserve the right to alter specifications without notice

# 3

# **Heavy Duty Grade 1**

# HAFELE

#### Wide and Narrow Stile Devices

Part NameMaterial1. Auxiliary Guarded LatchStainless Steel2. Latch Bolt, 3/4" (19 mm) throwStainless Steel

Chassis Cover (Head Cover)
 Chassis Plated
 Nonferrous Alloy or Stainless Steel
 Steel

Flated Steel
 Push Bar Extruded Aluminum
 Push Bar End Cap Nonferrous Alloy

7. Push Bar Trim Brass, Stainless Steel, Steel 8. Mechanism Housing (Device Body) Extruded Aluminum

Mechanism Housing (Device Body)
 Dogging Plate (Rear Cover)
 Extruded Aluminum
 Extruded Aluminum
 End Cap
 Top Latch, 5/8" (16 mm) throw
 Stainless Steel

Latch Assembly Cover Brass,
 Top Vertical Rod and Rod Guide
 Bottom Vertical Rod
 Strong Aluminum Tube
 Strong Aluminum Tube

15. End Cap Bracket16. Bottom Latch, 5/8" (16 mm) throwPlated SteelStainless Steel

# Wide Stile Device Lengths

> The device lengths are precut for 36" (914 mm) and 48" (1219 mm) wide door use (standard shipping size)

## The Short Device, 36"

- > 36" (914 mm) has an actual end to end length of 33 1/2" (850 mm) suitable for a 36" (914 mm) wide door use
- > Push pad length is 18 1/4" (464 mm)
- > The short device can be cut down to a minimum end to end size of: Standard device (S) 27" (686 mm)

Fire rated device (F) 25 1/4" (641 mm)

## The Long Device, 48"

- > 48" (1219 mm) has an actual end to end length of 45 1/2" (1156 mm) suitable for a 48" (1219 mm) wide door use
- > Push pad length is 21 1/2" (546 mm)
- > The long device can be cut down to a minimum end to end size of: Standard device (S) 31" (787 mm)

Fire rated device (F) 28 1/2" (724 mm)

## **Vertical Rods**

Our standard and fire rated vertical rod exit device accommodates up to 8' (2438 mm) doors. Fire rated devices may be ordered for up to 10' (3048 mm) fire exit doors. Specify door height if greater than standard sizes when ordering.

### Note

For fire rated devices consult door manufacturers literature for maximum allowable door height and width. End to end length does not include latch bolt.

Dimensional data not binding. We reserve the right to alter specifications without notice

# **Heavy Duty Grade 1**



## **Narrow Stile Device Lengths**

> The device lengths are precut for 36" (914 mm) and 48" (1219 mm) wide door use (standard shipping size)

## The Short Device, 36"

- > 36" (914 mm) has an actual end to end length of 34 1/4" (870 mm) suitable for a 36" (914 mm) wide door use
- > Push pad length is 18 1/4" (546 mm)
- > The short device can be cut down to a minimum end to end size of: Standard device (S) 27" (686 mm) Fire rated device (F) 25 1/4" (641 mm)

## The Long Device, 48"

- > 48" (1219 mm) has an actual end to end length of 45" (1143 mm) suitable for a 48" (1219 mm) wide door use
- > Push pad length is 21 1/2" (456 mm)
- > The long device can be cut down to a minimum end to end size of: Standard device (S) 32 1/2" (826 mm) Fire rated device (F) 31" (787 mm)

## **Vertical Rods**

Our standard and fire rated vertical rod exit device accommodates up to 8' (2438 mm) doors. Fire rated devices may be ordered for up to 10' (3048 mm) fire exit doors. Specify door height if greater than standard sizes when ordering.

For fire rated devices consult door manufacturers literature for maximum allowable door height and width. End to end length does not include latch bolt.

## Sex Nuts and Bolts (SNB) - Supplied with fire rated devices

SNB-For 1-3/4" Door



3/4"

SNB-For 2-1/4" Door

1-9/16"

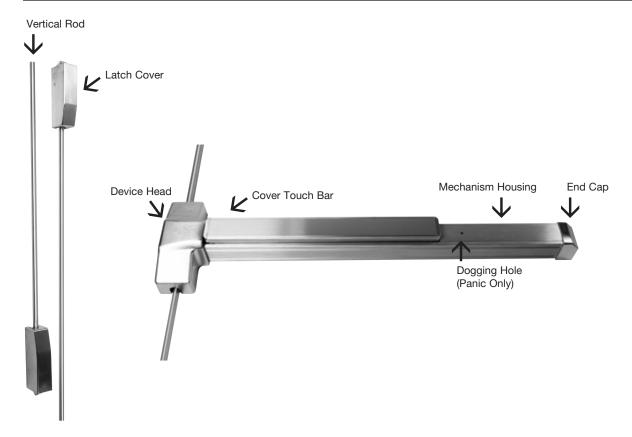
SNB-For 2-1/2" Door

1-9/16"

1 1/4"

Dimensional data not binding. We reserve the right to alter specifications without notice





# Shim Kits 8000 Series (made to order - customer special)

- > 1/8" (3 mm) thick shim plates for use on door with glass bead
- > Foot print matches 8000 series
- > Devices as specified (8700 or 8800)



Dimensional data not binding. We reserve the right to alter specifications without notice.

# HAFELE

## **Rim Strikes**

3 1/4"

(83 mm)

1 7/32" (31 mm)



Projection: 13/16" (21 mm)

1 7/32" (31 mm)

0

3 1/4"

(83 mm)

3 5/16"

(85 mm)

Projection: 13/16" (21 mm)

# **Mullion Strikes (sold separately)**

1 7/32" (31 mm)



Projection: 7/8" (22.5 mm)

25/32" (20.6 mm)



Projection: 7/8" (22.5 mm)

# **Vertical Rod Strikes**

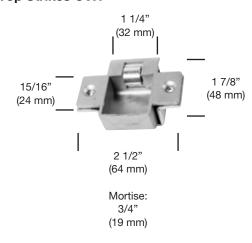


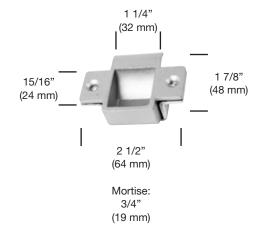
# **Top Strikes SVR**



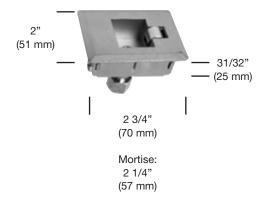


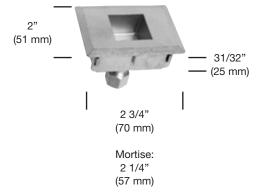
# **Top Strikes CVR**





# **Bottom Strikes (Floor Strikes)**



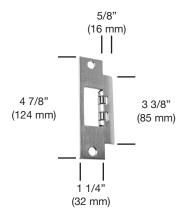


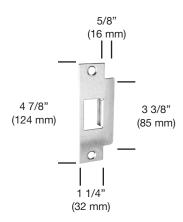
3



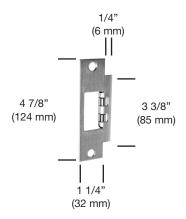
## **Mortise Strikes**

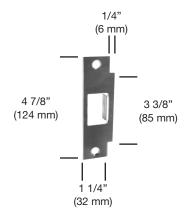
# **Standard Lip**





# **Short Lip**





# **Double Door Strike (sold separately)**



Dimensional data not binding. We reserve the right to alter specifications without notice.

Dimensions in mm Inches are approximate

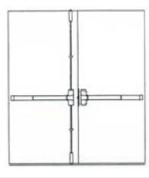




Rim Device and SVR or CVR Device combination – same direction. Overlapping astragal is not required. Coordinator with double door strike is required.



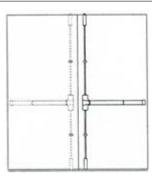
Two Rim Devices on two independent active doors with removable mullion.



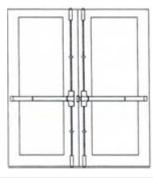
Mortise Lock Device and SVR Device combination – same direction. Overlapping astragal is not required. Coordinator with standard ANSI strike is required.



Two Surface Vertical Rod Devices (SVR) or Concealed Vertical Rod Devices (CVR) – same direction. Overlapping astragal is not required.



Two Surface Vertical Rod Devices (SVR) – double egress. Overlapping astragal is optional.



SVR and Three-Latching Device combination – same direction. Overlapping astragal is not required. Coordinator with double door strike is required.



## Flat Top Escutcheon

> Features: Non-handed trim is easy to install

Lever handle allows convenient one hand operation

Escutcheon trim has four through-bolts connected to the device chassis for security and durability Trims fit 1 3/4" (44 mm) doors standard. For 2" (51 mm), 2 1/4" (57 mm) or any other non-standard

door thicknesses, please specify when ordering.

When locked the lever is rigid and in the horizontal position to prevent the lock from being damaged.

> Escutcheon plate dimensions: 9 7/16" x 2 15/16" x 13/16" (240 x 75 x 21 mm)

> Material: Alloy cast

> Finish: 630 satin stainless steel (US32D)



| For Rim, Surface/Concealed<br>Vertical Rod and LBR | 911.52.400                  | 911.52.401                        | 911.52.402                            | 911.52.403                            |
|--|-----------------------------|-----------------------------------|---------------------------------------|---------------------------------------|
| For Mortise Lock Exit Devices Only                 | 911.52.374                  | 911.52.375                        | 911.52.376                            | 911.52.377                            |
| Operation  | Key locks and unlocks lever | Lever always active (no cylinder) | Key retracts latch bolt (rigid lever) | Pull when device dogged (rigid lever) |
| Function   | Classroom                   | Passage                           | Night Latch                           | Dummy*                                |
| Trim designation                                   | Cylinder escutcheon lever   | Blank escutcheon lever            | Night Latch escutcheon lever          | Dummy escutcheon lever                |
| ANSI function No.                                  | 8                           | 14                                | 3                                     | 2                                     |
| Cylinder type                                      | Mortise                     | Not required                      | Rim                                   | Not required                          |

#### Note

Dummy trim is not recommended for fire rated devices\*



## **Radius Top Escutcheon**

> Features: Non-handed trim is easy to install

Lever handle allows convenient one hand operation

Four through-bolts connected to the device chassis for security and durability

Lever is freewheeling (clutch); rotates when locked to prevent excessive force being applied reducing

possible damage

Trims fit 1 3/4" (44 mm) doors standard. For 2" (51 mm), 2 1/4" (57 mm) or any other non-standard

door thicknesses, please specify when ordering.

> Escutcheon plate dimensions: 9 7/16" x 2 15/16" x 13/16" (240 x 75 x 21 mm)

> Material: Alloy cast

> Finish: 630 satin stainless steel (US32D)



| For Rim, Surface/Concealed<br>Vertical Rod and LBR | 911.79.120                  | 911.79.121                        | 911.79.122                            | 911.79.123                            |
|--|-----------------------------|-----------------------------------|---------------------------------------|---------------------------------------|
| For Mortise Lock Exit Devices Only                 | 911.52.392                  | 911.52.393                        | 911.52.394                            | 911.52.395                            |
| Operation  | Key locks and unlocks lever | Lever always active (no cylinder) | Key retracts latch bolt (rigid lever) | Pull when device dogged (rigid lever) |
| Function   | Classroom                   | Passage                           | Night Latch                           | Dummy*                                |
| Trim designation                                   | Cylinder escutcheon lever   | Blank escutcheon lever            | Night Latch escutcheon lever          | Dummy escutcheon lever                |
| ANSI function No.                                  | 8                           | 14                                | 3                                     | 2                                     |
| Cylinder type                                      | Mortise                     | Not required                      | Rim                                   | Not required                          |

#### Note

Dummy trim is not recommended for fire rated devices\*

# HAFELE

# **Optional Lever Designs**









# **How to Order**

For 88E and 89E Series Trims with mortise lock device please use the following nomenclature. 8820 - 36 - 89E - 01 - A - 626

Device model number = 8820
Device length = 36
Trim model number = 89E
Lever = 01
Function = A
BHMA Finish = 626
Function Codes: A - Classroom

B - Passage C - Storeroom D - Dummy

Note

The 88E and 89E Series trims for use with mortise lock exit devices cannot be ordered individually.

Trims must be packed together with mortise lock exit device when ordered.

# **How to Order**

For 88L and 89L Series Trims with rim device please use the following nomenclature. 8810 - 36 - 89L - 01 - A - 626

Device model number = 8810
Device length = 36
Trim model number = 89L
Lever = 01
Function = A
BHMA Finish = 626
Function Codes: A - Classroom
B - Passage

B - Passage C - Storeroom D - Dummy



# **Radius Top Plate**

> Trims will accept cylinders from other manufacturers

> Cylinders are not furnished standard

> Features: Non-handed, easy to install

Trim has through-bolts to securely fasten to device chassis

> Escutcheon plate dimensions: 14 11/16" x 3" x 3/32" (373 x 76 x 2 mm)

Alloy cast

630 satin stainless steel (US32D) > Finish:

Note

The 87P and 87E Series trims used for mortise lock devices cannot be ordered separate. These trims must be packed together with the mortise lock exit device when ordered.









| For Rim, Surface Vertical Rod and LBR | 911.52.404                          | 911.52.405                             | 911.52.406              | 911.52.407              |
|---------------------------------------|-------------------------------------|--|-------------------------|-------------------------|
| For Concealed Vertical Rod            | 911.52.335                          | 911.52.336                             | 911.52.337              | 911.52.338              |
| For Mortise Lock Exit Devices Only    | 911.52.380                          | 911.52.381                             | 911.52.382              | 911.52.383              |
| Operation                             | Key locks and unlocks thumbpiece    | Thumbpiece always active (no cylinder) | Key retracts latch bolt | Pull when device dogged |
| Function                              | Classroom                           | Passage                                | Night Latch             | Dummy*                  |
| Trim designation                      | Cylinder pull plate with thumbpiece | Blank pull plate with thumbpiece       | Cylinder pull plate     | Dummy<br>pull plate     |
| ANSI function No.                     | 8                                   | 14                                     | 3                       | 2                       |
| Cylinder type                         | Mortise                             | Not required                           | Rim                     | Not required            |

# Note

# **Flat Top Plate**

> Trims will accept cylinders from other manufacturers

> Cylinders are not furnished standard

> Features: Non-handed, easy to install

Trim has through-bolts to securely fasten to device chassis

> Escutcheon plate dimensions: 14 11/16" x 3" x 3/32" (373 x 76 x 2 mm)

> Material: Alloy cast

> Finish: 630 satin stainless steel (US32D)

Note

The 86P and 86E Series trims used for mortise lock devices cannot be ordered separate. These trims must be packed together with the mortise lock exit device when ordered.









| For Rim, Surface Vertical Rod and LBR | 911.79.485          | 911.79.486           | 911.79.487   | 911.79.488       |
|---------------------------------------|---------------------|----------------------|--------------|------------------|
| For Concealed Vertical Rod            | 911.52.396          | 911.52.397           | 911.52.398   | 911.52.399       |
| For Mortise Lock Exit Devices Only -  |                     |                      |              |                  |
| Classroom function requires           | 911.52.384          | 911.52.385           | 911.52.386   | 911.52.387       |
| 1 1/2" cylinder                       |                     |                      |              |                  |
| Operation                             | Key locks and       | Thumbpiece always    | Key retracts | Pull when device |
| Operation                             | unlocks thumbpiece  | active (no cylinder) | latch bolt   | dogged           |
| Function                              | Classroom           | Passage              | Night Latch  | Dummy*           |
| Trim decimation                       | Cylinder pull plate | Blank pull plate     | Cylinder     | Dummy            |
| Trim designation                      | with thumbpiece     | with thumbpiece      | pull plate   | pull plate       |
| ANSI function No.                     | 8                   | 14                   | 3            | 2                |
| Cylinder type                         | Mortise             | Not required         | Rim          | Not required     |

## Note

Dimensional data not binding. We reserve the right to alter specifications without notice.

# HAFEL

# **Model 85P Series Pull Plates**

# Narrow, Radius Top Plate

> Trims will accept cylinders from other manufacturers

> Cylinders are not furnished standard

> Features: Non-handed, easy to install

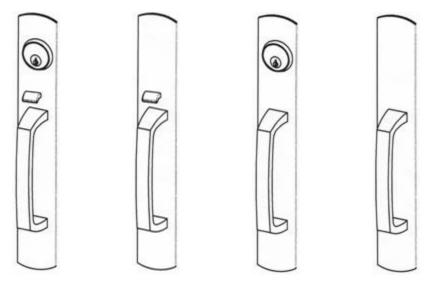
Trim has through-bolts to securely fasten.

Trim fits 1 3/4" (44 mm) door standard. For 2" (51 mm) or 2 1/4" (57 mm), specify on the order.

14 1/2" x 1 25/32" x 3/32" (368 x 45 x 2 mm) > Escutcheon plate dimensions:

> Material:

> Finish: 630 satin stainless steel (US32D)



| For Rim, Surface Vertical Rod and LBR | 911.52.408                          | 911.52.409                             | 911.52.410              | 911.52.411              |
|---------------------------------------|-------------------------------------|--|-------------------------|-------------------------|
| For Concealed Vertical Rod            | 911.52.342                          | 911.52.343                             | 911.52.344              | 911.52.345              |
| Operation                             | Key locks and unlocks thumbpiece    | Thumbpiece always active (no cylinder) | Key retracts latch bolt | Pull when device dogged |
| Function                              | Classroom                           | Passage                                | Night Latch             | Dummy*                  |
| Trim designation                      | Cylinder pull plate with thumbpiece | Blank pull plate with thumbpiece       | Cylinder pull plate     | Dummy<br>pull plate     |
| ANSI function No.                     | 8                                   | 14                                     | 3                       | 2                       |
| Cylinder type                         | Mortise                             | Not required                           | Rim                     | Not required            |

## Note

3

# HAFELE

# Narrow, Flat Top Plate

> Trims will accept cylinders from other manufacturers

> Cylinders are not furnished standard

> Features: Non-handed, easy to install

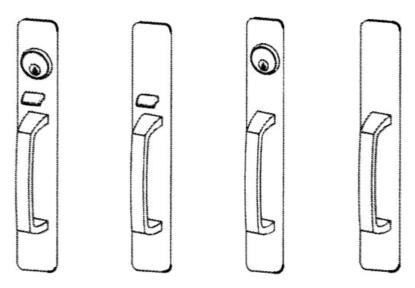
Trim has through-bolts to securely fasten.

Trim fits 1 3/4" (44 mm) door standard. For 2" (51 mm) or 2 1/4" (57 mm), specify on the order.

> Escutcheon plate dimensions: 14 1/2" x 1 25/32" x 3/32" (368 x 45 x 2 mm)

> Material: Alloy cast

> Finish: 630 satin stainless steel (US32D)



| For Rim, Surface Vertical Rod and LBR | 911.52.412                          | 911.52.413                             | 911.52.414              | 911.52.415              |
|---------------------------------------|-------------------------------------|--|-------------------------|-------------------------|
| For Concealed Vertical Rod            | 911.52.346                          | 911.52.347                             | 911.52.348              | 911.52.349              |
| Operation                             | Key locks and unlocks thumbpiece    | Thumbpiece always active (no cylinder) | Key retracts latch bolt | Pull when device dogged |
| Function                              | Classroom                           | Passage                                | Night Latch             | Dummy*                  |
| Trim designation                      | Cylinder pull plate with thumbpiece | Blank pull plate with thumbpiece       | Cylinder pull plate     | Dummy<br>pull plate     |
| ANSI function No.                     | 8                                   | 14                                     | 3                       | 2                       |
| Cylinder type                         | Mortise                             | Not required                           | Rim                     | Not required            |

## Note

Lever is freewheeling (clutch); rotates when locked to prevent excessive force being applied reducing possible damage

Four operational options, see below

> Dimensions: Rose Ø3 3/8" (86 mm) x Lever 5 1/4" (133 mm) x Projection 3" (76 mm)

> Material: Alloy cast

> Features:

> Finish: 630 satin stainless steel (US32D)

# For 8000 Series Rim and Surface Vertical Rod



| Item No.          | 911.79.943                   | 911.79.941                        | 911.79.944                            | 911.79.945                            |
|-------------------|------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|
| Operation         | Key locks and unlocks lever  | Lever always active (no cylinder) | Key retracts latch bolt (rigid lever) | Pull when device dogged (rigid lever) |
| Function          | Classroom                    | Passage                           | Storeroom                             | Dummy*                                |
| Trim designation  | No cylinder round rose lever | Cylinder round rose lever         | No cylinder round rose lever          | No cylinder round rose lever          |
| ANSI function No. | 8                            | 14                                | 3                                     | 2                                     |

## Note

3

> Area of application: For use with Fire-rated rim exit devices on fire-rated pairs of doors

> Specifications: Mullion tube: 2" x 3" (51 x 76 mm), with wall thickness of 1/8" (3 mm) 11 gauge

Mullion lengths: 7' (2134 mm) or 8' (2438 mm) Mullion can be cut in the field as required

Use a rim cylinder, model 426 or a interchangeable core, model 308 (sold separately)

Top bracket: Stainless Steel (model 752F). Using key allows mullion to be removed in seconds.

Mullion can be locked into top bracket easily without using key (supplied)

Bottom bracket: Stainless Steel (model 755F). Fixed by 4 hex bolts and anchors (supplied)

Shims: 1/2" (13 mm) and 5/8" (16 mm) (supplied)

Each mullion includes the following fasteners: 2 Flat head machine screws, 5/16-18 x 1 1/2", Stainless Steel

4 Flat head machine screws, 5/16-18 x 5/8", Stainless Steel 4 Hex head machine screws, 5/16-18 x 1 1/4", Stainless Steel

4 Expansion anchors, Ø1/2" x 1 1/2" length, Steel

> Strikes: Use 2 (sets) of mullion strikes (688) and strike hooks (689) (sold separately)

Material: Stainless SteelFinish: powder-coated gray

# **Model 7200**

> Fasteners:





| Length     | Item No.   |
|------------|------------|
| 2 m (7')   | 793.00.131 |
| 2.4 m (8') | 793.00.132 |



# **Brackets**





# **Mullion Strikes (sold separately)**

1 7/32" (31 mm)



Projection: 7/8" (22.5 mm)



Projection: 7/8" (22.5 mm)

> Specifications:



> Area of application: For use with a pair of UL listed fire rated Less Bottom Rod (LBR) exit devices.

The Fire Latch Bolt is a spring loaded stainless steel bolt that installs in the lower door edge to replace bottom vertical rods of two Surface Vertical Rod (SVR) exit devices on double doors. The UL listed fire latch bolt is a temperature actuated bolt that is designed to release from one door leaf and engage the other door,

connecting the opposite door leaf and keeping the doors in alignment and closed during a fire. UL listed, supplied with pairs of Surface Vertical Rod (SVR) devices Less Bottom Rod (LBR)

> Dimensions: Faceplate: 1 25/32" x 1" (45 x 25.4 mm)

Bolt Ø x Length: 27/32" x 3 5/32" (21.6 x 80 mm)

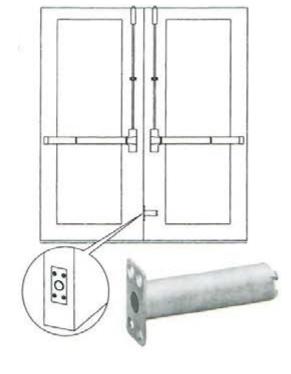
> Material: Stainless Steel

### Note

Fire latch bolt is supplied with SVR and LBR sets.

# FL001





Dimensional data not binding. We reserve the right to alter specifications without notice.

# HAFELE

# Less Dogging (LD)

> Less dogging is available on all Panic exit devices when users want to remove the standard dogging feature.



# Cylinder Dogging (CD)

- > Cylinder dogging is available on all Panic exit devices to replace standard hex key dogging.
- > Cylinder dogging requires a standard 1 1/4" (32 mm) mortise cylinder with a straight cam.
- > This option can be ordered with the device when specified.

### Note

Cylinder Dogging Kit (CDK) can be ordered for field conversion. This option cannot be used on fire exit hardware.





> Cylinders are not supplied when ordering a device or a trim. Please order separately.

### Note

Standard cylinder is 1 1/4" (32 mm) long. SFIC cylinders are 1 3/8" (35 mm) long. LFIC Cylinders are 1 1/2" (38 mm) long. Please specify cam.

# **Mortise Cylinder**



Standard Type





Standard Type



Interchangeable Core (SFIC) 208



Interchangeable Core (SFIC) 308



Small Format Interchangeable Core (SFIC) LH-7 Pin Ic Core



Large Format Interchangeable Core (LFIC)
LH-IC Core Large Format



Key in knob (KIK), key in lever (KIL) Cylinder K001

## Note

Dimensional data not binding. We reserve the right to alter specifications without notice.

Please specify tailbar and keyway



> Area of application: For use with 8600/8800 (wide stile) rim and vertical rod exit devices

Bolts directly to baseplate

Cylinder cutout available 1 1/4" (32 mm) Order cylinder with collar separately 6 3/8" x 11" (162 mm x 280 mm)

> Size: > Projection: 1 7/8" (48 mm)

> Door thickness: 1 3/4" - 2" (45 mm - 51 mm)

> Clearance: 1 5/8" (41 mm)

Stainless Steel, 11 GA. .12" (3 mm) thick > Material:

> Finishes: 630 stainless steel satin (US32D); Additional finishes available by request

# LH77, Non-handed



| Item No.   |
|------------|
| 911.38.072 |

# LH78, LHR



| Item No.   |
|------------|
| 911.38.073 |

# LH79, RHR



Dimensions in mm Inches are approximate

| Item No.   |
|------------|
| 911.38.074 |

# **Vandal Resistant Trim with Latchguard**



> Area of application: For use with 8600/8800 (wide stile) rim and vertical rod exit devices

Bolts directly to baseplate

Cylinder cutout available 1 1/4" (32 mm) Order cylinder with collar separately 7 1/4" x 11" (184 mm x 280 mm)

> Size: > Projection: 1 7/8" (48 mm)

> Door thickness: 1 3/4" - 2" (45 mm - 51 mm)

> Clearance: 1 5/8" (41 mm)

Stainless Steel, 11 GA. .12" (3 mm) thick > Material:

> Finishes: 630 stainless steel satin (US32D); Additional finishes available by request

# LH80, Non-handed



| Item No.   |
|------------|
| 911.38.075 |

# LH81 LHR



| Item No.   |
|------------|
| 911.38.076 |

# LH82 RHR



| Item No.   |
|------------|
| 911.38.077 |



> Area of application:

Exit device (also known as panic device or panic hardware) is the terminology used in architectural hardware. It is a type of lock having a push bar (also known as a push pad, push rail or touch bar). When the push bar is depressed it will retract the latch bolt (s), permitting the door to be opened in the direction of travel. An Exit device is a critical part of the Fire, Life Safety and Security in all types of buildings. Exit devices have two classifications: Panic hardware and Fire exit hardware. Both are designed to provide immediate egress. All Exit devices are tested and listed by an authorized, nationally recognized independent test laboratory.

> 5000 Series Exit Devices are suitable for use in the following types of buildings:

Apartments
Retail Stores

Multi-Family Buildings

Healthcare Stadiums Factories Gymnasiums Parking Garages Hospitality Educational Restaurants

5000 Series Exit devices are ideally suited for use on emergency exits in all of these buildings. These durable devices are designed to meet the demand for modern styling by eliminating lever arms and cross bars. These devices are Underwriters Laboratories (UL and cUL) listed for accident hazard (Panic) installations, comply with UL305 requirements and are listed for Fire exit hardware, UL10C.

## **Features**

- > All devices are non-handed
- > The center case is multi-functional
- > Pressure along any part of the touch pad will retract latch bolt
- > Auxiliary guarded latch deadlocks automatically when door closes
- > High shock resistant latching mechanism designed for protection from vandalism or forced entry
- > All inside components are made of rust resistant alloy or zinc dichromate plated steel
- > Outside trims are available with rose or escutcheon to meet the exact needs of the application
- > All trims feature through-bolt design for more security and durability
- > Panic hardware users have the option of hex key (standard) or cylinder dogging (special order); allowing for convenient push pull operation during peak traffic times



# 5510S Wide Stile Design Panic Rim Exit Device - For Wide Stile and Flush Doors 5510F Wide Stile Design Panic Rim Exit Device - For Wide Stile Fire Labeled Doors

> Area of application: For use on single doors or double doors with mullion.

Fire rated on 4 x 8' (1219 x 2438 mm) single doors or 8' x 8' (2438 x 2438 mm) double fire rated doors.

Fasteners provided for standard 1 3/4" (44 mm) thick hollow metal or wood doors.

Please specify if door is greater than 1 3/4" (44 mm).

> Minimum stile width: 3 1/2" (90 mm) > Length: 36" (914 mm)

> Strike: Furnished with 532 Strike. Shim is 1/8" (3 mm) thick for use on doors with a 1/2" (13 mm) stop.

Shim allows the device to fully engage the strike. If the stop is 5/8" (16 mm) shim is not required.

> Handing: Non-handed

> Fasteners: Machine screws furnished standard. Sex nuts and bolts (SNB) are required for use on wood doors,

(order separately)

Dogging:
 Dogging options:
 Hex key dogging standard on panic rated rim device. Fire rated rim device does not include dogging.
 Cylinder dogging (not for use on fire rated devices); Less dogging for rim panic device is available

Certifications:
 Material:
 UL Listed for Panic hardware or for Fire exit hardware
 Device head cover: Stainless Steel or Nonferrous Alloy

Chassis: Plated Steel

Mechanism housing: Steel or Stainless Steel

Push bar: Steel or Stainless Steel End cap: Steel or Stainless Steel

Latch bolt: 100% Stainless Steel, deadlocking type 11/16" (17 mm) throw

> Finish: aluminum



| Version             | Item No.   |
|---------------------|------------|
| 5510S - panic-rated | 911.79.336 |
| 5510F - fire-rated  | 911.79.337 |

## **Panic Rim Strike**

> Area of application: Surface applied. This is the standard

strike on 5000 series panic rim

exit devices.

> Material: Stainless Steel; Roller: plated

# Fire Rim Strike

> Area of application: Surface applied. This is the standard

strike on the 5000 series fire-rated

rim devices.

> Material: Stainless Steel



Dimensional data not binding. We reserve the right to alter specifications without notice





# 5530S Wide Stile Design Panic SVR Exit Device - For Wide Stile and Flush Doors 5530F Wide Stile Design Panic SVR Exit Device - For Wide Stile Fire Labeled Doors\*

> Area of application: For use on single doors or double doors with mullion. Fire rated on 4' x 8' (1219 x 2438 mm) single doors or

8' x 8' (2438 x 2438 mm) double fire rated doors. Fasteners provided for standard 1 3/4" (44 mm)

thick hollow metal or wood doors. Please specify if door is greater than 1 3/4" (44 mm).

> Minimum stile width: 3 1/2" (90 mm)
> Length: 36" (914 mm)
> Strike: Top: 534; Bottom: 537

> Handing: Non-handed

> Fasteners: Machine screws furnished standard. Sex nuts and bolts (SNB) are required for use on wood doors,

(order separately)

Dogging: Hex key dogging standard on panic rated rim device. Fire rated rim device does not include dogging.
 Dogging options: Cylinder dogging (not for use on fire rated devices). Less dogging for rim panic device is available.

Certifications:
 Material:
 UL Listed for Panic hardware or for Fire exit hardware
 Device head cover: Stainless Steel or Nonferrous Alloy

Chassis: Plated Steel

Mechanism housing: Steel or Stainless Steel

Push bar: Steel or Stainless Steel End cap: Steel or Stainless Steel

Latch bolt: 100% Stainless Steel, deadlocking type 1/2" (13 mm) throw

Latch case cover: Steel or Stainless Steel Vertical rods: Tubular Aluminum with rod guides

> Finish: aluminum



# 534 Top Strike

> Area of application: Applied to surface of stop.

> Material: Hardened Steel > Finish: plated



# 537 Bottom Strike

> Material: Non-ferrous Alloy

> Finish: plated



# 3

HAFELE

# **Device Lengths**

# 5500 Series

- > The device lengths are suitable for 36" (915 mm) or 48" (1219 mm) doors without cutting
- > Short 36" (915 mm) device is 32" (813 mm) long with a 20" (508 mm) push bar; can be cut down to 26" (660 mm)
- > Long 48" (1219 mm) device is 44" (1118 mm) long with a 24" (607 mm) push bar; can be cut down to 31" (787 mm)
- > Standard vertical rods accommodate 7' (2134 mm) or 8' (2438 mm) exit doors. Specify door height if greater than standard size when ordering.

## Note

Length does include latch bolt.

Dimensional data not binding. We reserve the right to alter specifications without notice.

# HAFELE

# 5610S Panic Rated Rim Exit Device

## For Narrow Stile Exit Door Use

> Area of application: For use on single doors or double doors with mullion.

Standard for 1 3/4" (44 mm) thick doors.

Please specify if door is greater than 1 3/4" (44 mm).

> Minimum stile width: 2 1/2" (65 mm) > Length: 36" (914 mm)

> Strike: Furnished with 532 strike.

> Handing: Non-handed

> Fasteners: Machine screws furnished standard. Sex nuts and bolts (SNB) are required for use on wood doors,

(order separately).

> Dogging: Hex key dogging standard on panic rated rim device.

> Dogging options: Cylinder dogging (not for use on fire rated devices); Less dogging for rim panic device is available.

> Certifications: UL Listed for panic hardware

> Material: Device head cover: Stainless Steel or Nonferrous Alloy

Chassis: Plated Steel

Mechanism housing: Steel or Stainless Steel

Push bar: Steel or Stainless Steel End cap: Steel or Stainless Steel

Latch bolt: 100% Stainless Steel, deadlocking type 11/16" (17 mm) throw

Deadlocking latch: 100% Stainless Steel, 5/8" (16 mm) throw

> Finish: aluminum



| Version             | Item No.   |  |  |
|---------------------|------------|--|--|
| 5610S - panic-rated | 911.52.140 |  |  |

# Strike Shim

> Area of application: Shim is 1/8" (3 mm) thick for use on

doors that have a 1/2" (13 mm) stop. Shim allows the device to fully engage the strike. If the stop is 5/8" (16 mm) then shim is not required.

# **Panic Rim Strike**

> Area of application: Surface applied; this is the standard

strike on 5000 series panic rim

exit devices.

> Material: Stainless Steel; Roller: plated





Dimensional data not binding. We reserve the right to alter specifications without notice

# HXFEL

## For Narrow Stile Exit Door Use

> Area of application: For use on single doors or double doors where two point latching is required.

Standard for 1 3/4" (44 mm) thick doors.

Please specify if door is greater than 1 3/4" (44 mm).

2 1/2" (65 mm) > Minimum stile width: > Length: 36" (914 mm)

> Strike: Furnished with 532 strike. Shim is 1/8" (3 mm) thick for use on doors with a 1/2" (13 mm) stop. Shim allows the device to fully engage the strike. If the stop is 5/8" (16 mm) shim is not required.

> Handing: Non-handed

Machine screws furnished standard. Sex nuts and bolts (SNB) are required for use on wood doors, > Fasteners:

(order separately).

> Dogging: Hex key dogging standard on panic rated rim device.

> Dogging options: Cylinder dogging (not for use on fire rated devices); Less dogging for rim panic device is available.

> Certifications: UL Listed for panic hardware

Device head cover: Stainless Steel or Nonferrous Alloy > Material:

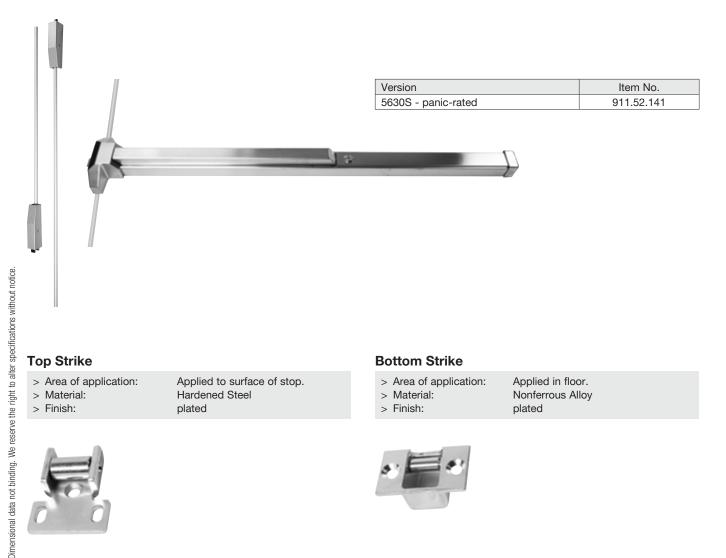
Chassis: Plated Steel

Mechanism housing: Steel or Stainless Steel

Push bar: Steel or Stainless Steel End cap: Steel or Stainless Steel

Latch bolt: 100% Stainless Steel, 1/2" (13 mm) Latch case covers: Steel or Stainless Steel Vertical rods: Tubular Aluminum with rod guides

> Finish: aluminum



# **Top Strike**

> Area of application: Applied to surface of stop.

> Material: Hardened Steel > Finish:



# **Bottom Strike**

> Area of application: Applied in floor. > Material: Nonferrous Alloy > Finish: plated



# HXFELE

> Area of application: For 5510 series Rim and 5530 series SVR

> Features: Non-handed trim is easy to install

Lever handle allows convenient one hand operation

Two through-bolts connect the device to the chassis for security and durability

These trims are anti-vandalism type that prevents the lock from damage when the lever is locked.

> Cylinders: Not furnished standard.

When ordering please specify: RC - Regular cylinder

IC - Interchangeable core

NC - No cylinder

> Escutcheon plate dimensions: 8 1/16" x 2 5/8" x 29/32" (205 x 67 x 23 mm) > Material: Escutcheon plate: Stainless Steel; Handle: Zinc Alloy

> Finish: 630 satin stainless steel (US32D)

# Model 58L Series Top Escutcheon



| Item No.          | 911.79.350                | 911.79.351             | 911.79.352                               | 911.79.353                           |
|-------------------|---------------------------|------------------------|--|--------------------------------------|
| Operation         |                           |                        | Key retracts<br>latch bolt (rigid lever) | Pull when device dogged(rigid lever) |
| Function          | Classroom                 | Passage                | Storeroom                                | Dummy*                               |
| Trim designation  | Cylinder escutcheon lever | Blank escutcheon lever | Night Latch escutcheon lever             | Dummy escutcheon lever               |
| ANSI function No. | 8                         | 14                     | 3  | 2                                    |
| Cylinder type     | Mortise                   | Not required           | Rim                                      | Not required                         |

## Note

# Model 56P (Wide) and 54P (Narrow) Series Pull Plates



3

> Area of application: Wide Stile: For 5510 series Rim and 5530 series SVR Narrow Stile: For 5610 series Rim and 5630 series SVR

> Fasteners:
 > Material:
 > Finish:
 Supplied with mounting bolts
 Steel or Stainless Steel
 Stiel or Stainless Steel (US32D)

## Note

Dummy trim is not recommended for fire rated devices\*

# For Wide Stile

 $\,>\,$  Area of application: Retrofits 1 3/4" steel doors prepared for bore locks.

> Plate dimensions: 11 13/16" x 3" x 3/32" (300 x 76 x 2 mm)

| Item No.          | 911.79.354                        | 911.79.506                        | 911.79.355                           |
|-------------------|-----------------------------------|-----------------------------------|--------------------------------------|
| Operation         | Key retracts latch bolt           | Pull when dogged                  | Does not operate                     |
| Function          | Night latch                       | Dummy*                            | Decorative                           |
| Trim designation  | Cylinder pull plate with cylinder | Dummy pull plate without cylinder | Flat plate without cylinder and grip |
| ANSI function No. | 3                                 | 1                                 | 10                                   |
| Cylinder type     | Rim                               | Not required                      | Not required                         |

# **For Narrow Stile**

> Plate dimensions: 11 13/16" x 1 25/32" x 3/32" (300 x 45 x 2 mm)

| Item No.          | 911.79.507                               | 911.79.508                        | 911.79.509                           |
|-------------------|--|-----------------------------------|--------------------------------------|
| Operation         | Key retracts latch bolt Pull when dogged |                                   | Does not operate                     |
| Function          | Night latch Dummy*                       |                                   | Decorative                           |
| Trim designation  | Cylinder pull plate<br>with cylinder     | Dummy pull plate without cylinder | Flat plate without cylinder and grip |
| ANSI function No. | 3  | 1                                 | 10                                   |
| Cylinder type     | Rim                                      | Not required                      | Not required                         |



> Area of application: For Rim and SVR only
> Features: Non-handed, easy to install

Trim has through-bolts to securely fasten to device chassis

> Plate dimensions:
 11 13/16" x 1 25/32" x 3/32" (300 x 45 x 2 mm)
 > Material:
 Escutcheon plate: Stainless Steel; Handle: Zinc Alloy

> Finish: 630 satin stainless steel (US32D)

# Model 57P Series Flat Top Plate









| Item No.          | 911.79.480                          | 911.79.481                             | 911.79.482                 | 911.79.483              |
|-------------------|-------------------------------------|--|----------------------------|-------------------------|
| Operation         | Key locks and unlocks thumbpiece    | Thumbpiece always active (no cylinder) | Key retracts<br>latch bolt | Pull when device dogged |
| Function          | Classroom                           | Passage                                | Storeroom                  | Dummy*                  |
| Trim designation  | Cylinder pull plate with thumbpiece | Blank pull plate with thumbpiece       | Cylinder pull<br>plate     | Dummy<br>pull plate     |
| ANSI function No. | 8                                   | 14                                     | 3                          | 2                       |
| Cylinder type     | Mortise                             | Not required                           | Rim                        | Not required            |

## Note

# **Pull Plates**



> Area of application: 5510 series Rim and 5530 series SVR only; retrofits 1 3/4" steel doors prepared for bore locks.

Trims will accept cylinders from other manufacturers.

> Plate dimensions: 7 11/16" x 3" x 1/8" (196 x 76 x 3 mm) > Fasteners: Supplied with sex nuts and bolts

> Cylinders are not furnished standard. When ordering please specify: RC - Regular cylinder

IC - Interchangeable core

NC - No cylinder

> Material: Steel or Stainless Steel

> Finish: 630 satin stainless steel (US32D)

# Model 52R Series Raised Lip Style







| Item No.          | 793.00.134              | 793.00.135                                  | 793.00.133          |
|-------------------|-------------------------|---|---------------------|
| Operation         | Key retracts latch bolt | cts latch bolt Pull when dogged Does not op |                     |
| Function          | Night latch             | Dummy*                                      | Decorative          |
| Trim designation  | Cylinder pull plate     | Blank plate                                 | Flat plate (no lip) |
| ANSI function No. | 3                       | 1   | 10                  |
| Cylinder type     | Rim                     | Not required                                | Not required        |

## Note

# HAFEL

> Area of application: For economy Rim and SVR. > Features: Non-handed and easy to install.

Lever handle allows convenient one hand operation.

Two through-bolts that connect to the device chassis for increased durability and security.

Lever is freewheeling (clutch); rotates when locked to prevent excessive force being applied reducing the

chance of the lever being damaged.

> Dimensions: Rose Ø3 1/8" (86 mm) x Lever 4 3/4" (133 mm) x Projection 3" (76 mm)

> Material: Steel or Stainless Steel

630 satin stainless steel (US32D) > Finish:

# **Model 53L Series**



| Item No.          | 911.79.500                  | 911.79.501                   | 911.79.502                | 911.79.504                            |
|-------------------|-----------------------------|------------------------------|---------------------------|---------------------------------------|
| Operation         | Key locks and unlocks lever |                              |                           | Pull when device dogged (rigid lever) |
| Function          | Classroom                   | Passage                      | Storeroom                 | Dummy*                                |
| Trim designation  | Cylinder round rose lever   | No cylinder round rose lever | Cylinder round rose lever | No cylinder round rose lever          |
| ANSI function No. | 8                           | 14                           | 3                         | 2                                     |

## Note

# HAFELE

# **Rim Strikes**



1/8 Shim Plate For 532



Projection: 1/2" (12 mm)



1 3/16"

Projection: 5/8" (16 mm)

# **Vertical Rod Strike**



1 5/8" (41mm)

Projection:

5/8"

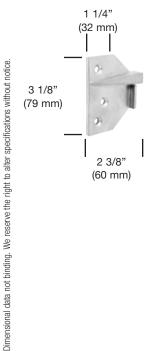
(16 mm)





1 5/8" (41mm)

# **Double Door Strike (sold separately)**



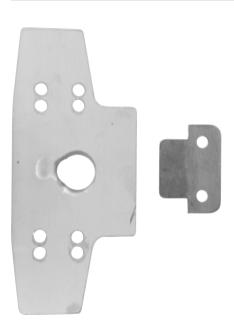


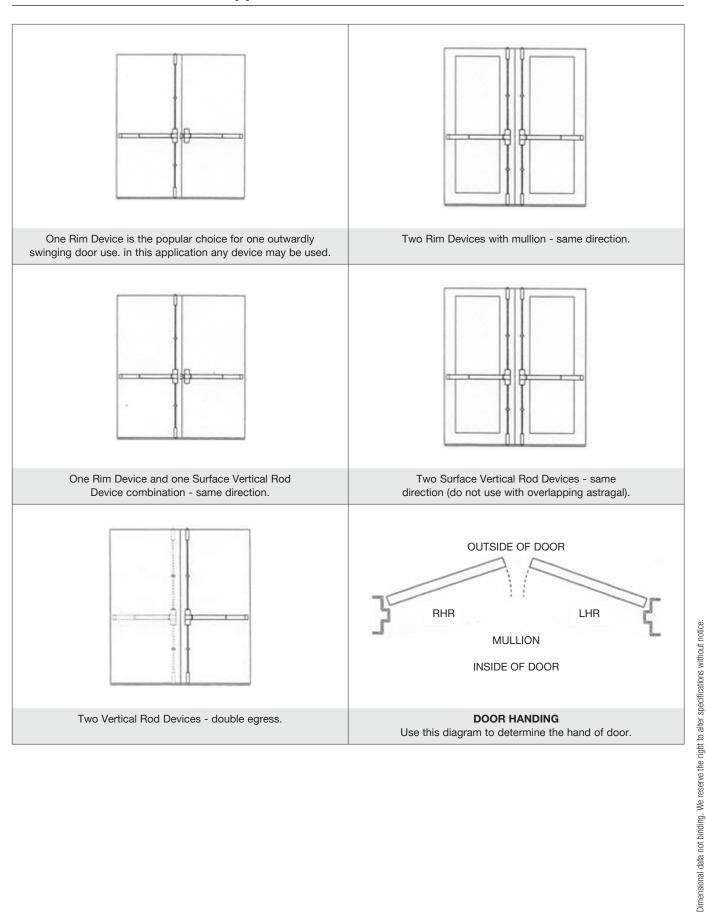
Projection:

1/8"

(3 mm)

- > 1/8" (3 mm) thick shim plates for use on door with glass bead
- > Foot print matches 5000 series
- > Devices as specified (5500 or 5600)

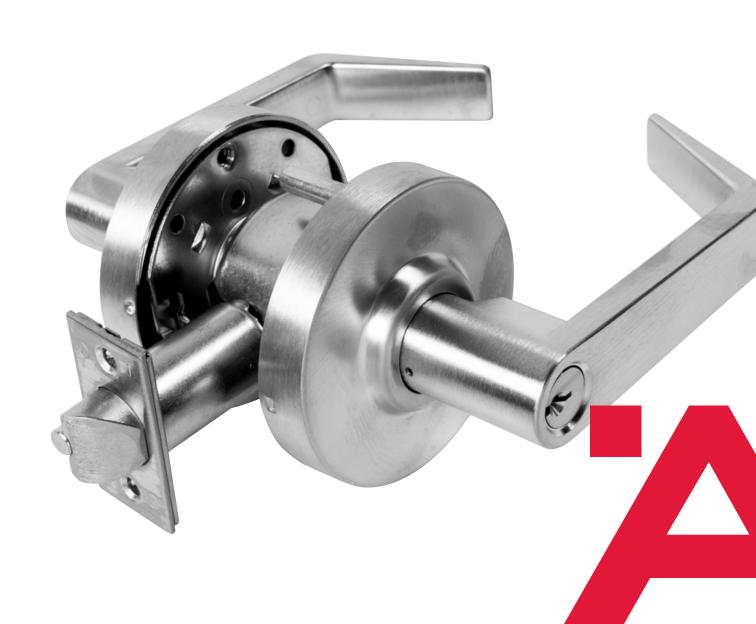






# 4

# LOCKSETS







# Locksets

| 5000 Series (Grade 1 Cylindrical)     | 4.3 - 4.5   |
|---------------------------------------|-------------|
| 5300 Series (Grade 2 Cylindrical)     | 4.6 - 4.10  |
| 8700 Series (Grade 1 Mortise)         | 4.11 - 4.2  |
| 4700 Series (Small Case Mortise Lock) | 4.22        |
| 3000 Series (Tubular)                 | 4.23 - 4.28 |
| 500 Series (Deadbolts)                | 4.29        |
| Cylinders and Keving                  | 4.30 - 4.32 |

HAFELE

# Cylindrical Grade 1 Extra Heavy Duty Levers

> Area of application: Designed for extra heavy duty commercial, industrial and institutional applications. > Mounting: Through-bolt mounting 2 3/4" (70 mm) center to center reduces chassis rotation

> Features: Quality cast and machined stainless steel hubs mounted with heavy duty return springs tested to

over one million cycles without noticeable lever sag; Heavy rose liner material provides attack resistance

Heat treated heavy gauge cold rolled steel spindles withstand 1000 inch pounds of torque.

The threaded outside rose assembly is adjustable for door thickness; Free-wheeling clutch style lever standard.

> For doors: 1 3/8" to 1 7/8" (35 mm to 48 mm)

> Backset: 2 3/4" (70 mm) standard 2 3/8" (60 mm) available > Front: Stainless Steel or Brass, 2 1/4" x 1 1/8" (57 mm x 29 mm)

> Strike: ANSI (4 7/8" x 1 1/4") strike standard

> Roses: Ø3 1/2" (90 mm) Stainless Steel or Brass base metal

> Handing: Non-handed

> Latchbolt: Stainless Steel 17/32" (13.5 mm) throw standard; 3/4" (19 mm) throw available

> Cylinder: Solid Brass 6-pin cylinder Schlage C keyway with two keys per lock

> IC Core: Solid Brass 6 or 7-pin core sold separately

> Keying: Keyed different (KD) standard, available master keyed (MK), keyed alike (KA) and construction master keyed

(CMK), see keys and keying section for additional options

> Certifications: ANSI/BHMA certified A156.2 Series 4000 Grade 1; ADA Compliant A117.10

cUL/UL Listed for all functions up to 3 hours

> Finish: 626 satin chrome-plated (US26D)

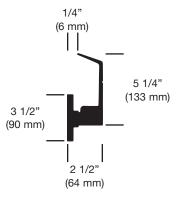
# **Lever Designs**

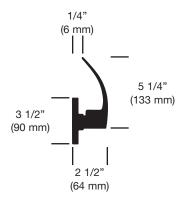
## L Lever



## R Lever







Dimensions in mm Inches are approximate 4

# HAFEL

# Cylindrical Grade 1 Extra Heavy Duty Knobs

> Area of application: Designed for extra heavy duty commercial, industrial and institutional applications.

> Mounting: No exposed mounting screws > Features: Knobs include steel reinforcement.

Heat-treated heavy gauge cold rolled steel spindles add strength and security.

The threaded outside rose assembly is adjustable for door thickness.

Internal steel mechanisn is heat-treated.

> For doors: 1 3/8" to 2" (35 mm to 52 mm)

> Backset: 2 3/4" (70 mm) standard 2 3/8" (60 mm) available Stainless Steel or Brass, 2 1/4" x 1 1/8" (57 mm x 29 mm) > Front: > Strike: ANSI 4 7/8" x 1 1/4" (123 mm x 32 mm) strike standard Ø2 3/4" (70 mm) Stainless Steel or Brass base metal > Roses:

> Handing: Non-handed

> Latchbolt: Stainless Steel 17/32" (13.5 mm) throw standard; 3/4" (19 mm) throw available

> Cylinder: Solid Brass 6-pin cylinder Schlage C keyway with two keys per lock

> IC Core: Solid Brass 6 or 7-pin core sold separately

Keyed different (KD) standard, available master keyed (MK), keyed alike (KA) and construction master keyed > Keying:

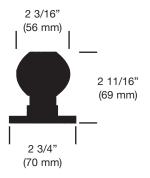
(CMK), see keys and keying section for additional options.

ANSI/BHMA certified A156.2 Series 4000 Grade 1; cUL/UL Listed for all functions up to 3 hours > Certifications:

> Finish: 630 stainless steel satin (US32D)

# **Knob Design** O/B







# **Standard Lock Functions**

# Non-Keyed

|   | Function     | ANSI No. | Description  | L Lever    | R Lever    | Knob       |
|---|--------------|----------|--|------------|------------|------------|
|   | Passage      | F75      | Latchbolt retracted by knob/lever on either side.  | 911.79.931 | 911.79.511 | 911.79.521 |
|   | Privacy      | F76      | Push button locks outside knob/lever. Turning inside knob/lever or emergency turn unlocks outside knob/lever. Inside knob/lever always active. | 911.79.932 | 911.79.512 | 911.79.522 |
| 4 | Single dummy | _        | Single dummy trim for one side of door. Used for door pull or as matching inactive trim.   | 911.79.935 | 911.79.515 | 911.79.525 |

# Keyed

Dimensional data not binding. We reserve the right to alter specifications without notice.

| Function                               | ANSI No. | Description   | L Lever    | R Lever    | Knob       |
|--|----------|---|------------|------------|------------|
| Office                                 | F82      | Push button locks outside knob/lever until unlocked by key or by turning inside knob/lever.   | 911.79.937 | 911.79.518 | 911.79.528 |
| Entrance                               | F109     | Turn/push button locking: Pushing/turning button locks outside knob/ lever requiring key until button is manually unlocked. Push button locking: pushing button locks outside knob/lever until unlocked by key or by turning inside knob/lever. | 911.79.930 | 911.79.510 | 911.79.520 |
| Classroom                              | F84      | Outside knob/lever locked and unlocked by key. Inside knob/lever always unlocked.   | 911.79.933 | 911.79.513 | 911.79.523 |
| Storeroom                              | F86      | Outside knob/lever is fixed. Entrance by key only. Inside knob/lever always unlocked.   | 911.79.934 | 911.79.514 | 911.79.524 |
| Communicating (Double classroom)       | F80      | Latchbolt retracted by knob/lever on either side unless locked.   | 911.79.936 | 911.79.516 | 911.79.526 |
| Institutional<br>(Double<br>storeroom) | F87      | Both knobs/levers always locked. Latchbolt retracted by key from either side.   | 911.79.939 | 911.79.517 | 911.79.527 |
| Classroom security                     | -        | Key in either knob/lever locks or unlocks outside knob/lever, inside knob/lever is always unlocked.   | 911.79.973 | 911.79.519 | _          |

# Cylindrical Grade 2 Standard Duty Commercial Levers



> Area of application: Designed for medium to high traffic commercial applications.

> Mounting: Through-bolt mounting posts 2 5/8" (67 mm) center to center provided, to prevent chassis rotation;

no exposed mounting screws.

> Features: Quality heavy duty return springs to reduce lever sag; Heavy rose liner material provides attack resistance.

Heat treated heavy gauge steel spindles; The rose assembly is adjustable for door thickness.

Specify clutching or non-clutching when ordering

> For doors: 1 3/8" to 1 3/4" (35 mm to 44 mm)

> Backset: 2 3/4" (70 mm) standard 2 3/8" (60 mm) available > Front: Stainless Steel or Brass, 2 1/4" x 1 1/8" (57 mm x 29 mm)

> Strike: ANSI (4 7/8" x 1 1/4") strike standard, wood door strike (T-Strike) available

> Roses: Ø3 1/4" (90 mm) Stainless Steel or Brass

> Handing: Non-handed

> Latchbolt: Stainless Steel 1/2" (12.5 mm) throw standard

> Cylinder: Solid Brass 6-pin cylinder Schlage C keyway with two keys per lock standard.

Weiser keyway available by order keying keyed different (KD) standard.

Available master keyed (MK), keyed alike (KA) and construction master keyed (CMK),

see Keys and Keying section for additional options.

> Certifications: ANSI/BHMA certified A156.2 Series 4000 Grade 2

ADA Compliant A117.10; cUL/UL Listed for all functions up to 3 hours

> Finishes: 626 satin chrome-plated (US26D), 613 oil-rubbed bronze US10B), 605 brass polished (US3)

# **Lever Designs**

## L Lever

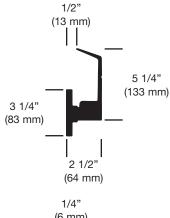


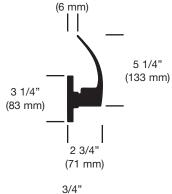
# R Lever

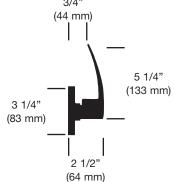


# **G** Lever









# Cylindrical Grade 2 Standard Duty Commercial Knobs



> Area of application: Designed for medium to high traffic commercial applications.

> Mounting: No exposed mounting screws

> Features: Heavy gauge cold rolled steel spindles.

The rose assembly is adjustable for door thickness.

> For doors: 1 3/8" to 1 3/4" (35 mm to 44 mm)

> Backset: 2 3/4" (70 mm) standard 2 3/8" (60 mm) available > Front: Stainless Steel or Brass, 2 1/4" x 1 1/8" (57 mm x 29 mm)

> Strike: ANSI (4 7/8" x 1 1/4") strike standard, wood door strike (T-Strike) available

> Roses: Ø2 3/4" (70 mm) Stainless Steel or Brass

> Handing: Non-handed

> Latchbolt: Stainless Steel 1/2" (12.5 mm) throw standard

> Cylinder: Solid Brass 6-pin cylinder Schlage C keyway with two keys per lock standard.

Weiser keyway available by order keying keyed different (KD) standard.

Available master keyed (MK), keyed alike (KA) and construction master keyed (CMK),

see Keys and Keying section for additional options.

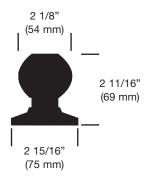
> Certifications: ANSI/BHMA certified A156.2 Series 4000 Grade 2

cUL/UL Listed for all functions up to 3 hours

> Finish: 630 stainless steel satin (US32D), 613 oil-rubbed bronze US10B), 605 brass polished (US3)

# Knob Design O/B





Dimensions in mm Inches are approximate

Dimensional data not binding. We reserve the right to alter specifications without notice

# Cylindrical Grade 2 Standard Duty Commercial Knobs/Levers



# **Standard Lock Functions**

Finish: Levers: 626 satin chrome-plated (US26D); Knobs: 630 stainless steel satin (US32)

# Non-Keyed

|   | Function            | ANSI No. | Description  | L Lever    | R Lever    | G Lever    | Knob       |
|---|---------------------|----------|--|------------|------------|------------|------------|
|   | Passage             | F75      | Latchbolt retracted by knob/ lever on either side.   | 911.79.921 | 911.85.001 | 911.85.011 | 911.85.081 |
|   | Privacy             | F76      | Push button locks outside knob/<br>lever. Turning inside knob/lever<br>or emergency turn unlocks<br>outside knob/lever. Inside knob/<br>lever always active. | 911.79.922 | 911.85.002 | 911.85.012 | 911.85.082 |
| 4 | Single dummy        | _        | Single dummy trim for one side of door. Used for door pull or as matching inactive trim.   | 911.79.925 | 911.85.005 | 911.85.015 | 911.85.085 |
|   | Communicating latch | -        | For twin communicating or exit doors (Exit) where one side operation is required. Blank rose outside. Inside knob/lever operation.                           | 911.79.926 | 911.85.006 | 911.85.016 | 911.85.086 |

# Keyed

|            | Function                               | ANSI No. | Description  | L Lever    | R Lever    | G Lever    | Knob       |
|------------|--|----------|--|------------|------------|------------|------------|
| <b>.4.</b> | Entrance                               | F109     | Turn/push button locking: Pushing/turning button locks outside knob/lever requiring key until button is manually unlocked. Push button locking: pushing button locks outside knob/lever until unlocked by key or by turning inside knob/lever. | 911.79.920 | 911.85.000 | 911.85.010 | 911.85.080 |
|            | Classroom                              | F84      | Outside knob/lever locked and unlocked by key. Inside knob/lever always unlocked.  | 911.79.923 | 911.85.003 | 911.85.013 | 911.85.083 |
|            | Storeroom                              | F86      | Outside knob/lever is fixed.<br>Entrance by key only. Inside<br>knob/lever always unlocked.  | 911.79.924 | 911.85.004 | 911.85.014 | 911.85.084 |
| <b>.4</b>  | Communicating<br>(Double<br>classroom) | F80      | Latchbolt retracted by knob/<br>lever on either side unless<br>locked. Key locks or unlocks<br>its own knob/lever.   | 911.79.928 | 911.85.007 | 911.85.017 | 911.85.087 |
| <b>.4.</b> | Institutional<br>(Double<br>storeroom) | F87      | Both knobs/levers always locked. Latchbolt retracted by key from either side.  | 911.79.929 | 911.85.008 | 911.85.018 | 911.85.088 |

Dimensional data not binding. We reserve the right to alter specifications without notice.

# 4

# Cylindrical Grade 2 Standard Duty Commercial Knobs/Levers

# **Standard Lock Functions**

Finish: 613 oil-rubbed bronze(US10B)

# Non-Keyed

|   | Function            | ANSI No. | Description  | L Lever    | R Lever    | G Lever    | Knob       |
|---|---------------------|----------|--|------------|------------|------------|------------|
|   | Passage             | F75      | Latchbolt retracted by knob/ lever on either side.   | 911.85.071 | 911.85.041 | 911.85.051 | 911.85.101 |
|   | Privacy             | F76      | Push button locks outside knob/<br>lever. Turning inside knob/lever<br>or emergency turn unlocks<br>outside knob/lever. Inside knob/<br>lever always active. | 911.85.072 | 911.85.042 | 911.85.052 | 911.85.102 |
| 4 | Single dummy        | _        | Single dummy trim for one side of door. Used for door pull or as matching inactive trim.   | 911.85.075 | 911.85.045 | 911.85.055 | 911.85.105 |
|   | Communicating latch | -        | For twin communicating or exit doors (Exit) where one side operation is required. Blank rose outside. Inside knob/lever operation.                           | 911.85.076 | 911.85.046 | 911.85.056 | 911.85.106 |

# Keyed

Dimensional data not binding. We reserve the right to alter specifications without notice.

|            | Function                               | ANSI No. | Description  | L Lever    | R Lever    | G Lever    | Knob       |
|------------|--|----------|--|------------|------------|------------|------------|
| <b>.4.</b> | Entrance                               | F109     | Turn/push button locking: Pushing/turning button locks outside knob/lever requiring key until button is manually unlocked. Push button locking: pushing button locks outside knob/lever until unlocked by key or by turning inside knob/lever. | 911.85.070 | 911.85.040 | 911.85.050 | 911.85.100 |
|            | Classroom                              | F84      | Outside knob/lever locked and unlocked by key. Inside knob/lever always unlocked.  | 911.85.073 | 911.85.043 | 911.85.053 | 911.85.103 |
|            | Storeroom                              | F86      | Outside knob/lever is fixed.<br>Entrance by key only. Inside<br>knob/lever always unlocked.  | 911.85.074 | 911.85.044 | 911.85.054 | 911.85.104 |
| <b>.4.</b> | Communicating (Double classroom)       | F80      | Latchbolt retracted by knob/<br>lever on either side unless<br>locked. Key locks or unlocks<br>its own knob/lever.   | 911.85.077 | 911.85.047 | 911.85.057 | 911.85.107 |
| 4,         | Institutional<br>(Double<br>storeroom) | F87      | Both knobs/levers always locked. Latchbolt retracted by key from either side.  | 911.85.078 | 911.85.048 | 911.85.058 | 911.85.108 |

# HAFEL

# Cylindrical Grade 2 Standard Duty Commercial Knobs/Levers

# **Standard Lock Functions**

Finish: 605 brass polished (US3)

# Non-Keyed

|   | Function            | ANSI No. | Description  | L Lever    | R Lever    | G Lever    | Knob       |
|---|---------------------|----------|--|------------|------------|------------|------------|
|   | Passage             | F75      | Latchbolt retracted by knob/ lever on either side.   | 911.85.061 | 911.85.021 | 911.85.031 | 911.85.091 |
|   | Privacy             | F76      | Push button locks outside knob/<br>lever. Turning inside knob/lever<br>or emergency turn unlocks<br>outside knob/lever. Inside knob/<br>lever always active. | 911.85.062 | 911.85.022 | 911.85.032 | 911.85.092 |
| 4 | Single dummy        | _        | Single dummy trim for one side of door. Used for door pull or as matching inactive trim.   | 911.85.065 | 911.85.025 | 911.85.035 | 911.85.095 |
|   | Communicating latch | -        | For twin communicating or exit doors (Exit) where one side operation is required. Blank rose outside. Inside knob/lever operation.                           | 911.85.066 | 911.85.026 | 911.85.036 | 911.85.096 |

# **Keyed**

|            | Function                               | ANSI No. | Description  | L Lever    | R Lever    | G Lever    | Knob       |
|------------|--|----------|--|------------|------------|------------|------------|
| <b>-40</b> | Entrance                               | F109     | Turn/push button locking: Pushing/turning button locks outside knob/lever requiring key until button is manually unlocked. Push button locking: pushing button locks outside knob/lever until unlocked by key or by turning inside knob/lever. | 911.85.060 | 911.85.020 | 911.85.030 | 911.85.090 |
|            | Classroom                              | F84      | Outside knob/lever locked and unlocked by key. Inside knob/lever always unlocked.  | 911.85.063 | 911.85.023 | 911.85.033 | 911.85.093 |
|            | Storeroom                              | F86      | Outside knob/lever is fixed.<br>Entrance by key only. Inside<br>knob/lever always unlocked.  | 911.85.064 | 911.85.024 | 911.85.034 | 911.85.094 |
|            | Communicating (Double classroom)       | F80      | Latchbolt retracted by knob/<br>lever on either side unless<br>locked. Key locks or unlocks<br>its own knob/lever.   | 911.85.067 | 911.85.027 | 911.85.037 | 911.85.097 |
|            | Institutional<br>(Double<br>storeroom) | F87      | Both knobs/levers always locked. Latchbolt retracted by key from either side.  | 911.85.068 | 911.85.028 | 911.85.038 | 911.85.098 |

Dimensional data not binding. We reserve the right to alter specifications without notice.

## **Mortise Lockset Grade 1 Extra Heavy Duty**



> Area of application: Ideal for high frequency doors in public buildings, commercial, hospitality, healthcare and educational applications;

consistent dependable operation stands up to rigorous use and abuse.

> Version: Field reversible

> Mounting: Concealed through-bolts

> For doors: 1 3/4" (44 mm), specify if alternate door thickness is required

> Backset: 2 3/4" (70 mm) only

Case size: 4 5/16" x 6" x 1" (110 x 152 x 25 mm)
Armour Front: 1 1/4" x 8" (32 mm x 203 mm)
Preparation: Conforms to ANSI A117.1
Beveled doors: Self-adjusting tabs on case
Deadbolt: Stainless Steel, 1" (25 mm) throw

> Latchbolt: Stainless Steel, 3/4" (19 mm) throw with anti-friction tongue

> Deadlocking: Stainless Steel, non-handed

> Through-bolts: Through-bolted trim aligns with mortise case lock

> Stop works: Incorporated into thumbturn

> Strike: 1 1/4" x 4 7/8" (32 x 124 mm), curved lip, square corner, extended lip strikes available

> Spindles: Break-away under excessive torque, preventing forced entry or lock damage

> Cylinder: 6 pin cylinder standard, with 2 keys, "C" keyway

> IC core: Interchangeable core is available

Cam: All cylinder functions use standard butterfly style cam
 Cylinder collar: Compression ring and collar supplied standard
 Fasteners: Concealed under the rose or escutcheon

> Certifications: ANSI/BHMA A156.13 Series 1000 Grade 1 Operational and Security

ADA Compliant ANSI A117.1 Accessibility Code; cUL/UL Listed up to 3 hours

UL10C Positive Pressure Rated; UL10B Neutral Pressure Rated

> Material: Latch bolt and deadbolt: Stainless Steel; Internal parts: High Strength Steel Alloy

Mortise lock case and internal components are treated to ensure corrosion resistance.

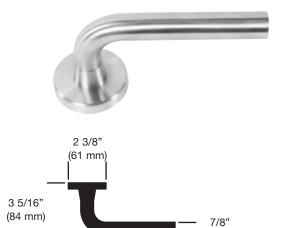
> Finish: 630 satin chrome-plated (US32D)



#### **Lever Designs**



L801



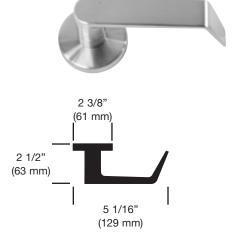
5 7/8" (150 mm) (22 mm)

#### L802

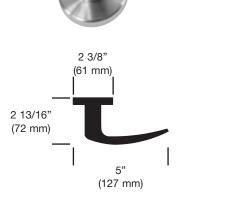


## L811

4



## L812



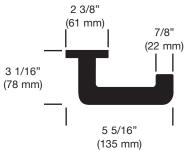


#### **Lever Designs**



L813



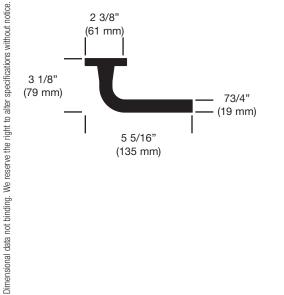


#### L814



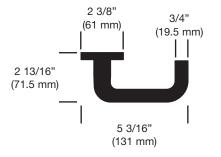
#### L815





#### L816





4



L818

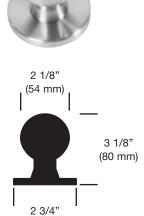


#### L819

4



#### **Ball Knob**

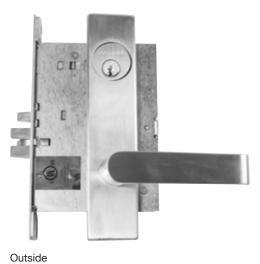


(70 mm)

Width x Height x Thickness: 1 3/4" X 7 15/16" X 7/16" (44 X 202 X 11 mm)

Escutcheons available for all functions.

#### **ESC1 Outside**



#### **ESC1** Inside



#### **Lever Designs**

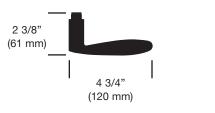
#### \*Note

Handed lever. See page 4.28 for available escutcheons.



#### 101 Matisse\*





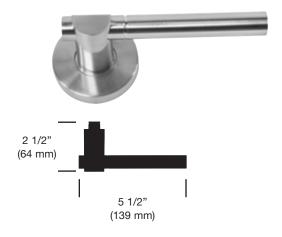
102 Picasso\*



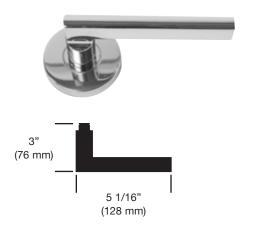
#### 103 Dali\*



116 Mondrian\*



#### 119 Logan



126 Stella





#### **Lever Designs**

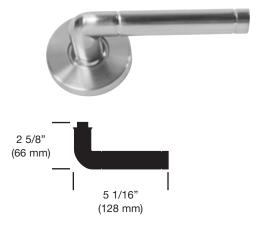
#### \*Note

Handed lever. See page 4.28 for available escutcheons.

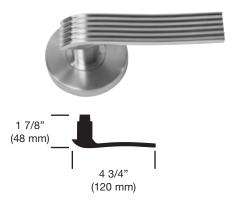
#### 136 Muna



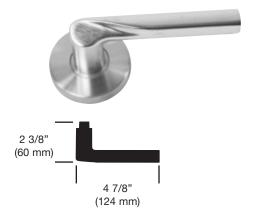
#### 167 Vancouver



#### 204 Wave



#### 208 Aquis\*



## **Mortise Lockset Grade 1 Extra Heavy Duty**

#### **Lever Designs**

#### \*Note

Handed lever. See page 4.28 for available escutcheons.

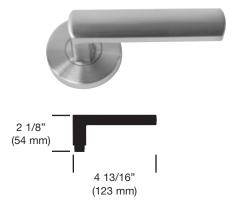
#### 420 Belle\*



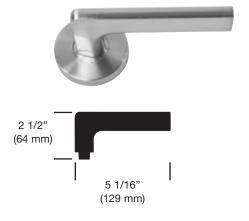
#### 421 Plana



#### 422 Serra



#### 423 Miro



## **Mortise Lockset Grade 1 Extra Heavy Duty**



#### Non-Keyed

|             | Function | ANSI No. | Description   | Item No.   |
|-------------|----------|----------|---|------------|
| .].         | Passage  | F01      | Latchbolt retracted by knob/lever on either side.   | 911.79.900 |
| <u>.#</u> . | Privacy  | F22      | Latchbolt retracted by knob/lever on either side unless outside is locked by thumbturn. Operating inside knob/lever or emergency turn outside unlocks outside. Inside knob/lever always active. | 911.79.910 |

#### Keyed without deadbolt

|          | Function  | ANSI No. | Description  | Item No.   |
|----------|-----------|----------|--|------------|
| <u>.</u> | Office    | F04      | Latchbolt retracted by knob/lever on either side unless outside is locked by key outside or by turning inside thumbturn. When outside is locked, latchbolt is retracted by key outside or by knob/lever inside. Outside knob/lever remains locked until thumbturn is returned to vertical or unlocked by key. Auxillary latch deadlocks latchbolt when door is locked. | 911.79.901 |
|          | Classroom | F05      | Latchbolt retracted by knob/lever from either side unless outside is locked by key. Unlocked from outside by key. Auxiliary latch deadlocks latchbolt when door is locked. Inside knob/lever is always free for immediate egress.  | 911.79.902 |
| 1        | Storeroom | F07      | Latchbolt retracted by key outside or by lever inside. Outside knob/lever always locked. Auxiliary latch deadlocks latchbolt when door is locked. Inside knob/lever is always free for immediate egress.   | 911.79.903 |

#### Keyed with deadbolt

|              | Function  | ANSI No. | Description   | Item No.   |
|--------------|-----------|----------|---|------------|
| <u>:  </u> : | Corridor  | F13      | Latchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by key outside or inside thumbturn. Throwing deadbolt locks outside knob/lever. Turning inside knob/lever simultaneously retracts deadbolt and latchbolt and unlocks outside knob/lever. Inside knob/lever is always free for immediate egress.  | 911.79.904 |
| <u>.</u>     | Entrance  | F20      | Latchbolt retracted by knob/lever from either side unless outside is locked by 20 degree rotation of thumbturn. Deadbolt thrown or retracted by 90 degree rotation of thumbturn. When locked, key outside or knob/lever inside retracts deadbolt and latchbolt simultaneously. Outside knob/lever remains locked until thumbturn is restored to vertical position. Deadbolt thrown or retracted by key outside or inside thumbturn. Throwing deadbolt locks outside knob/lever. Auxillary latch deadbolts latchbolt when door is locked. Inside knob/lever is always free for immediate egress. | 911.79.908 |
| 1            | Dormitory | F21      | Latchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by key outside or thumbturn inside.  | 911.79.909 |

#### **Deadbolt Functions**

Dimensional data not binding. We reserve the right to alter specifications without notice.

|    | Function              | ANSI No. | Description  | Item No.   |
|----|-----------------------|----------|--|------------|
| 1  | Deadbolt with turn    | F17      | Deadbolt thrown or retracted by key outside or thumbturn inside. | 911.79.906 |
| •1 | Deadbolt without turn | F18      | Deadbolt thrown or retracted by key outside.                     | 911.79.907 |



#### Add Ons Options

#### **Lead Lined**

> 1/8" thick lead plate installed on case cover for use on x-ray room doors



#### **Torx Security**

> Enhance security and reduce tampering with the use of Torx security fasteners





#### **Coin Turn Cylinder**

> For emergency override



#### **ADA Compliant Thumbturn**

> Available for rose trim



#### **Tactile Warning**

- > Peened surface warns user against potential hazards
- > Used typically on one side only, unless otherwise specified
- > Available on stainless steel and 26D levers only



#### **Antimicrobial**

> Häfele offers a wide range of architectural products with silver ion antimicrobial coating

# Add Ons Occupied Indicators

#### Indicator R/W

> Red/White indicator with coin turn





◆ Ø2 1/16" (52 mm) ◆

3/8" Projection

#### Indicator R/GRN

> Red/Green indicator with coin turn





◆ Ø1 15/16" (52 mm) ▶

3/8" Projection

#### **Indicator DND**

Dimensional data not binding. We reserve the right to alter specifications without notice.

> Blank/Do not disturb actuated by thumbturn for rose turn only



3/8" Projection

> Area of application: For locking where no latch is required, ideal for bathrooms and changing rooms.

> Version: Armored front is adjustable for door bevel

Non-handed > Handing: > Backset: 2 3/4" (70 mm) only

1" (25 mm) Stainless Steel throw deadbolt > Bolt:

> Material: Case: Steel with corrosion resistant parts; Cylinder Retainer: High Strength Steel Alloy

> Finish: 630 satin stainless steel (US32D)

#### **Standard Deadbolt Lock Functions**



|          | Function                      | Description  | Item No.   |
|----------|-------------------------------|--|------------|
| <b>*</b> | Cylinder with turn            | Deadbolt thrown or retracted by key outside or thumbturn inside.   | 911.79.865 |
| •        | Double cylinder               | Deadbolt operated by key from either side.   | 911.79.866 |
| •I       | Classroom                     | Deadbolt thrown or retracted by key from outside. Inside thumbturn cylinder retracts deadbolt but cannot project it. *Specify right hand or left hand. | 911.79.867 |
| •        | Cylinder lock (cylinder only) | Deadbolt thrown or retracted by key from one side. No trim on opposite side.   | 911.79.868 |
|          | Door bolt (thumbturn only)    | Deadbolt thrown or retracted by thumbturn from one side.<br>No trim on opposite side.  | 911.79.869 |



> Area of application: For standard duty commercial and high-end residential use including office, residential single

and multi-family applications.

> Version: Compatible with 8700 series mortice locks for hybrid (mortise lock and tubular applications.

> For doors: 1 3/8" - 1 3/4" (35 - 44 mm), specify if alternate door thickness is required

> Backset: 2 3/8" or 2 3/4" (60 or 70 mm)

> Strike: Full lip strike standard

> Handing: Non-handed passage and privacy sets; some designs are handed for use as dummies

> Latch bolt: 1/2" (12 mm) throw standard

> Certifications: Warnock Hersey/Interlock listed for use on fire doors (20 minute rated).

#### **Standard Deadbolt Lock Functions**



|                                      | Function  | Function Description   | Finish      | Item No.   |
|--------------------------------------|---|--|-------------|------------|
| ( )                                  | D   | Latchbolt retracted by lever on either side.   | 630 (US32D) | 911.79.860 |
| 40-                                  | Passage   | Lateriboli retracted by lever on either side.  | 619 (US15)  | 911.79.862 |
| ()                                   | Privacy Or pushing mergency release unlocks outside lever.        | 630 (US32D)  | 911.79.861  |            |
|                                      |   | 619 (US15)   | 911.79.863  |            |
| ۲.                                   | Half dummy trim   | Single dummy trim for one side of door.  Used for door pull as matching inactive trim. | 630 (US32D) | 911.79.850 |
| 4                                    | Hall duriling trim  |  | 619 (US15)  | 911.79.851 |
| Double dummy for both sides of door. | Double dummy for both sides of door.                              | 630 (US32D)  | 911.79.852  |            |
| 4                                    | Double dummy trim  Used for door pulls as matching inactive trim. | 619 (US15)   | 911.72.853  |            |

Dimensions in mm Inches are approximate



#### **Lever Designs**

#### \*Note

Handed lever. See page 4.28 for available escutcheons.

101 Matisse\*



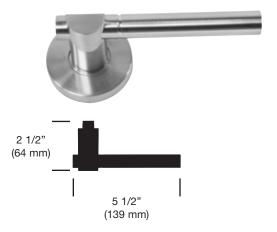
102 Picasso\*



#### 113 Dali\*



#### 116 Mondrian\*



Dimensions in mm



#### **Lever Designs**

#### \*Note

Handed lever. See page 4.28 for available escutcheons.

#### 119 Logan



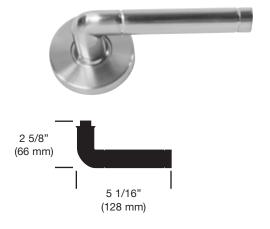
#### 126 Stella



#### 136 Muna



#### 167 Vancouver



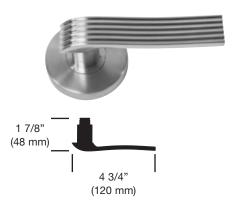
Dimensions in mm Inches are approximate

#### **Lever Designs**

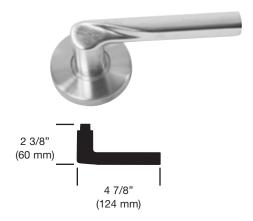
#### \*Note

Handed lever. See page 4.28 for available escutcheons.

#### 204 Wave



#### 208 Aquis\*





#### **Lever Designs**

#### \*Note

Handed lever. See page 4.28 for available escutcheons.

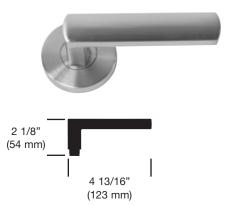
420 Belle\*



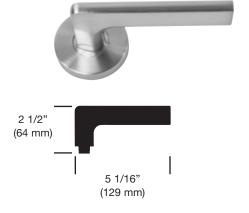
#### 421 Piana



#### 422 Serra



#### **423 Miro**





#### **Escutcheons**

#### Note

Also available for 8700 series mortise. Made to order. Engraving is available.

#### Shown with 126 Stella Lever

> LH10028 square 2 7/8" (73 mm) X 11 3/4" (298 mm)



#### Shown with 102 Picasso Lever

> LH10035 round 3 1/4" (83 mm) X 11" (279 mm)





> Area of application: Designed for locking where no latch is required. Ideal for suite entry, bathrooms and changing rooms.

> Bore: 560 2 1/8" (54 mm); 560N 1 1/2" (38 mm)

Non-handed > Handing:

2 3/4" (70 mm) and 2 3/8" (60 mm) > Backset: 1" (25 mm) throw deadbolt > Bolt: 1 3/8" - 2" (35 – 50 mm) > Door thickness: > Certification: cUL/UL listed for up 3 hours

> Material: Roller: Hardened Steel (corrosion resistant for attack resistance)

#### **Standard Deadbolt Lock Functions**









|           | Function                      | Description  | Bore   | Finish      | Item No.   |
|-----------|-------------------------------|--|--------|-------------|------------|
|           |                               |  | 560    | 630 (US32D) | 911.79.880 |
| 4=1.      |                               |  | 560    | 632 (US3)   | 911.79.882 |
|           | Cylinder with turn            | Deadbolt thrown or retracted by key outside or thumbturn inside.                   | 560    | 641 (US10B) | 911.79.883 |
| Adalı     |                               | of thumburn inside.  | 560N   | 630 (US32D) | 911.79.881 |
|           |                               |  | 560-IC | 630 (US32D) | 911.79.888 |
| 1010-2019 | Double cylinder               | Dandhalk arawatad bu law fuara sithay sida   | 560    | 630 (US32D) | 911.79.884 |
|           |                               |  | 560    | 632 (US3)   | 911.79.885 |
|           | Double Cyllrider              | Deadbolt operated by key from either side.   | 560    | 641 (US10B) | 911.79.886 |
|           |                               |  | 560-IC | 630 (US32D) | 911.79.889 |
|           | Door bolt<br>(thumbturn only) | Deadbolt thrown or retracted by thumbturn from one side. No trim on opposite side. | 560    | 630 (US32D) | 911.79.887 |

Dimensions in mm Inches are approximate

## **Cylinders**



#### **Cylinder Options**

- > Cylinders are not supplied when ordering exit device or trim. Please order separately.
- > The pages detailing exit device trim designs and functions advise cylinder type required.

#### Note

4

Standard cylinder is 1 1/4" (32 mm) long. SFIC cylinders are 1 3/8" (35 mm) long. LFIC cylinders are 1 1/2" (38 mm) long. Please specify cam.

#### Mortise Cylinder, Standard Type, 526



| Finish      | Item No.   |
|-------------|------------|
| 626 (US26D) | 916.60.571 |
| 641 (US10B) | 916.60.572 |
| 632 (US3)   | 916.60.573 |
| 619 (US15)  | 916.60.574 |

#### Rim Cylinder, Standard Type, 426



| Finish      | Item No.   |
|-------------|------------|
| 626 (US26D) | 916.60.561 |
| 641 (US10B) | 916.60.562 |
| 632 (US3)   | 916.60.563 |

#### Interchangeable Core, (SFIC), 208



| Finish      | Item No.   |  |
|-------------|------------|--|
| 626 (US26D) | 916.60.585 |  |

#### Interchangeable Core, (SFIC), 308



| Finish      | Item No.   |
|-------------|------------|
| 626 (US26D) | 916.60.586 |

#### **Cylinder Options**

- > Cylinders are not supplied when ordering exit device or trim. Please order separately.
- > The pages detailing exit device trim designs and functions advise cylinder type required.

#### Note

Standard cylinder is 1 1/4" (32 mm) long. SFIC cylinders are 1 3/8" (35 mm) long. LFIC cylinders are 1 1/2" (38 mm) long. Please specify cam.

## Small Format Interchangeable Core, (SFIC) LH-7 PIN IC Core



Finish: 626 (US26D)

| Version      | Item No.   |
|--------------|------------|
| Keyed random | 916.60.580 |
| Maser keyed  | 916.60.581 |
| Temp         | 916.60.582 |

Material: Plastic

| Version | Item No.   |
|---------|------------|
| Temp    | 916.60.583 |

# Large Format Interchangeable Core, (LFIC) \*LC-IH Core Large Format



\*Special order only

#### Key in Knob (KIK), Key in Lever (KIL) Cylinder, K001



Finish: 626 (US26D)

| Keyway     | Item No.   |
|------------|------------|
| Schlage C  | 916.60.590 |
| Weiser     | 916.60.591 |
| Sargent LA | 916.60.592 |

## **Keying**



Concealed Key Control (for cylinders)

#### **Keying Information**

Job name and location:

> Häfele has a full service keying department. We offer the following services: MK Master Keying
KA Keyed Alike
KD Keyed Different (standard)
CMK Construction Master Keying
VKC Visual Key Control (for keys)

When ordering master key systems it is important to consider all of the items below. If information is missing the order may be placed on hold until the missing information is provided.

CKC

| 2. | System is new | or existing |  |
|----|---------------|-------------|--|
|    |               |             |  |

| 3. | Highest level of s | ystem: 1-SKD_ | , 2-MK | , 3-GM | , or 4-GGM |  |
|----|--------------------|---------------|--------|--------|------------|--|
|    |                    |               |        |        |            |  |

| 4. System type: Standard cylinders, SFIC (small format interchangeable core) | 1. | System type: Standard cylinde | , SFIC (small format interchangeable core) |  |
|--|----|-------------------------------|--|--|
|--|----|-------------------------------|--|--|

or LFIC (large format interchangeable core)\_\_\_\_

| 5. | Cvlinder | and kev stamping | if required must be specified |
|----|----------|------------------|-------------------------------|

| 6 | Key quantities for operating keys | master keve | control keys | and construction keys |  |
|---|-----------------------------------|-------------|--------------|-----------------------|--|

| 7 | If construction keying | is required please specify |  |
|---|------------------------|----------------------------|--|

| 8 | Packaging: | nack keys with locks | or pack separately |  |
|---|------------|----------------------|--------------------|--|

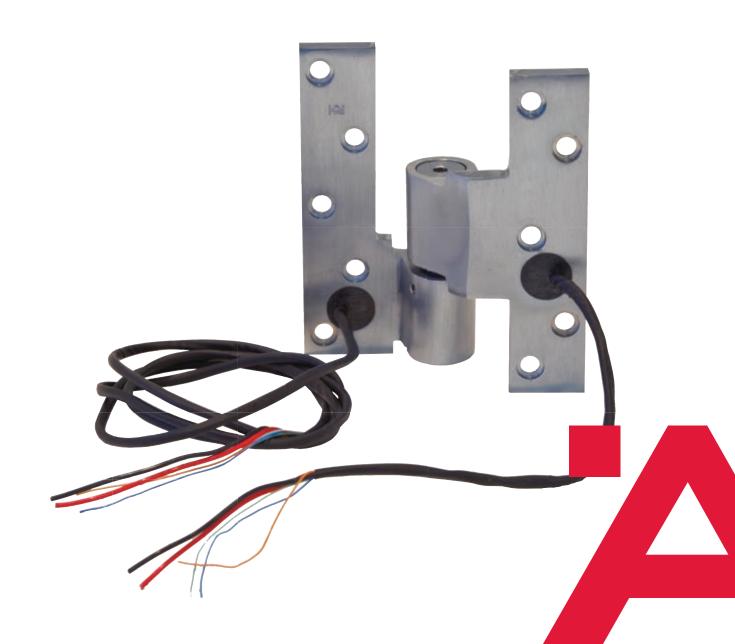
| 0  | Drandad | or non branded aulinders |  |
|----|---------|--------------------------|--|
| 9. | Branded | or non-branded cylinders |  |

| 10. | Branded | or non-branded kevs |
|-----|---------|---------------------|
|     |         |                     |

#### 11. Additional Information:



# ELECTRIFIED PRODUCTS



#### **Contents**









#### **Electrified Products**

| Mortise (EL/EU, ELR AND REX)    | 5.3    | - 5.4 |
|---------------------------------|--------|-------|
| Device Trims                    |        | _ 5.5 |
| Electric Latch Retraction (ELR) |        |       |
| Exit Alarm                      |        | _ 5.7 |
| Delayed Egress                  |        | _ 5.8 |
| Cylindrical (EL/EU AND REX)     |        | _ 5.9 |
| Power Supplies                  | 5.10 - | 5.13  |
| Hinges                          | 5.14 - | 5.15  |
| Door Loops                      |        | 5.16  |
|                                 |        | 5.17  |

#### **Electrified Mortise Locks**

#### Add Ons

> Area of application: Allows remote keyless access and egress control for heavy use applications where security,

safety and convenience are required.

Common applications include security control rooms, cashier rooms, stairwell doors, telephone equipment

rooms, IT departments and hospital equipment and narcotics storage areas.

Electrified mortise locks can be purchased complete with trim or the chassis may be purchased separately to

HXFEL

retrofit with existing hardware trim.

Actuating devices include card readers, wall switches, security consoles, remote release buttons, telephone

access controls and many more.

Continuous duty solenoids > Features:

Reversible handing Low current draw

> Options: Available EL Electrically Locked (Fail Safe)

EU Electrically Unlocked (Fail Secure)

Request to Exit (REX)

Latch Bolt Monitor Switch (LBM)

Electric Latch Retraction (see next page for more details)

> Operating voltage: 12 or 24 VDC (please specify when ordering)

> Amperage: 12V = 700mA / 24V = 350mA> Coil resistance: 12V = 18 Ohms / 24V = 69 Ohms

> Power consumption: 8 watts

#### Note

Dimensional data not binding. We reserve the right to alter specifications without notice

Special order only.





AHAS **5.3** 

## HXFEL

#### Add Ons

> Area of application: Brings electric latch retraction to a standard mortise lock body.

When energized, the latch bolt is completely retracted allowing a push-pull condition.

This revolutionary product accomplishes what previously could only be done with electric strikes

or electric latch retraction exit devices.

Interface module allows for up to 350' (106.6 m) long wire runs. An ideal solution for conditions requiring automatic door openers.

> Features: Utilizes our patented technology

350mA @ 24V

**Electrified Latch Retraction Mortise Locks** 

Circuitry allows for momentary or "continuously on" (push/pull) applications

No special lock prep required – fits standard mortise pocket

Solenoids rated for continuous duty

> Options: Available in EU (Fail Secure)

Must be powered by a PS Series power supplies > Power:

#### Note

Special order only.

> Amperage:





## HAFEL

#### Add Ons

> Area of application: Perfect for stairwell conditions and applications, where electric latch retraction of the exit device's latchbolt(s)

is cost prohibitive or not required.

Especially practical in applications where fire/life safety codes require a "fail safe" condition, which is not an

option with electrified latch pullback devices.

> Features: Continuous duty solenoids used to ensure trouble free operation

Internally mounted solenoid means easy installation - no special prep required

Low current draw, an expensive power supply is not required

Available Fail Safe (Electrically Locked) or Fail Secure (Electrically Unlocked) > Options:

12 or 24V must be specified when ordering

> Operating voltage: > Amperage: 260mA at 12V / 160mA at 24V > Coil resistance: 12V = 49 Ohms / 24V = 159 Ohms

#### Note

Special order only.



## HXFEL

#### **Motorized Latch Retraction Exit Device**

#### Add Ons

> Area of application: Allows for remote keyless, mechanical or electronic, access control in high occupancy/high traffic conditions

where exit devices are required. Applications include hospitals, airports, schools, churches and is commonly

used in conjunction with automatic door openers.

> Features: A very robust motorized latch retraction unit for 8000 Series exit devices

Comes with smart module: on board diagnostics with audible feedback for adjustment and power issues

Push to set (PTS): 5 second electronic adjustment for post installation

Electric dogging rated for continuous duty - auto retraction if dogged push pad is pulled from position

Low current draw

Field switchable to a "high torque" mode 6' (1.8 m) cable with quick connect

> Voltage: Voltage range - 22 to 28 VDC

System protection - unit will shut down when voltage exceeds 28VDC

Average in rush current - 1A Average hold current - 180mA

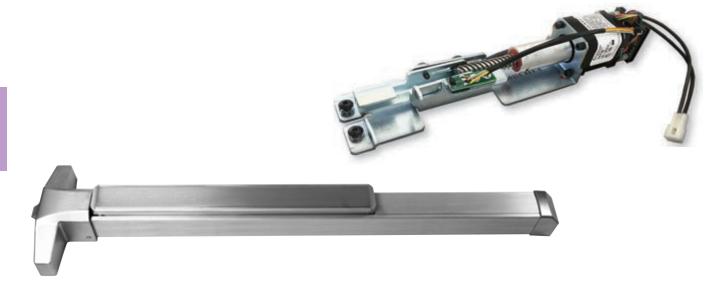
500' (152.4 m) with 18ga wire; 700' (213.3 m) with 16ga wire > Wire run:

Recommended - PS1, PS2 or PS5-8 > Power supplies:

> Options: Request to exit (REX)

#### Note

Special order only.



#### Add Ons

> Area of application: All 8000 series exit devices can be converted into alarm devices.

Designed to deter, with the alarm, unauthorized use of the opening.

To warn someone who might open a controlled door the push bar is printed with EMERGENCY EXIT ONLY

PUSH TO OPEN ALARM WILL SOUND.

> Features: The alarm module is operated by a 9VDC battery

Type E - monitors push bar, latch bolt and end cap

When the push bar is depressed or the latch bolt is retracted by the outside trim, the alarm will sound.

Tampering with end cap will also trip alarm.

> How to order: Use prefix "AL" on any 8000 Series.

Example: AL8810SE - 36 - 630 (Alarmed rim exit device with Type E monitor, 36" in 630 (US32D) finish)

#### Note

Special order only.





#### Add Ons

> Area of application: Designed to provide a controlled exit in a predetermined time delay.

When the exit device is armed it will delay exit to any person for 15 to 30 (specify) seconds after the push pad

is depressed for 3 or more seconds.

Once the push pad is depressed for 3 or more seconds an alarm will sound that will alert appropriate people to respond to the signal and take immediate action. The alarm module also has a nuisance alarm feature in

the event someone bumps or touches the push pad for less than 3 seconds.

The delayed egress exit device is furnished with a sticker in red letters which states:

EMERGENCY EXIT ONLY
PUSH UNTIL ALARM SOUNDS

DOOR CAN BE OPENED IN 15 SECONDS

> Features: When in the armed state it can be by-passed by turning the cylinder clockwise, allowing authorized personnel

to exit without setting off the alarm.

When in the armed state turning the cylinder counter clockwise will temporarily release the device without

setting off the alarm and will re-arm after 10 seconds.

> Certification: ANSI A156.3 and ANSI A156.24

#### Note

Consult local codes before specifying or supplying. Special order only.



**Electrified Cylindrical Locks** 

## Add Ons

> Area of application: Allows remote keyless access and egress control for commercial applications where security, safety and

convenience are required. Common applications include security control rooms, classrooms, meeting rooms,

telephone equipment rooms and IT departments.

Actuating devices include card readers, wall switches, security consoles, remote release buttons,

telephone access controls and many more.

> Features: Continuous duty solenoids

Non-handed Low current draw 1 year warranty

> Options: Available EL Electrically Locked (Fail Safe)

EU Electrically Unlocked (Fail Secure)

Request to exit (REX)

> Operating voltage: 12 or 24 VDC please specify when ordering

> Amperage: 12V = 250mA / 24V =150mA > Coil resistance: 12V = 49 Ohms / 24V =159 Ohms

> Power consumption: 3W

#### Note

Special order only.





#### **Power Accessory**

> Area of application: The CRU2 "non-polarity" sensitive is a current reduction module that is designed to work with low current

DC voltage electric locking devices (cylindrical locks, mortise locks or panic trim) that are being used in a

"fail safe" or "unlock cycle" condition.

When energized, the CRU2 allows the device to receive full current long enough for the solenoid to actuate. Once actuated, the CRU2 limits the current the solenoid consumes allowing it to run cooler, but delivering

Once actuated, the GNO2 limits the current the solehold consumes allowing it to run cook

enough current for the solenoid to remain actuated as long as is needed.

> Features: With a small adjustment screw for flexibility in the field, allowing the installer to fine tune the current and

maximize the efficiency.

Accepts up to 30V AC or DC input

Allows "continuously on" low current devices to run cooler, increasing the life of the solenoid and

reducing service calls. No more "hot levers"

Protects solenoid locks and exit trim from spikes and blow back.

> Operating voltage range: 12 to 30VDC

> Maximum amperage: 1.0A

#### CRU2



| Item No.   |
|------------|
| 823.31.000 |

#### **Power Supply**

> Area of application: A heavy duty, high quality, low cost solution for powering a single electric latch pullback exit device.

The solid-state design ensures years of trouble-free operation. This linear power supply delivers the current needed for the extreme in-rush requirement of most solenoid driven electric latch retracting exit devices.

The power supply comes housed in a sturdy, yet compact metal enclosure.

> Features: Delivers the necessary high current in-rush for a single exit device.

Solid-state design eliminates problems associated with mechanical relays.

Single input/output (input triggered by dry contact)

> Certifications: UL listed; CSA listed

> Input voltage: 120VAC

Output voltage: 24VDC regulated @ 1A (56 watt transformer)
 LEDs: Red = Power indicator / Green = Channel on
 Enclosure dimensions: 10" x 10" x 4" (254 x 254 x 102 mm)

#### PS<sub>1</sub>



| Item No.   |
|------------|
| 917.93.040 |

**Power Supply** 

> Area of application: A high quality, cost effective solution for powering two electric latch pullback exit devices.

> Features: Provides the necessary surge current that most latch pullback exit devices require.

Delivers the necessary in-rush current to power two latch pullback exit devices.

Independent inputs/outputs with priority sensing; with built-in delays each output harnesses the full capacity

for the power supply.

Solid-state design eliminates mechanical problems associated with relays. Thermal overload sensing reduces risk of failure due to overheating.

Fire alarm disconnect link. Inputs triggered by dry contact.

Intelligent short circuit detection detects shorts much faster than glass or resettable fuses and isolates the

short to the individual output.

Removable euro-style terminal blocks allow for easy wiring.

Efficient battery backup/charging circuitry with zero voltage drop at power loss (PS2BB)

Solid-state reverse polarity protection for battery connections (PS2BB) Audible alert when sensing AC power failure & low battery (PS2BB) 2 solid-state inputs/outputs (input triggered by dry contact)

> Certifications: UL Listed; CSA Listed

> Input voltage: 120VAC

> Output voltage: 24 VDC regulated @ 2A (56 watt transformer)

> Temperature range: - 32° to 120° F

> LEDs: Red = power indicator / Green = channel on

> Enclosure dimensions: 12.5" x 15" x 5" (317.5 x 381 x 127 mm) (for the PS2BB, accommodates two 7AH batteries)

#### Note

5

Requires (2)ea. 12V 7 amp hour batteries (batteries not included) (PS2BB)

#### PS2/PS2BB



| Version                     | Item No.   |
|-----------------------------|------------|
| PS2                         | 917.93.041 |
| PS2BB (BB = battery backup) | 917.93.043 |

#### **Series Power Supply**

> Features:

> Area of application: A regulated, linear power supply rated at 5 Amps @ 24VDC.

State-of-the-art, solid-state design offers a flexible and cost effective solution to powering and controlling low

current DC locking devices such as mortise locks, cylindrical locks, panic trim, and electric strikes. The installer can control low current and high surge current devices together with one power supply. Offers a continuous 27.6V battery charging circuit while allowing adjustable output voltage (24-27VDC).

The PS5 is available in 4, 6, and 8 I/O models to accommodate most field conditions.

Housed in an attractive, high-quality enclosure. Adjustable output voltage from 24-27VDC

Independent, battery backup charging circuit at 27.6V with solid-state design and very low voltage loss

Fire alarm link

Solid-state design eliminates mechanical problems associated with relays.

Removable euro-style terminal blocks allow for easy wiring. Up to (8) Solid-state inputs (specify dry contact or voltage trigger)

Up to (8) Solid-state outputs Thermal auto-resettable fuses 3-year "no hassle" warranty

> Certifications: UL Listed; CSA Listed (PS5-8 only)

> Input voltage: 110 VAC

> Output voltage: 24VDC @ 5A continuous current

> LEDs: Red = power indicator / Green = channel on

> Enclosure dimensions: 12.5" x 15" x 5" (317.5 x 381 x 127 mm) (accommodates two 7AH batteries - batteries not included)

#### PS<sub>5</sub>



| Item No.   |
|------------|
| 917.93.042 |

5

#### **Add Ons**

> Features:

#### **Power Transfer Butt Hinges**

> Area of application: The electric through wire hinge (ETH) is the ideal way to pass low voltage power from the hinge jamb to

the lock set without having any exposed wires. These hinges are commonly used with electric mortise &

cylindrical locks, electric strikes (when on a pair of doors), electric exit trims, latch pullback devices,

door mounted card readers and low voltage door lights. 4' lead available

Center located wire access holes

Quick connect optional

> Specifications: 2W (2/20ga)

4W (4/26ga) 8W (8/28ga) 12W (12/28ga)

> Certification: UL-F Rated

#### Note

Special order only.



### Add Ons

### **Power Transfer Butt Hinges**

> Area of application: The energy transfer pivot hinge is available in the same wire configurations as butt hinges.

A great option for passing power from the hinge jamb to the door without any exposed wires or cords.

> Features: Non-conductive wire access cap for wire protection

4' lead available

Multiple wire configurations available

Quick connect optional

> Specifications: 2W (2/20ga)

4W (4/26ga) 8W (8/28ga) 12W (12/28ga)

### Note

Special order only.



### **Concealed Door Loop**

> Area of application: The patented concealed door loop (CDL) is a low cost method of transferring low voltage power from the

door frame to the locking device. Typical door loops are surface mounted and remain constantly visible;

the CDL slides into the door and/or frame completely concealing itself when the door is closed.

Common applications include: use with continuous hinges, storefront conditions where offset hinges are used, and for most applications where ETH hinges or conventional door loops would be used. The CDL's

aesthetic appeal will benefit retrofits as well as new installations.

> Function: Standard> Features: Durable finish

Special 1/4" (3 mm) flexible armoured conduit (i.d. 1/4" (3 mm)

Supports up to 180° swing (standard butt and continuous hinge applications)

Easy installation

Variable mounting locations

> Options: CDL-EXT extended 12" (305 mm); CDL-EXT2 extended 18" (457 mm)

> Finish: aluminum

### CDL



| Item No.   |
|------------|
| 912.02.160 |

### **Surface Door Loop**

> Area of application: The surface door loop provides a safe way to transfer power when concealed methods are not possible.

With flexible armoured conduit (i.d. 9/32" (7.144 mm) and end caps, the DL20 door loop offers a field sizable

(18" - 20" (457 - 508 mm), surface applied solution.

> Function: Standard > Specifications: 2W (2/20ga) 4W (4/26ga)

8W (8/28ga) 12W (12/28ga)

> Finish: aluminum

### Note

Other wire configurations available.

### **DL20**



| Item No.   |
|------------|
| 912.02.162 |

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Dimensional data not binding. We reserve the right to alter specifications without notice



> Specifications: Basic wall mount

> Technical details: L x W x H: 3 1/8" x 3 1/8" x 1 5/8" (80 × 80 × 40 mm)

Dual voltage: 12V / 24VDC

Current draw: 100mA/12VDC, 50mA/24VDC

Holding force: about 50KGS Adjustable or fixed armature plate

Built-in spike suppressor

> Sensor: Optional

> Certifications: CE approved; UL listed

### **LHDH501**



Item No. 912.05.802

> Specifications: Wall flush mount

> Technical details: L x W x H: 4 3/4" x 3 1/16" x 15/16" (121  $\times$  78  $\times$  25 mm)

Dual voltage: 12V / 24VDC

Current draw: 100mA/12VDC, 50mA/24VDC

Holding force: about 50KGS Adjustable or fixed armature plate

Built-in spike suppressor

> Sensor: Optional

> Certifications: CE approved; UL listed

### **LHDH505**



Dimensions in mm

Item No.

912.05.803

5

### **Wall Magnet**

HAFELE

> Specifications: Surface mount

> Technical details: L x W x H: 4 5/8" x 2 3/4" x 3" (116.5 × 69.5 × 76.2)

Power: 12V AC/DC, 24V AC/DC, 120V AC Current: 12V/60mA, 24V/30mA, 120V/20mA

Holding force: about 15KGS Adjustable armature plate

> Certification: UL listed

> Finish: aluminum painted

### LHDH2300

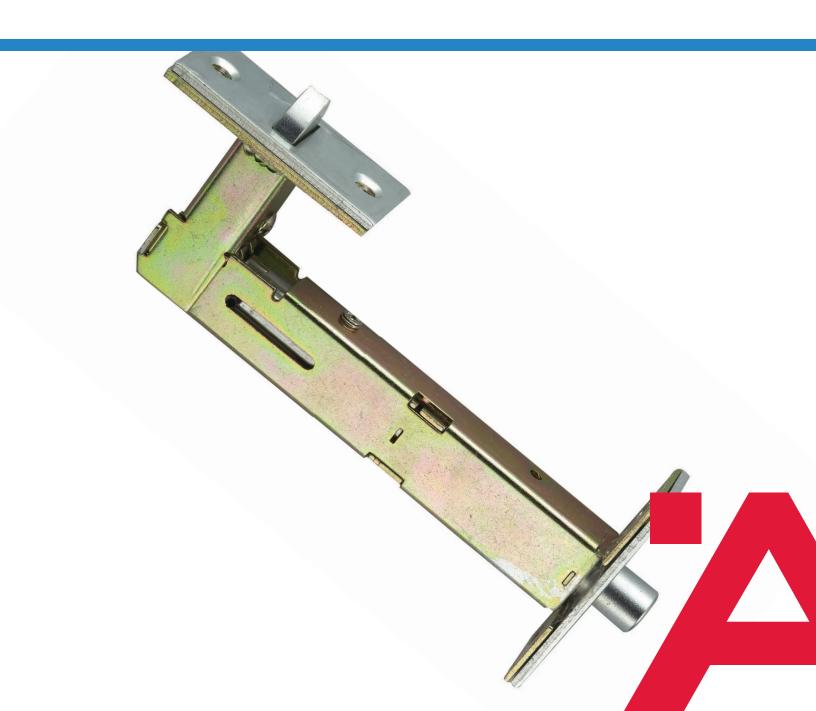


| Item No.   |
|------------|
| 912.05.804 |



# 6

# FLATWARE AND ACCESSORIES





### Flatware Accessories

| Pulls, Flush Bolts, Surface Bolts, Roller Latches, |             |
|--|-------------|
| Floor Stops and Wall Stops                         | 6.3 - 6.6   |
| Kickplates , Push Plates, and Coordinators         | 6.7 - 6.10  |
| Automatic Flush Bolts, Constant Latching           |             |
| Flush Bolts and Universal Flush Bolts              | 6.11 - 6.16 |

HAFELE

> Material: Stainless Steel

> Finish: 630 satin stainless steel US32D

### **Pulls**



| Model    | Dimensions      | Item No.   |
|----------|-----------------|------------|
| LH4006-1 | Ø3/4" x 6" C/C  | 903.03.200 |
| LH4006-2 | Ø1" x 6" C/C    | 903.03.210 |
| LH4008-1 | Ø3/4" x 8" C/C  | 903.03.202 |
| LH4008-2 | Ø1" x 8" C/C    | 903.03.212 |
| LH4012-1 | Ø3/4" x 12" C/C | 903.03.204 |
| LH4012-2 | Ø1" x 12" C/C   | 903.03.214 |

### **Pull/Plates**



| Model    | Dimensions                       | Item No.   |
|----------|----------------------------------|------------|
| LH4606-1 | Ø3/4" x 6" C/C x 4" x 16" plate  | 903.03.220 |
| LH4606-2 | Ø1" x 6" C/C x 4" x 16" plate    | 903.03.230 |
| LH4608-1 | Ø3/4" x 8" C/C x 4" x 16" plate  | 903.03.222 |
| LH4608-2 | Ø1" x 8" C/C x 4" x 16" plate    | 903.03.232 |
| LH4612-1 | Ø3/4" x 12" C/C x 4" x 16" plate | 903.03.224 |
| LH4612-2 | Ø1" x 12" C/C x 4" x 16" plate   | 903.03.234 |

### **Offset Pulls**



Dimensional data not binding. We reserve the right to alter specifications without notice.

| Model    | Dimensions     | Item No.   |
|----------|----------------|------------|
| LH1180-1 | Ø3/4" x 6" C/C | 903.03.240 |
| LH1180-2 | Ø1" x 6" C/C   | 903.03.250 |

Dimensions in mm Inches are approximate

### **Flush Bolts**



- > Material: Brass/Steel
- > Finish: 630 satin stainless steel US32D

| Model   |                                  | Item No.   |
|---------|----------------------------------|------------|
| LH401   | Extension flush bolt             | 911.68.384 |
| LH401UL | Extension flush bolt - UL listed | 911.79.004 |

### **Surface Bolts**



- > Material: Steel
- > Finish: 630 satin stainless steel US32D

| Model    |   | Item No.   |
|----------|---|------------|
| LH70TB   | 8" Surface bolt c/w top and bottom strike             | 911.79.838 |
| LH70TBUL | 8" Surface bolt c/w top and bottom strike - UL listed | 911.79.839 |

### **Roller Latches**



Heavy duty "adjustable" roller latch



Heavy duty "adjustable" roller latch (with "T" strike)



Heavy duty "adjustable" roller latch (with ANSI strike)

- > Material: Brass
- > Finish: 630 satin stainless steel US32D

| Model  |   | Item No.   |
|--------|---|------------|
| LH403  | Heavy duty "adjustable" roller latch                    | 911.24.084 |
| LH404H | Heavy duty "adjustable" roller latch (with "T" strike)  | 911.68.385 |
| LH405H | Heavy duty "adjustable" roller latch (with ANSI strike) | 911.68.386 |

### 3-Wheel Hanger Running Gear



- > Weight capacity: 125 lbs.
- > Material: Steel

| Finish      | Item No.   |
|-------------|------------|
| zinc-plated | 407.13.930 |

Dimensions in mm Inches are approximate

### **Floor Stops**

# HAFELE

### LH200



- > 1/4" rise > Material: Zinc
- > Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 937.54.904 |

### LH209



- > 1/4" rise X 1 1/2" high
- > Material: Zinc
- > Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 937.54.930 |

### LH281



- > Extra heavy duty
- > Material: Zinc
- > Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 937.94.077 |

### LH430



- > Decorative
- > Material: Zinc
- > Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 937.54.934 |

### **LH210**



- > Non-directional
- > Material: Zinc

Dimensional data not binding. We reserve the right to alter specifications without notice.

> Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 937.54.931 |
|            |

### LH211



- > Heavy duty spring loaded
- > Material: Zinc
- > Finish: 630 satin stainless steel US32D

|  | Item No.   |
|--|------------|
|  | 937.54.932 |

### **LH240**



- > Wall stop (convex)
- > Material: Brass
- > Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 937.01.300 |

### **LH240B**



- > Wall stop (convex)
- > Material: Stainless Steel
- > Finish: 630 satin stainless steel US32D

| Item No.   |
|------------|
| 937.13.300 |

### **LH250**



- > Wall stop (concave)
- > Material: Brass
- > Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 937.01.301 |

### **LH250B**



- > Wall stop (concave)
- > Material: Stainless Steel
- > Finish: 630 satin stainless steel US32D

| Item No.   |
|------------|
| 937.13.310 |

### **LH270**



- > Heavy duty baseboard stop
- > 2 3/8" high
- > Material: Brass
- > Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 937.13.340 |

### LH272



- > Heavy duty baseboard stop
- > 2 3/8" high
- > Material: Brass
- > Finish: 626 satin chrome plated US26D

|  | Item No.   |
|--|------------|
|  | 937.54.933 |

### LH273



- > Heavy duty baseboard stop
- > 3 1/2" high
- > Material: Brass
- > Finish: 626 satin chrome plated US26D

| · |            |
|---|------------|
|   | Item No.   |
|   | 937.13.341 |

### LH289



- > Door holder; heavy duty kick down
- > Material: Brass
- > Finish: 626 satin chrome plated US26D

| Item No.   |
|------------|
| 938.42.000 |

Dimensions in mm Inches are approximate

# 6

HAFEL





### **Kickplates**

> Specify: Width x Height x Material Gauge

Screw mounting with beveled edges standard > Mounting:

Tape mounting available

Brass, Bronze, Aluminum, Stainless Steel (304) > Material:

> Material gauge: GSH80 - 20 ga.

> GSH80A - 18 ga. GSH80B - .062 ga. GSH80C - .125 ga.

> Finish: All standard ANSI/BHMA finishes

### Note

Available by special order/price per application.

### **Pictogram Plates**

> Specify: Width x Height x Material Gauge

> Material: Brass, Bronze, Aluminum, Stainless Steel (304)

> Material gauge: GSH80 - 20 ga.

GSH80A - 18 ga. GSH80B - .062 ga. GSH80C - .125 ga.

> Finish: All standard ANSI/BHMA finishes

### Note

Dimensional data not binding. We reserve the right to alter specifications without notice.

Available by special order/price per application.

Custom engraving available; i.e. Male, Female, ADA, Suite Numbers, Logos, etc.

> Area of application: Used to coordinate the closing of pairs of doors in jamb openings 36" (914 mm) to 104" (2642 mm) wide.

> Features: The rubber roller at the end of the coordinator arm cushions the contact of the active door when it is closing.

The reversible nylon roller which lifts the coordinator arm insures smooth and long lasting operation.

A curved lip roller strike is supplied with all devices.

> Handing: Non-handed > Overall projection: 7" (178 mm) > Certification: UL Listed

> Material: Coordinator mechanism and inactive door brackets: Solid Brass

Roller strike for the top of the inactive door: Wrought Stainless Steel

> Finish: 652 satin chrome-plated (US26D)

### LH409 Drop Down Style Coordinator



| Item No.   |
|------------|
| 931.65.560 |

### **Door Coordinators**



931.65.542

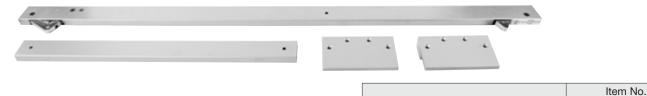
> Features: F6018, 18" (457 mm) filler bar, aluminum

Supplied with 2 pieces of MB2, mounting brackets for top stop width over 2 1/4" (57 mm)

> Length: 42" (1067 mm)

> Material: Steel > Finish: aluminum

### **LHSMC-42 Surface Mounted Door Coordinator**



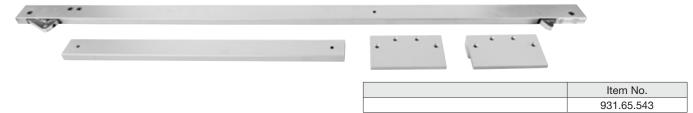
> Features: F6018, 20" (508 mm) filler bar, aluminum

Supplied with 2 pieces of MB2, mounting brackets for top stop width over 2 1/4"(57 mm)

> Length: 52" (1321 mm)

> Material: Steel > Finish: aluminum

### LHSMC-52 Surface Mounted Door Coordinator



6

### **Door Coordinators**



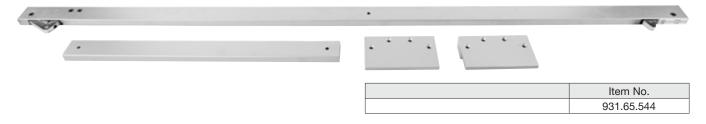
> Features: F6018, 36" (914 mm) filler bar, aluminum

Supplied with 2 pieces of MB2, mounting brackets for top stop width over 2 1/4" (57 mm).

> Length: 60" (1524 mm)

> Material: Steel > Finish: aluminum

### **LHSMC-60 Surface Mounted Door Coordinator**



### **Mounting Brackets**

> Area of application: For top stop width 7/8" to 2 1/4" (22 to 57 mm)

### LHMB3



| Item No.   |
|------------|
| 931.65.545 |

### **Supplied With**

2 pcs.

> Area of application: Use in pairs (top and bottom) on the inactive leaf of double wood or hollow metal doors. Opening active door

automatically retracts top and bottom bolts. Closing active door automatically extends top and bottom bolts.

> Specifications: Non-handed

> Faceplate Size: LH610M - 1" x 6 3/4" (25.4 x 171 mm) LH610W - 1" x 8 1/2" (25.4 x 216 mm)

> Certifications: cUL/UL listed for fire doors

Label A (3 - hour fire doors) ANSI/BHMA A156.3

630 satin stainless steel (US32D)

### Note

> Finish:

Can be used as top bolt only when combined with LHFL001.

The LHFL001 is an auxiliary fire latch bolt, temperature actuated, that extends from the active door into the inactive door.

### **Automatic Flush Bolts**





| Model                   | Item No.   |
|-------------------------|------------|
| LH610M, for metal doors | 911.79.023 |
| LH610W, for wood doors  | 911.79.711 |

Dimensional data not binding. We reserve the right to alter specifications without notice

6



> Area of application: The self-latching flush bolt is used on the top of the door and is combined with an automatic flush bolt

at the bottom of the door.

The top bolt automatically engages frame strike when the inactive door is closed.

> Faceplate Size: LH510M - 1" x 6 3/4" (25.4 x 171 mm) LH510W - 1" x 8 1/2" (25.4 x 216 mm)

> Certifications: UL/UL listed for fire doors. Label A (3 - hour fire doors)

ANSI/BHMA A156.3

> Finish: 630 satin stainless steel (US32D)

### **Constant Latching Flush Bolts**





| Model                   | Item No.   |
|-------------------------|------------|
| LH510M, for metal doors | 911.79.046 |
| LH510W, for wood doors  | 911.79.052 |

> Area of application: Installed at the top and bottom of fire-rated doors on the inactive leaf.

Top and bottom bolts will automatically retract when the active door is opened.

> Features: Simple door preparation

Easy installation

Requires (2) Ø1 1/8" (29 mm) holes and simple rectangular faceplate preps

Dual use for metal and solid wood doors

No cut-outs on inactive door

Non-handed

Ideal for wood veneer doors as smaller profile adds stability to the door

> Certifications: cUL/UL listed for 3 hour fire-rated doors

UL 10B and 10C fire tests for door assemblies

ANSI/BHMA A156.3

> Finish: 652 satin chrome-plated (US26D)

### **LHFB820 Universal Automatic Flush Bolts**





| Item No.   |
|------------|
| 911.79.870 |

### Supplied With

2 - 810 Bolts

Dimensions in mm Inches are approximate 6



> Area of application: Installed at the top and bottom of fire-rated doors on the inactive leaf

Top bolt (FB710) automatically engages the curved lip strike every time the inactive door is closed; the bolt

remains engaged until it is retracted by depressing the plunger on the face plate. Bottom bolt (FB810) will automatically retract when the active door is opened.

> Features: Simple door preparation

Easy installation

Requires (2) Ø1 1/8" (29 mm) holes and simple rectangular faceplate preps

Dual use for metal and solid wood doors

No cut-outs on inactive door

Non-handed

Ideal for wood veneer doors as smaller profile adds stability to the door

> Certifications: cUL/UL listed for 3 hour fire-rated doors

UL 10B and 10C fire tests for door assemblies

ANSI/BHMA A156.3

> Finish: 652 satin chrome-plated (US26D)

### LHFB780 Universal Self-Latching Flush Bolt





| Item No.   |
|------------|
| 911.79.871 |

Supplied With FB710 Top bolt FB810 Bottom bolt

Dimensions in mm Inches are approximate



> Area of application: The top bolt is installed on the top edge of the inactive door.

The bottom fire latch bolt (LHFL001) is used to replace the automatic flush bolt.

This combination reduces the amount of door prep required.

> Certification: cUL/UL listed for pairs of fire-rated doors > Finish: 652 satin chrome-plated (US26D)

### **Universal Automatic Flush Bolt Less Bottom Bolt**



| Model             | Item No.   |
|-------------------|------------|
| LHFB810 + LHFL001 | 911.79.872 |
| LHFB810 only      | 911.79.847 |

> Area of application: The top bolt is installed on the top edge of the inactive door.

The bottom fire latch bolt (LHFL001) is used to replace the self-latching flush bolt.

This combination reduces the amount of door prep required.

> Certification: cUL/UL listed for pairs of fire-rated doors > Finish: 652 satin chrome-plated (US26D)

### **Universal Self-Latching Flush Bolt Less Bottom Bolt**



| Model             | Item No.   |
|-------------------|------------|
| LHFB710 + LHFL001 | 911.79.873 |
| LHFB710 only      | 911.79.848 |

Dimensions in mm Inches are approximate Automatically extends from the inactive door into the active door locking both doors together.

> Installation: Used with automatic (LHFB810) or self-latching (LHFB710) flush bolts

Inactive Door: 1. Measure 6" (152 mm) from bottom of the inactive door

2. Drill  $\emptyset$ 7/8" x 3 7/16" (22 x 87 mm) deep hole for fire latch bolt

Active Door: 1. Drill a Ø1" x 1 3/4" (25 x 44 mm) deep hole for plug at the exact same height

as the fire latch bolt

2. Install plug in door

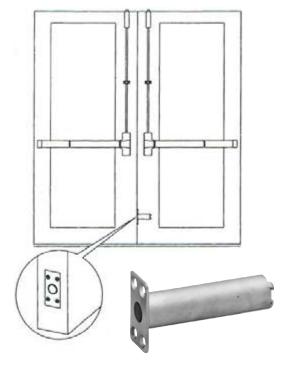
### Note

Not for use with other manufacturer's products.

### LHFL001



| Item No.   |
|------------|
| 911.79.047 |



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| 903.03.214 |      |            |          |                | 4.5      | 911.79.933 . |          |                    | 4.9      |
| 903.03.220 |      | 911.52.400 |          |                | 4.5      | 911.79.934 . |          |                    | 4.9      |
| 903.03.222 |      | 911.52.401 |          |                | 4.5      | 911.79.935 . |          |                    | 4.9      |
| 903.03.224 |      | 911.52.402 |          |                | 4.5      | 911.79.936 . |          |                    | 4.9      |
| 903.03.230 |      | 911.52.403 |          |                | 4.5      | 911.79.937 . |          |                    | 4.9      |
| 903.03.232 |      | 911.52.404 |          |                | 4.5      | 911.79.939 . |          |                    | 4.9      |
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Dimensions in mm Inches are approximate

Dimensional data not binding. We reserve the right to alter specifications without notice.

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Dimensions in mm Inches are approximate