

Heavy-Duty Floor Closers

RIXSON®
ASSA ABLOY

Complete Premium Door Control
Concealed Closers for Maximum
Efficiency, Heavy and High Traffic Openings



ASSA ABLOY, the global leader in door opening solutions

Introduction

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

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

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

Heavy-duty hardened one piece steel spindles

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

Bottom arm attached directly to closer spindle

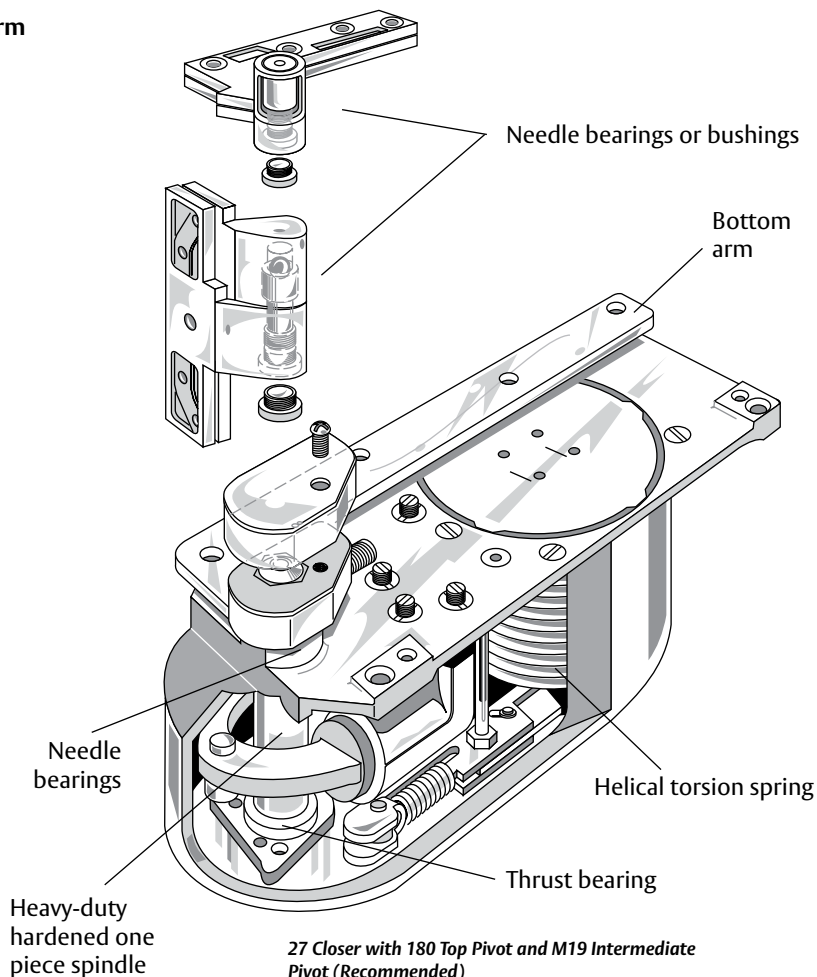
- A mechanical advantage that increases efficiency insuring that ICC/ANSI 117.1 compliant, lower opening forces, will still close the door
- One to one ratio of door swing to spindle rotation makes control more precise
- Floor closers are more efficient than a regular arm surface closer

Helical torsion spring

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

Advantages of concealed floor closers

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



Many different models to choose from

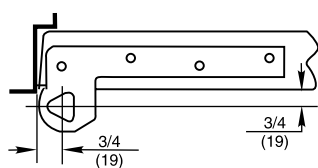
- Use standard product with a top pivot for the best efficiency
- Use a quick install (Q) model to facilitate easy closer removal
- Use extra heavy-duty (L & H) (L-offset) (H-center hung) models for higher traffic/lead lined or extremely heavy doors
- Use model HM with 3/4" offset hinges for hollow metal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

Contents	Page
Heavy-Duty Floor Closers: General Information	2
How to Select Product	4
Options.....	5-6
Certifications	6
Limited Warranty.....	6
Specifications	6
 Offset Floor Closer	
27 Offset Floor Closer	7
27-180 Offset Floor Closer 180° Swing.....	8
127 Closer for Deep Reveal	9
427 Closer for Alcove Application	10
F327 Closer Independently Hung Hanging Means by Others	11
L27 Closer for Lead-Lined/Heavy Weight/High Traffic Doors	12
L27-180 Closer for Lead-Lined/Heavy Weight/High Traffic Doors 180° Swing.....	13
QT/Q27 Closer with Quick Install Mounting 1-3/4" Door	14
HM27 Closer with Offset Hinges for Hollow Metal Installations 1-3/4 Door	15
20 Lighter Duty Floor Closer	16
 Intermediate Pivots & Hinges	
119.....	17
M19/M190.....	17
ML19	18
FA19.....	18
 Single-Acting Center Hung Floor Closer	
28 x 554 Closer with Flat, Low Profile Arm	19
28 Closer with Arm Centering Screws	20
H28 Closer Heavy Weight/High Traffic 2" min. Door Thickness	21
H28 x 587 Closer Heavy Weight/High Traffic 1-3/4" Door or For Alternate Pivot Point	21
328 Closer for Patch Fittings (<i>Patch Fittings by Others</i>)	22
428 Closer with Patch Fittings	23
EH28 Closer Heavy Weight/High Traffic Power Transfer	24
EH28 x 587 Closer Heavy Weight/High Traffic 1-3/4" Door or For Alternate Pivot Point with Power Transfer	24
 Double-Acting Center Hung Floor Closer	
30 Lighter Duty Double Acting Floor Closer	25
40 Double Acting Floor Closer	25
H40 Heavy Weight/High Traffic 2" Min. Door Thickness	26
H40 x 587 Closer Heavy Weight/High Traffic 1-3/4" Door or For Alternate Pivot Point	26
 Optional Center Hung Top Pivots	
345.....	27
H345.....	27
 Quick Reference of Options	28
How to Order	28
Parts Drawings	29-42

Heavy-Duty Floor Closers

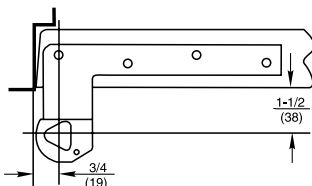
How to Select Product

1. Offset vs. Center Hung Application



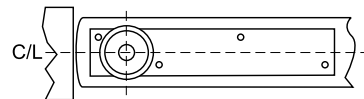
3/4" Offset

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



1-1/2" Offset

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



Center Hung

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

2. Size of Door (width, height, thickness)

Estimated door weights pounds per square foot (PSF)

Door Material	Door Thickness		
	1-3/4"	2-1/4"	3"
Hollow Metal	6.5	7	—
Solid Core Wood	7	9	11.5
Aluminum/Glass Storefront	3.5	4	—
Tempered Glass	Glass Thickness		
	3/8"	1/2"	3/4"
	5	7	9.75
Lead Lining (add to door material weight)	Lead Thickness		
	1/16"	1/8"	1/4"
	5	8	9.75
3/4" Cladding (add to door material weight)	Cladding Material		
	Wood	Stone	Bronze
	3	10.5	28

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

Door: 21sq ft x 7lb./sq ft = 147lbs
 Lead Lining: 21sq ft x 9.75lb./sq ft = 204.75lbs
 Total Door weight 351.75lbs

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

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

For doors of other sizes consult factory

3. Expected Frequency of Door Operation

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

Options

Sealed Closer – Prefix SC

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

Delayed Action – Prefix DA

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

Physically Handicapped – Prefix PH

To comply with ICC/ANSI 117.1 established by the Americans with Disabilities Act. PH prefix indicates 5 pounds of opening force, based at 30" from centerline of pivot. PH closers may not be used on labeled fire doors or exterior doors. Rixson accepts no responsibility for PH closers and door latching. Also, be advised that ADA guidelines DO NOT apply to fire rated openings or exterior doors. 

Wood Door – Prefix W

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

Fire Rated – Prefix F

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

Twenty Minute Label – Suffix -20

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

8-1/2 # Opening Force – Prefix PH Suffix 8-1/2

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

Less All Parts – Suffix LAP

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

Less Floor Plate – Suffix LFP

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

Less Cement Case – Suffix LCC

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

Less Top Pivot – Suffix LTP

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

Heavy-Duty Floor Closers Options, Certifications, Limited Warranty, Specifications

Options Continued

Degree of Swing – Follows Model Number

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

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

Non Hold Open – Suffix N

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

Automatic Hold Open – Suffix A

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

Selective Hold Open – Suffix S

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

Hand- Suffix RH or LH

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

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

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

Cold Weather Fluid – Suffix CWF

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

Extended Spindle – Suffix Extra Length

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

1-1/2" Offset – Suffix 1-1/2

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

Cover Pan (Terrazzo) – Suffix Part Number

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

Special Layouts – Suffix SPLO#

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

Certifications

All Rixson® heavy-duty floor closers are in compliance with ANSI/BHMA 156.4 Standards. See individual products for sub sections.



Limited Warranty

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

Specification

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

Model 27 3/4" Offset

Application

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



ANSI/C06041/C06051

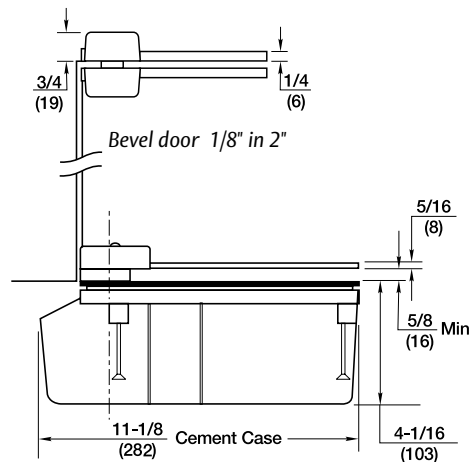
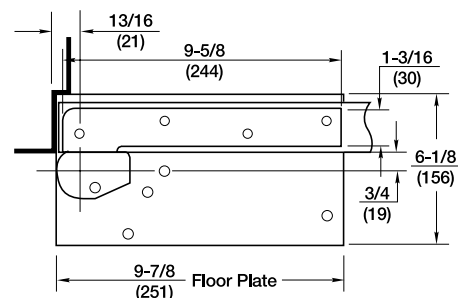
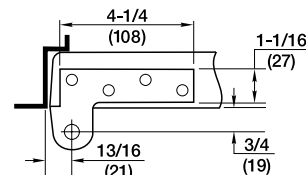
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (*specify 85°, 90°, 95°, 105°*)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option-prefix "DA" (*Non-hold open closers only*)
- Models available to meet ICC/ANSI 117.1 low opening force requirements, prefix "PH". (*For 8-1/2 lbs. of opening force prefix PH and suffix 8-1/2 lbs.*)
- Cold weather fluid available – specify "CWF" (*not available for closers with "DA"*)
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (*floor plate shown*)
- Available 1-1/2" offset, for doors with cladding or frames with applied molding, maximum door weight 250 lbs.
- Cylolac, rustproof cement case
- Vertical door adjustment
- Standard top pivot: #180 included
- Intermediate pivot(s) required: M19 (*order separately*), see page 17
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (*up to 3 hour assemblies*) prefix "F". This package will be supplied with a steel top pivot (F180) and a non-hold open closer. Intermediate pivot required: FM19 (*order separately*), see page 17
- Fire rated closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required



Heavy-Duty Offset Hung Floor Closers

Model 27-180 3/4" Offset

Application

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



ANSI/C06041/C06051

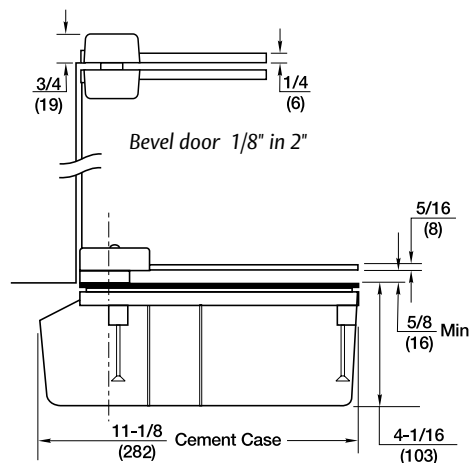
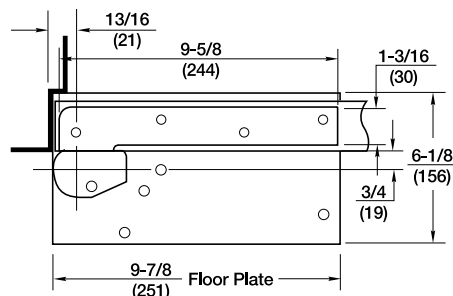
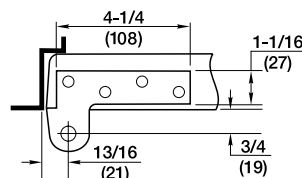
** Door size & weight guidelines are determined using the appropriate number of intermediate pivots*

Product Description & Features

- Maximum opening 180°, auxiliary floor or wall stop recommended
- Separate and independent valves for closing speed and latch speed
- Adjustable hydraulic backcheck
- Available non-hold open (N) or automatic hold open (A)
- Not available with delayed action (DA)
- Models available to meet ICC/ANSI 117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- Cold weather option – specify "CWF"
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (*floor plate shown*)
- Available 1-1/2" offset, for doors with cladding or frames with applied molding, maximum door weight 250 lbs.
- Cylolac, rustproof cement case
- Vertical door adjustment
- Standard top pivot: #180 included
- Intermediate pivot(s) required: M19 (*order separately*), see page 17
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (*up to 3 hour assemblies*) prefix "F". This package will be supplied with a steel top pivot (F180) and a non-hold open closer. Intermediate pivot required: FM19 (*order separately*), see page 17
- Fire rated closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required



Model 127 3/4 Offset

Application

- Single Acting, Handed
- Exterior or Interior Doors
- Deep Reveal Applications
- Weight to 250 lbs.*
- Door Width up to 4'0" (1219mm)



ANSI/C06041/C06051

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

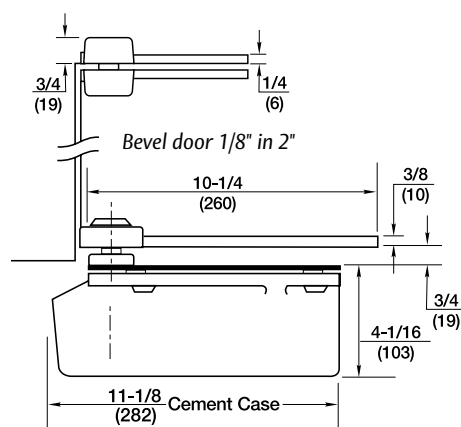
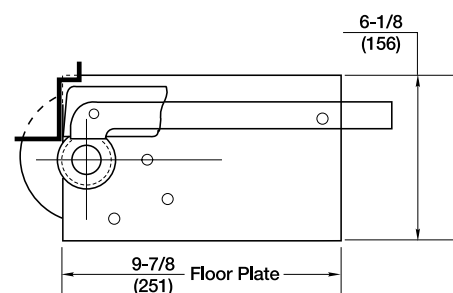
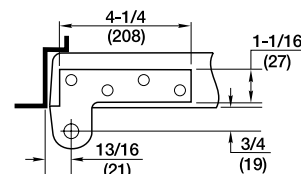
Product Description & Features

Recommended for applications where vertical movement of the door at installation is not possible, such as a door inset in a deep reveal or with no ceiling clearance

- Closer has a tapered spindle and uses a unique bottom arm to allow door installation
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (*specify 85°, 90°, 95° or 105°*)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix “DA” (*non-hold open closers only*)
- Models available to meet ICC/ANSI 117.1 low opening force requirements, prefix “PH”. (*For 8-1/2 lbs. of opening force prefix PH and suffix 8-1/2 lbs.*)
- Cold weather fluid option – specify “CWF” (*not available for closers with “DA”*)
- Sealed closer option – specify “SC”
- Available with floor plate or threshold installation (*floor plate shown*)
- Cylolac, rustproof cement case
- Standard top pivot: #180 included
- Intermediate pivot(s) recommended for non fire rated opening: 119 (*order separately*), see page 17
- Doors up to 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (*up to 3 hour assemblies*) prefix “F”. This package will be supplied with a steel top pivot (F180) and a non-hold open closer. Intermediate pivot required: FM19, (*order separately*), see page 17
- Fire rated closers cannot have PH option
- For 20-minute labeled doors suffix “-20” to the part number
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required



Heavy-Duty Offset Hung Floor Closers

Model 427 3/4" Offset

Application

- Single Acting, Handed
- Exterior or Interior Doors
- Deep Reveal/Alcove Applications
- Weight to 250 lbs.*
- Door Width up to 4'0" (1219mm)



ANSI/C06041

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

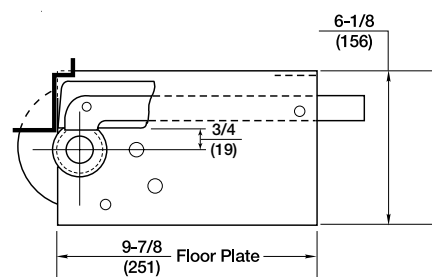
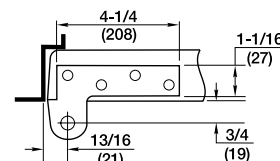
Product Description & Features

Recommended for applications where vertical movement of the door at installation is not possible, such as a door inset in an alcove with no ceiling or side jamb clearance

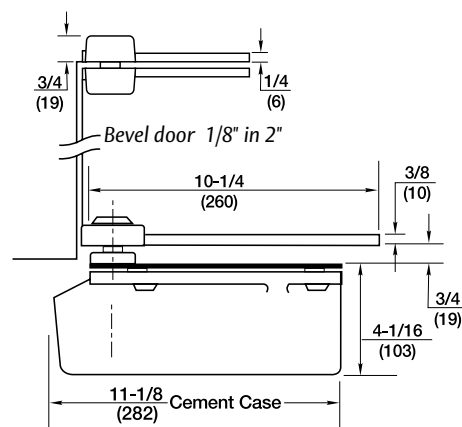
- Closer has a tapered spindle and uses a unique bottom arm with special cap to allow door installation
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85°, 90°, 95° or 105°)
Note: Alcove doors can rarely go beyond 90°
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix “DA” (non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix “PH”. (For 8-1/2 lbs. of opening force prefix “PH” and suffix “8-1/2 lbs.”)
- Cold weather fluid option – specify “CWF” (not available for closers with “DA”)
- Sealed closer option – specify “SC”
- Available with floor plate or threshold installation (floor plate shown)
- Cylolac rustproof cement case
- Standard top pivot: # 180 x 102 included
- Intermediate pivot(s) recommended: 119 (order separately), see page 17
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Not available for fire rated openings
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required



Frame portion



Model F327 Independently Hung

Application

- Single Acting, Handed
- Interior or Exterior Doors
- Door Width up to 4'0" (1219mm)
- For Doors over 250 lbs. Consult Factory
- 1-3/4 doors only



ANSI/C06051

Product Description & Features

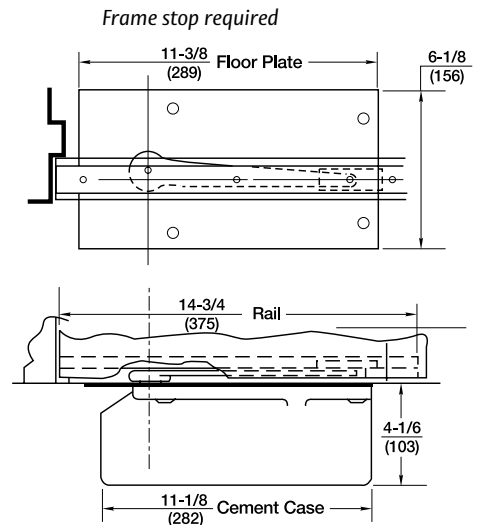
Used as a concealed floor closer for independently hung doors – butt hinges, pocket pivots, or continuous hinges

- Closer does not support weight of door

Note: *Hanging means must be specified when ordering. Check product template. If your hanging means are not listed, contact factory for a special layout and pricing*

- 90° maximum door swing
- Auxiliary stop recommended
- Includes closer, mortised rail and arm with slider
- Separate and independent valves for closing speed, latch speed and backcheck
- Not available in "PH", "DA", or Hold Open
- Cold weather fluid "CWF"
- Sealed closer option – specify "SC"
- Floor plate standard. For threshold applications a 1/2" extended spindle is required
- Cyclac rustproof cement case
- This closer carries a UL Listing for 3hr fire door assemblies. Fire rated hanging means required
- Furnished with wood and machine screws
- Extended spindle available in 1/2" increments up to 2" longer than standard

Technical Information

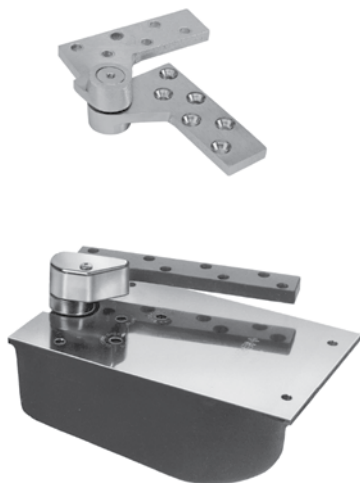


Heavy-Duty Offset Hung Floor Closers

Model L27 3/4" Offset

Application

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



ANSI/C06071

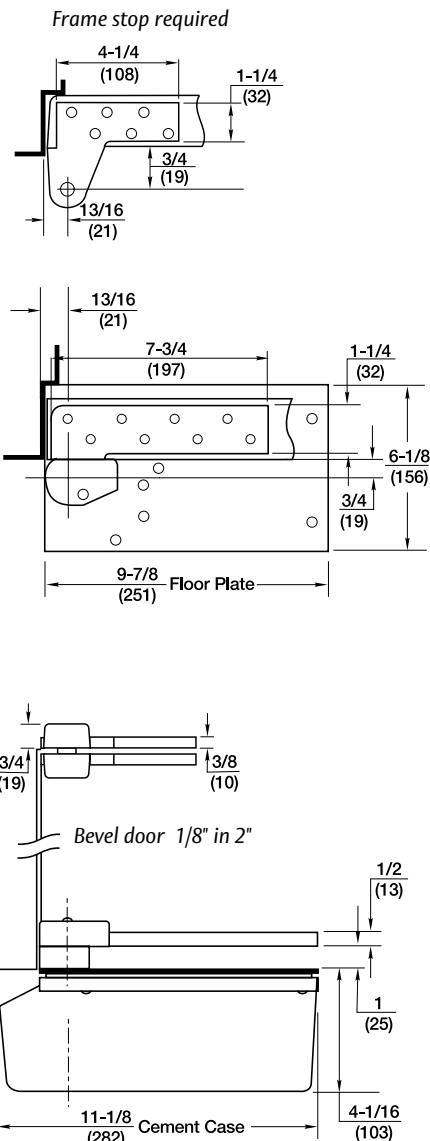
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

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

- Available for the following lead-lined door thicknesses: 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (63mm) or 3" (76mm)
- Additional thrust bearing for greater load capacity
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85°, 90°, 95° or 105°)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA" (non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix PH and suffix 8-1/2 lbs.)
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- For extended offsets, consult factory
- Cast iron cement case
- Vertical door adjustment
- Standard top pivot: L180 included
- Intermediate pivot(s) required: ML19 (order separately), see page 18
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies) prefix "F". This package will be supplied with steel top pivot (FL180) and non-hold open closer. Furnish intermediate pivot FML19, order separately, see page 18. **Note:** UL listing for 1-3/4" thick doors only.
- Fire rated closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Heavy-Duty Offset Hung Floor Closers

Model L27-180 3/4" Offset

Application

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



ANSI/C06071

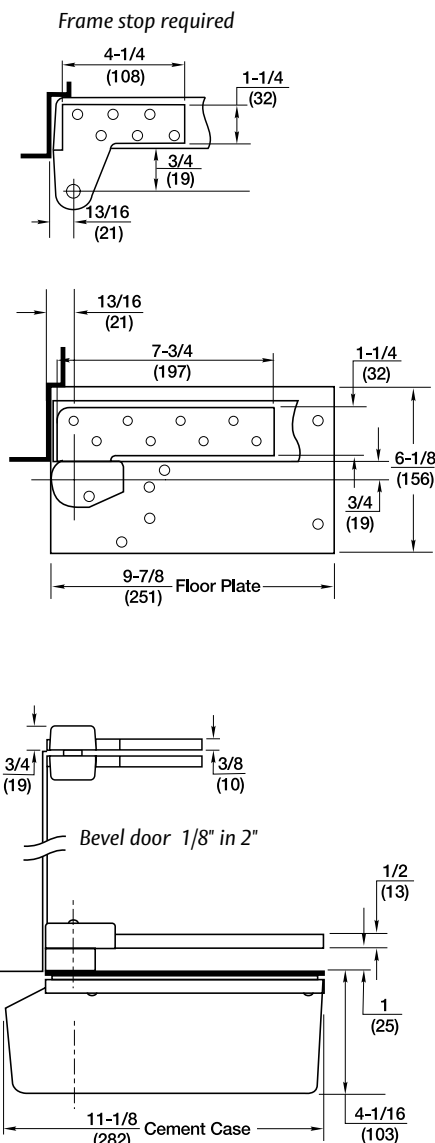
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

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

- Available for the following lead lined door thicknesses: 1-3/4"(44mm), 2"(51mm), 2-1/4"(57mm), 2-1/2"(63mm) or 3"(76mm)
- Additional thrust bearing for greater load capacity
- Maximum opening 180° auxiliary stop recommended
- Separate and independent valves for closing speed and latch speed
- Adjustable hydraulic backcheck
- Available non-hold open (N) or automatic hold open (A) at same degree as dead stop
- Not available with delayed action (DA)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix PH and suffix 8-1/2 lbs.)
- Cold weather fluid option – specify "CWF"
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (*floor plate shown*)
- For extended offsets, consult factory
- Cast iron cement case
- Vertical door adjustment
- Standard top pivot: L180 included
- Intermediate pivot(s) required: ML19 (*order separately*), see page 18
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (*up to 3 hour assemblies*) prefix "F". This package will be supplied with steel top pivot (FL180) and non hold open closer. Furnish intermediate pivot FML19, order separately, see page 18. **Note:** UL listing for 1-3/4" thick doors only.
- Fire rated closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Heavy-Duty Offset Hung Floor Closers

Model Q27/QT27 3/4" Offset

Application

- Single Acting, Handed
- Exterior and Interior Doors
- Weight to 350 lbs.*
- Door Width up to 4'0" (1219mm)
- 1 3/4" Thick Only



ANSI/C06041/C06051

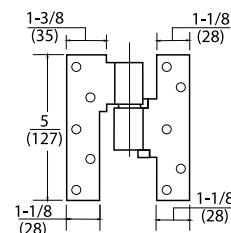
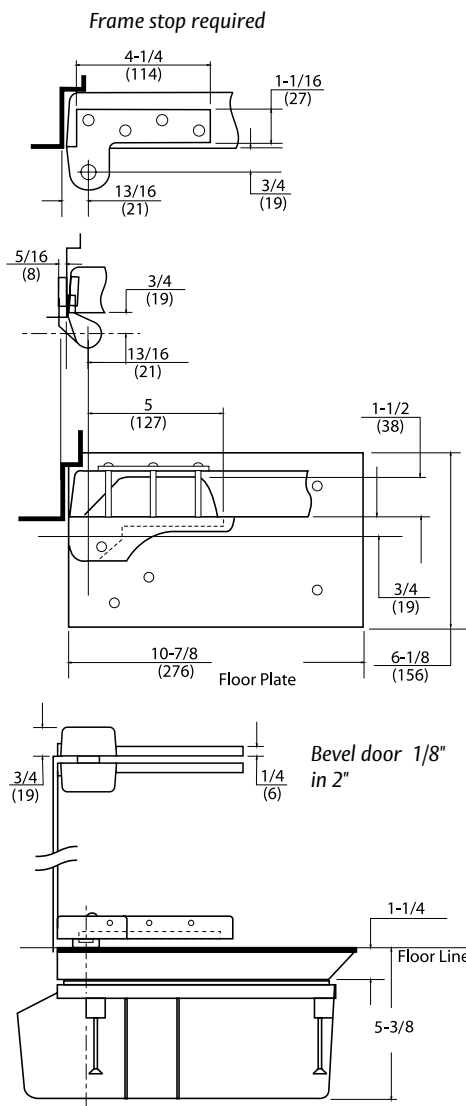
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

Surface-attached bottom arm allows closer removal without demounting door

- Q closers have a floor plate (shown).
- For threshold application prefix "QT"
- 3/4" offset only
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85°, 90°, 95° or 105°)
- Mortise arm with thru-bolt attachment
- Increased depth of cement case for easy closer removal
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA" (non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Cyclac rustproof cement case
- Vertical door adjustment
- Standard top pivot: #180 included
- One M19 intermediate pivot included.
Note: Closer cannot be ordered without the intermediate pivot
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot (included). Each additional 30" (762mm) or doors over 195 lbs. warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies) prefix F. This package will be supplied with steel top pivot (F180), one intermediate pivot (FM19), and a non-hold open closer
- Fire rated closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Heavy-Duty Offset Hung Floor Closers

Model HM27 3/4" Offset

Application

- Single Acting, Handed
- Exterior or Interior Doors
- 1-3/4" Hollow Metal Doors/Frames
- Weight to 250 lbs.
- Door Width up to 4'0" (1219mm)

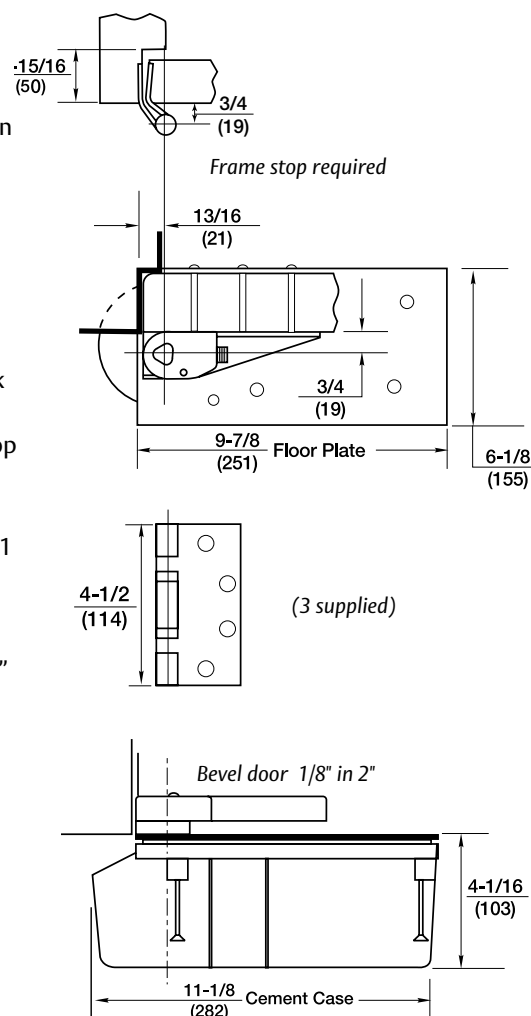


Product Description & Features

Designed for stock hollow metal doors and frames with standard weight 4-1/2" hinge preparation

- Includes three special steel 4-1/2" ball bearing standard weight hinges with 3/4" offset. Doors over 90" in height warrant an additional hinge
- Surface mounted bottom arm with through-bolts
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (85°, 90°, 95° or 105°)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA" (non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Cylolac rustproof cement case
- For fire rated opening (up to 3 hour assemblies) prefix "F". This package will be supplied with 3 steel hinges and a non-hold open closer
- Fire rated closers cannot have PH option
- Furnished with 1/2 wood and full machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



ANSI/C06041/C06051

Heavy-Duty Offset Hung Floor Closers

Model 20 3/4" Offset

Application

- Single Acting, Handed
- Interior Doors
- Weight to 200 lbs.*
- Door Width up to 3'0"



ANSI/C06042/C06052

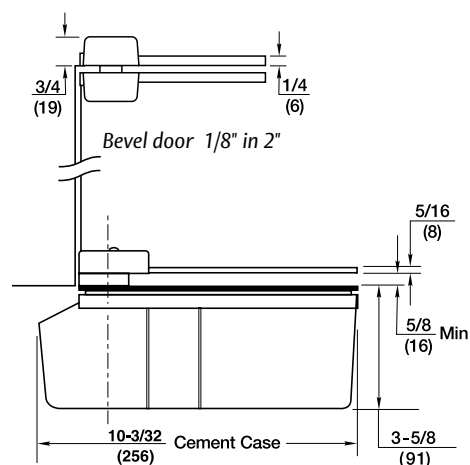
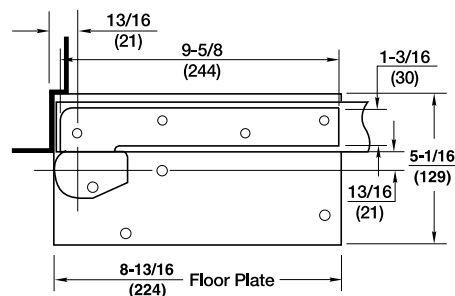
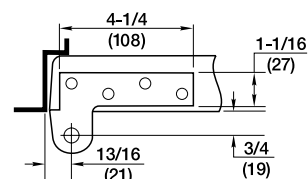
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

- Allows 180° door swing (*trim permitting*)
- Single valve adjustable closing speed 70° to 0°
- Built-in hydraulic backcheck cushions opening from 140° to 180°
- Available non-hold open only
- Delayed action not available
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (*For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs."*)
- Available with floor plate or threshold installation (*floor plate shown*)
- Cast iron cement case
- Vertical door adjustment
- Standard top pivot: #180 included
- Intermediate pivot(s) recommended: M19 (*order separately*), see page 17
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (*up to 3 hour assemblies*) prefix F. This package will be supplied with a steel top pivot (F180) and non hold open closer. Intermediate pivot required; FM19 (*order separately*). See page 17
- Fire rated closers cannot have PH option
- For 20-minute labeled doors suffix -20 to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required



Heavy-Duty Floor Closers Intermediate Pivots

Model 119

Application

- Full Mortise
- Handed

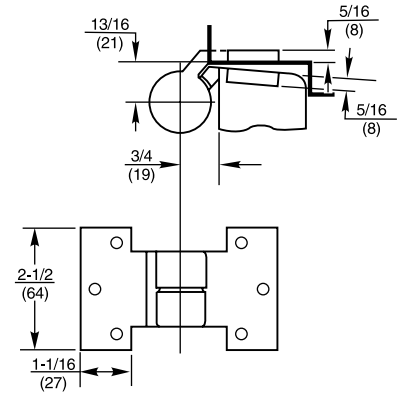
BHMA/ANSI NO: C07382



Product Description & Features

- Not load-bearing
- Maintains door alignment
- Available 3/4" offset only
- Non-ferrous base material
- Recommended for use with Model 127 and 427 Floor Closers
- Furnished with wood and machine screws

Technical Information



Model M19/M190

Application

- Full Mortise
- Handed

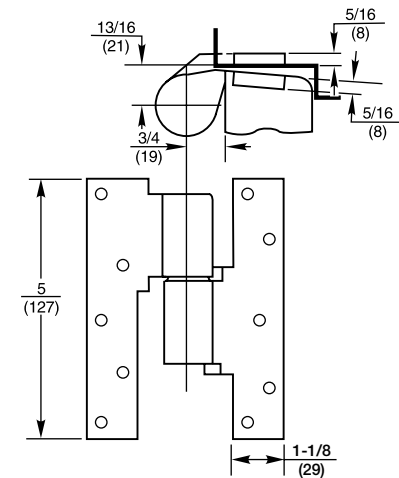
BHMA/ANSI NO: C07321/C07371



Product Description & Features

- M19, bushing, not load-bearing
- M190, bearing, load-bearing
- Maintains door alignment
- Aids in installing floor closers and bottom pivots
- Non-ferrous base material
- 3/4" offset standard
- Available 1-1/2 (38mm) offset
- Available for fire door assemblies (*ferrous material*) specify FM19 or FM190
- On labeled for fire doors NFPA80 requires an intermediate pivot for every additional 30" (762mm) of door height over 60" (1542mm)
- For 20-minute label suffix "-20" to the part number
- Furnished with wood and machine screws

Technical Information



Heavy-Duty Floor Closers Intermediate Pivots

Model ML19

Application

- Heavy-Duty Full Mortise
- Handed

BHMA/ANSI NO: C07311

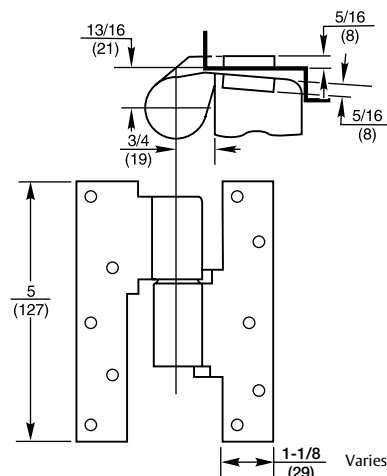


Product Description & Features

Screw holes spaced to straddle lead lining in center of door. Use on extra heavy or high traffic doors.

- Maintains door alignment
- Aids in installing floor closers and bottom pivot
- Available to accommodate door thicknesses 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) – specify thickness when ordering
- Load-bearing
- Non-ferrous base material
- 3/4" offset, for extended offsets consult factory
- Available for fire door assemblies – 1-3/4" (44mm) door only – specify FML19
- On labeled fire door assemblies, NFPA80 requires an intermediate pivot for every additional 30" (762mm) of door height over 60" (1524mm)
- For 20-minute label suffix "-20" to part number
- Furnished with wood and machine screws

Technical Information



Model FA19

Application

Full Mortise
Asylum or High Security
Applications
Handed

BHMA/ANSI NO: C07361

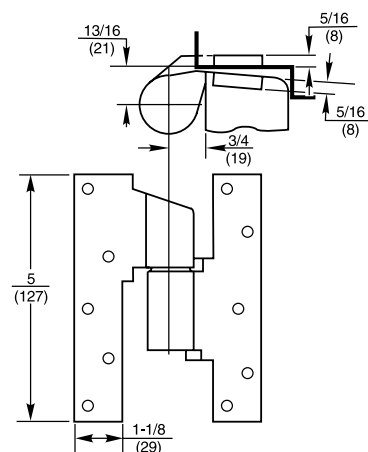


Product Description & Features

Optional intermediate pivot for institutional use or installations where flat surfaces are objectionable

- Maintains door alignment
- Aids in installing bottom pivots
- 3/4" (19mm) offset
- May be used with fire door assemblies
- For 20-minute label suffix "-20" to the part number
- Ferrous base material
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Furnished with wood and machine Torx® screws

Technical Information



Heavy-Duty Single-Acting Center Hung Floor Closers

Model 28 x 554 Arm Center Hung

Application

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



ANSI/C06021

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

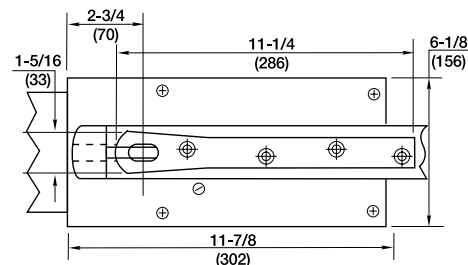
Product Description & Features

Concealed arm is designed to eliminate visible adjusting screws on face of door

- Arm bolt locks arm to closer spindle – adjustments made through heel of door
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (*specify 85°, 90°, 95° or 105°*)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA" (*non-hold open closers only*)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (*For 8-1/2 lbs. of opening force prefix "PH" and suffix 8-1/2 lbs.*)
- Cold weather fluid option – specify "CWF" (*not available for closers with "DA"*)
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (*floor plate shown*)
- Cylolac, rustproof cement case
- Standard top pivot: #340 included
- Not allowed for fire rated doors
- Frame stop required on the header at the lock side. If not supplied by frame manufacturer, recommend use of 60131 (*see Door Control Accessories page 92*).
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

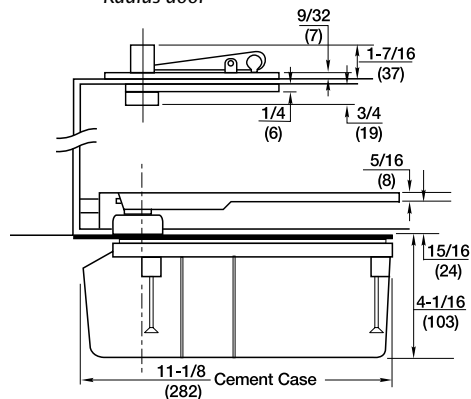
Technical Information

Frame stop required at lock edge



9/32

Radius door



Heavy-Duty Single-Acting Center Hung Floor Closers

Model 28 Center Hung

Application

- Single Acting, Handed
- Exterior or Interior Doors
- Weight to 350 lbs.
- Centering Arm
- Sizes up to 4'0"x8'6"*
(1219mmx2591mm)



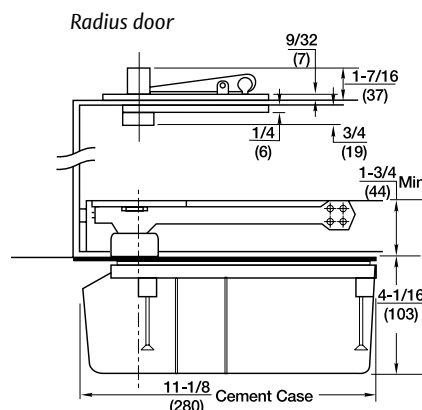
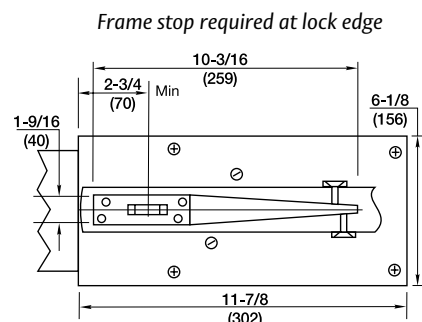
ANSI/C06021

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

Product Description & Features

- Centering arm with adjustment screws in faces of door
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (*specify 85, 90, 95 or 105°*)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA" (*non-hold open closers only*)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (*For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs."*)
- Cold weather fluid option – specify "CWF" (*not available for closers with "DA"*)
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (*floor plate shown*)
- Cylolac, rustproof cement case
- Arm reinforcement bracket for wood doors – prefix "W"
- Standard top pivot: #340 included
- Not allowed for fire rated doors
- Frame stop required on the header at the lock side. If not supplied by frame manufacturer, recommend use of 60131 (*see Door Control Accessories page 92*).
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Heavy-Duty Single-Acting Center Hung Floor Closers

Model H28 Center Hung

Application

- Single Acting, Handed
- Exterior or Interior Doors
- Extra Heavy High Traffic Doors
- Weight to 1000 lbs.
- Sizes up to 4'0"x8'6"*
(1219mmx2591mm)



ANSI/C06061

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

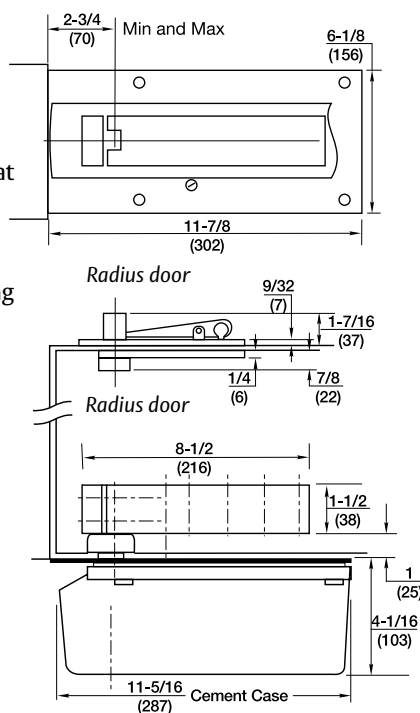
Product Description & Features

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

- Additional thrust bearing for greater load capacity
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85, 90, 95 or 105°)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA" (non-hold open closers only)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Cast iron cement case
- Standard top pivot: H340 included
- Not allowed for fire rated doors
- Frame stop required at header on lock side. If not supplied by frame manufacturer, recommend use of 60131 (see Door Control Accessories page 92).
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required at lock edge



Model H28 x 587 Arm Center Hung

Application

- Side Load Arm



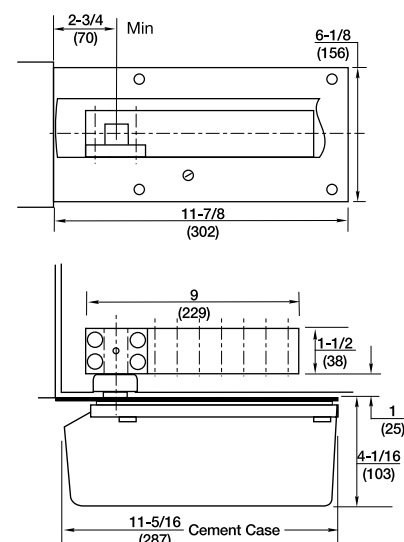
ANSI/C06061

Product Description & Features

Identical to Model H28 except:

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

Technical Information



Heavy-Duty Single-Acting Center Hung Floor Closers

Model 328 Center Hung

Application

- Single Acting, Handed
- Exterior or Interior Doors
- Glass Doors with Patch Fittings
- Weight up to 325 lbs.
- Size Up to 3'2" x 8'0"



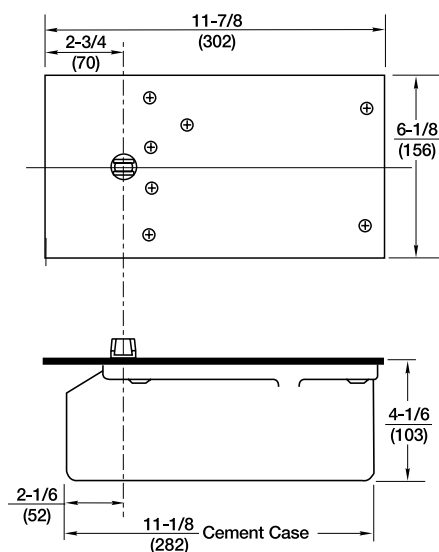
Product Description & Features

- No arm or top pivot provided
- Patch fittings by others. Rixson will provide spindle configuration to fit – provide details when ordering
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (*specify 85°, 90°, 95° or 105°*)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix “DA” (*non-hold open closers only*)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix “PH”. (*For 8-1/2 lbs. of opening force prefix “PH” and suffix “8-1/2 lbs.”*)
- Cold weather fluid option – specify “CWF” (*not available for closers with “DA”*)
- Sealed closer option – specify “SC”
- Floor plate standard. For threshold application an extended spindle is required
- Cylolac, rustproof cement case
- Not allowed for fire rated doors
- Frame stop required at header on lock side. If not supplied by frame manufacturer, recommend use of 60131 (*see Door Control Accessories page 92*).

For extended spindles, contact the factory

Technical Information

Frame stop required at lock edge



Heavy-Duty Single-Acting Center Hung Floor Closers

Model 428 Center Hung with Patch Fittings

Application

- Single Acting, Handed
- Exterior or Interior Doors
- Full Glass Doors
- Weight up to 325 lbs.
- Size Up to 3'2" x 8'0"

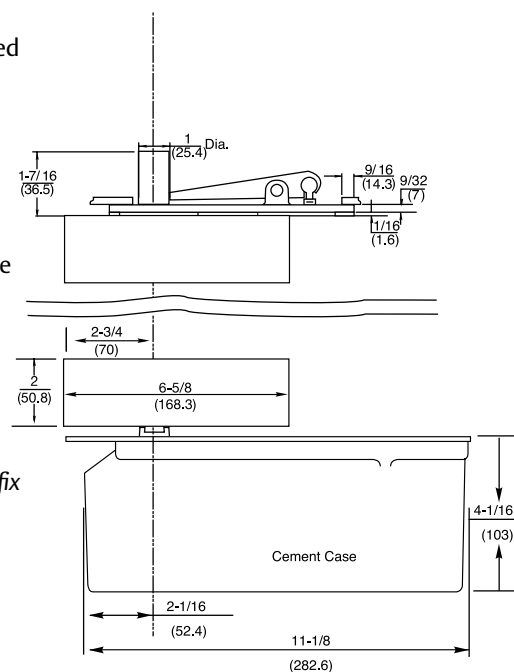


Product Description & Features

- Top and bottom patch fittings for tempered glass doors 3/8"-1/2" thick
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (*specify 85°, 90°, 95° or 105°*)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action available – prefix "DA" (*non-hold open closer only*)
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (*For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs."*)
- Cold weather fluid option – specify "CWF" (*not available for closers with "DA"*)
- Sealed closer option – specify "SC"
- Floor plate standard. For threshold application an extended spindle is required (*floor plate shown*)
- For extended spindles, contact the factory. No vertical adjustment
- Cylolac, rustproof cement case
- Frame stop required at header on lock side
- 605, 625 and 626 finishes only

Technical Information

Frame stop required at lock edge



Heavy-Duty Single-Acting Electrified Center Hung Floor Closers

Model EH28 Center Hung

Application

- Single Acting, Handed
- Interior or Exterior Doors
- Floor Closer for Power Transfer
- Weight to 500 lbs.
- Sizes up to 4'0" x 8'6"*
(1219x2591mm)



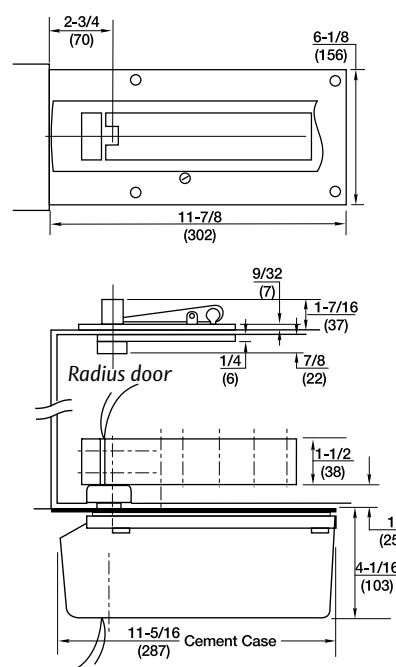
*For doors taller than 8'6" use
top pivot H345 in lieu of H340

Product Description & Features

- Provides power transfer through closer spindle. Low voltage, Class II wiring (2 wire, 18 gauge only)
- 2" min. thickness
- Additional thrust bearing for greater load capacity
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (specify 85°, 90°, 95° or 105°)
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- Delayed action option – prefix "DA"
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- Cold weather fluid option – specify "CWF" (not available for closers with "DA")
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Cast iron cement case
- Standard top pivot: H340 included
- Not allowed for fire rated doors
- Frame stop required on header on lock side. If not supplied by frame manufacturer, recommend use of 60131 (see Door Control Accessories page 92)
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required at lock edge

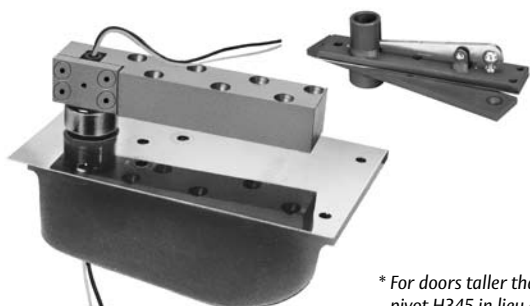


Not available with Electrolynx®

Model EH28 x 587 Arm Center Hung

Application

- Side Load Arm
- Single Acting, Handed
- Interior or Exterior Doors
- Floor Closer for Power Transfer
- Weight to 500 lbs.
- Sizes up to 4'0"x8'6"* (1219x2591mm)*



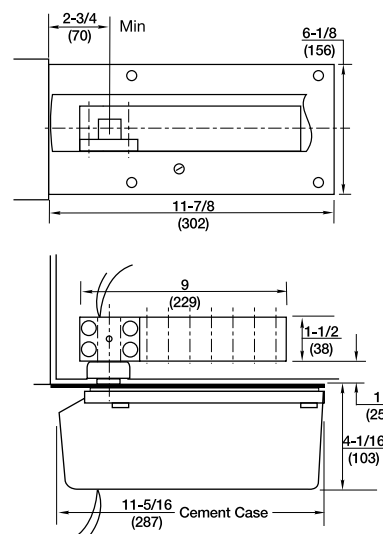
*For doors taller than 8'6" use top
pivot H345 in lieu of H340

Product Description & Features

Identical to Model EH28 except:

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

Technical Information



Heavy-Duty Double-Acting Center Hung Floor Closers

Model 30 Center Hung

Application

- Double Acting, Non-handed
- Interior or Exterior[^] Doors
- Weight to 200 lbs.
- Sizes up to 4'0"x8'6"*
(1219x2591mm)



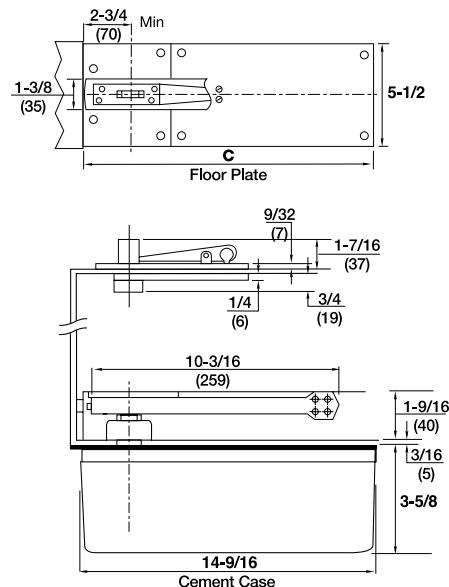
ANSI/C06012

* For doors taller than 8'6" use top pivot # 345 in lieu of 340
[^] Primary means of egress should not use double-acting closers

Product Description & Features

- Centering arm with adjustment screws in faces of door (*critical for double acting doors*)
- Adjustable closing speed valves for each direction of door swing
- Mechanism returns door to center
- Available non-hold open (N) or automatic hold open (A) at 90° (*requires 93° swing*) or 100° (*requires 103° swing*)
- Not available in Delayed Action (DA)
- Maximum door opening 103°
- Auxiliary door stop required, overhead or floor type
- Models available to meet ICC/ANSI A117.1 low opening force requirements (*consult factory*)
- Cold weather fluid option – specify "CWF"
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Steel cement case
- Arm reinforcement bracket for wood doors – prefix "W"
- Standard top pivot: #340 included
- Not allowed for fire rated doors
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Radius door

Model 40 Center Hung

Application

- Double Acting, Non-handed
- Interior or Exterior[^] Doors
- Weight to 300 lbs.
- Sizes up to 4'0" x 8'6"*
(1219x2591mm)



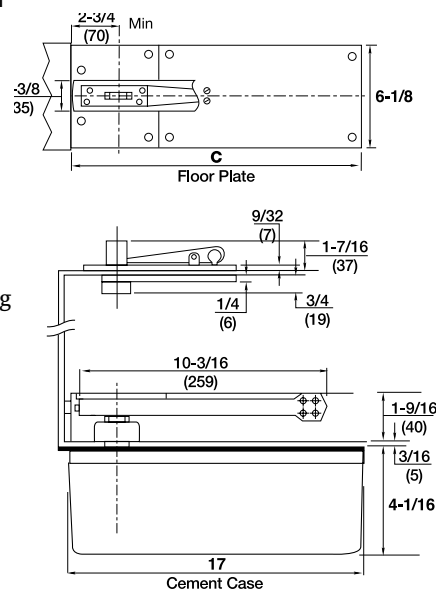
ANSI/C06012

* For doors taller than 8'6" use top pivot # 345 in lieu of 340
[^] Primary means of egress should not use double-acting closers

Product Description & Features

- Centering arm with adjustment screws in faces of door (*critical for double acting doors*)
- Adjustable closing speed valves for each direction of door swing
- Mechanism returns door to center
- Available non-hold open (N) or automatic hold open (A) at 90° (*requires 93° swing*) or 100° (*requires 103° swing*)
- Not available in Delayed Action (DA)
- Maximum door opening 103°
- Auxiliary door stop required, overhead or floor type
- Models available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH" (*consult factory*)
- Cold weather fluid option – specify "CWF"
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Steel cement case
- Arm reinforcement bracket for wood doors – prefix "W"
- Standard top pivot: #340 included
- Not allowed for fire rated doors
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Radius door

Heavy-Duty Double-Acting Center Hung Floor Closers

Model H40 Heavy-Duty

Application

- Double Acting, Non-handed
- Interior or Exterior[^] Doors
- Weight to 1000 lbs.
- Sizes up to 4'0" x 8'6"*
- (1219x2591mm)



ANSI/C06012

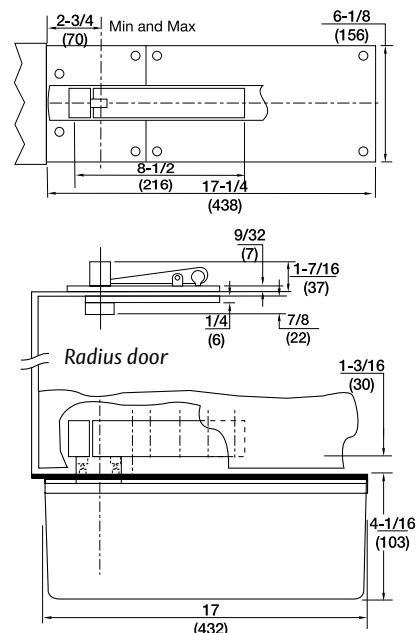
* For doors taller than 8'6" use to pivot H345 in lieu of H340

[^] Primary means of egress should not use double-acting closers

Product Description & Features

- For thick, extra heavy doors (2" min. thickness)
- Thrust bearing for greater load capacity
- Adjustable closing speed valves for each direction of door swing
- Mechanism returns door to center
- Available non-hold open (N) or automatic hold open (A) at 90° (requires 93° swing) or 100° (requires 103° swing)
- Maximum door opening 103°
- Auxiliary door stop required, overhead or floor type
- Models available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH" (consult factory)
- Cold weather fluid option – specify "CWF"
- Sealed closer option – specify "SC"
- Available with floor plate or threshold installation (floor plate shown)
- Steel cement case
- This arm does not allow door centering adjustment. Not recommended for pairs of doors
- Standard top pivot: #H340 included
- Not allowed for fire rated doors
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Model H40 x 587 Arm Center Hung

Application

- Side Load Arm



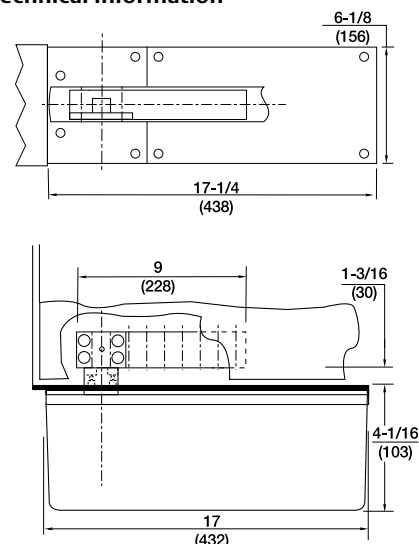
ANSI/C06012

Product Description & Features

Identical to Model H40 except:

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

Technical Information



Heavy-Duty Floor Closers

Quick Reference of Options

How to Order

Quick Reference of Options

Prefix	Model	Degree of Swing	Hold Open Options	General Options	Handed	Positive Dead Stop	Maximum Weight*
Offset Closers							
SC, DA, PH, F	27	85,90,95,105	N, S	Ext. Spdl, CWF, 1-1/2 OS, -20, 8.5#	Yes	Yes	450
SC, PH-F	27	180	N, A	Ext. Spdl, CWF, 1-1/2 OS, -20, 8.5#	Yes	Yes	450
SC, DA, PH, F	127	85,90,95,105	N, S	Ext. Spdl, CWF, -20, 8.5#	Yes	Yes	250
SC, DA, PH	427	85,90,95,105	N, S	Ext. Spdl, CWF, 8.5#	Yes	Yes	250
SC	F327	90	N	Extended Spindle	Yes	No	250
SC, DA, PH, F	L27	85,90,95,105	N, S	Ext. Spdl, CWF, -20, 8.5#	Yes	Yes	1500
SC, PH, F	L27-180	180	N, A	Ext. Spdl, CWF, -20, 8.5#	Yes	Yes	1500
SC, DA, PH, F	Q27/QT	85,90,95,105	N, S	Ext. Spdl, CWF, -20, 8.5#	Yes	Yes	350
SC, DA, PH, F	HM27	85,90,95,105	N, S	Ext. Spdl, CWF, -20, 8.5#	Yes	Yes	250
PH, F	20	180	N	Ext. Spdl, -20, 8.5#	Yes	No	200
Center Hung Closers							
SC, DA, PH	28 x 554	85,90,95,105	N, S	Ext. Spdl, CWF, 8.5#	Yes	Yes	350
SC, DA, PH, W	28	85,90,95,105	N, S	Ext. Spdl, CWF, 8.5#	Yes	Yes	350
SC, DA, PH	H28	85,90,95,105	N, S	Ext. Spdl, CWF, 8.5#	Yes	Yes	1000
SC, DA, PH	H28 x 587	85,90,95,105	N, S	Ext. Spdl, CWF, 8.5#	Yes	Yes	1000
SC, DA, PH	328	85,90,95,105	N, S	Ext. Spdl, CWF, 8.5#	Yes	Yes	325
SC, DA, PH	428	85,90,95,105	N, S	Ext. Spdl, CWF, 8.5#	Yes	Yes	325
SC, PH, W	30	90,100	N, A	Ext. Spdl, CWF, 8.5#	No	No	200
SC, PH, W	40	90,100	N, A	Ext. Spdl, CWF, 8.5#	No	No	300
SC, PH	H40	90,100	N, A	Ext. Spdl, CWF, 8.5#	No	No	1000
SC, PH	H40 x 587	90,100	N, A	Ext. Spdl, CWF, 8.5#	No	No	1000

*Offset closer weights are for 3/4" and the use of an intermediate pivot

How to Order

PH Prefix	27 Model	90 Degree of Swing	N Hold Open	x 1/2" Ext Spdl Suffix	x RH Hand	x 626 Finish
SC Sealed Closer DA Delayed Action PH Lighter Spring (ADA) W Wd Dr (center hung) F Fire Rated Doors (offset) — Not available with PH	27 127 427 F327^ L27 Q27 QT27 HM27 20	28 H28 328 428	85 90 95 105 180 (90 & 100 for 30-40 series only)	554 Concealed Arm 587 Side Load Arm Ext Spdl Longer Spindle (extra length required) 1-1/2" Offset CWF Cold Weather Fluid -20 20 Minute Label 8.5# Optional PH Spring LAP Closer Body Only LFP Less Floor Plate LCC Less Cement Case LTP Less Top Pivot Cover Pan (need depth) Door Thickness (for L Product) SPLO Special Layout #	RH Right Hand LH Left Hand Blank Double Acting	605 Bright Brass 606 Satin Brass 611 Bright Bronze 612 Satin Bronze 613 Oil Rubbed Bronze 618 Bright Nickel 619 Satin Nickel 622 Flat Black 625 Bright Chrome 626 Satin Chrome

*Degree of swing required for hold open only

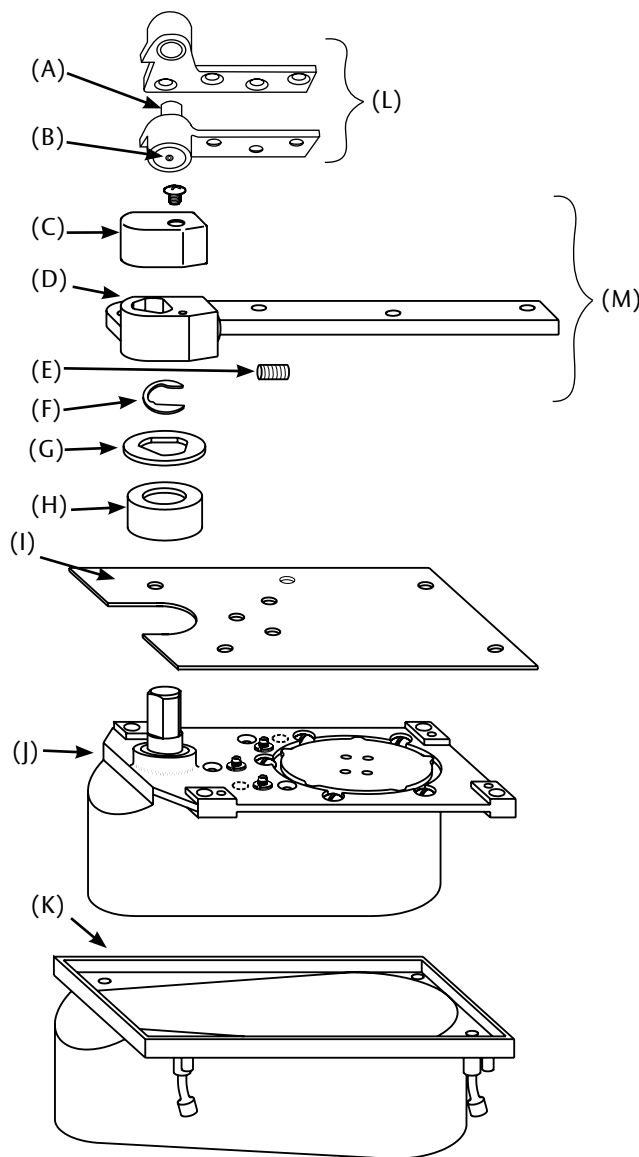
^Hanging means must be noted on order

Model 27

Right Hand Shown
3/4" Offset

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(C) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(D) 3/4" Offset Arm x Locking Screw 275177 (RH) 275176 (LH)
(E) Arm Locking Screw Only 88905-PKG (5)
(F) Arm Shims 275065-PKG (5)
(G) Arm Bearing Washer 275062-PKG (5)
(H) Spindle Shoulder Collar 259000-*

For 27 x 1-1/2" Offset
1-1/2" Offset Top Pivot 180 x 1-1/2" F180 x 1-1/2" Fire Rated 180 x 20 x 1-1/2 20 Minute
1-1/2" Offset Arm x Locking Screw 275167-*
1-1/2" Bottom Arm Package 252060R* 252060L*



(L) 3/4" Offset Top Pivot
Assembly
180 (standard)
F180 (Fire Rated)
180-20 (20 minutes)

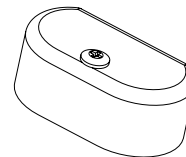
(M) Bottom Arm Package
252050R* (RH)
252050L* (LH)
(Includes C, D, H, and
attaching screws)

(I) Floor Plate x Screws
274050R* (RH) NHO
274050L* (LH) NHO
274750R* (RH) SHO
274750L* (LH) SHO

(J) Closer Body
LAP Specify Complete
Model

(K) Cement Case x Screws
253000-PKG

Closers prior to 1988
use Arm Cap 012132* AS



Screw Kits

180 Top Pivot Screw Kit 107014-* Machine (2) Req 107114-* Wood (2) Req
Arm Screw Kit 107044 Machine 107144 Wood
Floor Plate Screw Kit 107004 -*
Cement Case Screw Kit 107046

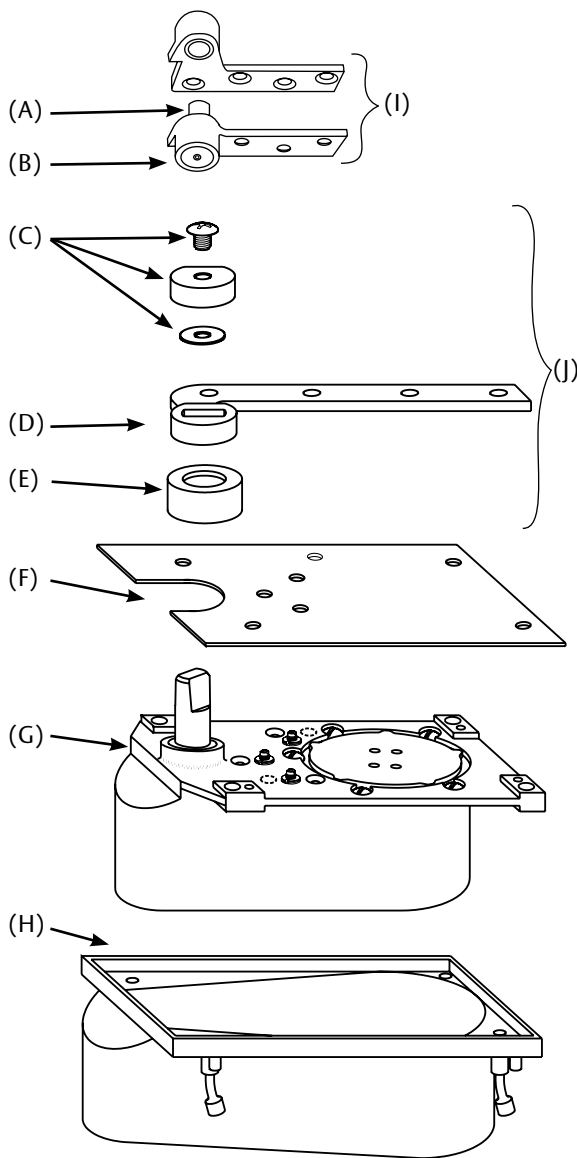
*specify finish

Heavy-Duty Floor Closer Parts Drawings

ModelS 127/427

Right Hand Shown
3/4" Offset Only

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(C) Arm Cap x Screw 12029-*AS
(D) 3/4" Offset Arm 12027 (RH) 12028 (LH)



(I) 3/4" Offset Top Pivot
180
F180
Fire Rated
180 x 20
20 Minute

(J) Bottom Arm Package
652050R* (RH)
652050L* (LH)
(Includes C, D and
attaching screws)

(E) Spindle Shoulder Collar
259000-*

(F) Floor Plate with Screws
274050R* (RH)
NHO/AHO
274050L* (LH)
NHO/AHO
274750R* (RH) SHO
274750L* (LH) SHO

(G) Closer Body (Specify
Complete Model No.
x LAP)

(H) Cement Case with
Screws
253000 - PKG

Screw Kits

180 x 102 Screw Kit
107014-* 1 each Machine
107114-* 1 each Wood
107112-* 1 each Wood
107012-* 1 each Machine

180 Top Pivot Screw Kit
107014-* Machine (2) Req
107114-* Wood (2) Req

Arm Screw Kit
107044 Machine
107144 Wood

Floor Plate Screw Kit
107004-*

Cement Case Screw Kit
107046

Model 427

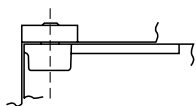
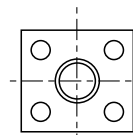
Arm Cap x Screw
2800-*CAP



(D) 3/4" Offset Arm
12027 (RH)
12028 (LH)

Top Pivot
180 x 102

180 x 102

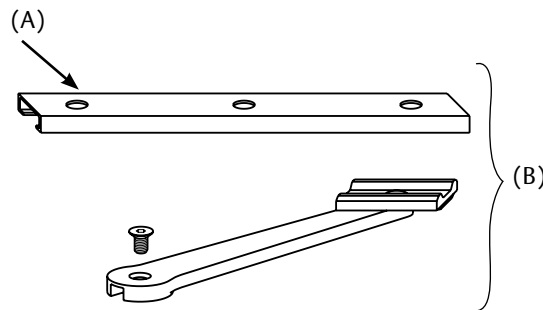


*specify finish

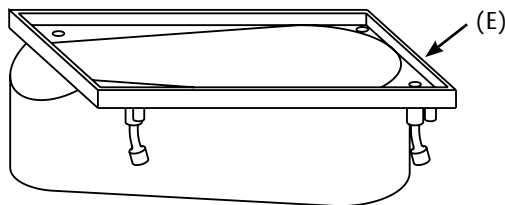
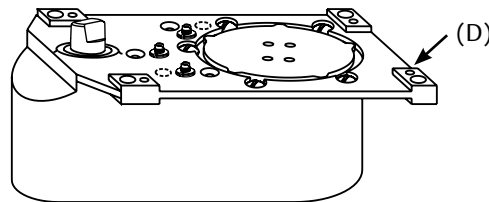
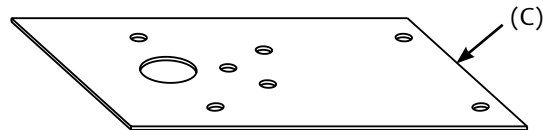
Model F327

Right Hand Shown
Independently Hung

(A) Door Rail 327006



(B) Bottom Arm Package 3252010-*
(C) Floor Plate with Screws 3274010R* (RH) 3274010L* (LH)
(D) Closer Body (Specify Complete Model No. x LAP)
(E) Cement Case with Screws 253000-PKG



Screw Kits
Slide Track Screw Kit 107033
Floor Plate Screw Kit 107004-*
Cement Case Screw Kit 107046

*specify finish

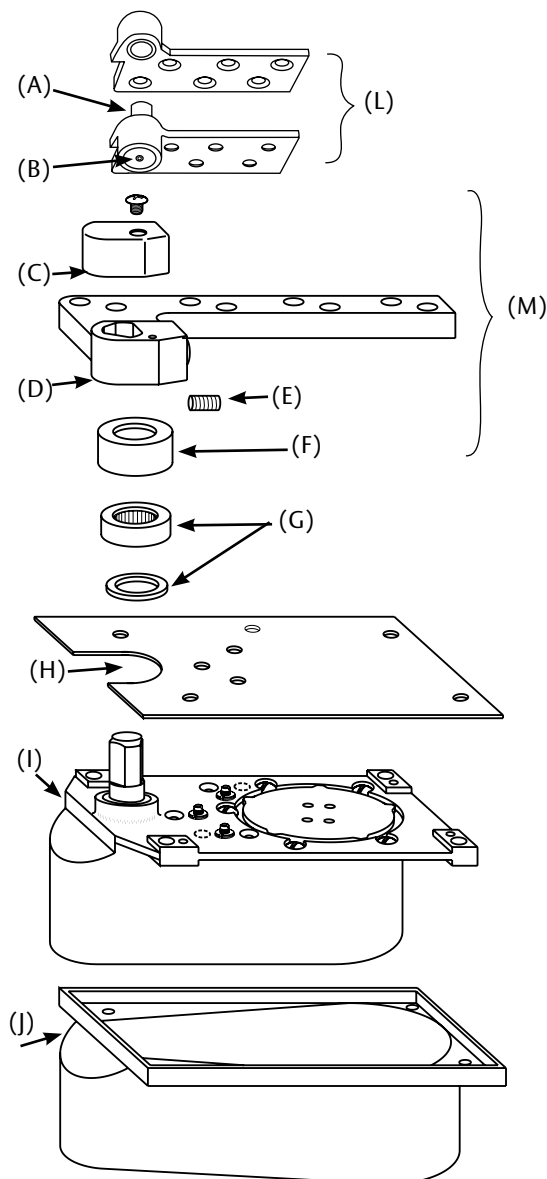
Heavy-Duty Floor Closers

Parts Drawings

Model L27

Right Hand Shown
3/4" Offset Only

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(C) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(D) Arm x Locking Screw 1-3/4" Door 18550-Asy (RH) 18650-Asy (LH)
(D) Arm x Locking Screw 2" Door 18551-Asy (RH) 18651-Asy (LH)
(D) Arm x Locking Screw 2-1/4" Door 18552-Asy (RH) 18652-Asy (LH)
(D) Arm x Locking Screw 2-1/2" Door 18553-Asy (RH) 18653-Asy (LH)
(D) Arm x Locking Screw 3" Door 18554-Asy (RH) 18654-Asy (LH)
(E) Arm Locking Screw Only 88905-PKG (5)
(F) Spindle Shoulder Collar 259500-*
(G) Heavy-Duty Thrust Bearing 41204-PKG (Includes 41207N spacer)



For L27 x 3/4" Offset

(L) 3/4" Offset Top Pivot
F180
FL180
Fire Rated
L180 x 20
20 Minute

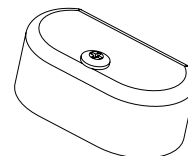
(M) Bottom Arm Package
1-3/4" Door
252051R* (RH)
252051L* (LH)
2" Door
252052R* (RH)
252052L* (LH)
2-1/4" Door
252053R* (RH)
252053L* (LH)
2-1/2" Door
252054R* (RH)
252054L* (LH)
3" Door
252055R* (RH)
252055L* (LH)
(Includes: C, D, F and
attaching screws)

(H) Floor Plate with Screws
274050R* (RH)
NHO/AHO
274050L* (LH)
NHO/AHO
274750R* (RH) SHO
274750L* (LH) SHO

(I) Closer Body (Specify
Complete Model No.
x LAP)
(Includes G)

(J) Cement Case
with Screws
253001-PKG

**Closers prior to 1988
use Arm Cap 012132**



Screw Kits

L180 Screw Kit
107016-* Machine (2) Req
107116-* Wood (2) Req
Arm Screw Kit
107048 Machine (2) Req
107144 Wood (2) Req
Floor Plate Screw Kit
107004-*
Cement Case Screw Kit
107046

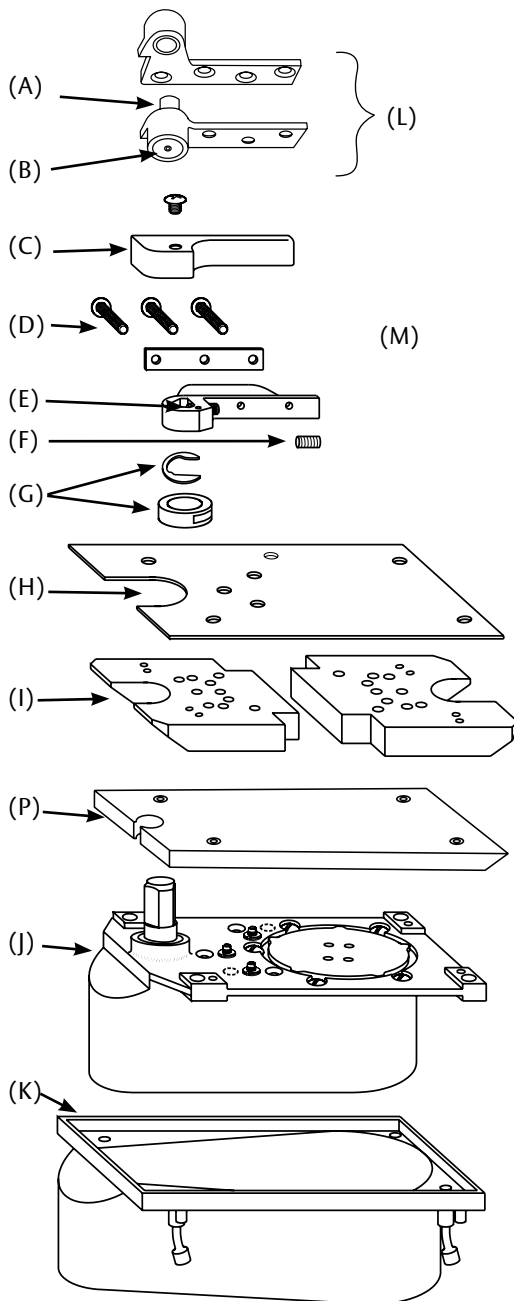
*specify finish

Heavy-Duty Floor Closers Parts Drawings

Model Q27/QT27

Right Hand Shown
3/4" Offset Only

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(C) Arm Cap & Screw 73035R*AS (RH) 73035L*AS (LH)
(D) Arm Mounting Screws and Plate 73014-*
(E) Removable Arm 73001R-ASY (RH) 73001L-ASY (LH)
(F) Arm Locking Screw Only 88905-PKG (5)
(G) Arm Washer/Shim Package - 275179 (Includes 275065 and 275178 Torque Washer)
(I) Q27 Styrofoam Filler 73009
(P) QT Styrofoam Filler 73017



For Q27/QT27 x 3/4" Offset
(L) 3/4" Offset Top Pivot 180 F180 Fire Rated 180 x 20 20 Minute
(M) Bottom Arm Package 222050R* (RH) 222050L* (LH) (Includes C, D, E and attaching screws)
(N) 3/4" Offset Intermediate Pivot M19 FM19 M19-20

(H) Q Floor Plate with Screws 294050R* (RH) (NHO/AHO) 294050L* (LH) (NHO/AHO) 294750R* (RH) (SHO) 294750L* (LH) (SHO)
(J) Closer Body (Specify Complete Model No. x LAP)
(K) Cement Case with Screws 253000-PKG

Screw Kits
180 Screw Kit 107014-* Machine (2) Req 107114-* Wood (2) Req
Q Floor Plate Screw Kit 107010-*
Cement Case Screw Kit 107046
M19 Intermediate Pivot Screw Kit 107015-* Machine (2 Req) 107115-* Wood (2 Req)

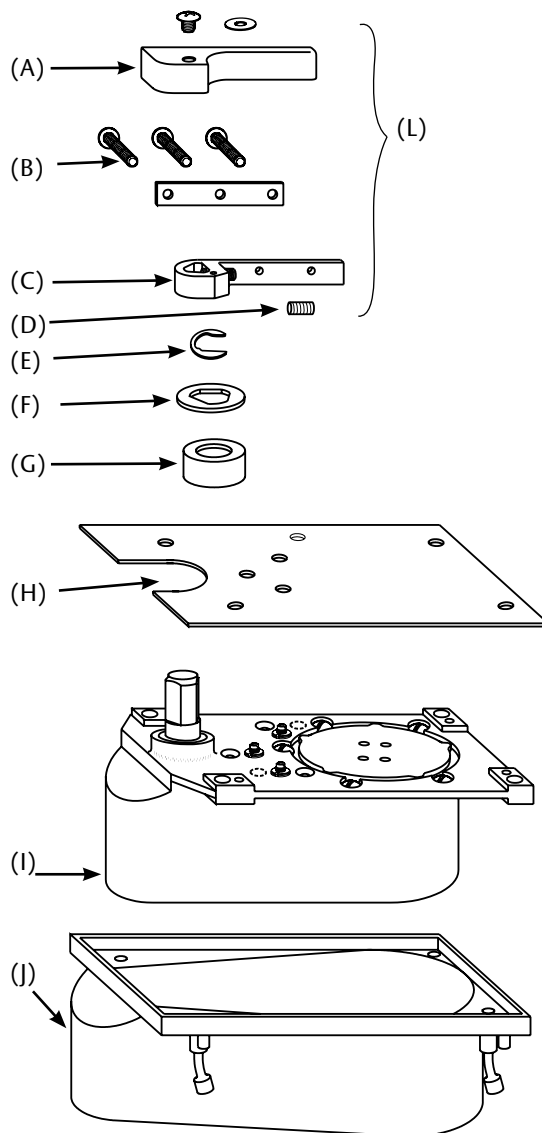
*specify finish

Heavy-Duty Floor Closers Parts Drawings

Model HM27

Right Hand Shown
3/4" Offset Only

(A) Arm Cap & Screw 73025R*AS (RH) 73025L*AS (LH)
(B) Arm Mounting Screws and Plate 73014-*
(C) Arm x Set Screw 73041R*AS (RH) 73041L*AS (LH)
(D) Arm Locking Screw Only 88905-PKG (5)
(E) Arm Shims (5) 275065-PKG
(F) Arm Bearing Washer 275062-PKG-5
(G) Spindle Shoulder Collar 259000-*



(L) Bottom Arm Package 222050R*HM (RH) 222050L*HM (LH) (Includes A, B, C, G and attaching screws)
(H) Floor Plate with Screws 274050R* (RH) (NHO/AHO) 274050L* (LH) (NHO/AHO) 274750R* (RH) (SHO) 274750L* (LH) (SHO)
(I) Closer Body (Specify Complete Model No. x LAP)
(J) Cement Case with Screws 253000-PKG
(K) Special Offset Hinges (3) 254545*PK

*specify finish

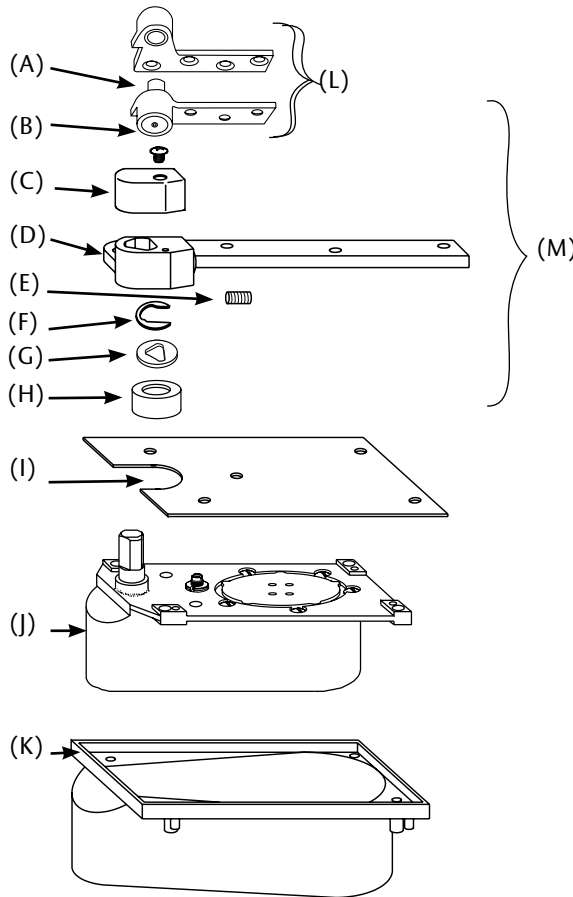
Screw Kits
Floor Plate Screw Kit 107004-
Cement Case Screw Kit 107046
Hinge Screw Kit 107519-*

Heavy-Duty Floor Closer Parts Drawings

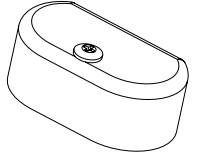
Model 20

Right Hand Shown
3/4" Offset

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(C) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(D) 3/4" Offset Arm x Locking Screw 275177 (RH) 275176 (LH)
(E) Arm Locking Screw Only 88905-PKG (5)
(F) Arm Shims 275065-PKG (5)
(G) Arm Bearing Washer 275062-PKG (5)
(H) Spindle Shoulder Collar 259000-*



(L) 3/4" Offset Top Pivot 180 FL180 Fire Rated 180 - 20 20 Minute
(M) Bottom Arm Package 252050R* (RH) 252050L* (LH) (Includes C, D, H and attaching screws)
(I) Floor Plate with Screws 204050-*
(J) Closer Body (Specify Complete Model No. x LAP)
(K) Cement Case with Screws 203000

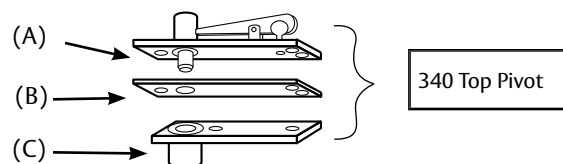
Closers prior to 1988 use Arm Cap 012132* AS


Screw Kits
180 Screw Kit 107014-* Machine (2) Req 107114-* Wood (2) Req
Arm Screw Kit 107044-* Machine (2) Req 107144-* Wood (2) Req
Floor Plate Screw Kit 107004-*
Cement Case Screw Kit 107046

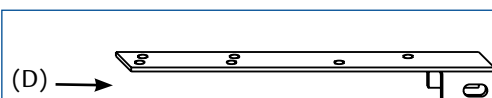
Heavy-Duty Floor Closers Parts Drawings

Model 28

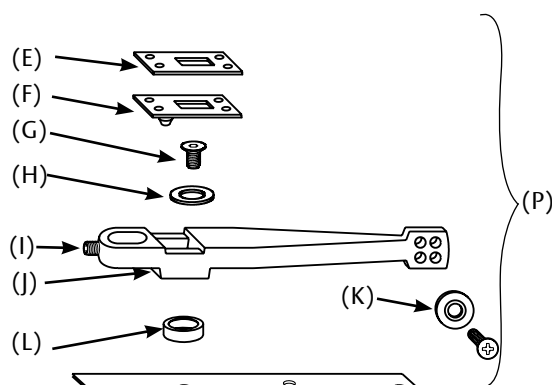
(A) Jamb Portion 3065
(B) Finish Plate 012202-*PK(BRS) 012204-*PK(SS)
(C) Door Portion 30243
(E) Arm Plate Shims (.062) 46045-PKG (5) Arm Plate Shims (.187) 46145-PKG (5)
(F) Arm Plate & Stud Assy 46445
(G) Arm Spindle Screw 01244010-PKG (5)
(H) Arm Spindle Washer 01030-PKG (5)
(I) Arm Set Screw Only 26087-PKG (5)
(J) Arm & Arm Set Screw 282026
(K) Arm Alignment Screw & Washer (2) of each 107032-*
(L) Arm Spindle Collar 259000-*



Wood Door Arm Package
282126
(D,E,F,J)

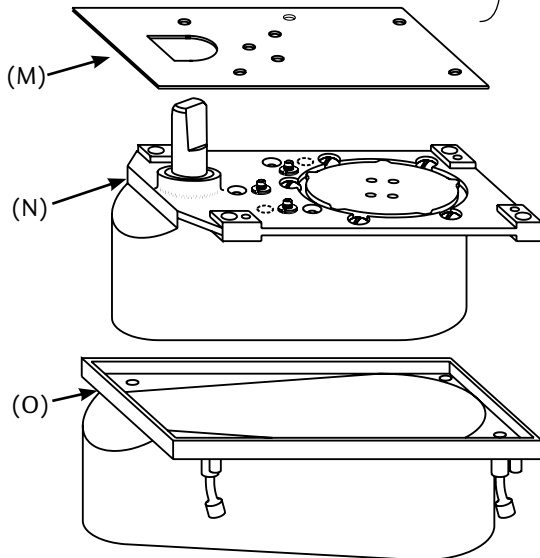


(D) W28 Wood Door Plate
& Shim Pkg
107066
(Includes 46145 & 46445)



(P) Bottom Arm
Package
(E-K)
282026-*

554 Concealed Arm Package
282554
(Includes 107064)



(M) Floor Plate with
Screws
284020R* (RH)
NHO/AHO
284020L* (LH)
NHO/AHO
284720R* (RH)
SHO
284720L*
(LH) SHO

(N) Closer Body
(Specify Complete
Model No. x LAP)

(O) Cement Case
with Screws
253000-PKG

Screw Kits

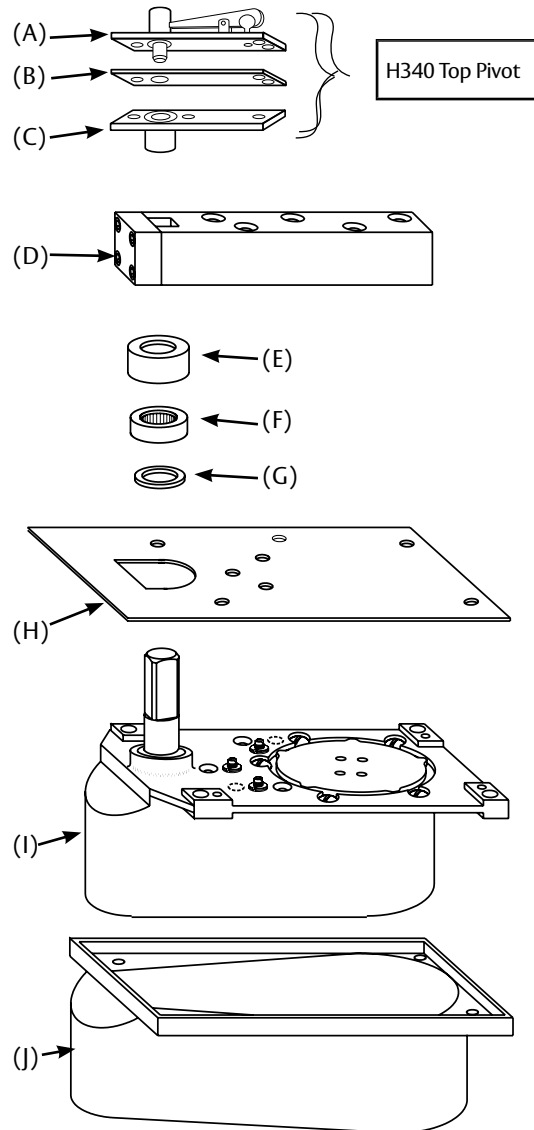
340 Screw Kit 107329 Machine & Wood
Arm Screw Kit 107044-* Machine (2) Req 107144-* Wood (2) Req
554 Arm Screw Kit 107064
Floor Plate Screw Kit 107004-*
Cement Case Screw Kit 107046

*specify finish

Heavy-Duty Floor Closers Parts Drawings

Model H28

(A) Jamb Portion 308548
(B) Finish Plate 012202-*PK (BRS) 012204-*PK (SS)
(C) Door Portion 30141
(D) Standard End Load Arm Package (minimum 2" door thickness) 262022 - (Includes 107060, 107045, and 107145)
(E) Arm Spindle Collar 259500-*
(F) Heavy-Duty Thrust Bearing 41204-PKG (Includes 41207N)
(G) Arm Shim Kit 107060



587 Side Load Arm Package For 1-3/4" Door



262587
(Includes G and attaching screws)

(H) Floor Plate with Screws
284020R* (RH)
NHO/AHO
284020L* (LH)
NHO/AHO
284720R* (RH)
SHO
284720L* (LH)
SHO

(I) Closer Body
(Specify Complete
Model No. x LAP)
(Includes 41204- PKG)

(J) Cement Case
with Screws
253001 - PKG

Screw Kits

H340 Screw Kit 107329 Machine & Wood
587 Arm Screw Kit 107077-* Machine (2) Req 107145-* Wood (2) Req
Arm Screw Kit 107045 Machine 107145 Wood
Floor Plate Screw Kit 107004-*
Cement Case Screw Kit 107046

*specify finish

In USA: (800) 457-5670 or www.rixson.com

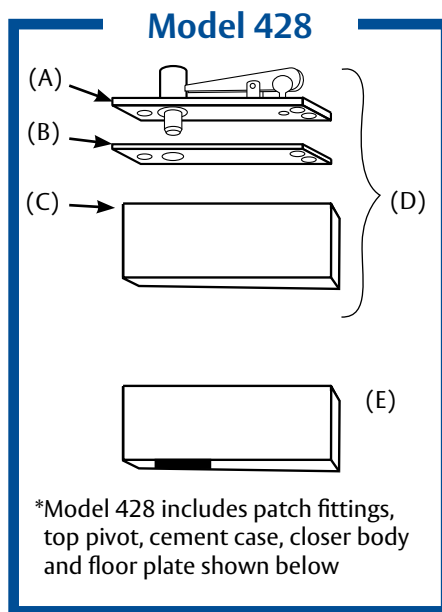
In Canada: (800) 461-3007 or www.assaabloy.ca

6/10

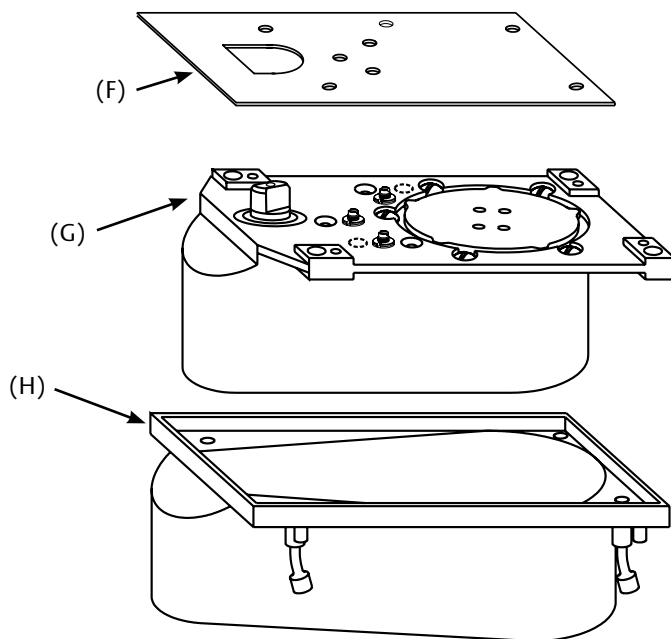
ASSA ABLOY, the global leader in door opening solutions

Model 328/428

(A) Jamb Portion 42801
(B) Finish Plate 012202-*PK (BRS) 012204-*PK (SS)
(C) Patch Fitting Cover 7495 - *



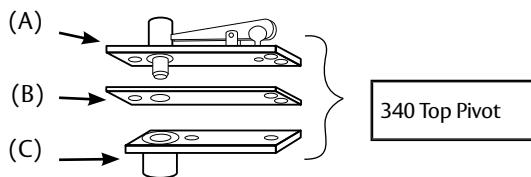
(D) Top Patch 7494-* PK
(E) Bottom Patch 7495-* PK
(F) Floor Plate with Screws NHO/AHO - 284020R* (RH) 284020L* (LH) SHO - 284720R* (RH) 284720L* (LH)
(G) Closer Body (Specify Complete Model No. x LAP)
(H) Cement Case with Screws 253000-PKG



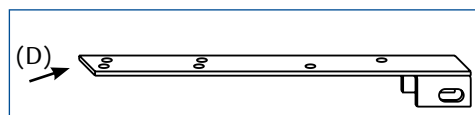
*specify finish

Model 30

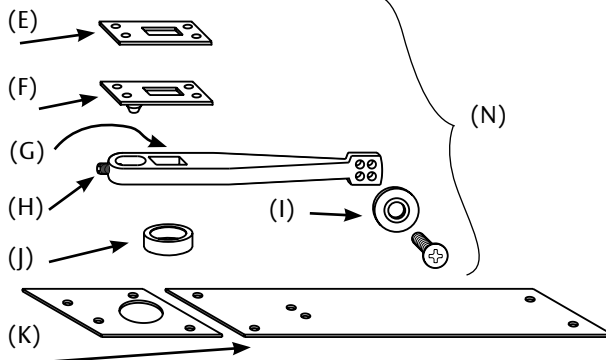
(A) Jamb Portion 3065
(B) Finish Plate 012202-*PK(BRS) 012204-*PK(SS)
(C) Door Portion 30243
(E) Arm Plate Shims (.062) 46045-PKG (5) Arm Plate Shims (.187) 46145-PKG (5)
(F) Arm Plate & Stud Assy 46445
(G) Arm & Arm Set Screw 302026
(H) Arm Set Screw Only (5) 26087-PKG
(I) Arm Alignment Screw & Washer (2) 107032-*
(J) Arm Spindle Collar 259000-*



WD DR Arm PKG
302126
(Includes D and G)



(D) **W30** Wood Door Plate
& Shim PKG
107066
(Includes shims and
special arm centering
screws)

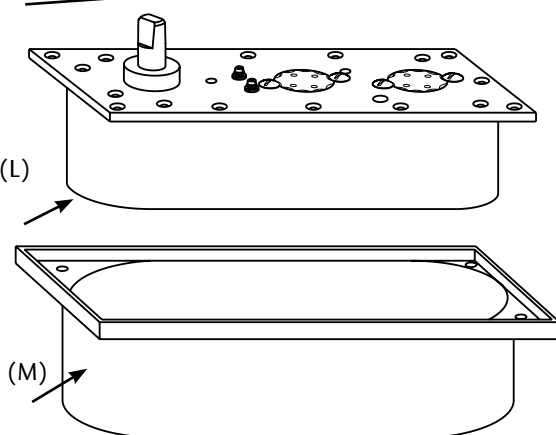


(N) Bottom Arm Package
302026 -*
(Includes E, G, I, J and
attaching screws)

(K) Floor Plate with
Screws (1 large and 1
small)
304020-*

(L) Closer Body
(Specify Complete
Model No. x LAP)

(M) Cement Case with
Screws
303000



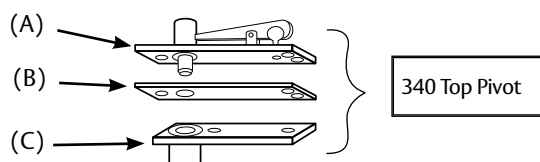
Screw Kits

H340 Screw Kit 107329 Machine & Wood
Arm Screw Kit 107048 Machine 107144 Wood
Floor Plate Screw Kit (2 req.) 107004-*
Cement Case Screw Kit 107014

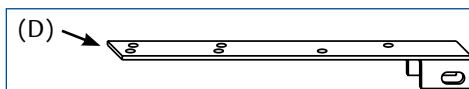
*specify finish

Model 40

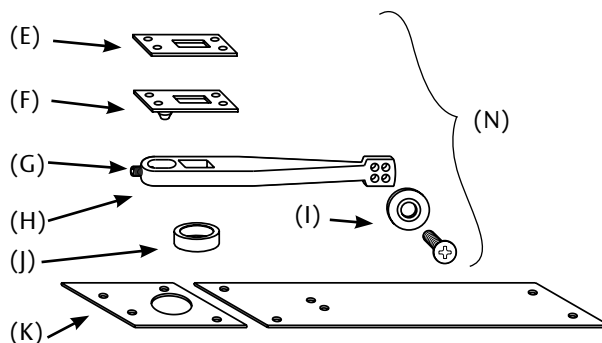
(A) Jamb Portion 3065
(B) Finish Plate 012202-*PK (BRS) 012204-*PK (SS)
(C) Door Portion 30243
(E) Arm Plate Shims (.062) 46045-PKG (5)
(E) Arm Plate Shims (.187) 46145-PKG (5)
(F) Arm Plate & Stud Assy 46445
(G) Arm & Arm Set Screw 302026
(H) Arm Set Screw Only 26087-PKG (5)
(I) Arm Alignment Screw & Washer (2) 107032-*
(J) Arm Spindle Collar 259000



WD DR Arm PKG
302126
(Includes D and G)



(D) **W40** Wood Door Plate
& Shim PKG
107066
(Includes shims and
special arm centering
screws)

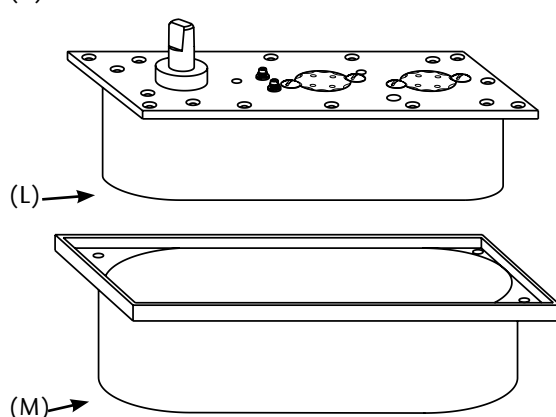


(N) Bottom Arm Package
302026 -*
(Includes E, F, G, I, J)

(K) Floor Plate with
Screws (1 large and 1
small)
404020-*

(L) Closer Body
(Specify Complete
Model No. x LAP)

(M) Cement Case with
Screws
403000



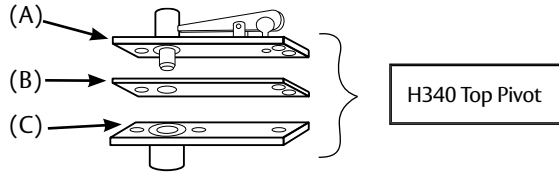
Screw Kits

340 Screw Kit 107329 Machine & Wood
Arm Screw Kit 107048 Machine 107144 Wood
Floor Plate Screw Kit (2 req.) 107004-*
Cement Case Screw Kit 107014

*specify finish

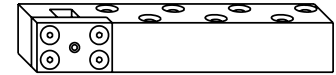
Model H40

(A) Jamb Portion 308548
(B) Finish Plate 012202-*PK (BRS) 012204-*PK (SS)
(C) Door Portion 30141
(D) Standard End Load Arm Package (minimum 2" door thickness) 262022
(E) Arm Spindle Collar 259500-*
(F) Heavy-Duty Thrust Bearing 41204-PKG
(G) Arm Shim Kit 107060

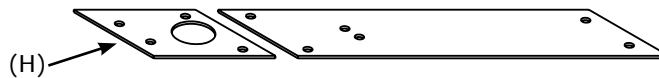
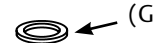
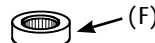
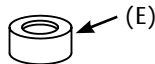


H340 Top Pivot

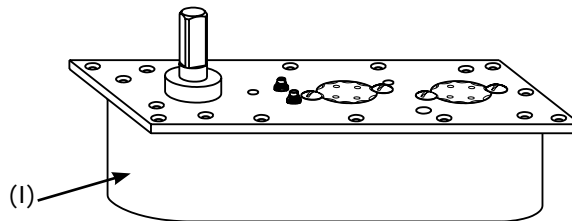
**587 Side Load Arm Package
For 1-3/4" Door**



262587
(Includes G and attaching screws)



(H) Floor Plate with Screws
1 Large 1 Small
404020 -*



(I) Closer Body
(Specify Complete
Model No. x LAP)
(Includes 41204- PKG)



(J) Cement Case
with Screws
403000

Screw Kits

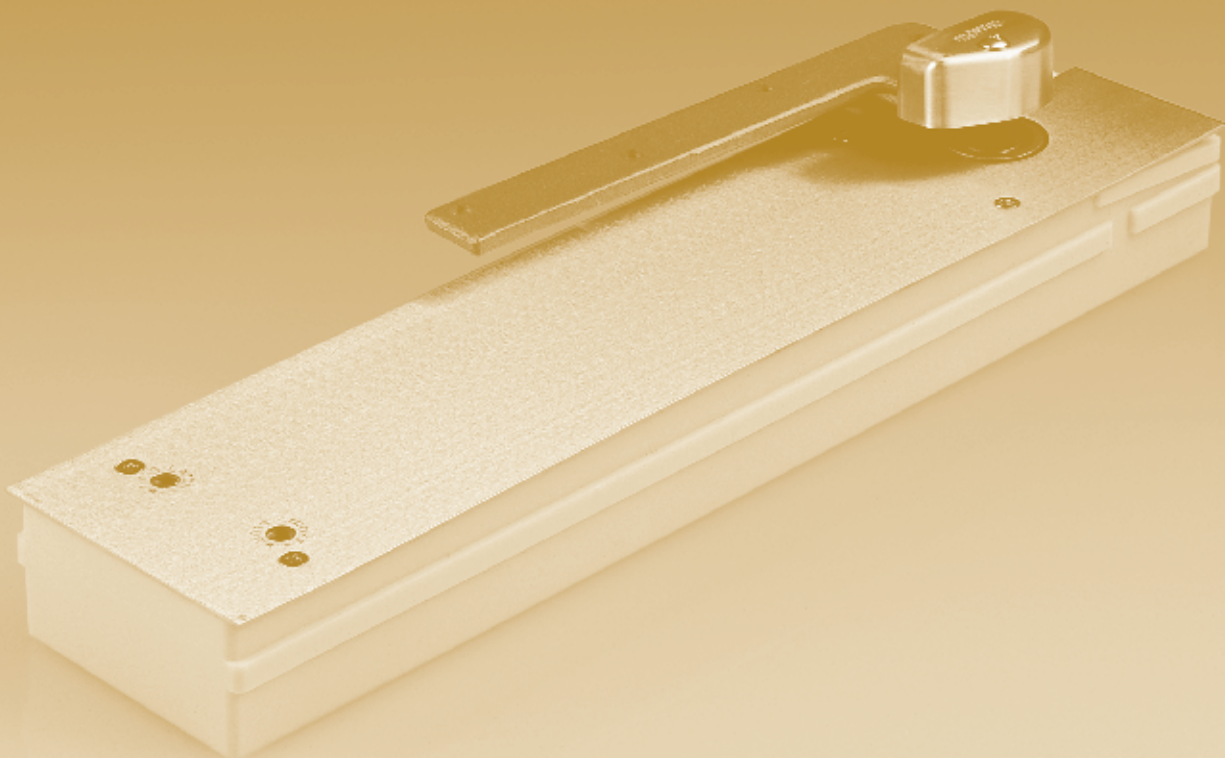
H340 Screw Kit 107329 Machine & Wood
587 Arm Screw Kit 107077 Machine 107145 Wood
Arm Screw Kit 107045 Machine 107145 Wood
Floor Plate Screw Kit (2 req.) 107004-*
Cement Case Screw Kit 107014

*specify finish

Shallow Depth Floor Closers

RIXSON®
ASSA ABLOY

Complete Premium Door Control for
Medium-Duty Interior Doors Where
Concealment is Desired



ASSA ABLOY, the global leader in door opening solutions

Introduction

Floor closers provide the best mechanical means to support and control a door. They are designed to work with the laws of physics to provide long-lasting performance and reliability. The Rixson® shallow depth floor closers are recommended for low to medium traffic interior doors, where traditional floor closer depth is too great for slab construction. Not recommended for high-traffic or exterior doors.

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

- Uses laws of gravity to its advantage
- Door swings with less resistance
- Reduced stress on frame
- Fasteners are in shear, not tension
- Eliminates door sag
- Vertically adjustable
- Thrust bearing supports vertical load
- Needle bearings for lateral forces

Interchangeable spindle adapters

- Up to 2" longer than standard in 1/2" increments

Bottom arm directly attached to closer spindle

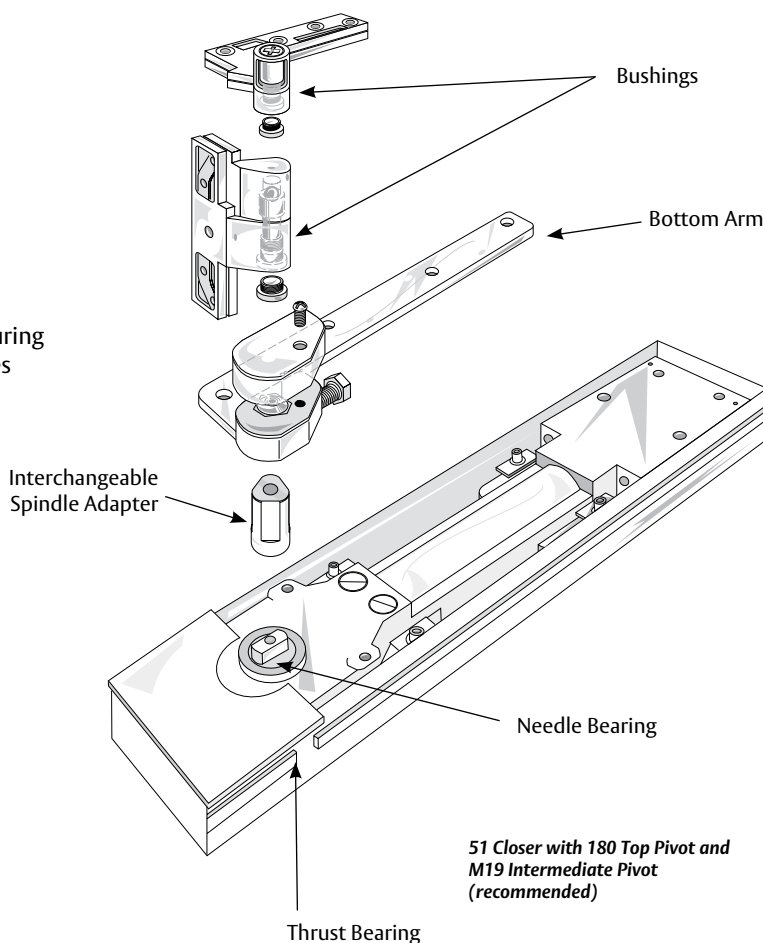
- A mechanical advantage that increases efficiency insuring that ICC/ANSI A117.1 compliant, lower opening forces will still close the door
- One to one ratio of door swing to spindle rotation makes control more precise
- Floor closers are more efficient than a regular arm surface closer

Advantages of concealed floor closers

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

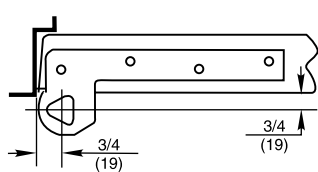
Many different models to choose from

- Use standard product with a top pivot for the best efficiency
- Use a quick install (Q) model to facilitate easy closer removal
- Use model HM with 3/4" offset hinges for hollow metal doors and frames prepared for 4-1/2" hinges
- Closer can be offset hung, center hung or independently hung, single acting or double acting (*center hung only*)



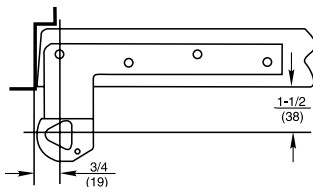
Contents	Page
Shallow Depth Floor Closers: General Information	44
How to Select Product.....	46
Options.....	47
Certifications	48
Limited Warranty.....	48
Specifications	48
Offset Hung Floor Closer	
51 Offset Floor Closer	49
F53 Closer Independently Hung – Hanging Means by Others	50
Q51/QT51 Closer with Quick Install™ Mounting 1-3/4 Door	51
HM51 Closer with Butts for Hollow Metal Installations 1-3/4 Door	52
Intermediate Pivots	
M19/M190.....	53
Pocket Pivot	
F519.....	53
Single Acting Center Hung Floor Closer	
50 x 554 Closer with Flat Low Profile Arm	54
50 Closer with Arm Centering Screws	55
5040 Closer with Patch Fittings	56
Double Acting Center Hung Floor Closer	
5020 Double Acting Floor Closer	57
Optional Center Hung Top Pivot	
345	58
Quick Reference of Options	59
How to Order	59
Parts Drawings	60-65

1. Offset vs. Center Hung Application



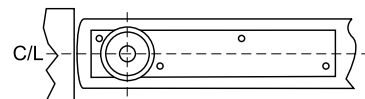
3/4" Offset

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



1-1/2" Offset

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



Center Hung

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

2. Size of Door (width, height, thickness)

Estimated door weights pounds per square foot (PSF)

Door Material	Door Thickness		
	1-3/4"	2-1/4"	3"
Hollow Metal	6.5	7	-
Solid Core Wood	7	9	11.5
Aluminum/Glass Storefront	3.5	4	-
Tempered Glass	Glass Thickness		
	3/8"	1/2"	3/4"
	5	7	9.75
3/4" Cladding	Cladding Material		
	Wood		
	3		

Example: 3/0 X 7/0 X 1-3/4"

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

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

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

For doors of other sizes consult factory

3. Expected Frequency of Door Operation

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

Options

Delayed Action – Prefix DA

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

Physically Handicapped – Prefix PH

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

Wood Door – Prefix W

When using a center hung product with the centering arm (i.e., 5010 and 5020) a special plate and less obtrusive adjusting screws are needed for wood doors. This plate is reinforcement for the deep mortise required for that arm, protecting the veneer.

Fire Rated – Prefix F

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

Twenty Minute Label – Suffix -20

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

Less All Parts – Suffix LAP

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

Less Floor Plate – Suffix LFP

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

Less Cement Case – Suffix LCC

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

Less Top Pivot – Suffix LTP

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

Shallow Depth Floor Closers Options Certifications Limited Warranty Specifications

Options Continued

Non Hold Open – Suffix N

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

Automatic Hold Open – Suffix A

These closers hold the door open. This feature cannot be changed in the field. Specify 90°, 105° or 180°.

Hand – Suffix RH or LH

All single acting floor closers are handed. All double acting floor closers (5020) are non-handed.

Extended Spindle – Suffix Extra Length

Any special coverings or severe door undercuts will require an extended spindle. See product template to determine if an extended spindle is needed. Extended spindles available in 1/2" increments up to 2" longer than standard.

1-1/2" Offset – Suffix 1-1/2

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

Cover Pan (Terrazzo) – Suffix Part Number

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

Special Layouts – Suffix SPLO#

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

Certifications

All Rixson® shallow depth floor closers are in compliance with ANSI/BHMA 156.4 Standards. See individual products for sub sections.



Limited Warranty

Rixson® shallow depth floor closers, models 50, 51 and F53 are warranted for 2 years against defect. See Rixson® Price Book for specific details of the limited warranty.

Specifications

Interior door floor closers shall be models 50 (center hung), 51 (offset hung) or F53 (independently hung). These closers shall have separate and independent checking valves to control latch speed, closing speed and adjustable hydraulic backcheck. All closers shall have a minimum of two bearings internal to the closer. One shall be a thrust bearing and the other a needle bearing. Separate bearing surfaces shall be in the top pivot. Closers shall have cases no more than 2" deep. Fire rated model F51 shall have steel top pivots. Male spindle assemblies shall have removable spindle adapters, changeable in the field.

Model 51 3/4" Offset

Application

- Single Acting, Handed
- Interior Doors
- Weight to 250 lbs.*
- Door Width up to 4'0" (1219mm)



ANSI/C06041/C06052

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

Product Description & Features

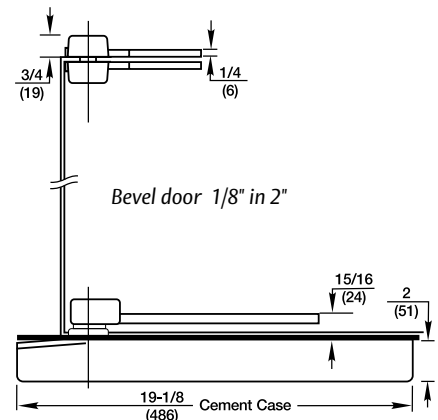
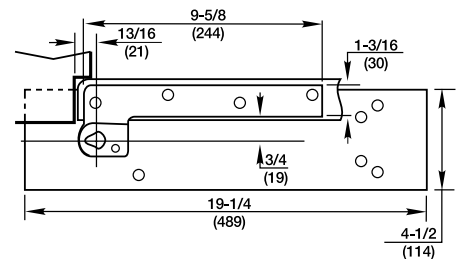
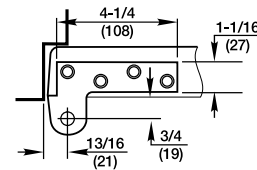
- Interchangeable spindle adapters
- Allows doors to swing 180°, trim permitting
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or automatic hold open (A) specify 90°, 105° or 180°
- Doors will swing 5° beyond hold open point
- Delayed action option – prefix "DA" (*non-hold open only*). Closer will not have backcheck
- Order spring sizes 3 through 5:

Model	Door Width
5103	36" (914mm)
5104	42" (1067mm)
5105	48" (1219mm)
- Models available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH"

Model	Door Width
PH5102	42" (1067mm)
PH5103	48" (1219mm)
- Available with floor plate or threshold installation (*floor plate shown*)
- Available 1-1/2" offset, for doors with cladding or frames with applied molding. Maximum door weight 175 lbs
- Cylolac, rustproof cement case
- Vertical door adjustment
- Standard top pivot #180 included
- Intermediate pivot recommended: M19 (*order separately*), see page 53
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (*up to 3 hour assemblies*) prefix "F". This package will be supplied with a steel top pivot (F180) and a non-hold open closer. Intermediate pivot required: FM19, order separately, see page 53
- For 20-minute label doors – suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required



Model F53

Application

- Single Acting, Handed
- Interior Doors
- Door Width up to 4'0" (1219mm)



ANSI/C06031

Product Description & Features

Used as a concealed floor closer for independently hung doors i.e. butt hinges, pocket pivots, etc

- Closer does not support weight of door

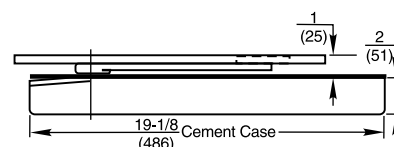
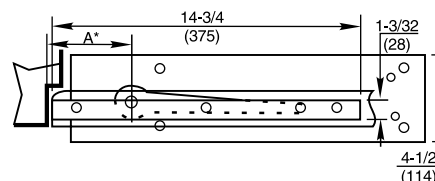
Note: *Hanging means used must be specified when ordering. Check product template. If your hanging means are not listed, contact factory for special layout and pricing*

- Interchangeable spindle adapters
- Auxiliary stop recommended
- Includes closer, mortised rail and arm with slider
- Separate and independent valves for closing speed, latch speed and backcheck.
- Not available in "PH" "DA" or hold open
- Order spring sizes 3 through 5:

Model	Door Width
5303	36" (914mm)
5304	42" (1067mm)
5305	48" (1219mm)
- Floor plate standard. For threshold applications a 1/2" extended spindle is required
- Cylolac rustproof cement case
- This closer carries a UL listing for 3-hour fire door assemblies. Fire rated hanging means required
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required
Door shown parallel to frame



"A" determined by door hanging means

Model F5310

Application

- Single Acting, Handed
- Interior Doors
- Door Width up to 4'0" (1219mm)



ANSI/C06041

Product Description & Features

Identical to Model F53 except:

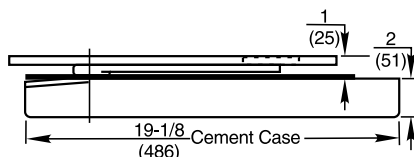
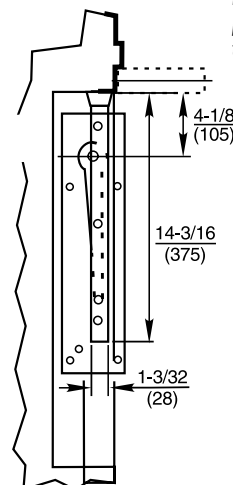
For use in 90° pocket door installations where closer is located in the pocket.

Can only be used with F519 pocket pivots

- Specially milled spindle allows positive latch speed control

Technical Information

Door shown perpendicular to frame



Model Q51/QT51 3/4" Offset

Application

- Single Acting, Handed
- Interior Doors
- Weight to 250 lbs.*
- Door Width up to 4'0" (1219mm)
- 1-3/4" thick only



ANSI/C06042/C06052

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

Product Description & Features

Surface attached bottom arm allows closer removal without demounting door.

- "Q" closers have a floor plate (shown)
- For threshold applications prefix "QT"
- 3/4" offset only
- Interchangeable spindle adapters
- Mortise arm with thru bolt attachment
- Increased depth of cement case for easy closer removal
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or automatic hold-open (A) specify 90° or 105°
- Doors will swing 5° beyond hold open point
- Delayed-action option – prefix "DA" (non-hold open only). Closer will not have backcheck
- Order spring sizes 3 through 5

Model	Door Width
Q(QT) 5103	36" (914mm)
Q(QT) 5104	42" (1067mm)
Q(QT) 5105	48" (1219mm)

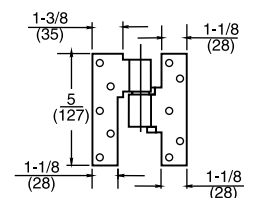
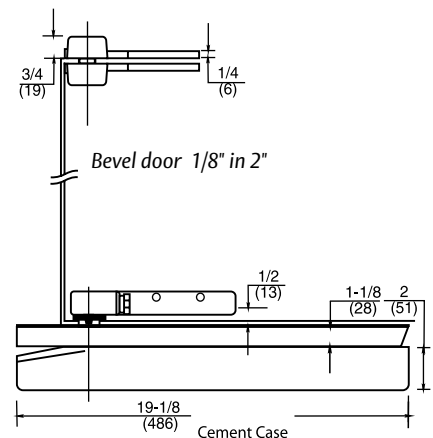
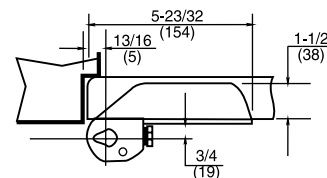
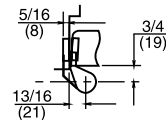
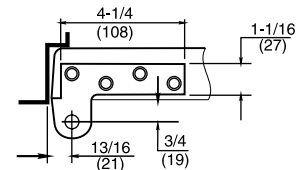
- Models available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH"

Model	Door Width
PHQ(QT) 5102	42" (1067mm)
PHQ(QT) 5103	48" (1219mm)

- Cylolac, rustproof cement case
- Vertical door adjustment
- Standard top pivot #180 included
- One M19 intermediate pivot included.
Note: Closer cannot be ordered without the intermediate pivot
- Doors up to 90" (2286mm) in height should use one intermediate pivot (included). Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies), prefix "F". This package will be supplied with a steel top pivot (F180) one intermediate pivot (FM19) and a non-hold open closer
- For 20-minute label doors suffix "20" to the part number
- Furnished with machine and wood screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required



Model HM51 3/4" Offset

Application

- Single Acting, Handed
- Interior Doors
- 1-3/4" Hollow Metal Doors & Frames
- Weight to 250 lbs.
- Door Width up to 4'0" (1219mm)



ANSI/C06042/C06052

Product Description & Features

Designed for stock hollow metal doors and frames with standard weight 4-1/2" hinge preparation.

- Interchangeable spindle adapters
- Includes three special steel 4 1/2" ball bearing standard weight hinges with 3/4" offset. Doors over 90" in height warrant an additional hinge
- Surface mounted bottom arm with through-bolts
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or automatic hold open (A) specify 90° or 105°
- Doors will swing 5° beyond hold open point
- Delayed action option – prefix "DA" (*non-hold open closers only*). Closer will not have backcheck

- Order spring sizes 3 through 5:

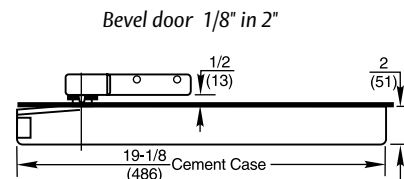
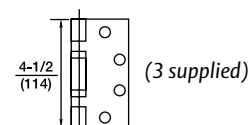
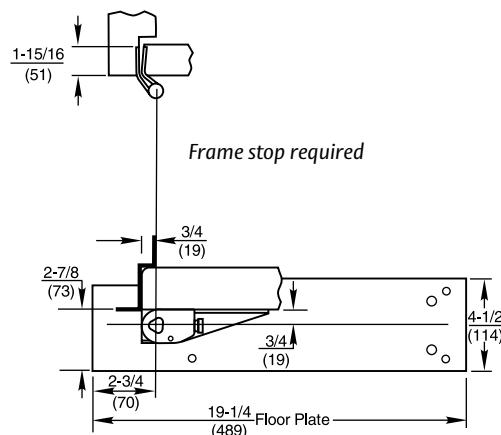
Model	Door Width
HM5103	36"(914mm)
HM5104	42"(1067mm)
HM5105	48"(1219mm)

- Models available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH"

Model	Door Width
PHHM5102	42"(1067mm)
PHHM5103	48"(1219mm)

- Available with floor plate or threshold installation (*floor plate shown*)
- Cicolac, rust proof cement case
- For fire rated openings (*up to 3-hour assemblies*), prefix "F". This package will be supplied with three steel hinges and a non-hold open closer
- Furnished with 1/2 wood and full machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Model M19/M190

Application

- Full Mortise
- Handed

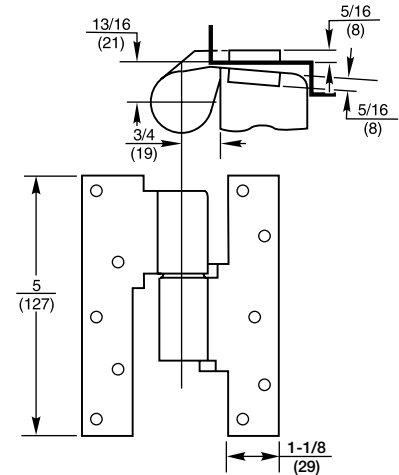


BHMA/ANSI NO: C07321/C07371

Product Description & Features

- M19, bushing, not load bearing
- M190, needle bearing, load bearing
- Maintains door alignment
- Aids in installing closers and bottom pivots
- Non ferrous base material
- 3/4" (19mm) offset standard
- Available in 1-1/2" (38mm) offset
- Available for fire door assemblies (*ferrous material*) specify FM19 or FM190
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For 20-minute label suffix "-20" to the part number
- Furnished with wood and machine screws

Technical Information



Model F519

Application

- Pocket Door Pivot
- Non-handed

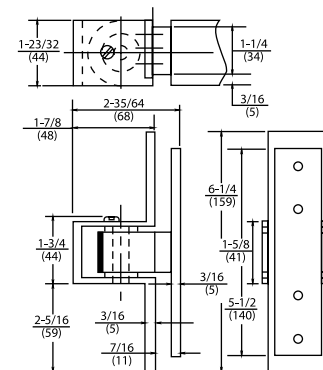


ANSI 156.1 A8911
ANSI 156.4 C07611

Product Description & Features

- Full mortise, non-handed pivot for pocket door applications
- Heavy-duty steel pivot with ball bearings
- Allows doors to swing 90°
- Minimum three pocket pivots per door
- Doors over 90" (2286mm) in height require four pocket pivots. Each additional 30" (762mm) warrants another pocket pivot
- UL listed for all labeled pocket fire-door assemblies up to and including 3 hours
- Fire-rated door assemblies must have been tested with pocket pivots
- Furnished with wood and machine screws

Technical Information



Shallow Depth Single Acting Center Hung Floor Closers

Model 50 x 554 Arm

Application

- Single Acting, Handed
- Interior Doors
- Concealed Arm
- Weight to 250 lbs.
- Door Sizes up to 4'0" x 8'0" (1219x2438mm)



ANSI/CO6022

Product Description & Features

Concealed arm is designed to eliminate visible adjusting screws on face of door

- Arm bolt locks arm to closer spindle – adjustment made through heel of door
- Interchangeable spindle adapters
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or automatic hold open (A) specify 90° or 105°
- Delayed action option – prefix "DA" (*non-hold open only*) closer will not have backcheck
- Order spring sizes 3 through 5:

Model	Door Width
5013 x 554	36" (914mm)
5014 x 554	42" (1067mm)
5015 x 554	48" (1219mm)

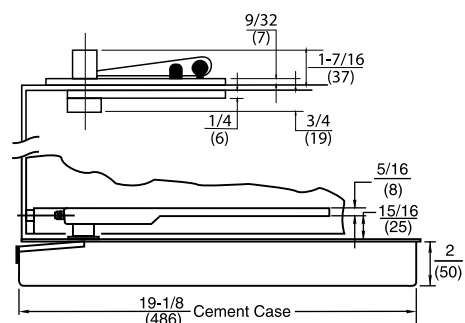
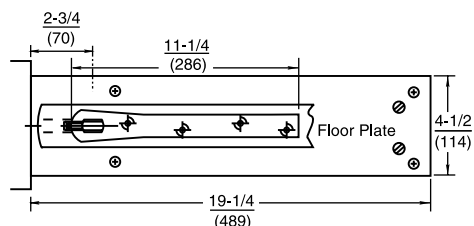
- Models available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH"

Model	Door Width
PH5012 x 554	42" (1067mm)
PH5013 x 554	48" (1219mm)

- Available with floor plate or threshold installation (*floor plate shown*)
- Cylolac, rustproof cement case
- Standard top pivot #340 included
- Not allowed for fire rated doors
- Frame stop required at lock edge. If not supplied by frame manufacturer, recommend use of 60131 (*see Door Control Accessories, page 92*)
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required at lock edge



Shallow Depth Single Acting Center Hung Floor Closers

Model 50

Application

- Single Acting Handed
- Interior Doors
- Centering Arm
- Weight to 250 lbs.
- Door Sizes up to 4'0" x 8'0" (1219x2438mm)



ANSI/CO6022

Product Description & Features

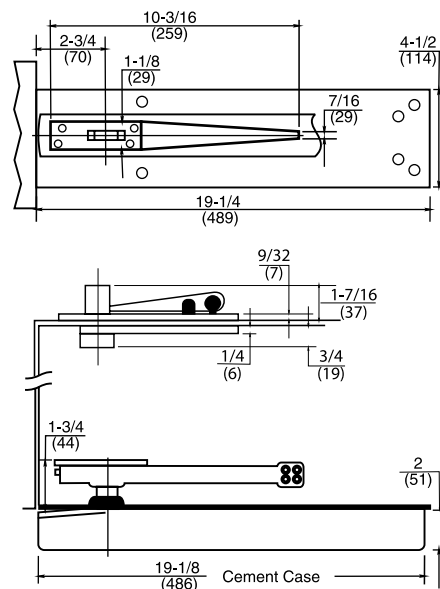
- Centering arm with adjustment screws in faces of door
- Interchangeable spindle adapters
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or automatic hold open (A) specify 90° or 105°
- Delayed action option – prefix "DA" (*non-hold open only*). Closers will not have backcheck
- Order spring sizes 3 through 5:

Model	Door Width
5013	36" (914mm)
5014	42" (1067mm)
5015	48" (1219mm)
- Models available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH"

Model	Door Width
PH5012	42" (1067mm)
PH5013	48" (1219mm)
- Available with floor plate or threshold installation (*floor plate shown*)
- Cylolac, rustproof cement case
- Arm reinforcement bracket for wood doors prefix "W"
- Standard top pivot #340 included
- Not allowed for fire rated doors
- Frame stop required at lock edge. If not supplied by frame manufacturer, recommend use of 60131 (*see Door Control Accessories, page 92*)
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information

Frame stop required at lock edge



Shallow Depth Single Acting Center Hung Floor Closer

Model 5040

Application

- Single Acting, Handed
- Interior Doors
- Full Glass Doors
- Weight to 200 lbs.
- Door Sizes 3'6" x 8'0"



Product Description & Features

- Top and bottom patch fittings for tempered glass doors 3/8" - 1/2" thick
- Interchangeable spindle adapters
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or automatic hold open (A) specify 90° or 105°
- Delayed action option – prefix "DA" (*non-hold open only*). Closers will not have backchecks. Not recommended for full glass doors
- Order spring sizes 3 and 4:

Model	Door Width
5043	36"(914mm)
5044	42"(1067mm)

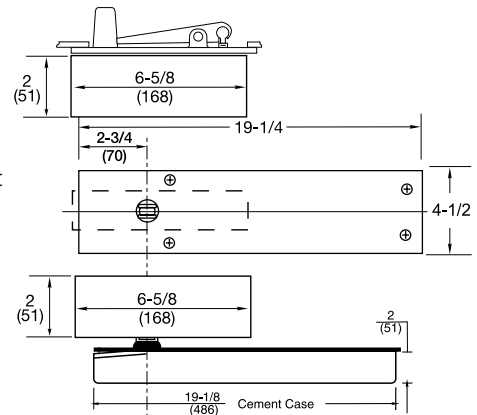
- Models available to meet ICC/ANSI A117.1 opening force requirements. Prefix "PH"

Model	Door Width
PH5042	42" (1067mm)

- Floor plate standard. For threshold application, an extended spindle is required (*floor plate shown*). There is no vertical adjustment
- Cyclac rustproof cement case
- Special top pivot included
- For extended spindles contact factory

Technical Information

Frame stop required at lock edge



Shallow Depth Double Acting Center Hung Floor Closer

Model 5020

Application

- Double Acting Non-Handed
- Interior Doors
- Weight to 250 lbs.
- Door Sizes up to 4'0"x 8'0"
(1219x2438mm)



ANSI/CO6011

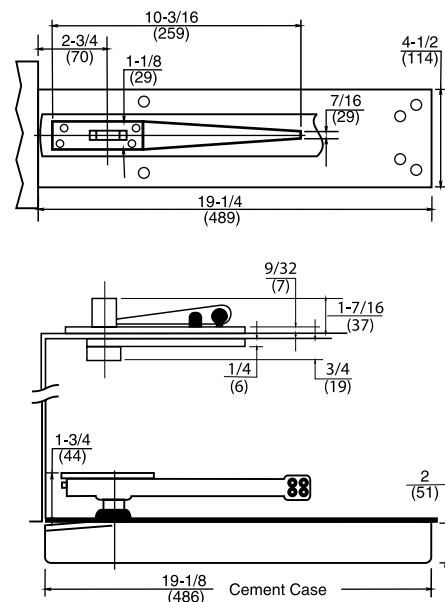
Product Description & Features

- Centering arm with adjustment screws in faces of door (*critical for double acting doors*)
- Interchangeable spindle adapters
- Separate and independent valves for closing speed, latch speed and backcheck
- Available non-hold open (N) or automatic hold open (A) specify 90°, 105°
- Delayed action option – prefix "DA" (*non-hold open only*). Closers will not have backcheck
- Auxiliary stop required
- Order spring sizes 3 through 5:

Model	Door Width
5023	36" (914mm)
5024	42" (1067mm)
5025	48" (1219mm)
- Models available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH"

Model	Door Width
PH5022	42" (1067mm)
PH5023	48" (1219mm)
- Available with floor plate or threshold installation (*floor plate shown*)
- Cyclac, rustproof cement case
- Arm reinforcement bracket for wood doors – prefix "W"
- Standard top pivot #340 included
- Not allowed for fire rated doors
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Model 345

Application

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

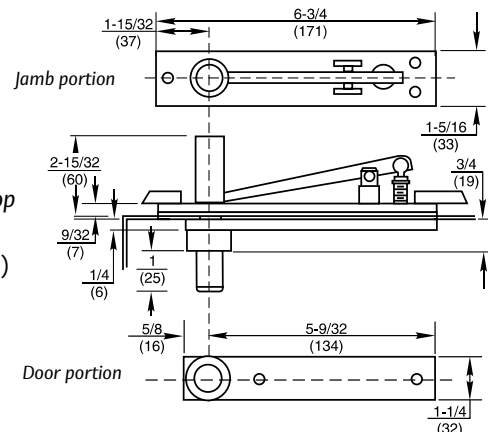


ANSI/C07021

Product Description & Features

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

Technical Information

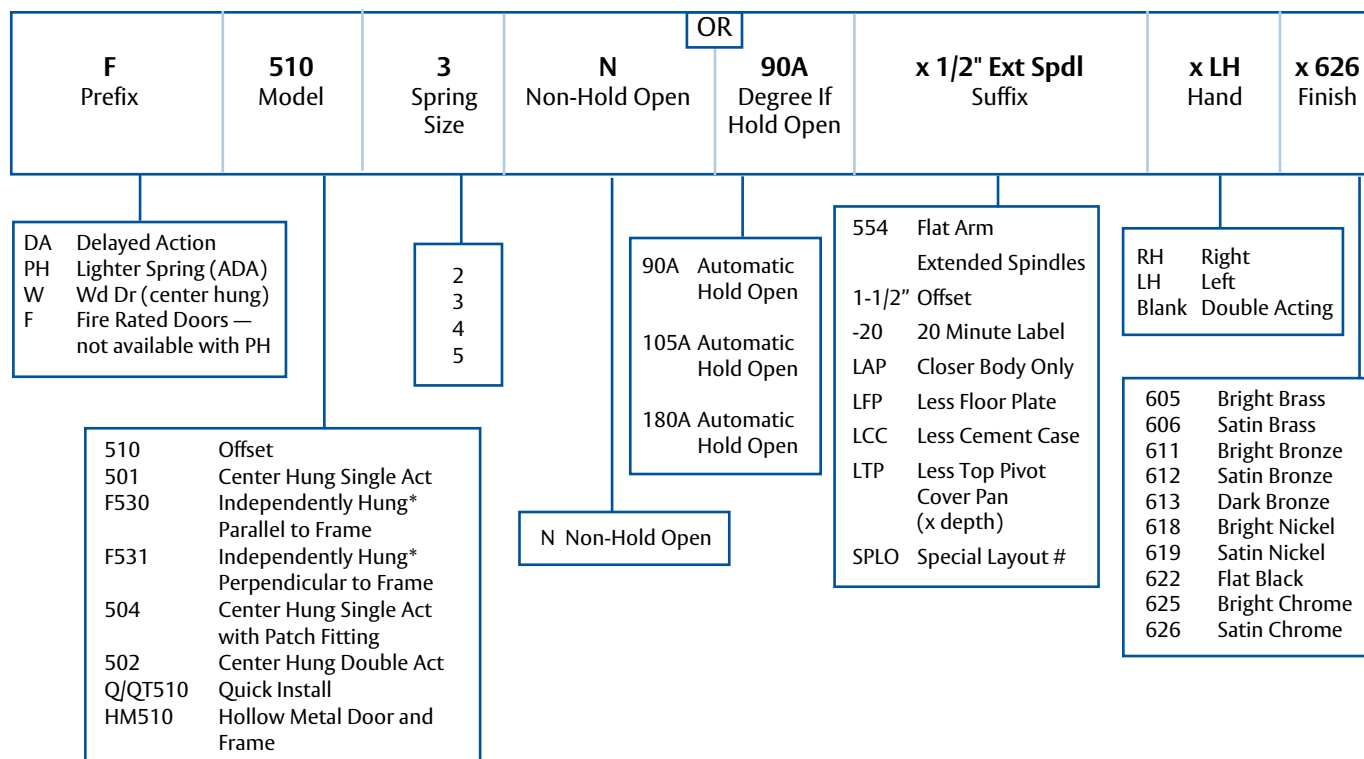


Reference

Prefix	Model	Degree if Hold Open	Holding Options	General Options	Handed	Maximum Weight*
DA, PH, F	51	90,105,180	N, A	Ext Spdl, 1-1/2 OS, -20	Yes	250
	F53		N	Extended Spindle	Yes	250
	F531		N	Extended Spindle	Yes	250
DA, PH, F	Q/QT51	90,105	N, A	Ext Spdl, -20	Yes	250
DA, PH, F	HM51	90, 105	N, A	Extended Spindle	Yes	250
DA, PH	50	90,105	N, A	Extended Spindle	Yes	250
DA, PH	5040	90,105	N, A	Extended Spindle	Yes	250
DA, PH	5020	90,105	N, A	Extended Spindle	No	250

*Offset closer weight are for 3/4" and the use of an intermediate pivot.

How to Order

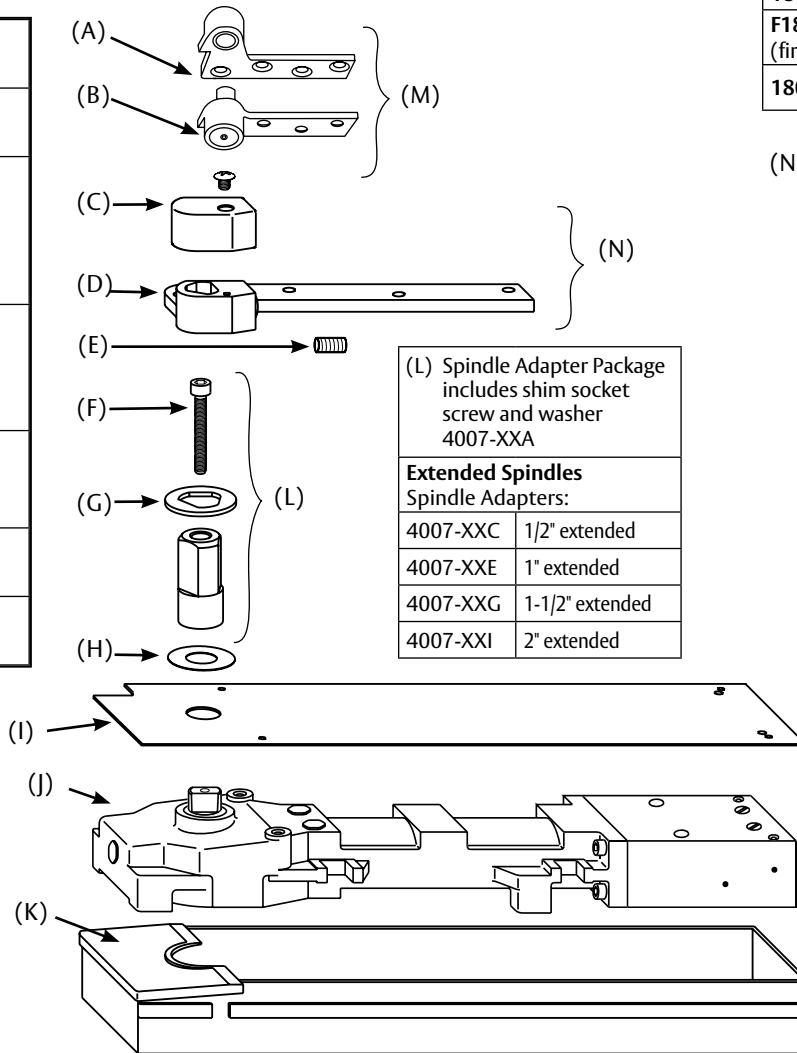


*Hanging means must be noted on purchase order.

Model 51

Right Hand Shown
3/4" Offset

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(C) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(D) 3/4" Offset Arm x Locking Screw 275177 (RH) 275176 (LH)
(E) Arm Locking Screw Only PKG (5) 88905
(G) Arm Bearing Washer 275062-PKG (5)
(H) Spindle Washer 519000-*



(M) 3/4" Offset Top Pivot Assembly
180 (standard)
F180 (fire rated up to 3 hours)
180-20 (20 minutes)

(N) Bottom Arm Package (Includes C, D and attaching screws) 252050R* (RH) 252050L* (LH)

(I) Floor Plate with Screws 4000500R* XXE (RH) 4000500L* XXE (LH)

(J) Closer Body (Specify Complete Model No. x LAP)
--

(K) Cement Case with Screws 4000301

For 51 x 1-1/2" Offset
180x1-1/2" (standard) F180x1-1/2" (fire rated up to 3 hours) 180-20x1-1/2" (20 minutes)
1-1/2" Offset Arm x Locking Screw 275167-*
1-1/2" Offset Bottom Arm pkg 252060-*

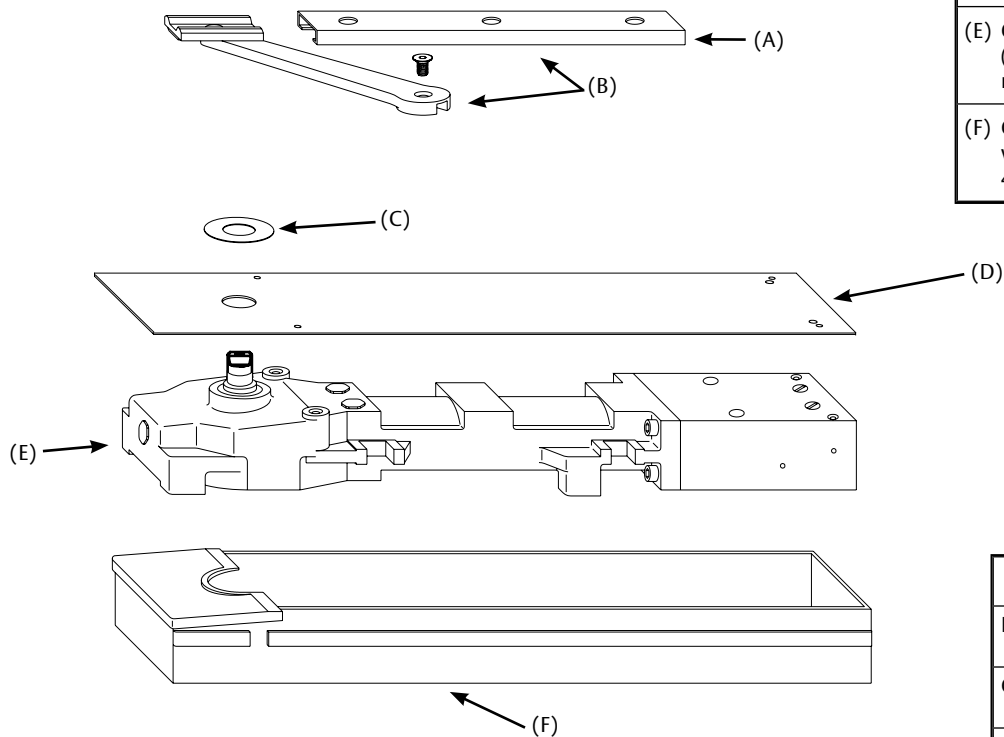
*specify finish

Screw Kits
180 Screw Kit 107014 Machine(2) Req 107114 Wood (2) Req
Arm Screw Kit 107044 Machine 107144 Wood
Floor Plate Screw Kit 107004-*
Cement Case Screw Kit 107075

Model F53 & F5310

(A) Door Rail 327006
(C) Spindle Washer 539000-*

(B) Bottom Arm Package 3252010-*
(D) Floor Plate with Screws 4000600-XXE ("BC")
(E) Closer Body (specify complete model no. x LAP)
(F) Cement Case with Screws 4000301



Screw Kits
Floor Plate Screw Kit 107004-*
Cement Case Screw Kit 107075
Slide Track Screw Kit 107033

*specify finish

In USA: (800) 457-5670 or www.rixson.com

In Canada: (800) 461-3007 or www.assaabloy.ca

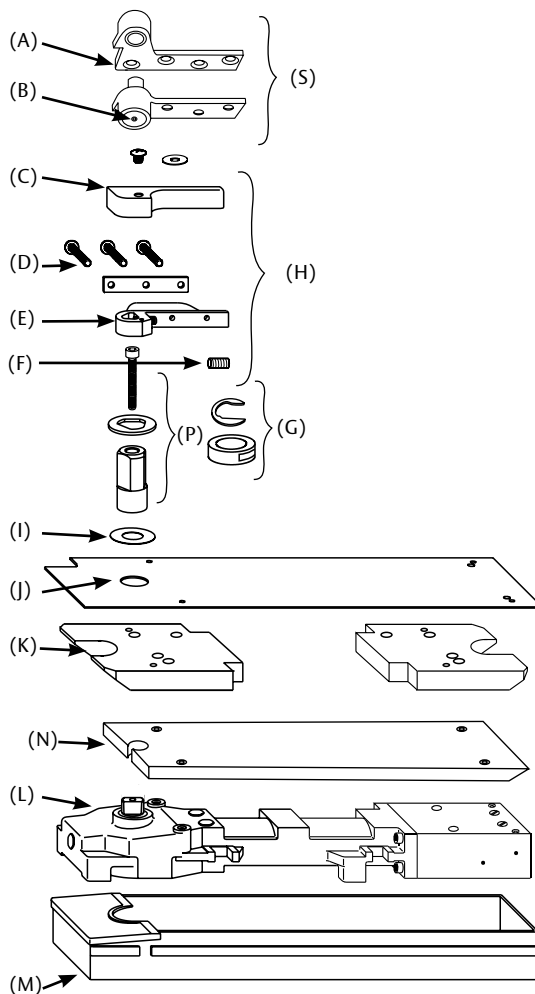
5/10

ASSA ABLOY, the global leader in door opening solutions

Model Q51/QT51

Right Hand Shown
3/4" Offset

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(C) Arm Cap & Screw 73035R*AS (RH, BRS) 73035L*AS (LH, BRS)
(D) Q/QT51 Arm Mounting Screws & Plate 73014-*
(E) Removable Arm 73001R-ASY (RH) 73001L-ASY (LH)
(F) Arm Locking Screw Only 88905-PKG (5)
(G) Arm Washer & Shim Package 275179 includes shim 275065
(I) Spindle Washer 519000-*



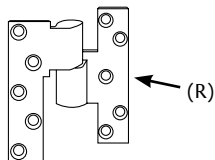
(S) 3/4" Offset Top Pivot
180
FL180
Fire Rated
180 - 20
20 Minute

(H) Bottom Arm Package
222050R* (RH)
222050L* (LH)
(Includes C, D, E, F)

(P) Spindle Adapter
Package
4007-XXC
(Includes shims, socket
screw & washer)

Extended Spindles Spindle Adapters:

4007-XXE	1/2" extended
4007-XXG	1" extended



M19 Intermediate Pivot

(R) 3/4" Offset
Intermediate Pivot (1)
M19
FM19
Fire Rated
M19-20
20 Minute

Screw Kits

180 Screw Kit 107014 Machine(2) Req 107114 Wood (2) Req
Q Floor Plate Screw Kit 107010-*
Cement Case Screw Kit 107075
M19 Intermediate Pivot Screw Kit 107015 Machine (2) Req 107115 Wood (2) Req

(J) Floor Plate w/Screws
4000501R* XXE
(RH)
4000501L* XXE
(LH), "BC")

(K) Q51 Styrofoam Filler
4000023

(N) QT51 Styrofoam Filler
4000019

(L) Closer Body
(Specify complete
model no. x LAP)

(M) Cement Case w/Screws
4000301

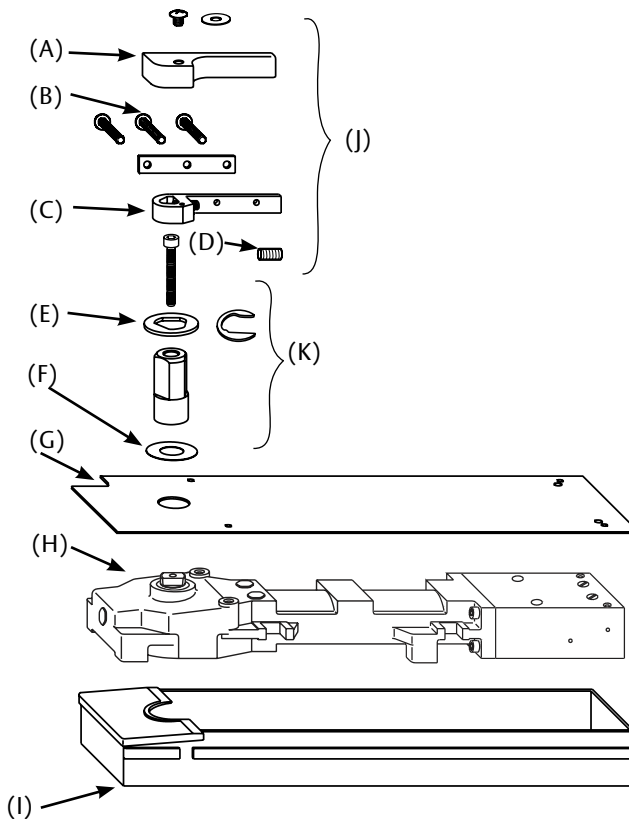
*specify finish

Model HM51

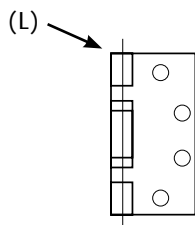
Right Hand Shown

3/4" Offset Only

(A) Arm Cap & Screw 73025R*AS (RH) 73025L*AS (LH)
(B) HM51 Arm Mounting Screws & Plate 73014-*
(C) Arm & Screw 73041R*AS (RH) 73041L*AS (LH)
(D) Arm Locking Screw Only 88905 - (5)
(E) Arm Bearing Washer 275062-PKG (5)
(F) Spindle Washer 519000-*



(J) Bottom Arm Package 222050R*HM (RH) 222050L*HM (LH) (Includes A, B, C)
(K) Spindle Adapter Package 4007-XXA
Extended Spindles Spindle Adapters: (Includes shims, arm washer & socket screw) 4007-XXC 1/2" extended 4007-XXE 1" extended 4007-XXG 1-1/2" extended 4007-XXI 2" extended



(L) Special Offset Hinges (3)
254545R*PK
254545L*PK

(G) Floor Plate w/Screws 4000501R*XXE (RH, "BC") 4000501L*XXE (LH, "BC")
(H) Closer Body (Specify complete model no. x LAP)
(I) Cement Case with Screws 400301

Screw Kits
Floor Plate Screw Kit 107004-*
Cement Case Screw Kit 107075

*specify finish

In USA: (800) 457-5670 or www.rixson.com

In Canada: (800) 461-3007 or www.assaabloy.ca

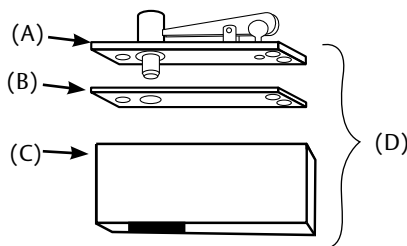
5/10

ASSA ABLOY, the global leader in door opening solutions

Model 5040

Right Hand Shown
3/4" Offset

(A) Jamb Portion 42801
(B) Finish Plate 012202-*PK (BRS) 012204-*PK (SS)
(C) Patch Filling 7495-*

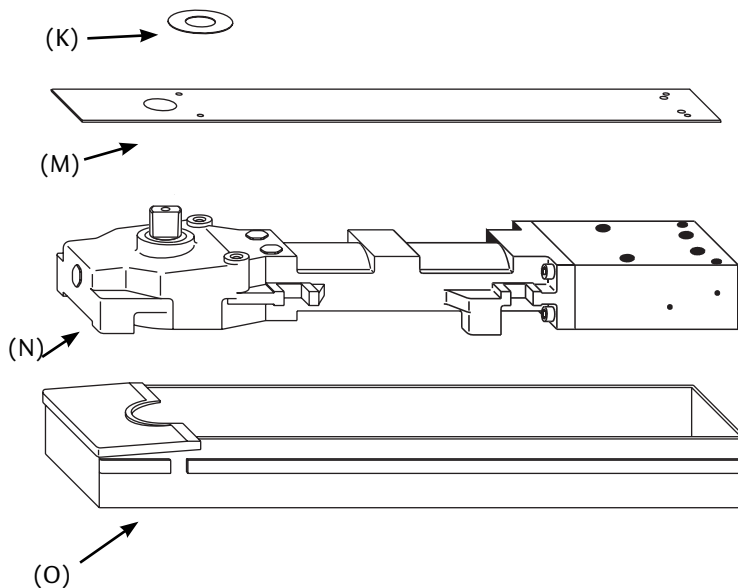


(D) Top Patch 7494* PK
(M) Floor Plate with Screws 4000600-*XXE BC")
(N) Closer Body (Specify Complete Model No. x LAP)
(O) Cement Case with Screws 4000301



(E) Bottom Patch
7495-* PK

(K) Spindle Washer 519000-*



Screw Kits
Floor Plate Screw Kit 107004-*
Cement Case Screw Kit 107075
340 Screw Kit Machine & Wood 107329

RIXSON®

ASSA ABLOY

Notes

Shallow Depth
Floor Closers

Specialty Closers

RIXSON®
ASSA ABLOY

High-End Residential

High-Security or

Gate Solutions



ASSA ABLOY, the global leader in door opening solutions

Introduction

The closers in this section are for specific niche markets, from the high-end residential Duo-Chek® to the high-security SEC27-180 closers. No two have the same features.

Duo-Chek® Model 10, 12, 15, 16

The Duo-Chek® is for high-end residential applications, such as the double-acting door going from the kitchen to the dining room.

The weight of the door is supported at bottom

- Uses laws of gravity to its advantage
- Door swings with less resistance
- Reduced stress on frame

Fasteners are in shear, not tension

- Eliminates door sag

Hardened steel spindles

- Thrust bearing supports vertical load
- Needle bearings for lateral forces

Bottom arm directly attached to closer spindle

- A mechanical advantage that increases efficiency, ensuring that ADA compliant opening forces will still close the door
- One-to-one ratio of door swing to spindle rotation makes control more precise
- Floor closers are more efficient than a regular arm surface closer

Gate Closers Models 354, 355, 356, 357, 359

Closers that mount to the side jamb for small gates such as teller gates, courtroom gates.

- Closer mounts off the floor approximately 6" under the door
- Double acting with a hold open option
- Single acting when used with butts

High-Security Models SEC27-180

These closers are used on doors in detention areas in hospitals, detention centers and non-cell prison doors.

The weight of the door is supported at bottom

- Uses laws of gravity to its advantage
- Door swings with less resistance
- Heavier doors can be accommodated
- Reduced stress on frame

Fasteners are in shear, not tension

- Eliminates door sag
- Vertically adjustable

Heavy-duty hardened steel spindles

- Designed to provide positive dead stop
- Thrust bearing supports vertical load
- Needle bearings for lateral force

Bottom arm directly attached to closer spindle

- A mechanical advantage that increases efficiency
- One-to-one ratio of door swing to spindle rotation makes controls more precise
- Floor closers are more efficient than a regular arm surface closer

Helical torsion spring

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

Advantages of security concealed floor closers

- Vandal resistant – mechanism not exposed
- Supplied with Torx® screws

Exterior Gate Closers Model 1350 and 1351

Surface closers and tracks used on high-end residential and commercial ornamental iron fencing systems that must be self-closing.

- Extremely easy to install
- Uses surface closer technology

Contents

Page

Specialty Door Closers: General Information	68
How to Select Product	70
Options	71
Certifications	72
Limited Warranty	72
Specifications	72

Double Acting Center Hung Floor Closers

10 Duo-Chek® Closer with Hold Open	73
12 Duo-Chek® Closer	73
15 Duo-Chek® Closer with Hold Open	73
16 Duo-Chek® Closer	73

Gate Closers

354 Flange Mounting 1-3/4" Gate Only	74
355 Flange Mounting 1-3/4" Gate Only	74
356 Flat Arm	75
357 Flat Arm	75
359 Independently Hung (<i>Hanging Means by Others</i>)	76

Security Closers

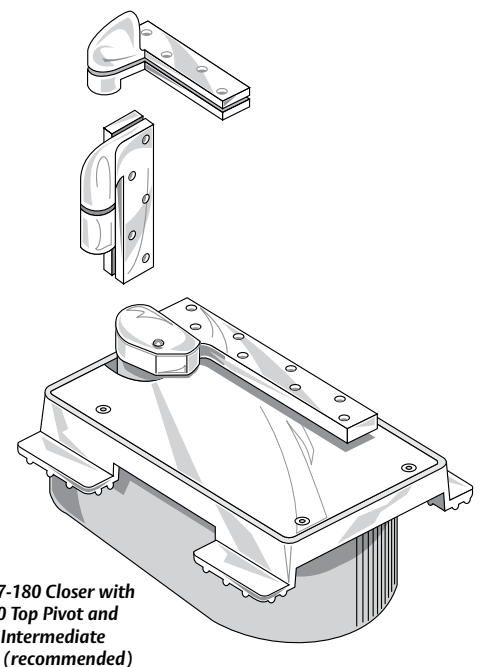
SEC27-180 Closer 180° Swing	77
-----------------------------	----

Exterior Gate Closers

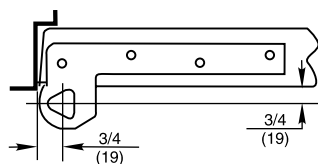
1350	78
1351	78

Quick Reference of Options

How to Order	79
Parts Drawings	80-84

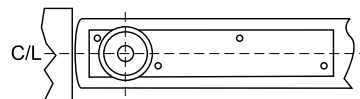


1. Offset vs. Center Hung Application



3/4" Offset

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



Center Hung

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

2. Size of Door (width, height, thickness)

Estimated door weights pounds per square foot (PSF)

Door Material	Door Thickness		
	1-3/4"	2-1/4"	3
Hollow Metal	6.5	7	-
Solid Core Wood	7	9	11.5
Aluminum/Glass Storefront	3.5	4	-
Tempered Glass	Glass Thickness		
	3/8"	1/2"	3/4"
	5	7	9.75

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

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

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

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

For doors of other sizes consult factory

3. Expected Frequency of Door Operation

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

Duo-Chek® Options

Physically Handicapped – Prefix PH

To comply with ICC/ANSI A117.1 and guidelines established by the Americans With Disabilities Act, PH prefix indicates 5# of opening force. 

Non-Hold Open – Suffix N

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

Automatic Hold Open – Suffix A

These closers hold the door open at 90°. This feature cannot be changed in the field.

Extended Spindle – Suffix Extra Length

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

Less All Parts – Suffix LAP

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

Less Floor Plate – Suffix LFP

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

Less Cement Case – Suffix LCC

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

Less Top Pivot – Suffix LTP

For unusual head conditions where the top pivot cannot be used, the closer is shipped without the top pivot.

Models 350 Gate Closers - No Options

SEC27-180 Options

Degree of Swing – Suffix -180

Single-acting heavy-duty floor closers have a deadstop. This means that the door cannot go past a certain point. The SEC27-180 allows the door to swing to 180°

Non-Hold Open – SEC closers are non-hold open

Less Cement Case – Suffix LCC

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

Less Top Pivot – Suffix LTP

For unusual head conditions where the top pivot cannot be used, the closer is shipped without the top pivot. An additional FA19 intermediate (side jamb) pivot is required.

Extended Spindle – Suffix Extra Length

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

Models 1350

Exterior Gate Closers - No Options

Certifications

The Rixson® Duo-Chek, 350 gate closers and SEC27-180 closers are in compliance with ANSI/BHMA 156.4 standards. See individual products for sub-section.



Limited Warranty

Rixson® specialty closers, Duo-Chek, gate closers are warranted for 2-years against defect. Rixson® specialty closer SEC27-180 is warranted 10 years against defect. See Rixson® Price Book for specific details of the limited warranty.

Suggested Specifications

Double-Acting Floor Closer Specifications

All low-traffic double-acting doors shall use Duo-Chek® models 10,12,15, or 16. Closing speed adjustments can be made through the cover plate. Closers must be available in lighter springs for accessibility requirements.

Interior Gate Closer Specifications

All interior gates shall use model 350 closers. Closers shall be mounted above the floor and may be single or double acting, depending on hanging means. Closers shall have hydraulic closing speed adjustment. Units shall have built-in hold open.

Security Closer Specifications

Closer shall be model SEC27-180 concealed floor closer package. Cement case to be cast iron with cast-in integral anchor extensions. 1/4" thick steel cover plate to be recessed into lip on cement case. Closer mechanism to have individual hydraulic cylinders for closing functions and adjustable hydraulic backcheck and be operated by a torsion spring. Closing and latch speed to be controlled by two independent valves. Closer to have built-in dead stop. Bottom arm shall be 1/2" thick steel. Top pivot shall be asylum type with Torx® security fasteners.

Exterior Gate Closer Specifications

All exterior gates shall be Rixson® model 1350 or 1351. They shall be surface type with non-corrosive tracks. Track shall be two sided to keep debris from collecting. Must accommodate gates with top cross member or open spokes.

Models 10 & 12 Duo-Chek®

Application

- Double Acting, Non-handed
- Low/Medium Traffic Interior Doors
- Weight to 125 lbs.
- Sizes up to 2'10" x 7'0" (864x2134mm)

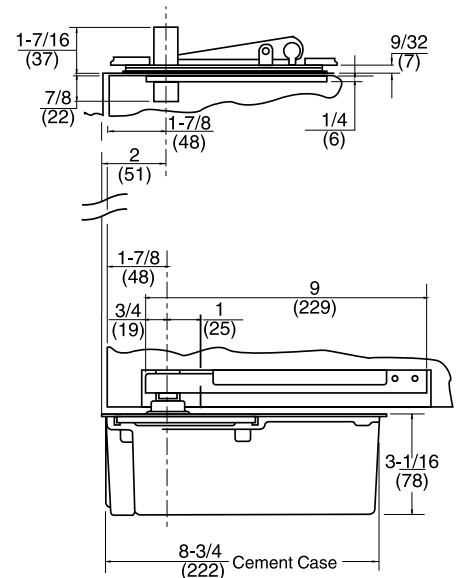
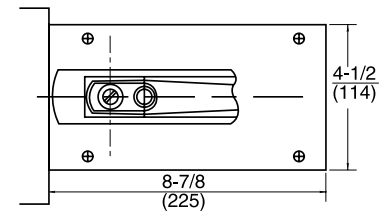


ANSI/CO6013
Shipping wt. 18 lbs.

Product Description & Features

- Model 10 is 90° automatic hold open; 12 is non-hold open
- Standard top pivot: 101020 walking beam type
- Not allowed for use on labeled fire doors
- Cast iron cement case
- Adjustable closing speed
- Centering arm for adjustment
- 105° maximum opening
- Models 10 and 12 available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH"
- 1-3/4" door thickness
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Models 15 & 16 Duo-Chek®

Application

- Weight to 125 lbs.
- Sizes up to 2'11" to 3'6" x 7'0" (889 to 1067 x 2134mm)

ANSI/CO6013
Shipping wt. 18 lbs.

Product Description & Features

- Identical to Models 10 & 12 except:
- Stronger spring to accommodate wider door
 - 15 is 90° automatic hold open; 16 is non-hold open
 - "PH" not available

Model 354

Application

- Double Acting, Non-handed
- Maximum weight: 75 lbs.
- Dwarf doors from 2'2" to 3'0" wide (660 x 914mm)

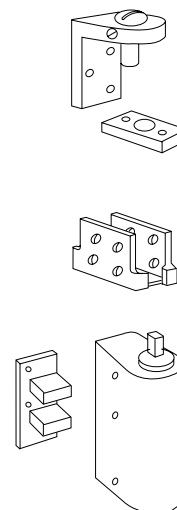


ANSI/C09503
Shipping wt. 6 lbs.

Product Description & Features

- Recommended for office rail gates, partitions, and lavatory stall doors
- Body mounts under gate
- Surface mounted top pivot: 3541020
- 1-3/4" door thickness
- Maximum opening 90°
- Arm adjustment door normally comes to rest at closed position. If door is to remain open, arm is set on spindle so door comes to rest at 90°
- Package also includes closer bracket and flange style arm
- Frame carries full weight of door
- Quiet control; no slamming or flapping
- All moving parts enclosed and fully immersed in lubricating checking fluid
- Painted finishes only

Technical Information



Model 355

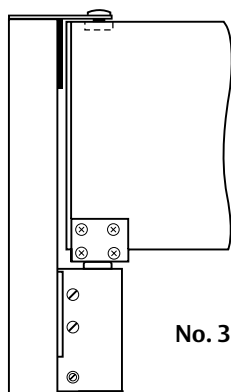
Application

- Double Acting, Non-handed

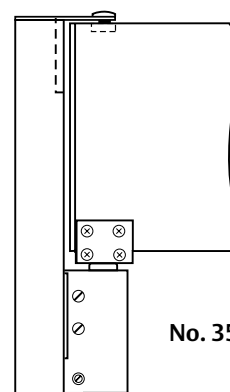
Product Description & Features

- Identical to 354 except:*
- Mortise top pivot: 3551020

ANSI/C09503
Shipping wt. 6 lbs.



No. 354



No. 355

Model 356

Application

- Double Acting, Non-handed
- Maximum weight: 75 lbs.
- Dwarf doors from 2'2" to 3'0" wide (660x914mm)

ANSI/CO9503

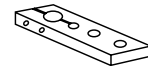


Shipping wt. 6 lbs.

Product Description & Features

- Recommended for office rail gates, partitions, and lavatory stall doors
- Body mounts under the gate
- Surface mounted top pivot: 3541020
- 1-3/4" door thickness
- Maximum opening 90°
- Arm adjustment door normally comes to rest at closed position. If door is to remain open, arm is set on spindle so door comes to rest at 90°
- Package also includes closer bracket and arm that may be surface mounted or mortised
- Frame carries full weight of door
- Quiet control; no slamming or flapping
- All moving parts enclosed and fully immersed in lubricating checking fluid
- Painted finishes only

Technical Information



Model 357

Application

- Double Acting, Non-handed

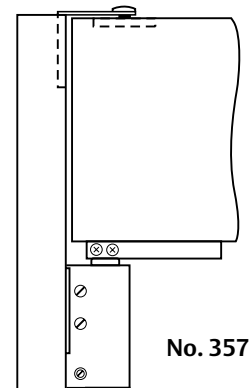
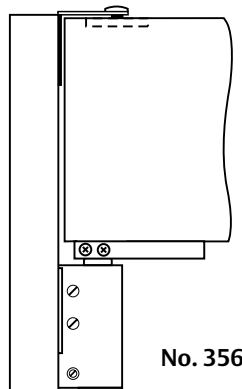
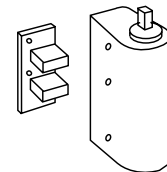
ANSI/CO9503

Shipping wt. 6 lbs.

Product Description & Features

Identical to 356 except:

- Mortise top pivot: 3551020



Model 359

Application

- Single Acting, Non-handed
- Maximum weight: 75 lbs.
- Dwarf doors from 2'2" to 3'0" wide (660x914mm)

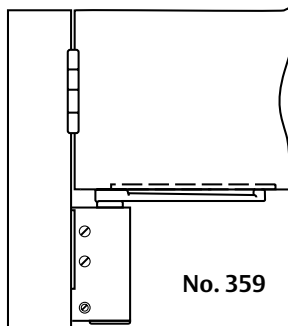
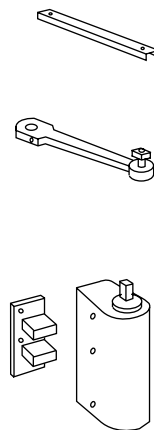


ANSI/C09503
Shipping wt. 5-1/2 lbs.

Product Description & Features

- Recommended for office rail gates, partitions, and lavatory stall doors
- Closer mounts under the door
- Closer mounts under the door
- 1-3/4" door thickness
- Maximum opening 140°
- Surface mounted to edge of partition with edge wide enough for 1-1/2" bracket
- Butt hinges by others
- Frame carries full weight of door
- Track style arm
- Package includes closer, bracket, and slide track arm
- Painted finishes only

Technical Information



Model SEC27-180 3/4" Offset Hung

Application

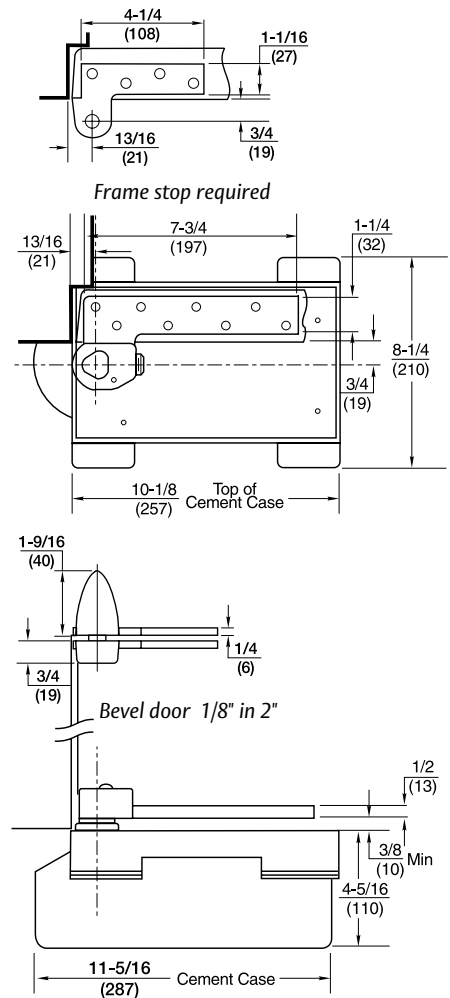
- Single Acting, Handed
- Interior Security Doors
- Weight to 650 lbs.
- Door Width up to 4'0" (1219mm)



Product Description & Features

Recommended for non cell doors in detention facilities or psychiatric centers

- Non-hold open only
- Standard top pivot: FA180 included
- Intermediate pivot recommended: FA19 (order separately), see page 23
- Door will swing to 180°, trim permitting
- Built-in hydraulic backcheck at 160°
- Cast iron cement case with cast-in extensions for positive anchorage in floor
- Solid 1/4" (6mm) thick steel floor plate
- Cast-in lip to provide positive containment of cement case in floor
- Sealed closer standard
- Heavy-duty forged bottom arm
- Adjustable closing speed
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Every additional 30" (762mm) of door height warrants another intermediate pivot
- This closer is for fire-rated openings (up to 3 hour assemblies). Only non-hold open closers are used. Intermediate pivot required: FA19, order separately, see page 137
- Delayed action not available
- Furnished with Torx® screws
- Extended spindles available in 1/2" increments up to 2" longer than standard



Model 1350 Exterior Gate Closer

Application

- Single Acting
- Exterior Ornamental Iron Gates
- Weight to 150 lbs.
- Gate Maximum 3'6" x 7'0"

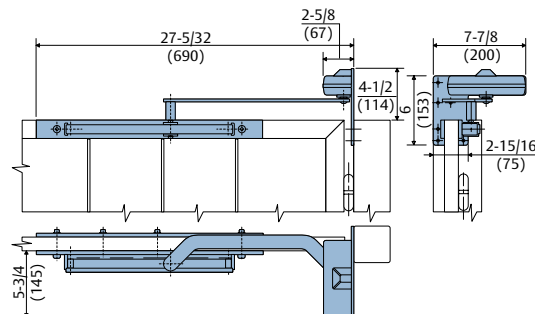


Product Description & Features

Recommended for exterior gates on high-end residences and commercial building campuses.

- Includes closer body, mounting bracket, arm and slide track
- Track has pass thru hole to avoid debris build-up
- Components are rust-resistant
- Surface closer has closing and latch speed controls
- May be mounted on cross-member or spokes
- Hanging means by others
- All-weather fluid
- All machine screws
- Black finish only

Technical Information



Model 1351 Exterior Gate Closer

Application

- Single Acting
- Exterior Ornamental Iron Gates
- Weight to 250 lbs.
- Gate Maximum 4'6" x 10'0"

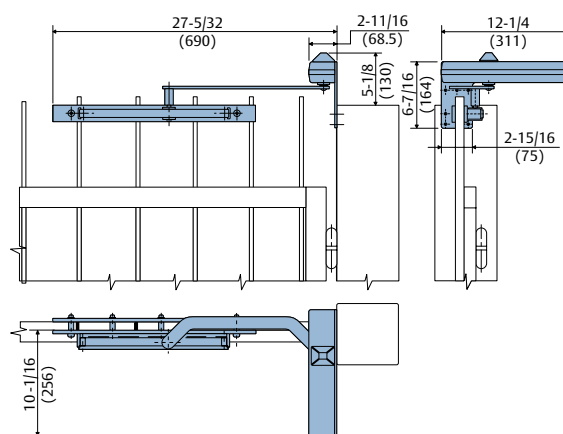


Product Description & Features

Recommended for exterior gates on high-end residences and commercial building campuses.

- Includes closer body, mounting bracket, arm and slide track
- Track has pass thru hole to avoid debris build-up
- Components are rust-resistant
- Surface closer has adjustable latch speed, closing speed and backcheck
- May be mounted on cross-member or spokes
- Hanging means by others
- All weather fluid
- All machine screws
- Black finish only

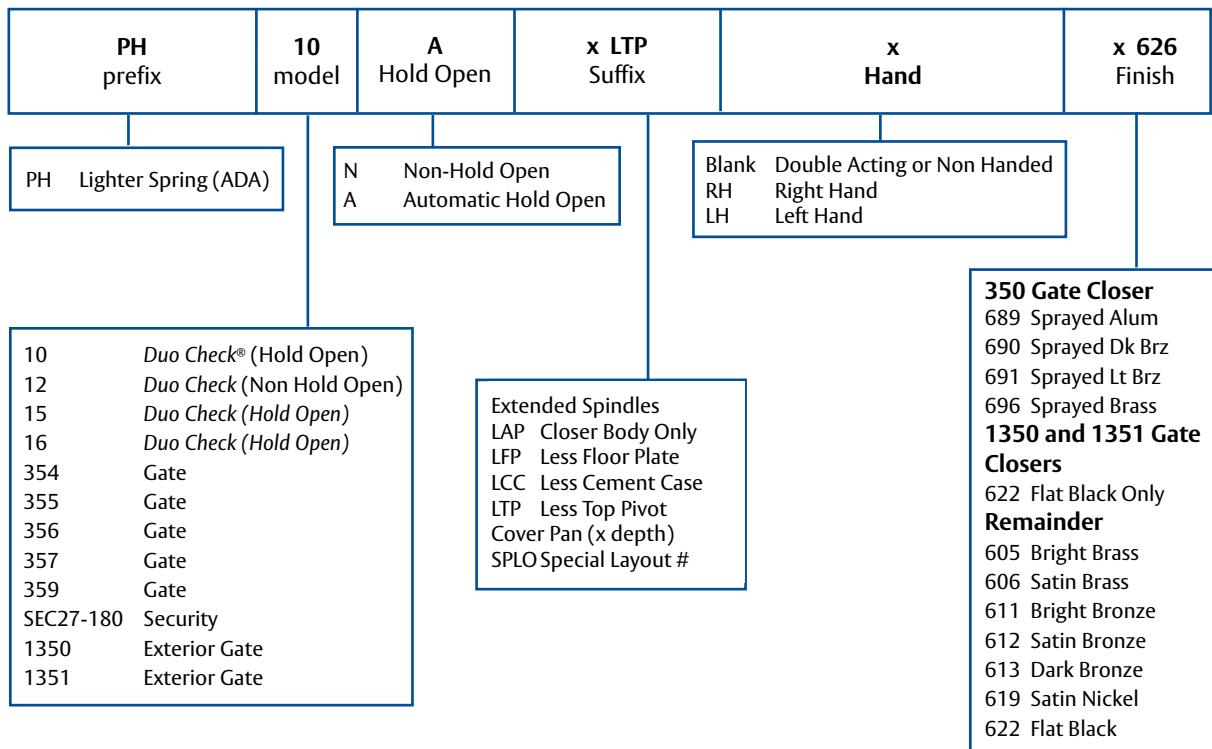
Technical Information



Quick Reference of Options

Prefix	Model	Degree of Hold Open	Holding Options	General Options	Fire Rated	Handed	Maximum Door Weight
PH	10	90	A	Extended Spindle	No	No	125
PH	12		N	Extended Spindle	No	No	125
	15	90	A	Extended Spindle	No	No	125
	16		N	Extended Spindle	No	No	125
	354	90	A		No	No	75
	355	90	A		No	No	75
	356	90	A		No	No	75
	357	90	A		No	No	75
	359		N		No	No	75
	SEC27-180		N	Extended Spindle	Yes	Yes	650
	1350		N				150
	1351		N				250

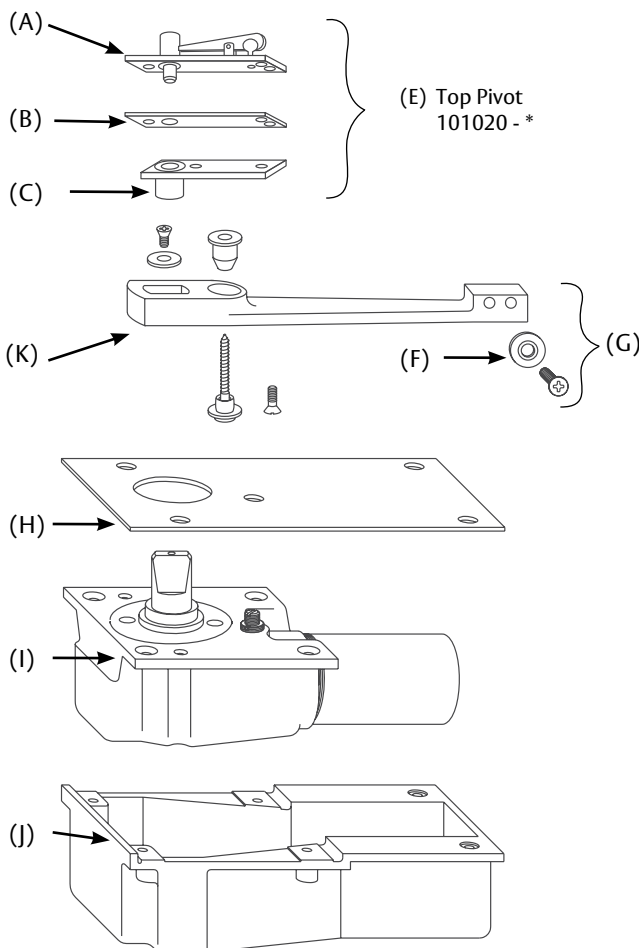
How to Order



*specify finish

Model 10, PH10, 12, PH12, 15, 16 Duo-Chek®

(A) Jamb Portion 3065
(B) Finish Plate 012202-*PK(BRS) 012204-*PK(SS)
(C) Door Portion 12716
(F) Alignment Screws & Washers 107032 - *
(K) Duo Arm 1004



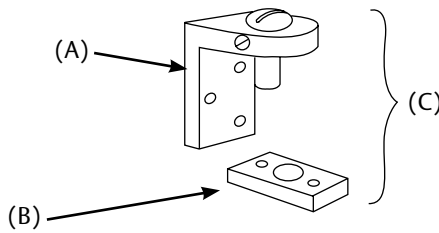
(G) Arm Package 102026 - * (Includes K and F)
(H) Floor Plate with Screws 104020 - *
(I) Closer Body (Specify Complete Model No. x LAP)
(J) Cement Case with Screws 103000

Screw Kits
Top Pivot Screw Kit 107329
Arm Screw Kit 107054
Floor Plate Screw Kit 107004-*

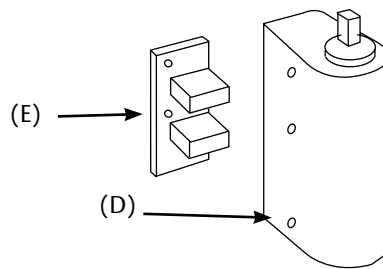
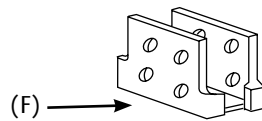
*specify finish

Model 354

(A) Jamb Portion 01960-*AS
(B) Gate Portion 35064-*AS
(E) Bracket 3549000-* (Includes Closer Mtg. Screw Kit)



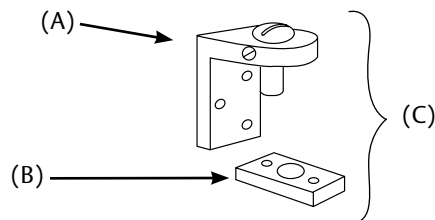
(C) Top Pivot Package 3541020-* (Includes A, B and attaching screws)
(F) Arm with Screws 3542026-*
(D) Closer Body X03540370-* (Includes E)



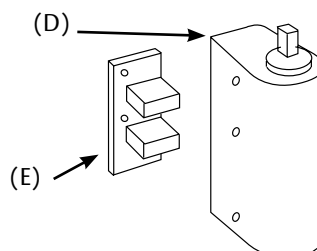
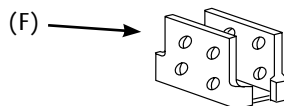
Screw Kits
Top Pivot Screw Kit 107017-*
Closer Mtg. Screw Kit 107350

Model 355

(A) Jamb Portion 0490-*AS
(B) Gate Portion 35064-*AS
(E) Bracket 3549000-* (Includes Closer Mtg. Screw Kit)



(C) Top Pivot Package 3551020-* (Includes A,B and attaching screws)
(F) Arm with Screws 3542026-*
(D) Closer Body X03540370-* (Includes E)

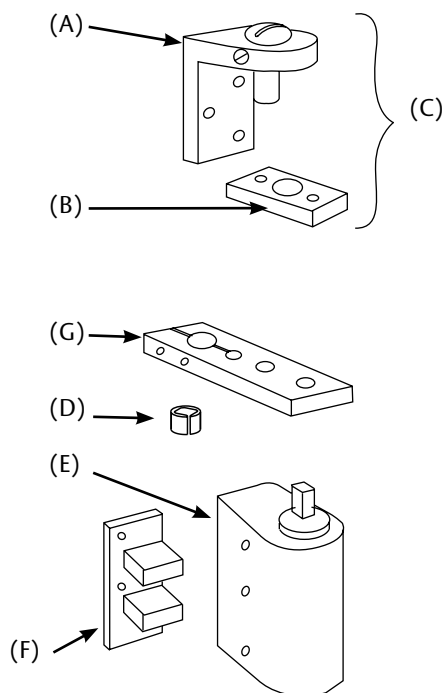


Screw Kits
Top Pivot Screw Kit 107017
Closer Mtg. Screw Kit 107350

*specify finish

Model 356

(A) Jamb Portion 01960-*AS
(B) Gate Portion 35064-*AS
(D) Bushing Only 35051 (Included in arm package)
(F) Bracket 3549000-* (Includes Closer Mtg. Screw Kit)

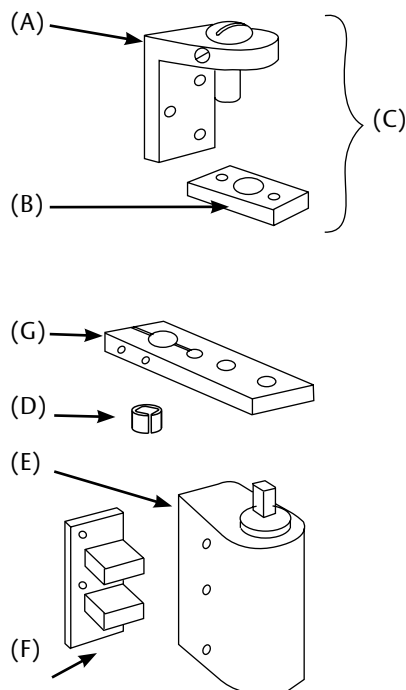


(C) Top Pivot Package 3541020-* (Includes A,B and attaching screws)
(G) Arm with Screws 3562020-* (Includes D and attaching screws)
(E) Closer Body X03540370-* (Includes F)

Screw Kits
Top Pivot Screw Kit 107017 -*
Arm Screw Kit 107359
Closer Mtg. Screw Kit 107350

Model 357

(A) Jamb Portion 0490-*AS
(B) Gate Portion 35064-*AS
(D) Bushing Only 35051 (Included in arm package)
(F) Bracket 3549000-* (Includes Closer Mtg. Screw Kit)



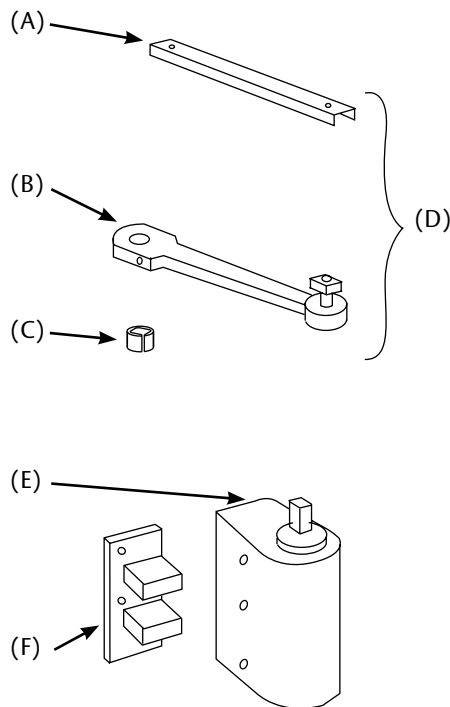
(C) Top Pivot Package 3551020-* (Includes A,B and attaching screws)
(G) Arm with Screws 3562020-* (Includes D and attaching screws)
(E) Closer Body X03540370-* (Includes F)

Top Pivot Screw Kit 107017-*
Arm Screw Kit 107359
Closer Mtg. Screw Kit 107350

*specify finish

Model 359

(A) Rail 35510-*
(B) Arm with Screw & Bushing 35535-*
(C) Bushing Only 35051 (Included in arm package)
(F) Bracket 3549000- (Includes Closer Mtg. Screw Kit)



(D) Arm & Rail Package 3592010- (Includes A, B, C and attaching screws)
(E) Closer Body X03540370- (Includes F)

Screw Kits
Arm Screw Kit 107003
Closer Mtg. Screw Kit 107350

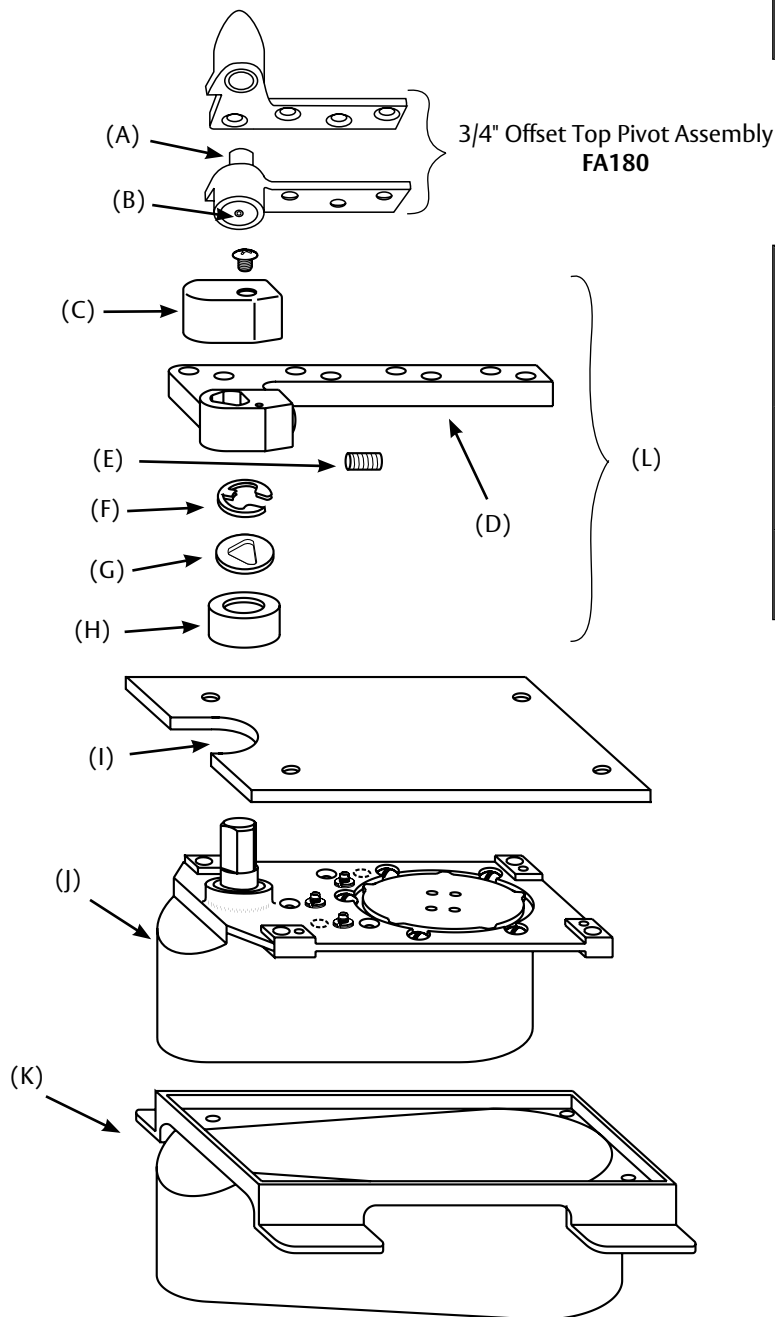
*specify finish

Models 1350 & 1351

No parts available

Model SEC27-180

(A) Pivot Stud 181770-Asy
(B) Finish Cap 181778 -*
(C) Arm Cap & Screw 012142R*T (RH, BRS) 012142L*T (LH, BRS) 012144R*T (RH, SS) 012144L*T (LH, SS)
(D) Arm x Locking Screw 18550-Asy (RH) 18650-Asy (LH)
(E) Arm Locking Screw Only) 88905-PKG (5)
(F) Arm Shims 275065-PKG (5)
(G) Arm Bearing Washer 275062-PKG (5)
(H) Spindle Shoulder Collar 259000 -*
(I) Floor Plate with Screws 274056 -*
(J) Closer Body (Specify Complete Model No. x LAP)
(K) Cement Case with Screws 253006R (RH) 253006L (LH)



(L) Bottom Arm Package
252056R* (RH)
252056L* (LH)
(Includes C, D, H and
attaching screws)

FA180 Torx® Screw Kit
107014 - *T Machine (2
required)
107114 - *T Wood (2
required)

Arm Screw Kit
107144 Machine (2
required)
107048 Wood (2 required)

Floor Plate Screw Kit
107021 -*

*specify finish

RIXSON®
ASSA ABLOY

Special Condition Accessories
and Installation Aids to Give the
Owner the True Benefit of
Using Floor Closers and Pivots



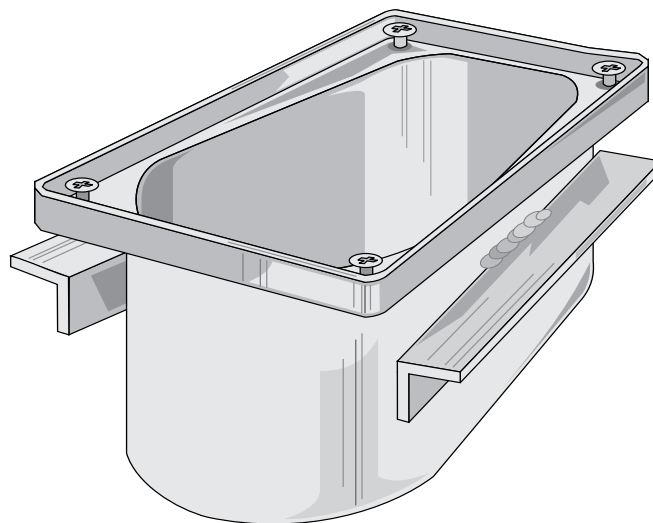
ASSA ABLOY, the global leader in door opening solutions

Introduction

This section includes a myriad of items to make sure all closing/hanging installations will give the best performance for the longest period of time.

It may be a caster for an extra-wide pivoted door or a tool to make sure the product has been installed correctly.

Take a minute to see some items that can make your life as a designer or as a distributor a little easier.



79501 Cement Case

Contents	Page
Door Control Accessories: General Information.....	86
Caster	
10600 Single Roller Caster	88
10602 Double Roller Caster	88
Special Cement Cases	
1101 Cement Case for Use Between 2 Slabs	89
79501 Cement Case for Use with Shallow Floors	89
25204 Twin Cement Case 1-7/8" Mullion for back-to-back closers	90
25304 Twin Cement Case 2" Mullion for back-to-back closers	90
Cover Pans	
846 Cover Pan for 27 closer, all depths	91
2237 Cover Pan for 28 closer x 554 flat arm, all depths	91
841 Cover Pan for 28 closer, centering arm, all depths	91
841B Cover pan for H28	91
841C Cover Pan for H28 x 587	91
2637 Cover Pan for 51 closer, all depths	91
2807D Cover Pan for 53 closer, all depths	91
2807B Cover Pan for 50 closer x 554 flat arm, all depths	91
2807A Cover Pan for 50 closer, centering arm, all depths	91
Applied Stop	
60131 Lock edge applied stop for center hung doors	92
Installation Tools	
2604/2608 Pivot Alignment Tools	93
1859001 27/28/30/40 Quickspotter	93
1859501 Q27 Quickspotter	93
1855051 50/51/53 Quickspotter	93
Installation DVDs	94

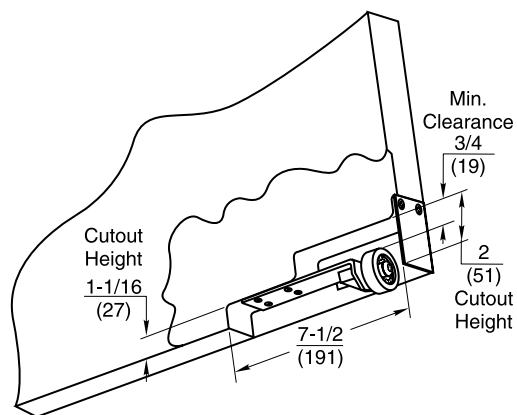
RollerMate® 10600 Caster for Leading Door Edge



Product Description & Features

- Casters are required for all doors over 5' wide that are pivoted near the heel edge of the door
- Can assist doors weighing up to 730 pounds. For doors up to 1500 pounds model 10602 should be used
- Metal doors minimum 1-3/4" thickness
- Wood doors minimum 2-1/4" thickness
- (3) 1/16" shim plates included for adjustment after door is installed
- Optional End Cap to finish off edge of door 10600-019
- Hollow metal mounting plate available
- For low frequency usage
- For interior door installations
- For pivot doors only
- Patented

Technical Information



1101 Cement Case for Exterior Expansion Joints or Between Slab Applications



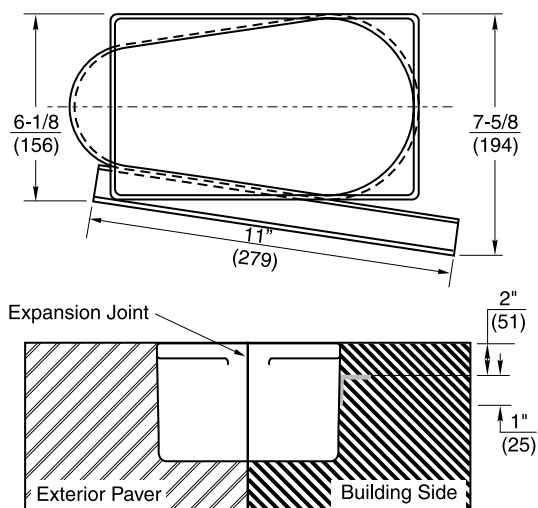
Application

At expansion joints, angle is applied to one side of a cast iron cement case allowing it to anchor to interior slab. Outside edge of slab independent of exterior slab.

To be used with 27 or 28 closer
(*not recommended for L or H series — extra heavy duty models*)

Specify hand or door swing.

Technical Information



79501 Heavy Duty Cement Case for Shallow Depth Floors



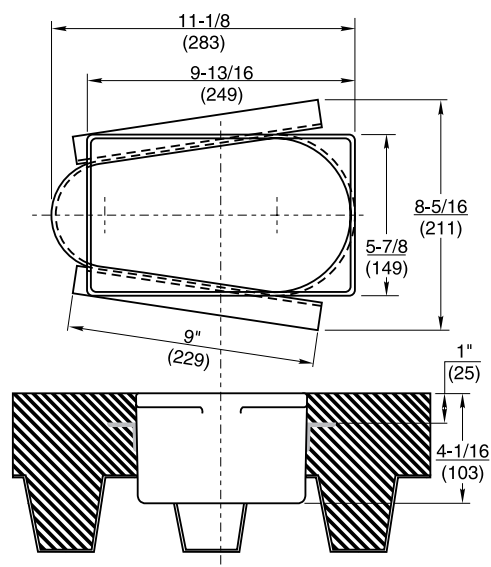
Application

When a shallow concrete floor (*less than 4-1/2"*) presents installation difficulties, there is no need to sacrifice proper door control. Heavy-duty closers (27 and 28) that are normally furnished with cyclac cases may be ordered with metal cases that have steel angles welded to the sides.
(For 30/40 series closers contact factory)

(*not recommended for L or H series — extra heavy-duty models*)

When concrete is poured the only concern is that the angles be stable.

Technical Information



Twin Cement Case



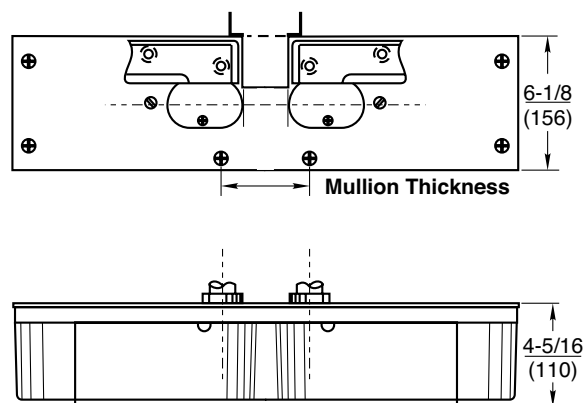
Application

27 closers cannot be mounted back-to-back where space between doors is less than 2-7/8" (73mm), without modification. When a 2" (51mm) (25304) or 1-7/8" (48mm) (25204) mullion is the only separation for these offset closers, a twin cement case must be furnished.

The closers are also modified

When a twin cement case is ordered, mullion width must be indicated. Both closers and cement cases must be ordered at the same time. Field modification to standard product is not possible.

Technical Information

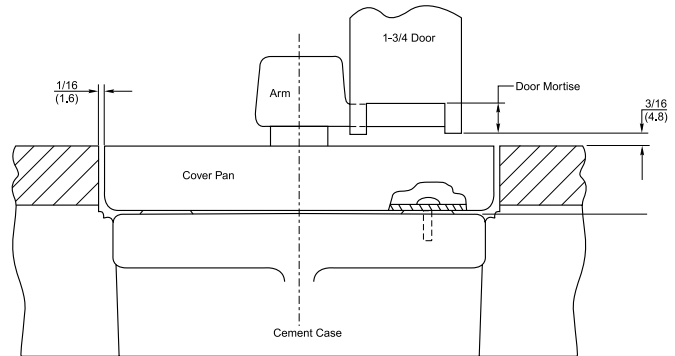


Cover (Terrazzo) Pans

Technical Information



Closers that are "buried" under floor materials, that do not have Rixson cover pans, will not be covered by warranty.



Application

To ensure the aesthetics of a continuous floor line, a cover pan can be used in lieu of a closer floor plate. A cover pan is filled with flooring material (terrazzo, marble, tile, etc.) and is then placed on top of the floor closer. This allows access to the floor closer for maintenance.

Specify stainless steel or brass, exact closer being used, hand, and depth of pan. (7/8" (22mm) is standard.) Deduct cost of floor plate, add for extended spindles, and add for cover pan.

For pan depths and closer spindle information, refer to "Templates" and "Door Control Accessories". Common cover pan part numbers include:

846	27 closer, all depths
2237	28 closer x 554 flat arm, all depths
841	28 closer, centering arm, all depths
841B	H28 closer, 2" door or thickness
841C	H28 closer x 587 arm
2637	51 closer, all depths
2807D	53 closer, all depths
2807B	50 closer x 554 flat arm, all depths
2807A	50 closer, centering arm, all depths

Any other closer models will be special layouts. Contact factory for correct product numbers and pricing.

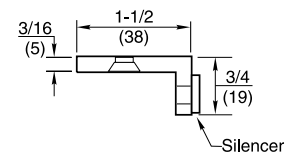
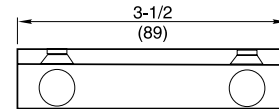
60131 Applied Stop



Application

For center hung doors with single acting closers. Mount to underside of frame head at the lock edge to keep doors from resting past center.

Technical Information



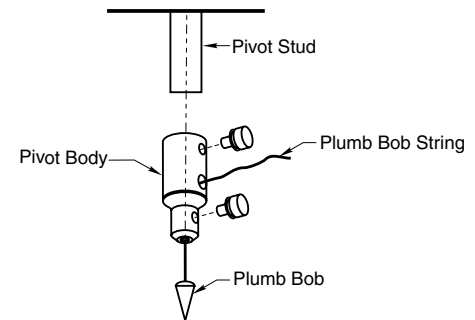
2604/2608 Pivot/Closer Alignment Tool



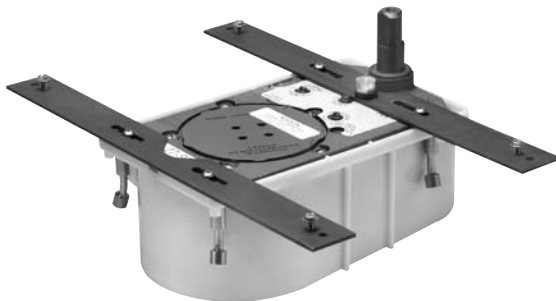
Application

- Reuseable tool ensures proper alignment of top and bottom pivot or closer
- May be used for offset or center hung installations
- Plumb line and bob not included
- Can be reused for future/additional installations
- For H340 and H345 top pivots use part number 2608

Technical Information



1859001 Quickspotter

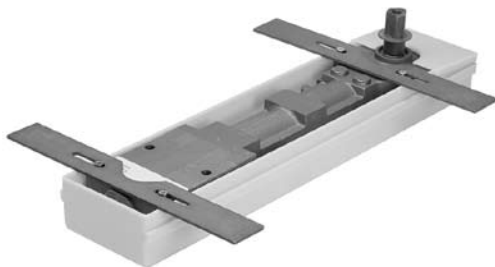


Application

Metal straps are attached to the closer to suspend it during setting. Locator indicates proper placement of spindle. The level ensures a leveled installation.

- Spindle locator plate (*for offset and center hung installations*)
- 2 spotter straps with leveling screws
- Bubble level
- May be used on Models 27, 28, 30, 40
- Can be reused for future/additional installations
- For Q27 specify model 1859501 Quickspotter

1855051 Quickspotter



Application

Metal straps are attached to the closer to suspend it during setting. Locator indicates proper placement of spindle. The level ensures a leveled installation.

- Spindle locator plate (*for offset and center hung installations*)
- 2 spotter straps with leveling screws
- Bubble level
- May be used on models 50, 51, and 53
- Can be reused for future/additional installations

Installation DVDs

Since installation of floor closers and pivots is a very sensitive and intimidating process, Rixson has developed step-by-step instructions on how to make the cavity in the concrete for the cement cases, use the pivot alignment tools, employ Quickspotters and view actual door hanging.

These vital installation support items are found on the Rixson website at www.rixson.com under "Installation Aids". They are also available from your local ASSA ABLOY Door Security Solutions sales agency (www.rixson.com under "Sales Contacts").

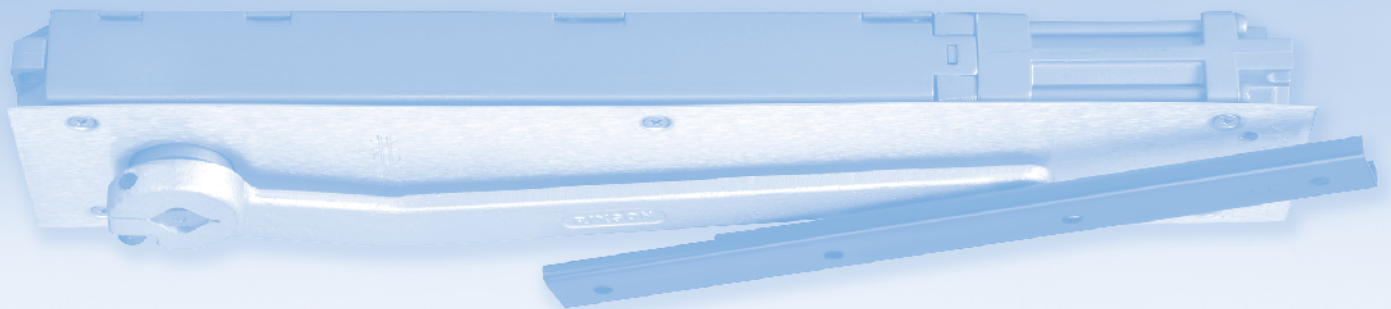
With these audio/video representations, installing a door closer will take little more time than hanging a butt hung door. And there will be the additional benefit of guaranteeing that the door is hanging plumb and true. Most important, the owner will get scores of years of service from the concealed hardware.



Overhead Concealed Closers

RIXSON®
ASSA ABLOY

*Frame Head Concealed Closers
Designed for Aluminum,
Hollow Metal, or Wood
Doors and Frames*



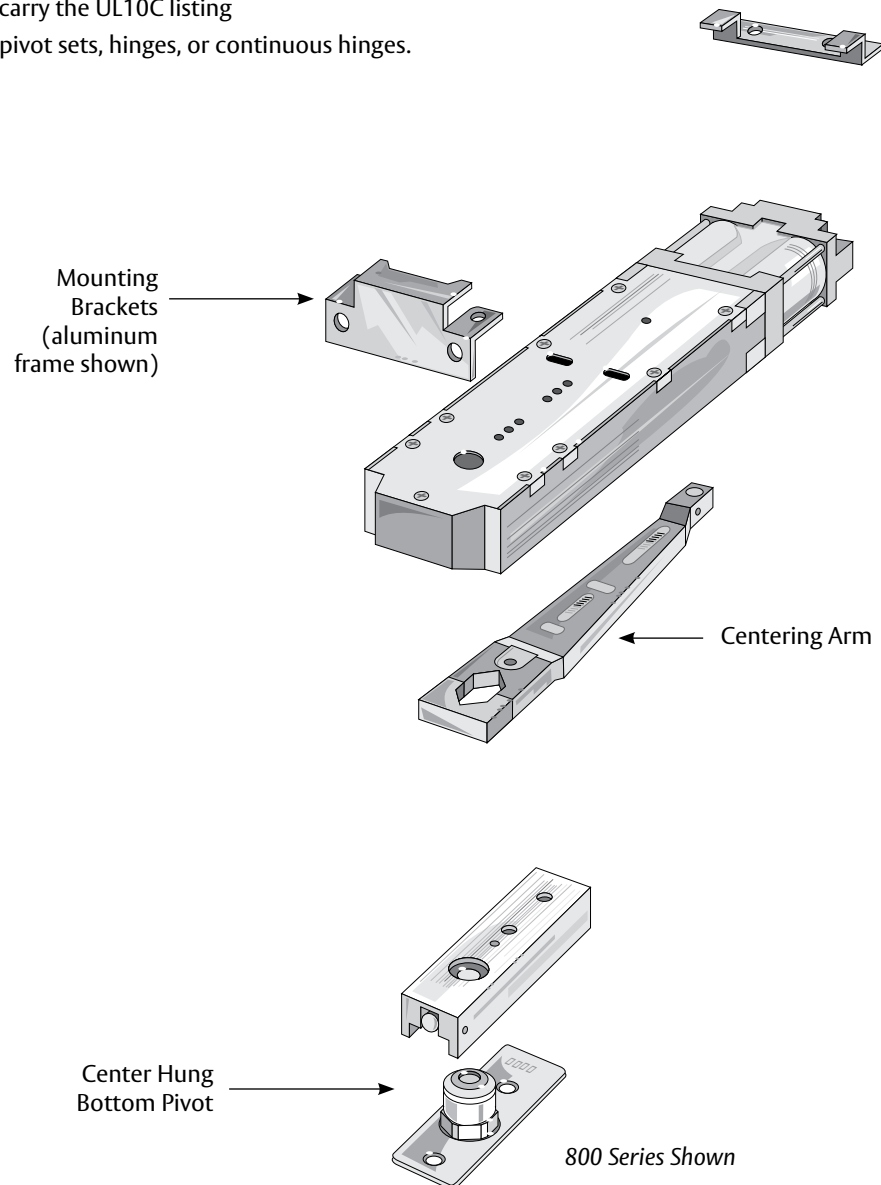
ASSA ABLOY, the global leader in door opening solutions

Introduction

Sometimes closers cannot practically be installed in the floor but concealment is desired. It is in this situation that closers will be concealed in the header of the frame.

Rixson provides 2 grades of overhead closers

- Commodity grade 608 series — for aluminum store front-medium traffic
- Architectural grade 700/800 series for larger, medium traffic doors
- Specific mounting brackets or boxes for aluminum, wood or metal frames
- Center hung models use the closer body as the top pivot and centering arm – making a more efficient closer
- Center hung models are packed with bottom pivot – eliminating the need for a separate pivot set
- Offset architectural grade products carry the UL10C listing
- Offset models can be installed with pivot sets, hinges, or continuous hinges.



Contents	Page
Overhead Concealed Closers: General Information	96
Options	98
Certifications	98
Limited Warranty	98
Specifications	98
 Commodity Grade Closer Model 608	
Offset Hung	
608 Closer for Aluminum Doors & Frames	99
M0608 Closer for Metal Doors & Frames	99
MW0608 Closer for Wood Doors & Metal Frames	99
W0608 Closer for Wood Doors & Frames	99
 Center Hung	
608EL End Load Arm Closer for Aluminum Doors & Frames	100
608SL Side Load Arm Closer for Aluminum Doors & Frames	100
M608 Closer for Metal Doors & Frames	100
MW608 Closer for Wood Doors & Metal Frames	100
W608 Closer for Wood Doors & Frames	100
AW608 Closer for Wood Doors & Aluminum Frames	100
 Architectural Grade Closer Models 700 & 800	
Offset Hung	
0700 Closer for Aluminum Doors & Frames	101
M0700 Closer for Metal Doors & Frames	101
MW0700 Closer for Wood Doors & Metal Frames	101
W0700 Closer for Wood Doors & Frames	101
 Single Acting Center Hung	
700 Closer for Aluminum Doors & Frames	102
M700 Closer for Metal Doors & Frames	102
MW700 Closer for Wood Doors & Metal Frames	102
W700 Closer for Wood Doors & Frame s	102
 Double Acting Center Hung	
800 Closer for Aluminum Doors & Frames	103
M800 Closer for Metal Doors & Frames	103
MW800 Closer for Wood Doors & Metal Frames	103
W800 Closer for Wood Doors & Frames	103
 How to Order	104
Parts Drawings	105-118

Overhead Concealed Closers Options Certifications Limited Warranty Specifications

Options

608 Series Commodity Grade Closer

Non-Hold Open – Suffix N

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

Automatic Hold Open – Suffix A

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

Degree of Swing – Follows Model Number

When product is ordered with automatic hold open, a degree of swing must be noted. Options are 90° or 105°. Non-hold open closers doors swing to 130°.

Extended Spindle – Suffix “Ext Spdl”

Often, it is desired to conceal the closer above ceiling tile or drywall. When this is done a longer spindle is required. This is available in 1/2" longer (only) than standard. Closer adjustment valves must always be accessible.

Handing

608 series closers are not handed.

700/800 Series Architectural Grade Closer

Non-Hold Open – Suffix N

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

Automatic Hold Open – Suffix A

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

Degree of Swing – Follows Model Number

When product is ordered a degree of swing must be noted. Options are 90° or 105°.

End Caps – 199

Used to cover mortise edges of wood doors center hung closer models. Two furnished, one for top arm other for bottom pivot. May be used on 608/700/800.

Extended Spindle – Suffix “Ext



Spdl”

Often, it is desired to conceal the closer beneath ceiling tile or drywall. When this is done a longer spindle is required. This is available in 1/2" longer (only) than standard. Closer adjustment valves must always be accessible.

Handing

700/0700 closers are either right or left hand. 800 series are double acting and non-handed.

Certifications

Rixson® 700/800 Overhead concealed closers are compliant to ANSI/BHMA 156.4 Standards. See individual products for sub sections.

Limited Warranty

Rixson® overhead concealed closers, models 608/700/800 are warranted for 2 years for defect. See Rixson Price Book for specific details of the limited warranty.

Specifications

Model 608 Overhead Concealed Closer

Compact cast iron body to fit in minimum 1-3/4 x 4" aluminum frame. Closer shall have separate and independent closing and latch speed control valves. Optional hold open at 90 or 105°. For center hung applications, arm shall have door centering adjustments and be directly connected to the closer spindle. Closer body is non-handed, single or double acting. Vertically adjustable center hung bottom pivot included. For independently hung doors use model 0608 with slide track arm and channel.

Model 700/800 Overhead Concealed Closer

Model 700 for single acting center hung doors. Hydraulic closer mechanism to fit in minimum 1-3/4" x 4" aluminum frame. Closer shall have a sized spring determined by the door width. Adjustable hydraulic backcheck and closing speed valves. Closers for single acting doors shall be handed and preloaded for positive closing action. Vertically adjustable center hung bottom pivot included. For double acting doors, use model 800 with adjustable closing speed for each swing direction. For independently hung doors use model 0700 with slide track arm and channel.

Model 0608 Offset Hung

Application

- Single Acting, Non-handed
- Exterior or Interior Doors
- Low to Medium Traffic
- Weight to 200 lbs.
- Door Size 3'8" x 8'0" (1118 x 2438mm)



Product Description & Features

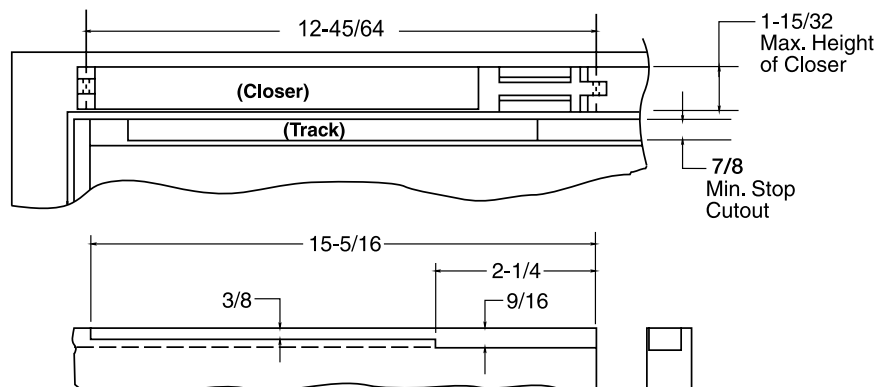
- Available in non-hold open (*door swings to 130°*) (N)
- Available in automatic hold open models — Specify 90° or 105° (A)
- Product should always be used with an auxiliary floor or wall stop
- 1-3/4" doors
- Arms are sprayed finishes only
- Adjustable closing and latch speeds
- On offset hung application, frame stop is required
- 1/2" longer than standard closer spindle is available and must be ordered as part of the closer. It cannot be added later
- Hanging means by others. Recommended product pivot set 547, see pivot section, page 128
- Cannot be used with a top pivot

Models

- **0608** closers should be used on aluminum doors and frames. Package includes closer body, arm and frame mounting clips. This can be used in an aluminum frame that is 1-3/4" x 4".
- **M0608** should be used on metal doors and frames. Package includes closer body, arm, frame mounting box 608049PKG*, and cover plate. Frame size 2" x 5-1/2" minimum.
- **MW0608** closer should be used on wood doors and metal frames. Package includes closer body, arm, frame mounting box 608049PKG* and cover plate. Frame size 2" x 5-1/2" minimum.
- **W0608** closer should be used on wood doors and frames. Package includes closer body, arm, frame mounting box 608049PKG and cover plate. Frame size 2" x 5-1/2" minimum.
- **AW0608** closer should be used on wood doors and aluminum frames. Package includes closer body, arm, frame mounting clips and cover plate. Frame size 1-3/4" x 4".

***Note that mounting channels must be welded into frames prior to shipment to job site.**

Technical Information



Model 608 Center Hung

Application

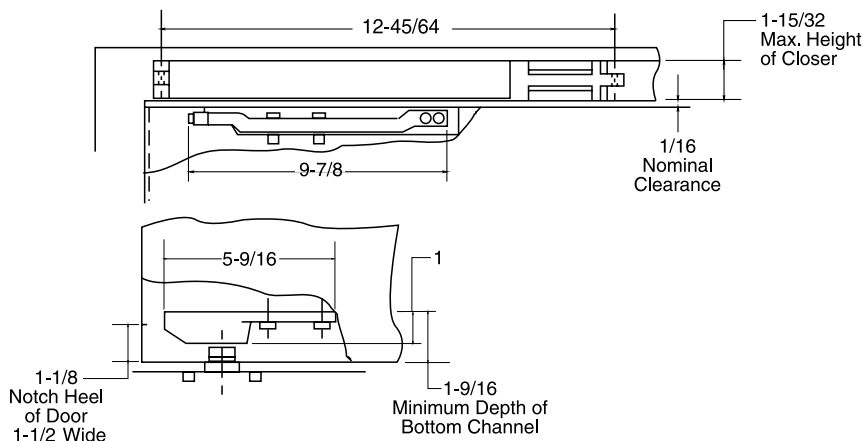
- Single or Double Acting, Non-handed
- Exterior or Interior Doors
- Low to Medium Traffic
- Weight to 200 lbs.
- Exterior Door Size 3'6" x 8'0" (1067 x 2438mm)
- Interior Door Size 3'8" x 8'0" (1118 x 2438mm)



End load arm shown

***Note that mounting channels must be welded into frames prior to shipment to job site.**

Technical Information



Product Description & Features

- Available in non-hold open (*door swings to 130° each direction*) (N)
- Available in automatic hold open models – Specify 90 or 105° (A)
- Product should always be used with an auxiliary floor or wall stop
- 1-3/4" doors
- Adjustable closing and latch speeds
- On single acting center hung application, frame stop is required (*see part number 60131 on page 92*), order separately
- 1/2" longer than standard closer spindle is available and must be ordered as part of the closer, it cannot be added later
- Includes 608011 bottom pivot
- Optional end cap 199 for top and bottom of wood door

Models

- **608EL** closers should be used on aluminum doors and frames. Package includes closer body, arm, frame mounting clips, and bottom pivot 608011. This can be used in an aluminum frame that is 1-3/4" x 4".
- **608SL** closers should be used on aluminum door and frames with an arm that attaches to the spindle thru the face of the door. Package includes body arm, frame, mounting clips and bottom pivot 608011. This can be used on a frame that is 1-3/4" x 4".
- **M608** closers should be used on metal doors and frames. Package includes closer body, arm, frame mounting box 608049PKG*, cover plate and bottom pivot 608011. Frame size 2"x 5-1/2" minimum.
- **MW608** closer should be used on wood doors and metal frames. Package includes closer body, arm, frame mounting box 608049PKG*, cover plate and bottom pivot 608011. Frame size 2"x 5-1/2" minimum.
- **W608** closer should be used on wood doors and frames. Package includes closer body, arm, frame, mounting box 608049PKG, cover plate and bottom pivot 608011. Frame size 2"x 5-1/2" minimum.
- **AW608** closer should be used on wood doors and aluminum frames. Package includes closer body, arm, frame mounting clips, and bottom pivot 608011. Frame size 1-3/4" x 4".

Model 0700 Offset Hung

Application

- Single Acting, Handed
- Exterior or Interior Doors
- Low to Medium Traffic
- Weight to 200 lbs.



ANSI C05032, C05042

RH Closer shown with cover, furnished with W, M, MW models

***Note that mounting channels must be welded into frames prior to shipment to job site.**

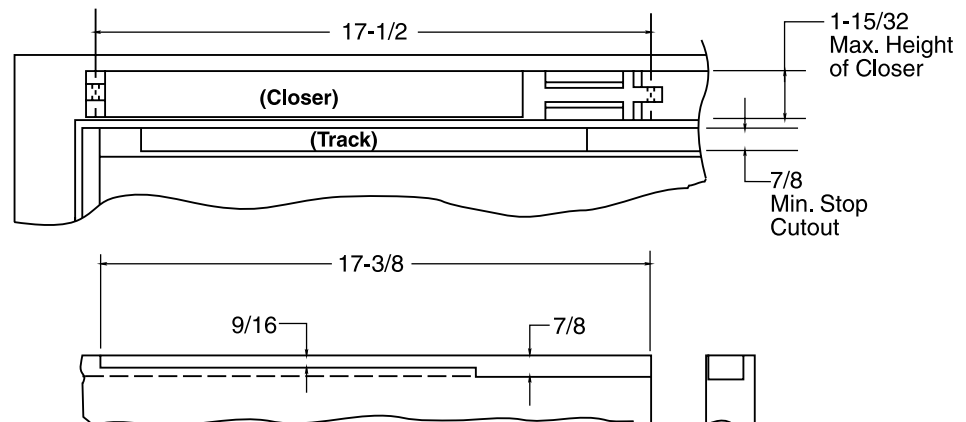
Product Description & Features

- Available in non-hold open (N) or automatic hold open (A)
- Product should always be used with an auxiliary floor or wall stop – Specify 90 or 105° (A or N)
- 1-3/4" doors
- Arms are sprayed finishes only
- Adjustable closing speed
- Adjustable hydraulic backcheck
- UL10C listed for fire rated opening
- 1/2" longer than standard closer spindle is available and must be ordered as part of the closer. It cannot be added later
- Hanging means by others. Recommended pivot set 547 see pivot section, page 128
- Cannot be used with a top pivot

Models

- **0700** closers should be used on aluminum doors and frames. Package includes closer body, arm and frame mounting clips 1639000. This can be used in an aluminum frame that is 1-3/4" x 4".
- **M0700** should be used on metal doors and frames. Package includes closer body, arm, frame mounting box 01920910*, and cover plate. Frame size 2" x 5-1/2" minimum.
- **MW0700** closer should be used on wood doors and metal frames. Package includes closer body, arm, frame mounting box 01920910* and cover plate. Frame size 2" x 5-1/2" minimum.
- **W0700** closer should be used on wood doors and frames. Package includes closer body, arm, frame mounting plate 01980900 and cover plate. Frame size 2"x 5-1/2" minimum.

Technical Information



Sized Springs

0706, M0706, MW0706, W0706	0707, M0707, MW0707, W0707	0708, M0708, MW0708, W0708
Exterior 2'6" x 8'0" (762mm x 2438mm)	Exterior 3'0" x 8'0" (914mm x 2438mm)	Exterior 3'6" x 8'0" (1067mm x 2438mm)
Interior 3'0" x 8'0" (914mm x 2438mm)	Interior 3'3" x 8'0" (991mm x 2438mm)	Interior 3'8" x 8'0" (1118mm x 2438mm)

Specify size when ordering

In USA: (800) 457-5670 or www.rixson.com

In Canada: (800) 461-3007 or www.assaabloy.ca

6/10

ASSA ABLOY, the global leader in door opening solutions

Architectural Grade Overhead Concealed Closers Single Acting Center Hung

Model 700 Center Hung

Application

Single Acting, Handed
Exterior or Interior Doors
Low to Medium Traffic
Weight to 200 lbs.



ANSI C05052



Closer shown with cover, furnished
with W, M, MW models

***Note that mounting channels must be welded into
frames prior to shipment to job site.**

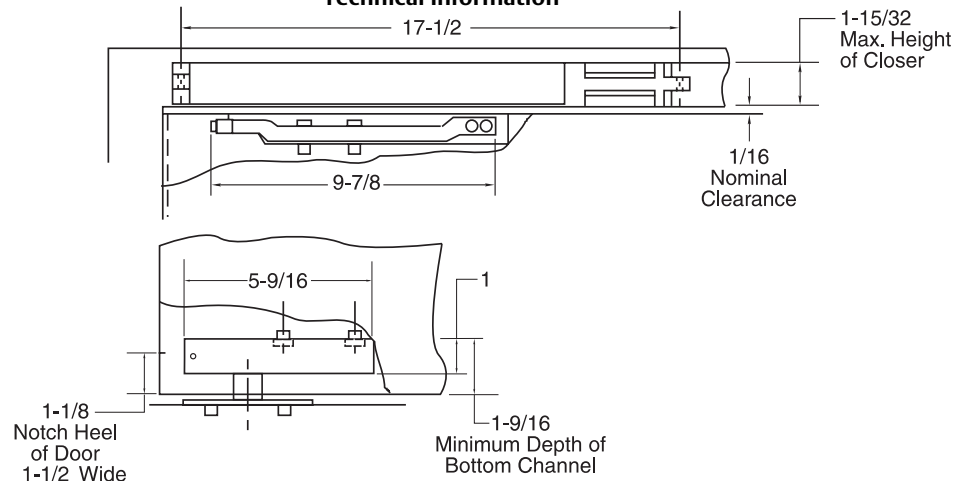
Product Description & Features

- Available in non-hold open (N) or automatic hold open (A). Specify 90 or 105°, A or N
- Product should always be used with auxiliary stop
- 1 3/4" doors
- Adjustable closing speed
- Adjustable hydraulic backcheck
- Frame stop required (*see part number 60131 on page 92*), order separately
- 1/2" longer than standard closer spindle is available and must be ordered as part of the closer. It cannot be added later
- Includes 2183020 bottom pivot
- Optional end cap 199 for top and bottom of wood door

Models

- **700** should be used on aluminum doors and frames. Package includes closer body, arm, frame mounting clips 1639000 and bottom pivot 2183020
- **M700** should be used on metal doors and frames. Package includes closer body, arm, cover plate, frame mounting channel 1929000* and bottom pivot 2183020
- **MW700** should be used on wood doors and metal frames. Package includes closer body, arm, cover plate, frame mounting channel 1929000* and bottom pivot 2183020
- **W700** should be used on wood doors and frames. Package includes closer body, arm, cover plate, frame mounting channel 19809010 and bottom pivot 2183020

Technical Information



Sized Spring

706, M706, MW706, W706	707, M707, MW707, W707	708, M708, MW708, W708
Exterior 2'6" x 8'0" (762mm x 2438mm)	Exterior 3'0" x 8'0" (914mm x 2438mm)	Exterior 3'6" x 8'0" (1067mm x 2438mm)
Interior 3'0" x 8'0" (914mm x 2438mm)	Interior 3'3" x 8'0" (991mm x 2438mm)	Interior 3'8" x 8'0" (1118mm x 2438mm)

Specify size when ordering

Architectural Grade Overhead Concealed Closers Double Acting Center Hung

Model 800 Center Hung

Application

Double Acting, Non-handed
Exterior or Interior Doors
Low to Medium Traffic
Weight to 200 lbs.



ANSI C05052, C05062



Closer shown with cover,
furnished with W, M, MW models

***Note that mounting channels must be welded into frames prior to shipment to job site.**

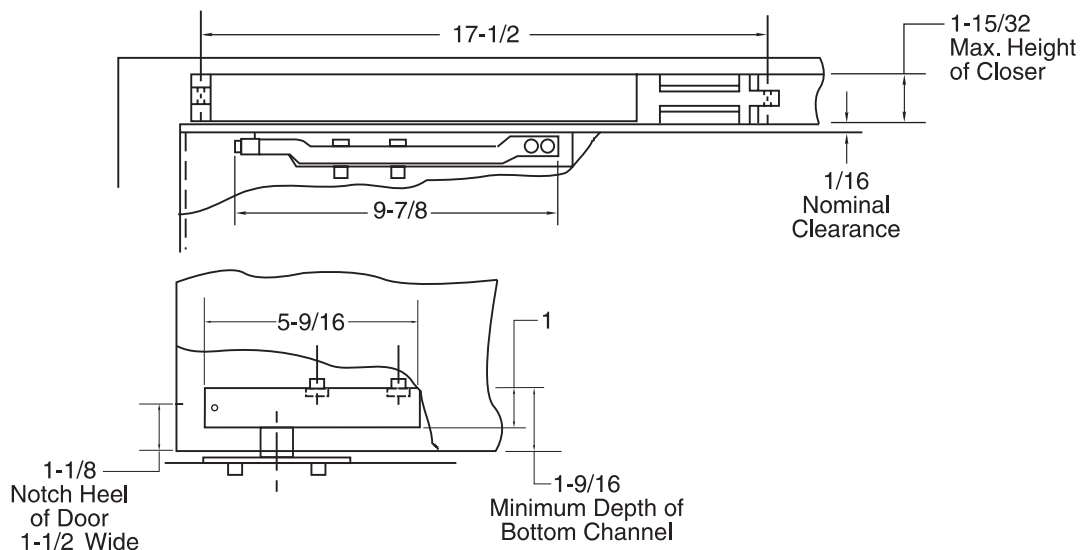
Product Description & Features

- Available in non-hold open (N) or automatic hold open (A). Specify 90 or 105°, A or N
- Product should always be used with an auxiliary floor or wall stop
- 1 3/4" doors
- Adjustable closing speed
- 1/2" longer than standard closer spindle is available and must be ordered as part of the closer. It cannot be added later
- Includes 2183020 bottom pivot
- Optional end cap 199 for top and bottom of wood door

Models

- **800** should be used on aluminum doors and frames. Package includes closer body, arm and frame mounting clips 1639000 and bottom pivot 2183020.
- **M800** should be used on metal doors and frames. Package includes closer body, arm, cover plate, frame mounting channel 1929000* and bottom pivot 2183020.
- **MW800** should be used on wood doors and metal frames. Package includes closer body, arm, cover plate, frame mounting channel 1929000* and bottom pivot 2183020.
- **W800** should be used on wood doors and frames. Package includes closer body, arm, cover plate, frame mounting channel 1989000, and bottom pivot 2183020.

Technical Information



Sized Springs

806, M806, MW806, W806	807, M807, MW807, W807	808, M808, MW808, W808
Exterior 2'6" x 8'0" (762mm x 2438mm)	Exterior 3'0" x 8'0" (914mm x 2438mm)	Exterior 3'6" x 8'0" (1067mm x 2438mm)
Interior 3'0" x 8'0" (914mm x 2438mm)	Interior 3'3" x 8'0" (991mm x 2438mm)	Interior 3'8" x 8'0" (1118mm x 2438mm)

Specify size when ordering.

How to Order

Commodity Grade Closer Models 608

M608 Model	90A Hold Open or Not	x 1/2" Ext Spdl Suffix	x 626 Finish
Offset Hung 0608 Closer for Aluminum Drs & Frames M0608 Closer for Metal Drs & Frames MW0608 Closer for Wood Drs & Metal Frames W0608 Closer for Wood Drs & Frames AW0608 Closer for Wood Drs & Aluminum Frames Center Hung 608EL End Load Arm Closer for Aluminum Drs & Fr 608SL Side Load Arm Closer for Aluminum Drs & Fr M608 Closer for Metal Drs & Frames MW608 Closer for Wood Drs & Metal Frames W608 Closer for Wood Drs & Frames AW608 Closer for Wood Drs & Aluminum Frames	90A Hold Open 105A Hold Open N Non-Hold Open	1/2" Extended Spindle	Arms Only 689 Sprayed Alum 690 Sprayed Dk Brz 691 Sprayed Lt Brz 696 Sprayed Brass Cover Plates 605 Bright Brass 606 Satin Brass 611 Bright Bronze 612 Satin Bronze 613 Dark Bronze 619 Satin Nickel 622 Flat Black 625 Bright Chrome 626 Satin Chrome

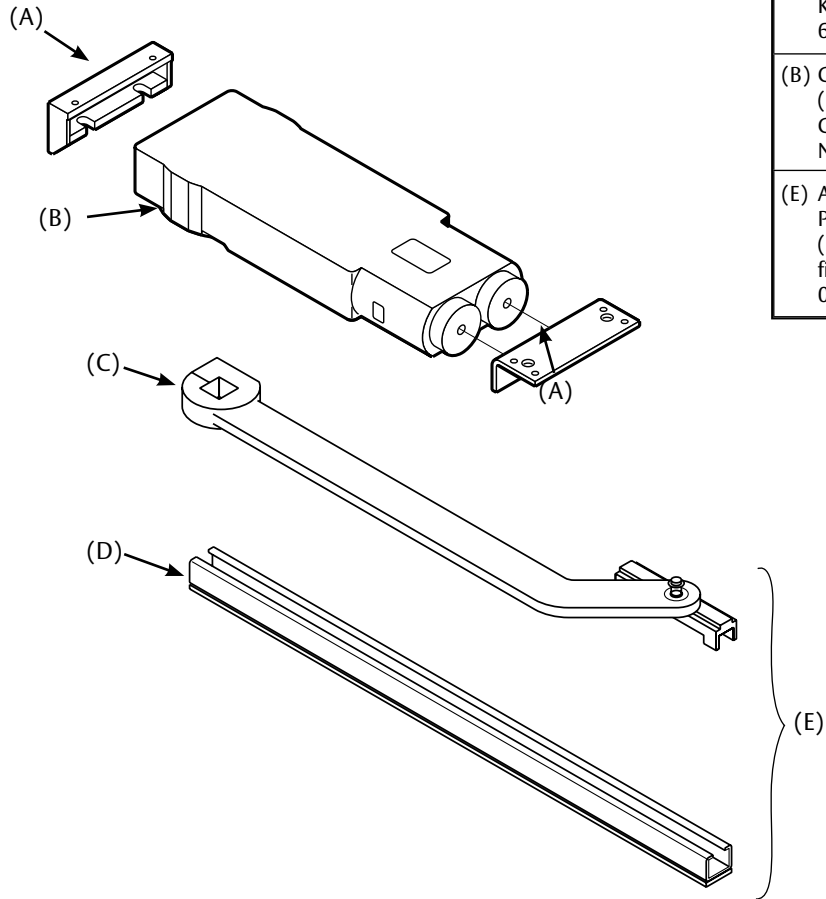
Overhead
Concealed Closers

Architectural Grade Closer Models 700 & 800

M80 Model	6 Spring Size	90A Hold Open or Not	x 1/2" Ext Spdl Suffix	— Hand	x 626 Finish
Offset Hung 0700 Closer for Aluminum Drs & Frames M0700 Closer for Metal Drs & Frames MW0700 Closer for Wood Drs & Metal Frames W0700 Closer for Wood Drs and & Frames Single Acting Center Hung 700 Closer for Aluminum Drs & Frames M700 Closer for Metal Drs & Frames MW0700 Closer for Wood Drs & Metal Frames W0700 Closer for Wood Drs and & Frames Double Acting Center Hung 800 Closer for Aluminum Drs & Frames M800 Closer for Metal Drs & Frames MW800 Closer for Wood Drs & Metal Frames W800 Closer for Wood Drs & Frames	6* 7* 8* <i>*See catalog for door widths</i>	90A Hold Open 105A Hold Open 90N Non-Hold Open 105N Non-Hold Open	1/2" Extended Spindle	700 Series RH Right Hand LH Left Hand 800 Series Blank Non-handed	Arms Only 689 Sprayed Alum 690 Sprayed Dk Brz 691 Sprayed Lt Brz 696 Sprayed Brass Cover Plates 605 Bright Brass 606 Satin Brass 611 Bright Bronze 612 Satin Bronze 613 Dark Bronze 619 Satin Nickel 622 Flat Black 625 Bright Chrome 626 Satin Chrome

0608/AW0608

(C) Arm Assembly (sprayed finishes only) 0608312-*
(D) Rail 0608109



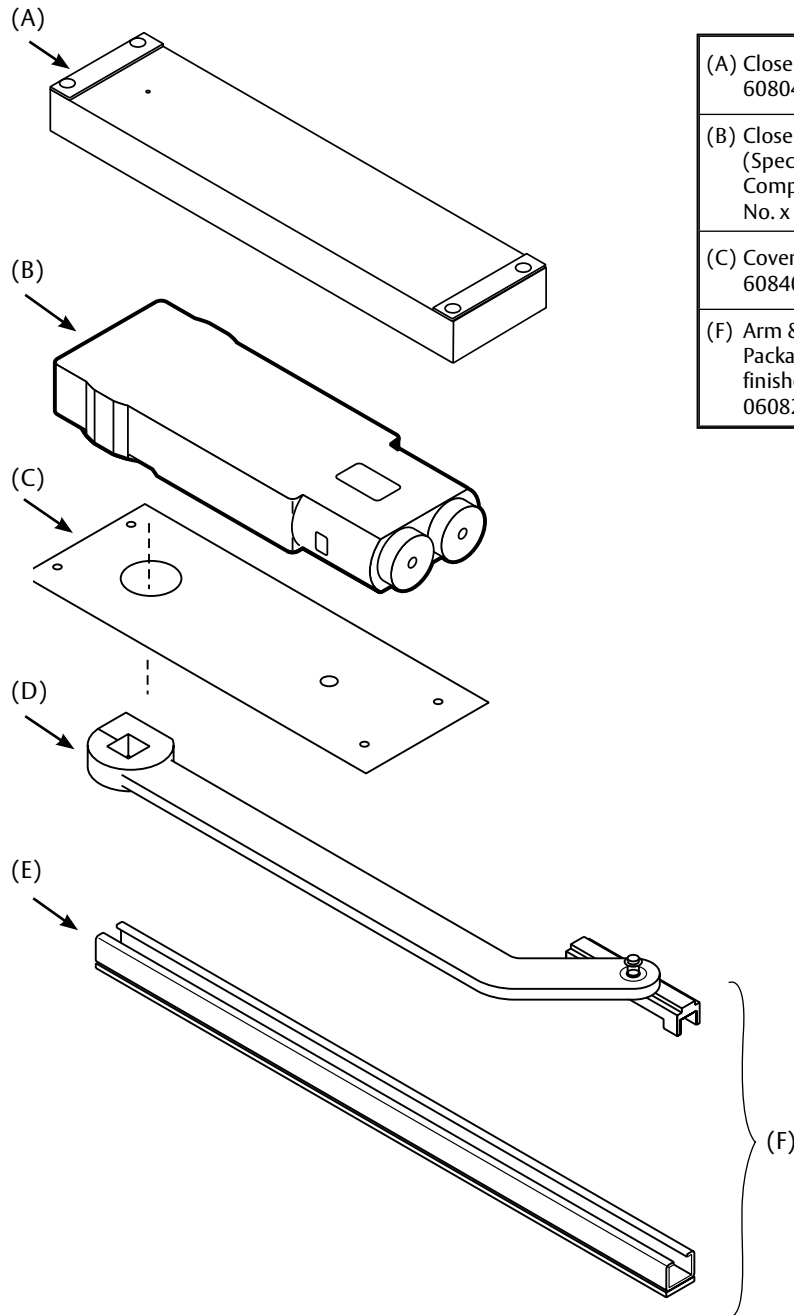
(A) Closer Mounting Kit 608019
(B) Closer Body (Specify Complete Model No. x LAP)
(E) Arm & Rail Package (sprayed finishes only) 06082012-*

Screw Kit
Screw Kit 608064

*specify finish

M0608/MW0608/W0608

(D) Arm Assembly (sprayed finishes only) 0608312-*
(E) Rail 0608109

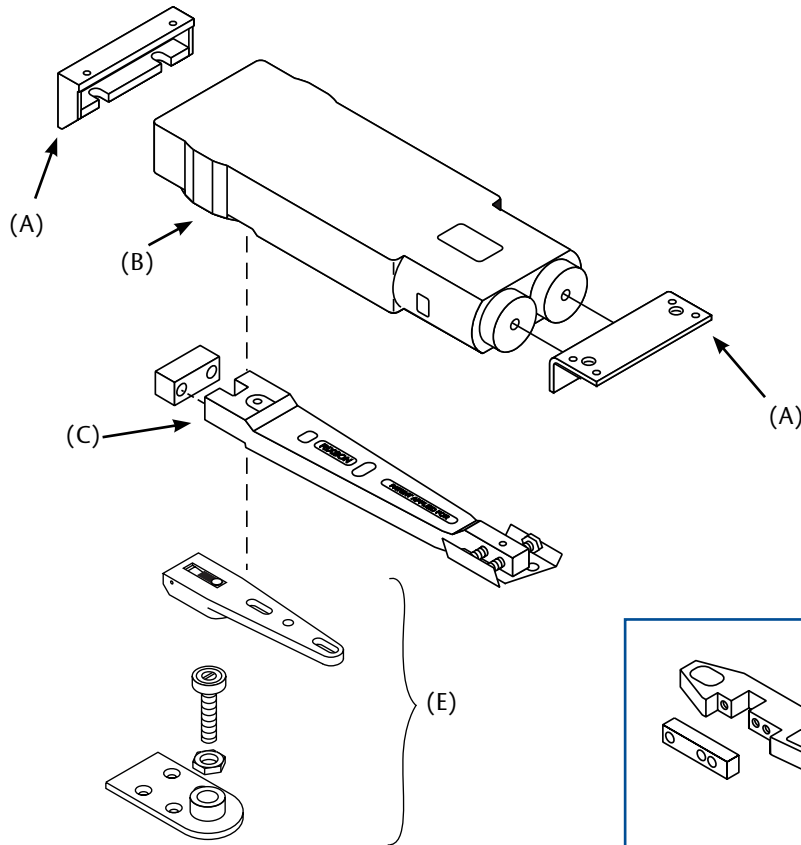


(A) Closer Mounting Kit 608049PKG
(B) Closer Body (Specify Complete Model No. x LAP)
(C) Cover Plate 6084000-*
(F) Arm & Rail Package (sprayed finishes only) 06082012-*

Screw Kits
Cover Plate Screw Kit 107022-*
Screw Kit 608064

*specify finish

608EL/608SL



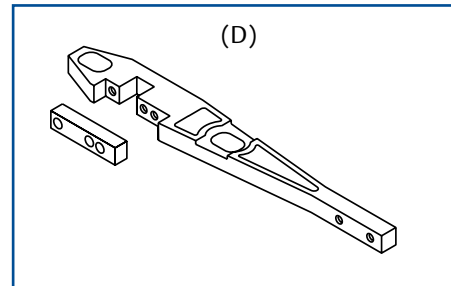
(A) Closer Mounting Kit
608019

(B) Closer Body
(Specify Complete
Model No. x LAP)

(C) End Load Arm Pkg
6002020

(D) Side Load Arm
6080055

(E) Bottom Pivot with
Screws
608011A



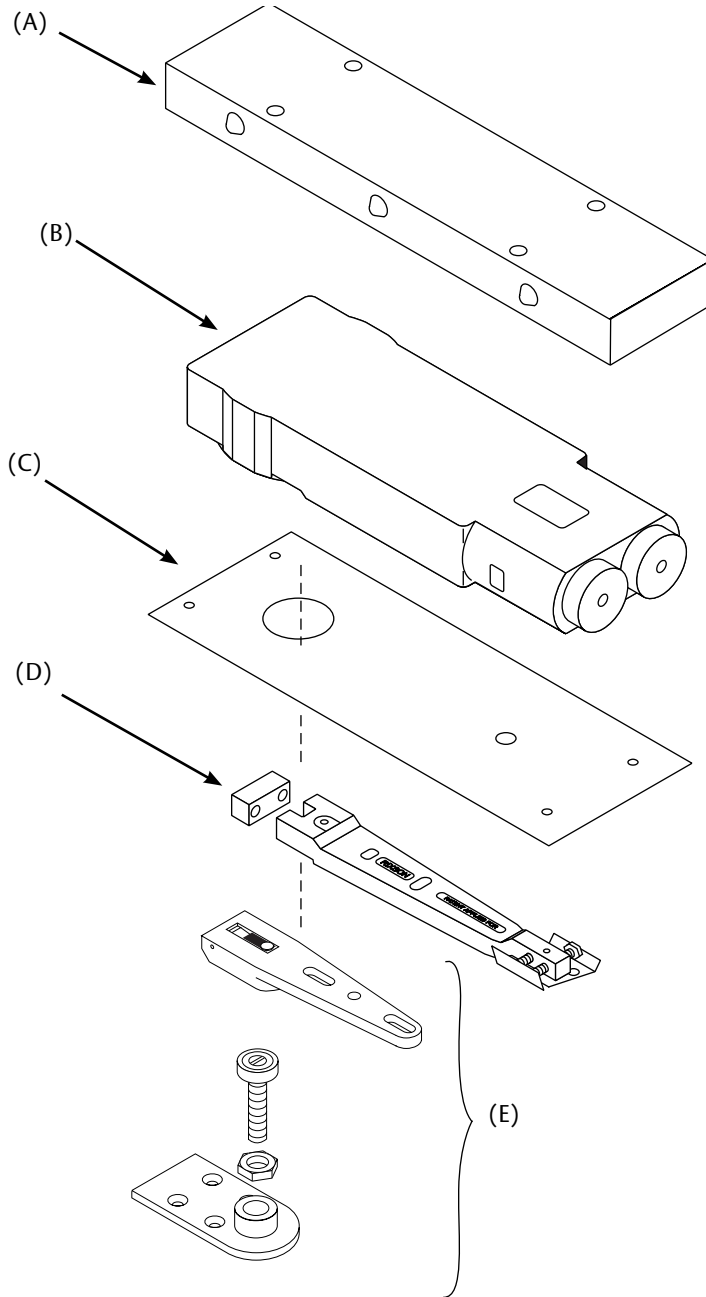
Screw Kit

Arm Screw Kit
(Includes arm end
block)
107065

Bottom Pivot Screw Kit
107143

*specify finish

M608

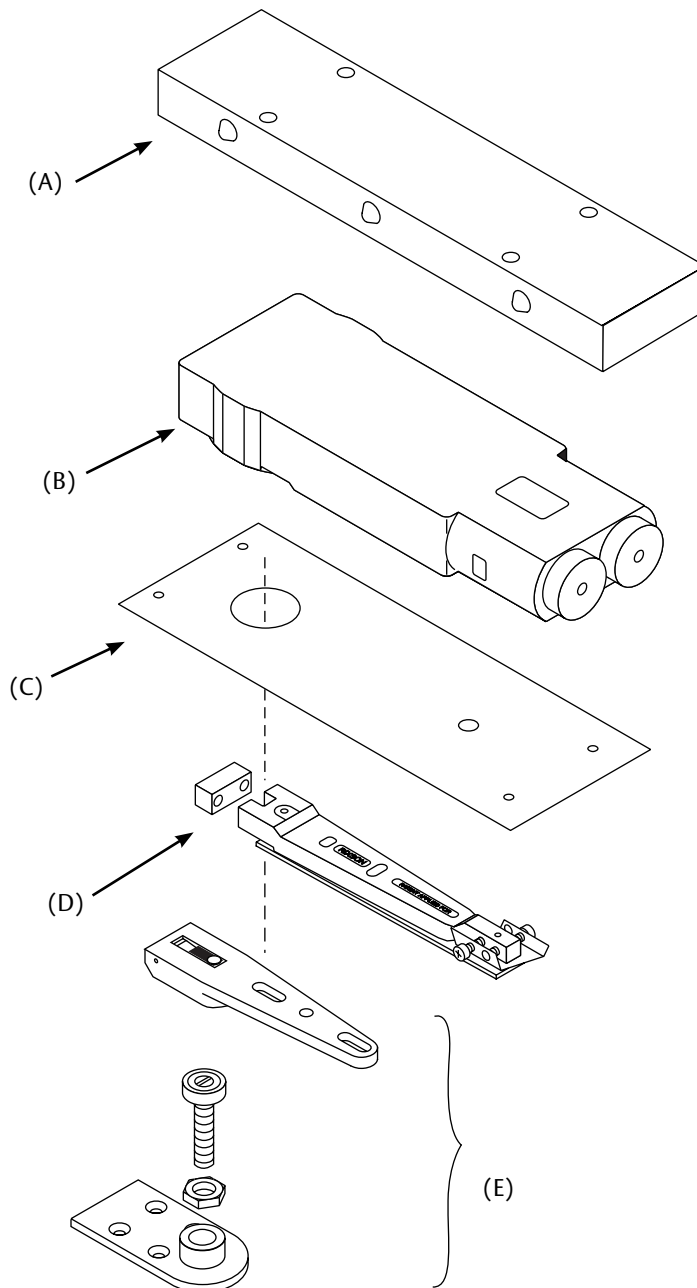


(A) Closer Mounting Kit 608049PKG
(B) Closer Body (Specify Complete Model No. x LAP)
(C) Cover Plate 6084000 - *
(D) Arm Package 6002020
(E) Bottom Pivot 608011A

Screw Kits
Arm Screw Kit 107065
Cover Plate Screw Kit 107022-*
Bottom Pivot Screw Kit 107143

*specify finish

MW608/W608

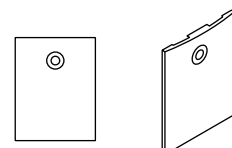


(A) Closer Mounting Kit 608049PKG
(B) Closer Body (Specify Complete Model No. x LAP)
(C) Cover Plate 6084000 - *
(D) Arm Package 6002021
(E) Bottom Pivot 608011A

Screw Kits
Bottom Pivot Screw Kit 107143
Arm Screw Kit 107065 Includes arm end block
Cover Plate Screw Kit 107022-*

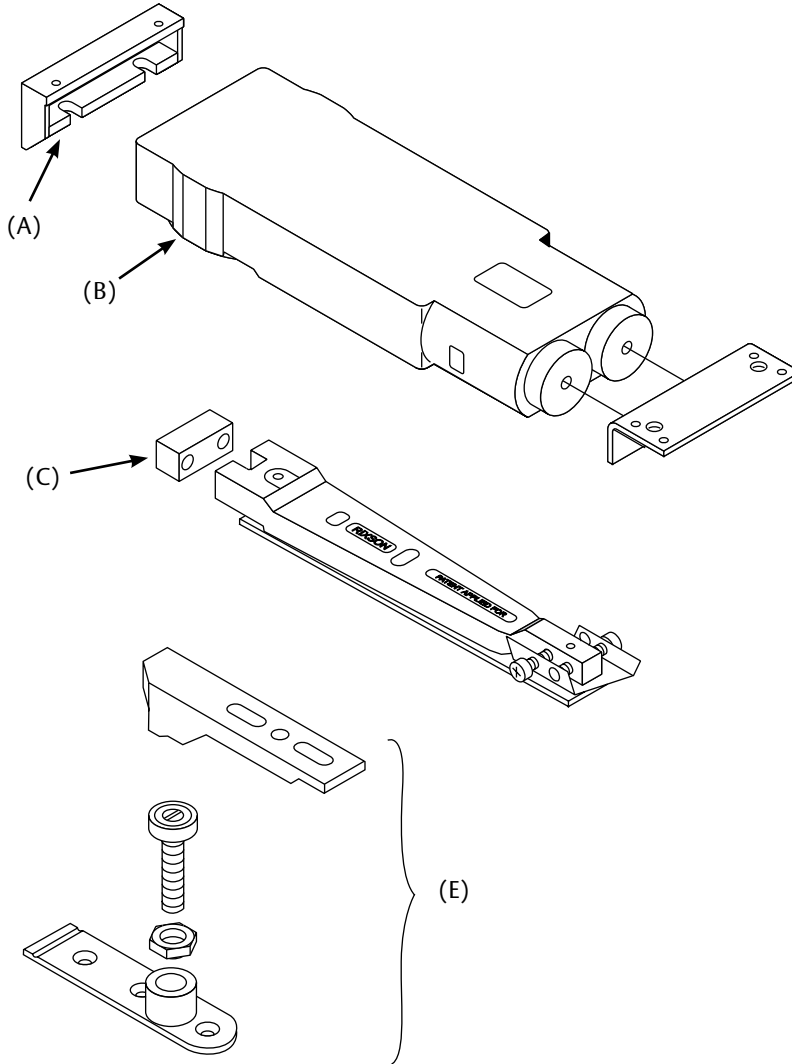
Overhead
Concealed Closers

Optional 199 end cap
1990906-* (612 and 627 only)



*specify finish

AW608



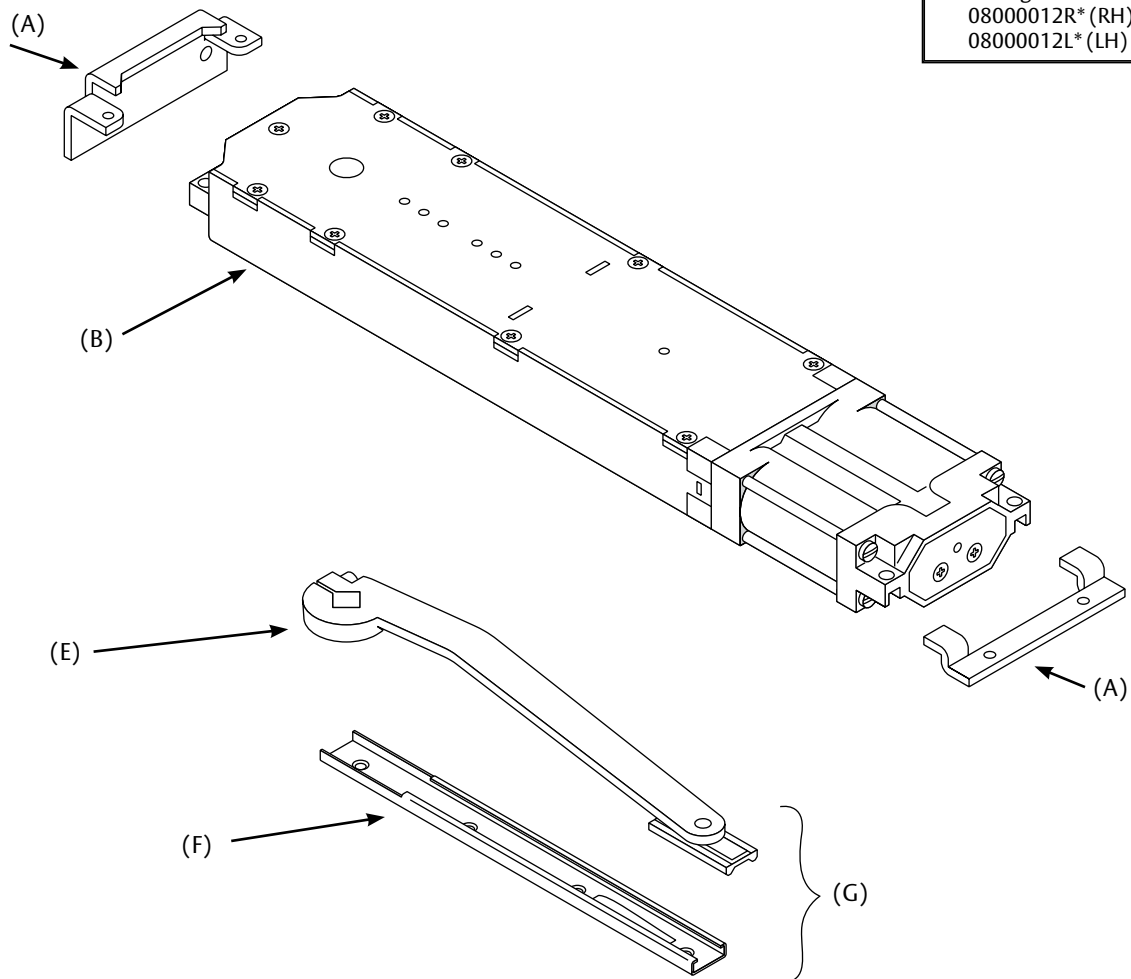
(A) Closer Mounting Kit 608019
(B) Closer Body (Specify Complete Model No. x LAP)
(C) End Load Arm Pkg 6002021
(E) Bottom Pivot with Screws 608011A

Screw Kits
Arm Screw Kit (Includes arm end block) 107065
Bottom Pivot Screw Kit 107143

0700

(E) Arm Assembly 08002010R* (RH) 08002010L* (LH)
(F) Rail Package 08005011

(A) Attaching Bracket 1639000
(B) Closer Body (Specify Complete Model No. x LAP)
(G) Arm & Rail Package 08000012R* (RH) 08000012L* (LH)



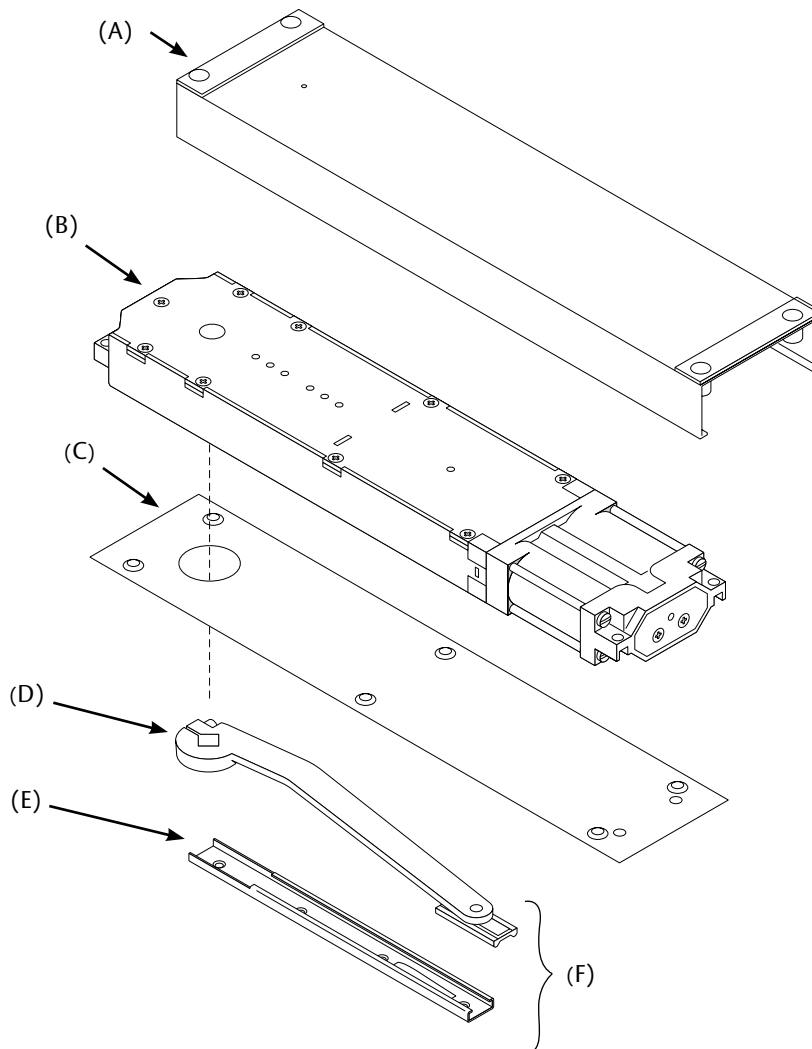
*specify finish

RIGHT HAND ARM SHOWN

M0700

(E) Rail Package 08005010
(D) Arm Assembly 08002010R* (RH) 08002010L* (LH)

(A) Closer Mounting Channel 01920910
(B) Closer Body (Specify Complete Model No. x LAP)
(C) Cover Plate 7004000R* (RH) 7004000L* (LH)
(F) Arm and Rail Package 08000012R* (RH) 08000012L* (LH)



Optional 199 end cap

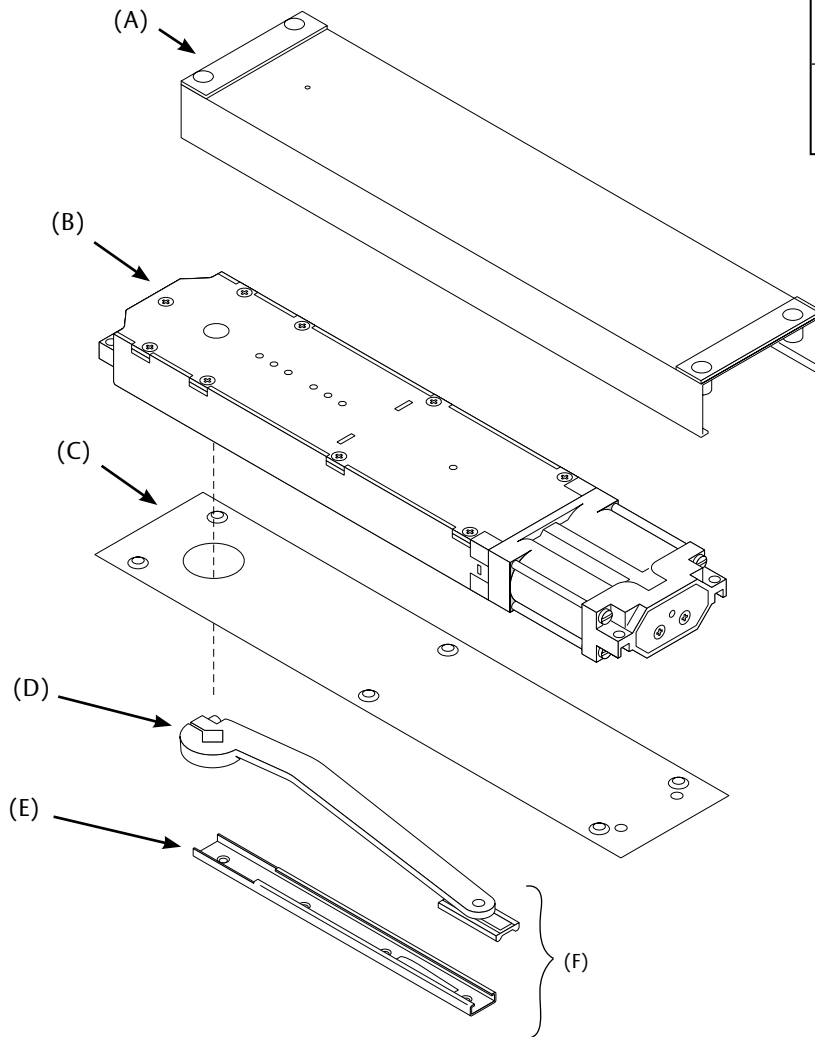
*specify finish
RIGHT HAND ARM SHOWN

Screw Kits
Cover Plate Screw Kit 107006-*

MW0700

(E) Rail Package 08005011 Includes rail & screw kit
(D) Arm Assembly 08002010R* (RH) 08002010L* (LH)

(A) Closer Mounting Channel 01920910
(B) Closer Body (Specify Complete Model No. x LAP)
(C) Cover Plate 7004000R* (RH) 7004000L* (LH)
(F) Arm & Rail Package 08000011R* (RH) 08000011L* (LH)



Screw Kits
Cover Plate Screw Kit 107006-*

*specify finish

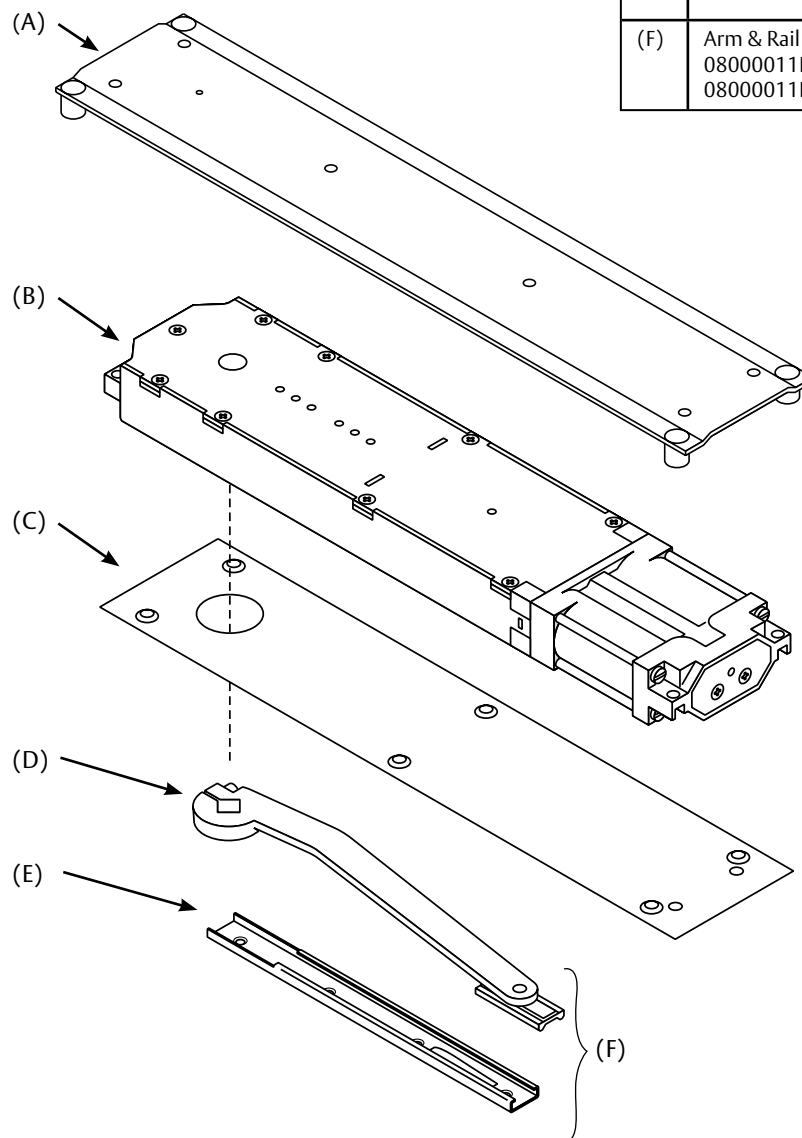
RIGHT HAND ARM SHOWN

W0700

(E) Rail Package
08005011
Includes rail & screw kit

(D) Arm Assembly
08002010R* (RH)
08002010L* (LH)

(A)	Closer Mounting Plate 01980910
(B)	Closer Body (Specify Complete Model No. x LAP)
(C)	Cover Plate 004000R* (RH) 7004000L* (LH)
(F)	Arm & Rail Package 08000011R* (RH) 08000011L* (LH)



Screw Kits

Cover Plate Screw Kit
107006-*

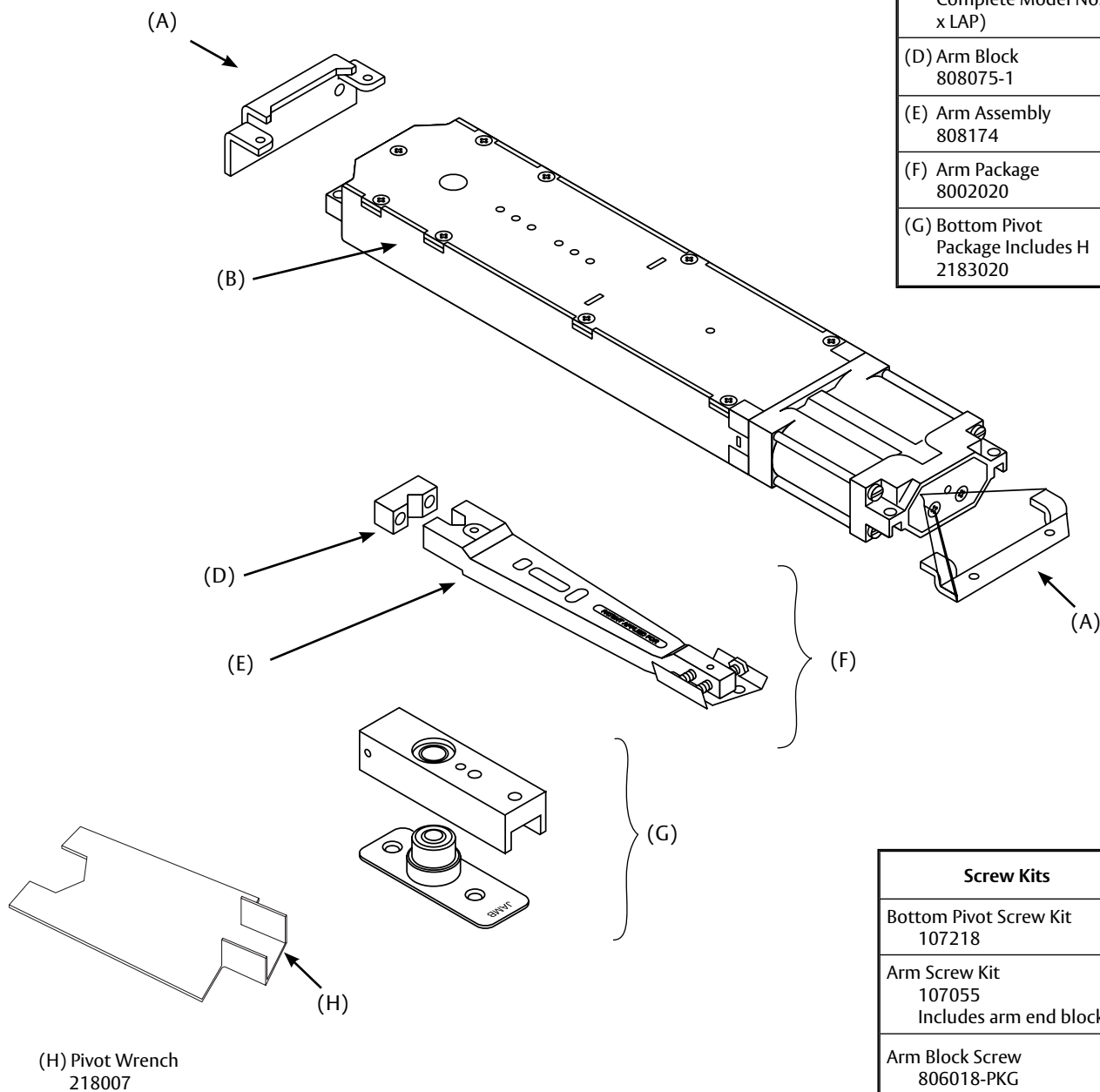
*specify finish

RIGHT HAND ARM SHOWN

700/800

(D) Arm Block 808075-1
(E) Arm Assembly 808175

(A) Attaching Bracket 1639000
(B) Closer Body (Specify Complete Model No. x LAP)
(D) Arm Block 808075-1
(E) Arm Assembly 808174
(F) Arm Package 8002020
(G) Bottom Pivot Package Includes H 2183020



Screw Kits
Bottom Pivot Screw Kit 107218
Arm Screw Kit 107055 Includes arm end block
Arm Block Screw 806018-PKG

M700/M800

(D) Arm Block
808075-1

(E) Arm Assembly
808175

(A) Closer Mounting
Channel 1929000

(B) Closer Body
(Specify Complete
Model No. x LAP)

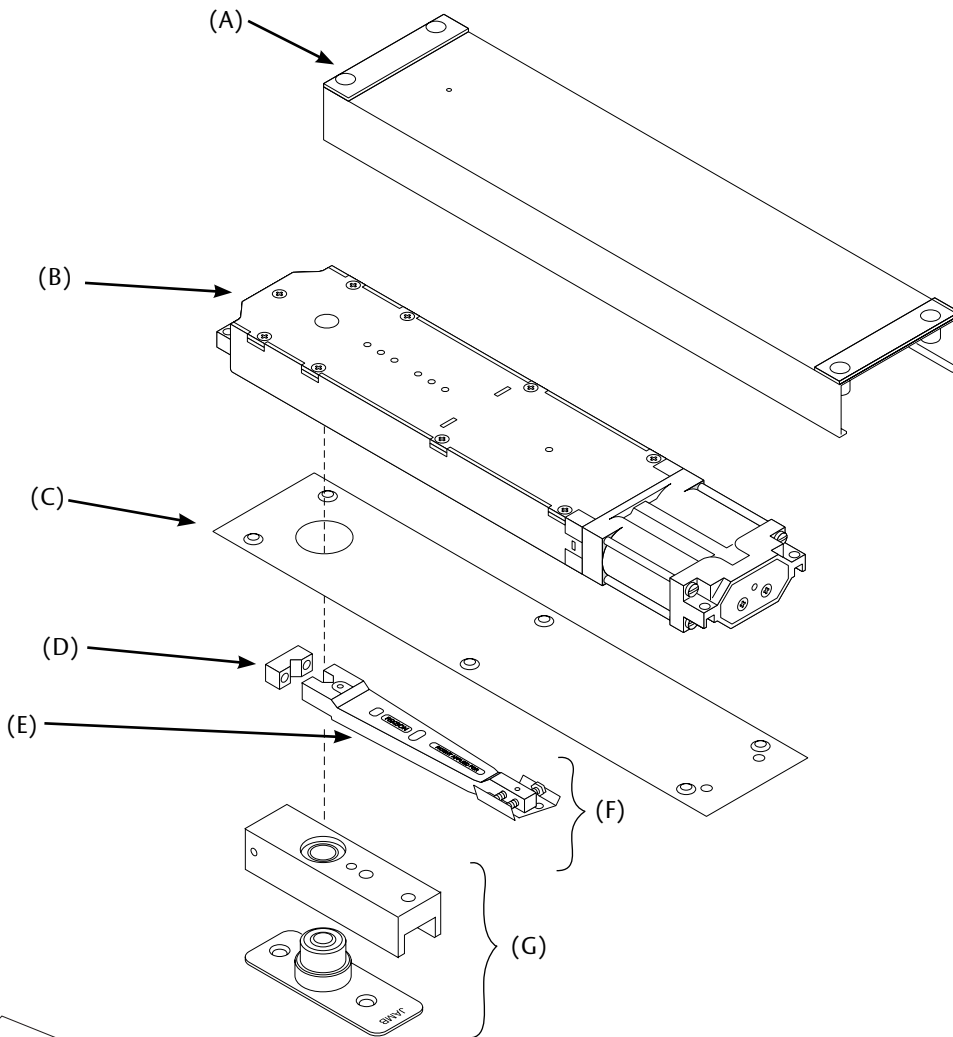
(C) Cover Plate
700 Series
7004000R* (RH)
7004000L* (LH)
800 Series 8004000-*

(D) Arm Block
808075-1

(E) Arm Assembly
808174

(F) Arm Package
8002020

(G) Bottom Pivot
Package Includes H
2183020



*specify finish

(H) Pivot Wrench
218007

Screw Kits

Bottom Pivot Screw Kit
107218

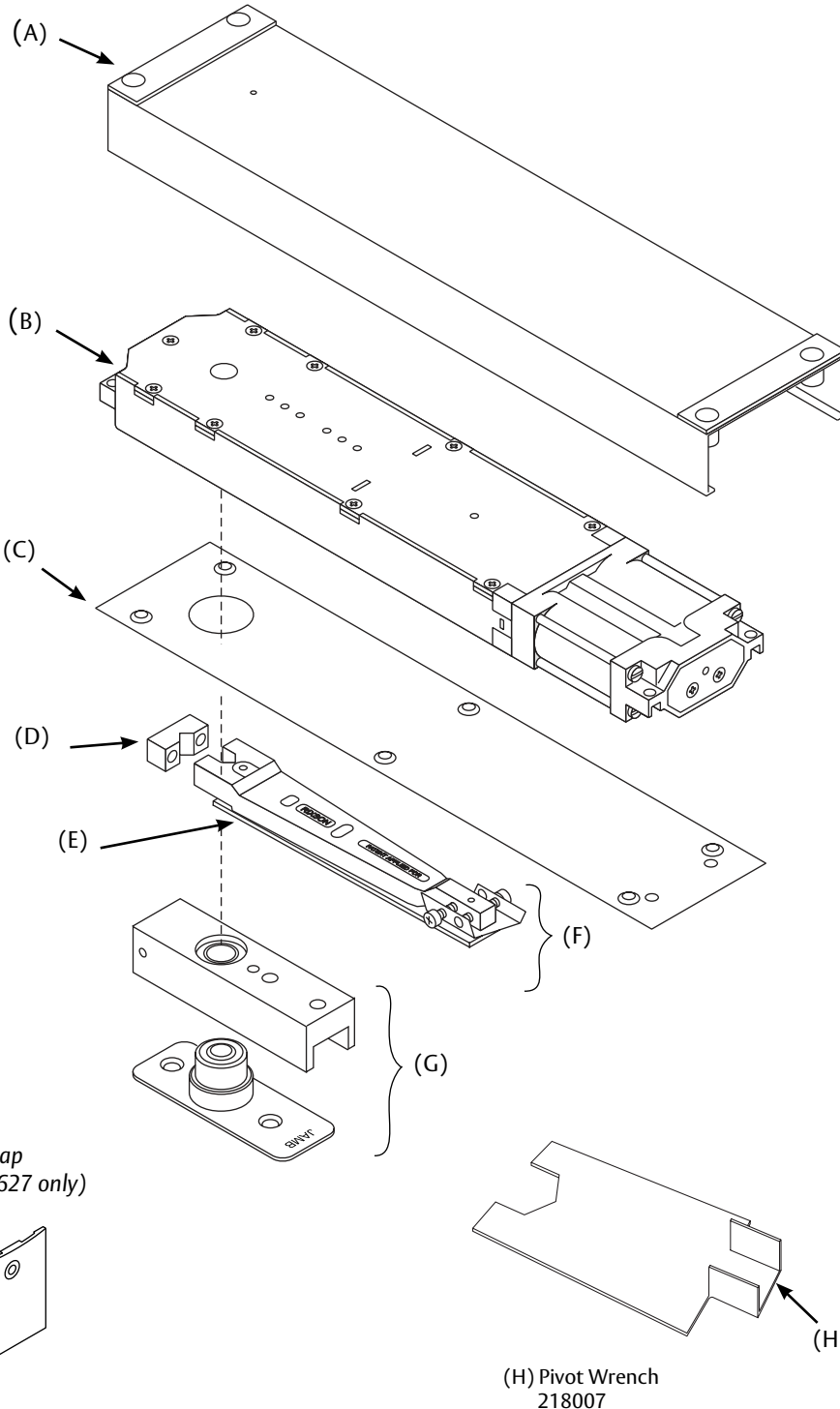
Arm Screw Kit
107055
Includes arm end block

Arm Block Screw
806018-PKG

Cover Plate Screw Kit
107006-*

MW700/MW800

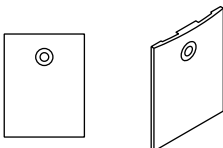
(D) Arm Block 808075-1
(E) Arm Assy 808174



(A) Closer Mounting Channel 1929000
(B) Closer Body (Specify Complete Model No. x LAP)
(C) Cover Plate 700 Series 7004000R* (RH) 7004000L* (LH) 800 Series 8004000-*
(D) Arm Block 808075-1
(E) Arm Assembly 808174
(F) Arm Package 8002021
(G) Bottom Pivot Includes H 2183020

Screw Kits
Bottom Pivot Screw Kit 107218
Arm Screw Kit 107055 Includes arm end block
Arm Block Screw 806018-PKG
Cover Plate Screw Kit 107006-*

Optional 199 end cap
1990906-* (612 & 627 only)

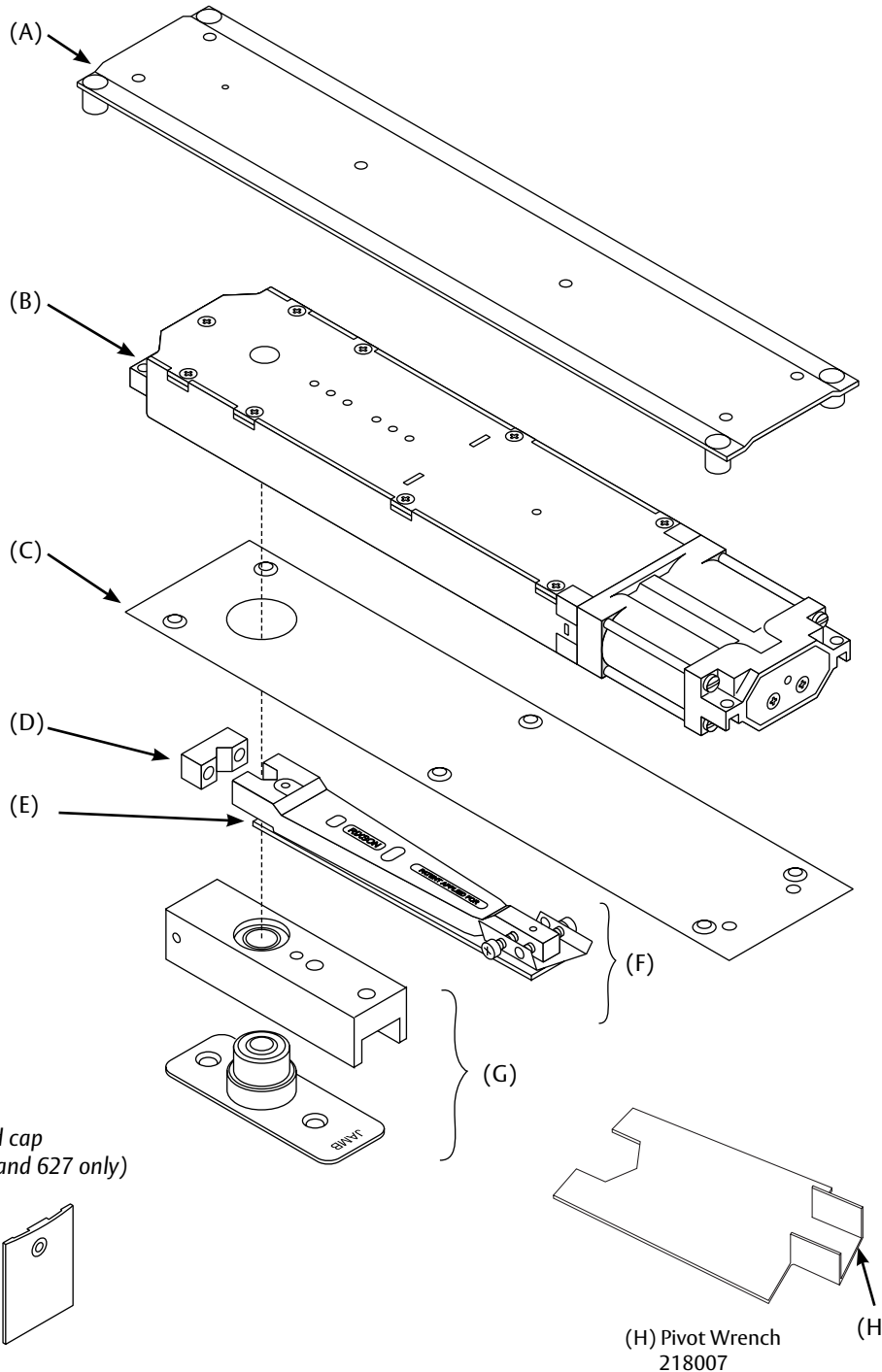


(H) Pivot Wrench
218007

*specify finish

W700/W800

Overhead
Concealed Closers



(A) Closer Mounting
Channel 01920910

(B) Closer Body
(Specify Complete
Model No. x LAP)

(C) Cover Plate
7004000R* (RH)
7004000L* (LH)

(D) Arm Block
808075-1

(E) Arm Assembly
808174

(F) Arm Package
8002021

(G) Bottom Pivot
Includes H
2183020

Screw Kits

Bottom Pivot Screw Kit
107218

Arm Screw Kit
107055
Includes arm end block

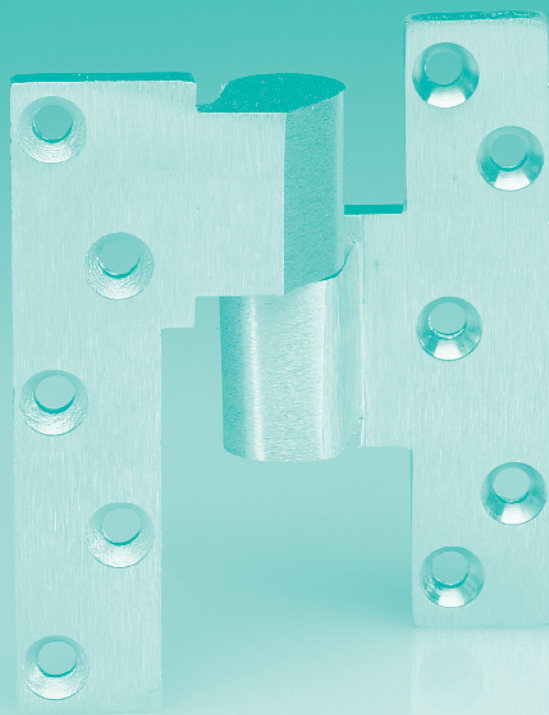
Arm Block Screw
806018-PKG

Cover Plate Screw Kit
107006-*

*specify finish

RIXSON
ASSA ABLOY

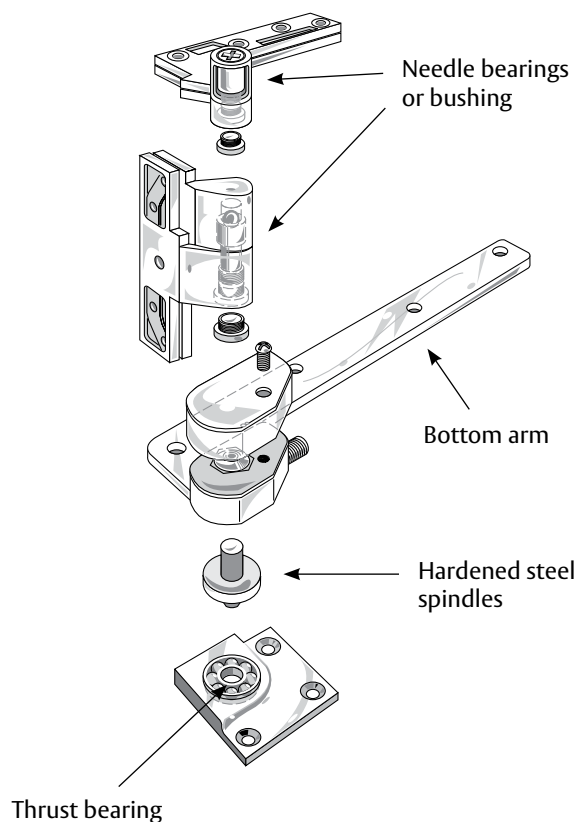
Architectural Solutions for
Durable and Efficient
Hanging of Doors



Introduction

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

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



147 Pivot set and M19 Intermediate pivot shown (recommended)

Contents

Pivots & Pivot Sets: General Information	120
How to Select Product	123
Options.....	124
Certifications	124
Limited Warranty.....	124
Specifications	124

Product Descriptions

Offset Pivot Sets

117-1/4	Light-Duty/Light Weight Jamb Attached Pivot Set	125
117	Light-Duty/Light Weight Pivot Set	125
173	Very Light Duty/Weight Pivot Set.....	126
147	Standard-Duty Pivot Set	126
L147	Heavy Weight Pivot Set	127
547	Pivot Set for Arch Top or Overhead Concealed Closers	128
165	Pivot Set Without Bottom Pivot	128
195	Jamb Attached Pivot Set.....	129
117-1/2	Heavy Weight Pivot Set	130
L117	Heavy Weight/High Traffic/Lead Lined Door Pivot Set.....	131

Offset Top Pivots

180	Standard Top Pivot.....	132
180 x 102	Top Pivot for Deep Reveal.....	132
H180	Heavy-Duty Top Pivot.....	132
L180	Heavy Weight/High Traffic/Lead Lined Door Top Pivot	133
FA180	Asylum Top Pivot	133
280	Half Surface Top Pivot	134
380	Half Mortise Top Pivot.....	134
L380	Half Mortise Heavy Weight/High Traffic/Lead Lined Door Pivot.....	134
480	Full Surface Top Pivot	134
680	Side Jamb Attached Top Pivot	135

Intermediate Pivots

119	Light-Duty Pivot.....	136
M19	Standard-Duty Pivot.....	136
M190	Load-Bearing Pivot	136
ML19	Heavy Weight/High Traffic Pivot.....	137
FA19	Asylum Intermediate Pivot	137
219	Half Surface Pivot.....	138
319	Half Mortise Pivot	138
L319	Half Mortise Heavy Weight/High Traffic Pivot.....	138
419	Full Surface Pivot.....	138

Electrified Intermediate Pivots

E-M19	Power Transfer Pivot	139
E-M19U	Power Transfer High Inrush Pivot.....	139
E-ML19	Power Transfer Heavy Weight/High Traffic Pivot	140

Contents continued

Electrified Intermediate Pivots (Cont'd)

CS-M19	Monitor Pivot	140
CS-E-M19	Monitor and Power Transfer Pivot	141
CS-ML19	Monitor Pivot Heavy Weight/High Traffic Pivot.....	141

Electrified Intermediate Pivots - 1-1/2" Offset

E-M19	Power Transfer Pivot	139
CS-M19	Monitor Pivot	140
CS-E-M19	Monitor and Power Transfer Pivot	141

Pocket Pivots

F519	Pocket Pivot	142
------	--------------------	-----

Electrified Pocket Pivot

E-F519	Power Transfer Pocket Pivot	142
--------	-----------------------------------	-----

Center Hung Pivot Sets

127-3/4	Light-Duty/Light Weight Jamb Attached Pivot Set	143
128-3/4	Light-Duty/Light Weight Pivot Set	143
370	Pivot Set	144
117-3/4	Heavy Weight Pivot Set	144
H117-3/4	Heavy Weight/High Traffic 2" Minimum Door Thickness	145
H117-3/4 x 587	Heavy Weight/High Traffic 1-3/4" Dr Moved Pivot Point.....	145
176	Very Light Duty/Weight Pivot Set.....	146
178	Pivot Set With Patch Fittings.....	146

Center Hung Top Pivots

320	Light Weight/Light-Duty Top Pivot	147
340	Top Pivot	147
H340	Heavy-Duty Top Pivot.....	147
345	Longer Throw Pin for Taller Doors Top Pivot	148
H345	Longer Throw Pin Heavy Weight/High Traffic for Taller Doors Top Pivot.....	148
340 x 102	Inverted Top Pivot	149
340 x AP3	Side Jamb Attached Top Pivot.....	149
320 x 102	Light-Duty Inverted Top Pivot	149

Electrified Center Hung Top Pivots

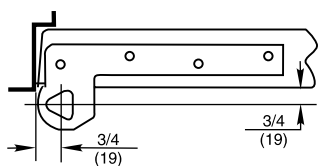
E-H340	Power Transfer Pivot	150
E-H345	Power Transfer Longer Throw Pivot	150
CS-340	Monitor Pivot	151
CS-H345	Monitor Pivot Longer Throw Pivot.....	151
CS-E-H340	Monitor and Power Transfer Pivot	152

Quick Reference of Options.....	153
--	------------

How to Order	153
---------------------------	------------

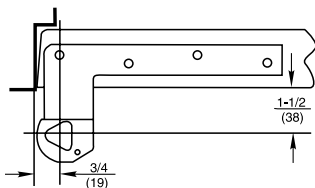
Parts Drawings	154-164
-----------------------------	----------------

1. Offset vs. Center Hung Application



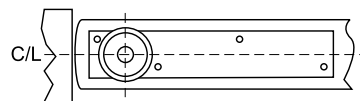
3/4" Offset

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



1-1/2" Offset

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



Center Hung

Pivot point centered in thickness of door.

2. Size of Door (width, height, thickness)

Estimated door weights pounds per square foot (PSF)

Door Material	Door Thickness		
	1-3/4"	2-1/4"	3"
Hollow Metal	6.5	7	-
Solid Core Wood	7	9	11.5
Aluminum/Glass Storefront	3.5	4	-
Tempered Glass	Glass Thickness		
	3/8"	1/2"	3/4"
	5	7	9.75
Lead Lining (add to door weight)	Lead Thickness		
	1/16"	1/8"	1/4"
	5	8	9.75
3/4" Cladding (add to door weight)	Cladding Material		
	Wood	Stone	Bronze
	3	10.5	28

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

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

Lead Lining: 9.75 = 204.75lbs

Total Door weight: 351.75lbs

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

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

For doors of other sizes, consult factory

3. Expected Frequency of Door Operation

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

Options

Fire Rated – Prefix F

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



Twenty-minute label – Suffix - 20

This UL rating is for 20-minute assemblies.

Product with this rating has an authorized label.



Handing

All offset pivots and pivot sets are handed.

Suffix RH or LH.

Extended Spindle – Suffix extra length needed

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

1-1/2" Offset – Suffix 1-1/2

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

Less Top Pivot – Suffix LTP

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

Special Layouts – Suffix SPLO#

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

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

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

Pivots and Pivot Sets Options, Certifications Limited Warranty, Specifications

ElectroLynx® Connectors – Suffix QC – Number of Wires

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

Hardwiring Made Easy®



Certifications

All Rixson® pivots and pivot sets are in compliance with ANSI/BHMA 156.4 Standards. See individual products for sub sections.



Limited Warranty

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

Specifications

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

Model 117-1/4

Application

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



BHMA/ANSI NO: C07172

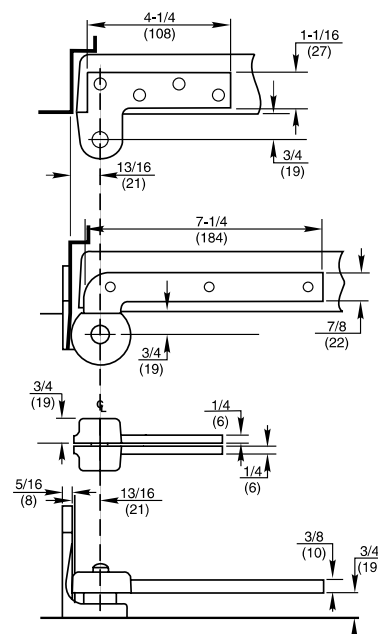
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

- Standard top pivot 180 included
- 119 intermediate pivot recommended (order separately); see page 136
- Bottom pivot mortised into side jamb
- Not available for fire-rated doors
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled 1/8" in 2"
- Weight of door borne by floor
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard

Technical Information

Frame stop required



Model 117

Application

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



BHMA/ANSI NO: C07162/C07202

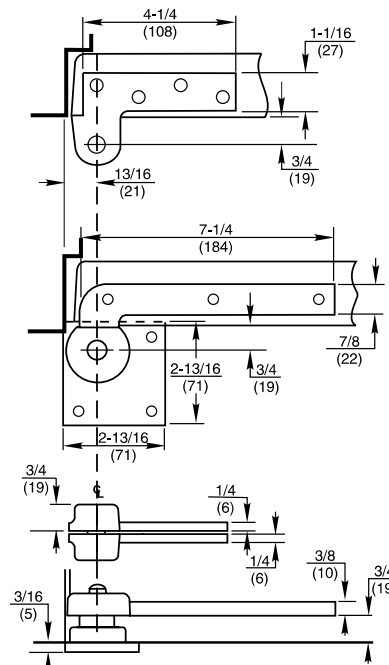
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

- Standard top pivot 180 included
- 119 intermediate pivot recommended (order separately); see page 136
- Bottom pivot mortised into floor
- Available for fire door assemblies up to three hours – specify F117. Intermediate pivot required by UL. Specify FM19, (order separately), see page 136
- For 20-minute label suffix “-20” to the part number
- Non-ferrous base material
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Available for 1-1/2" (38mm) offset (door weight 150lbs) for doors with cladding or frame molding.
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

Technical Information

Frame stop required



Model 173

Application

Interior Doors

Weight 150 lbs

Door Sizes up to 3'0" x 8'0" x 1-3/4"

Handed



C07202

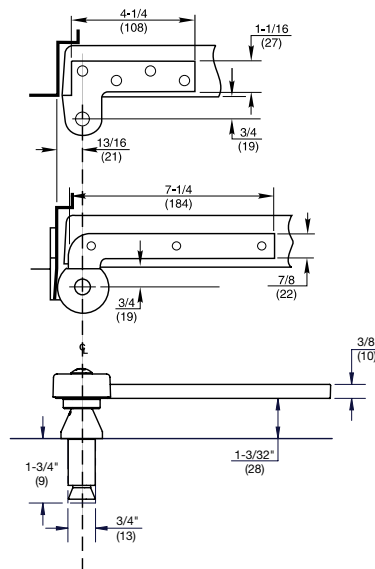
BHMA/
ANSI :
C07162\

Product Description & Features

- Standard top pivot 180 included
- 119 intermediate pivot recommended for all doors over 6'8" (order separately) see page 136
- Bottom pivot mounts directly to concrete floor
- Uses same arm and cap as 117 pivot set
- Non-ferrous base metal
- 3/4" offset only (*measured from centerline of pivot to face of door*)
- Available for 1-1/2" (38mm) offset (*door weight 100 lbs*) for doors with cladding or frame molding
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and metal screws
- 3/8" vertical adjustment
- No spindle extensions available
- Door will swing 180°, trim permitting

Technical Information

Frame stop required



Model 147

Application

Exterior or Interior Doors

Weight to 600 lbs.*

Door Width up to 4'0" (1219mm)

Handed



ANSI NO:

C07162
C07202

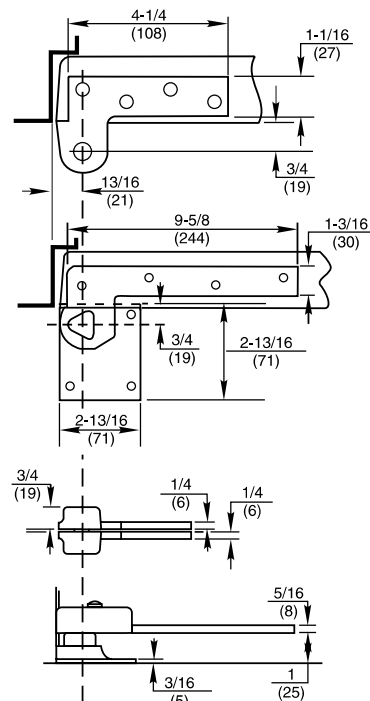
BHMA/

Product Description & Features

- Standard top pivot 180 included
- M19 intermediate pivot required (*order separately*); see page 136
- Bottom pivot mounts directly to floor
- Uses same arm and cap as 27 floor closer
- Available for fire door assemblies up to three hours (*ferrous material*) – specify F147. Intermediate pivot required by UL. Specify FM19 (*order separately*), see page 136
- For 20-minute label suffix “-20” to the part number
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (*measured from centerline of pivot to face of door*)
- Available for 1-1/2" (38mm) offset (*door weight 350lbs.*) for doors with cladding or frame molding
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

Technical Information

Frame stop required



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

Model L147

Application

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



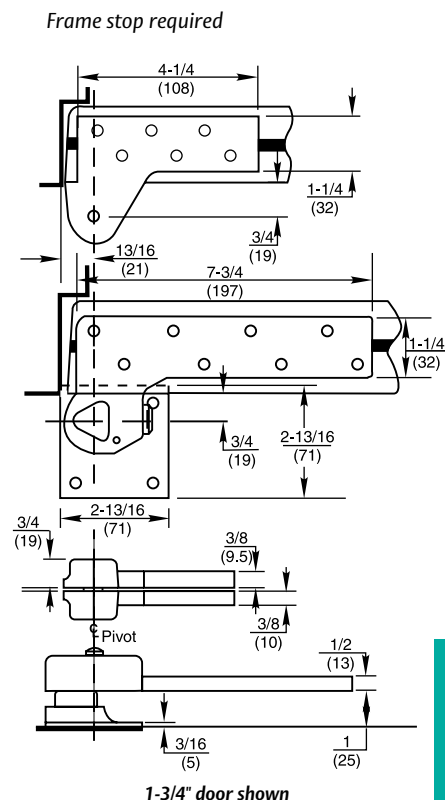
BHMA/ANSI NO: C07162
C07202

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

Product Description & Features

- Standard top pivot L180 included
- ML19 intermediate pivot required (order separately), see page 137
- Bottom pivot mounts directly to floor
- Doors with lead lining under the skin should also use this product.
- Screw holes in top pivot and bottom arm spaced to straddle lead lining in the middle of the door
- Available for fire door assemblies up to three hours for 1-3/4" (44mm) doors only (*ferrous material*) – specify FL147. Intermediate pivot required by UL. Specify FML19 (order separately), see page 137
- For 20-minute label suffix “-20” to the part number
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- Available to accommodate lead in door thicknesses 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) – specify when ordering
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

Technical Information



Model 547

Application

Exterior or Interior Doors
For Arch Top Doors or Overhead
Concealed Closers
Weight to 500 lbs.
Door Width up to 3'6" (1067mm)
Handed

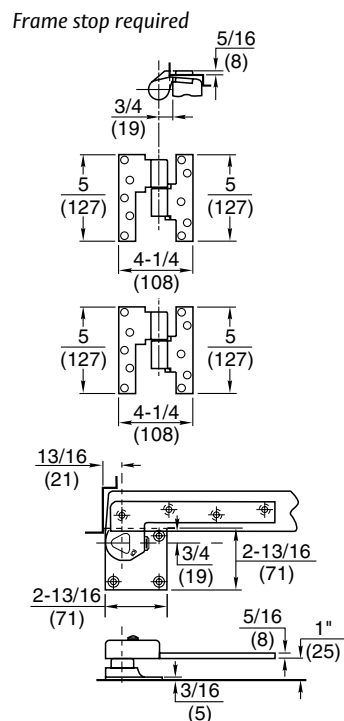


BHMA/ANSI NO: C07162 (modified)
C07202

Product Description & Features

- Set consists of two each M190 intermediate pivots and bottom pivot
- Bottom pivot mounts directly to floor
- Available for fire door assemblies up to three hours. Specify F547. Intermediate pivots FM190 included
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base material
- Doors 60" (1524) to 90" (2286mm) in height have two intermediate pivots. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

Technical Information



Model 165

Application

Exterior or Interior Doors
For Doors Without Bottom Pivots
Weight to 300 lbs.
Door Width up to 3'6" (1067mm)
Handed

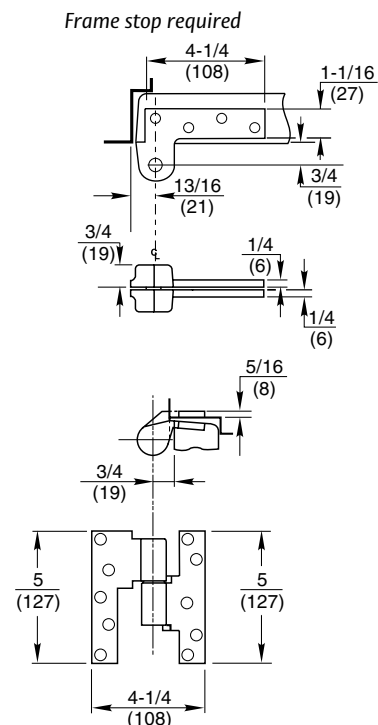


BHMA/ANSI NO: C07162 (modified)

Product Description & Features

- Set consists of one H180 top pivot and 2 each M190 intermediate pivots
- Not available for fire door assemblies
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height have two intermediate pivots. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Doors will swing 180°, trim permitting

Technical Information



Model 195

Application

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

BHMA/



ANSI NO: C07131

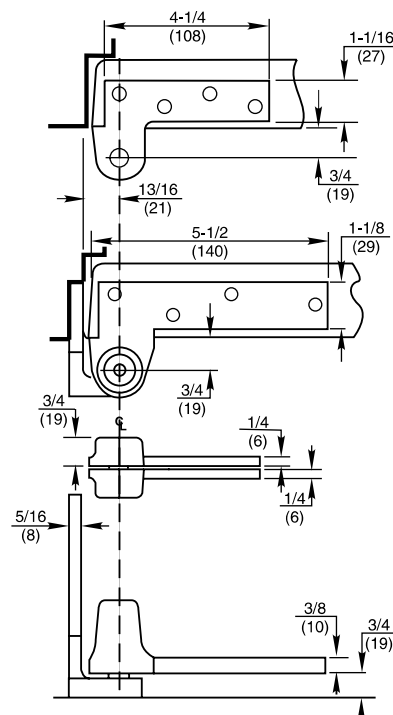
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

- Standard top pivot 180 included
- 119 or M19 intermediate pivots are recommended (*order separately*), see page 136
- Bottom pivot mortised into side jamb
- Not available for fire-rated door
- Pivot set can be vertically adjusted up to 3/16" (5mm) after installation without the use of shims
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- Non-ferrous base material
- 3/4" (19mm) offset (*measured from centerline of pivot to face of door*)
- Door edges must be beveled 1/8" in 2"
- Weight of door is borne by floor portion
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

Technical Information

Frame stop required



Model 117-1/2

Application

Exterior or Interior Doors
Weight to 650 lbs.*
Door Width up to 4'0" (1219mm)
Handed



BHMA/ANSI NO: C07121/C07202

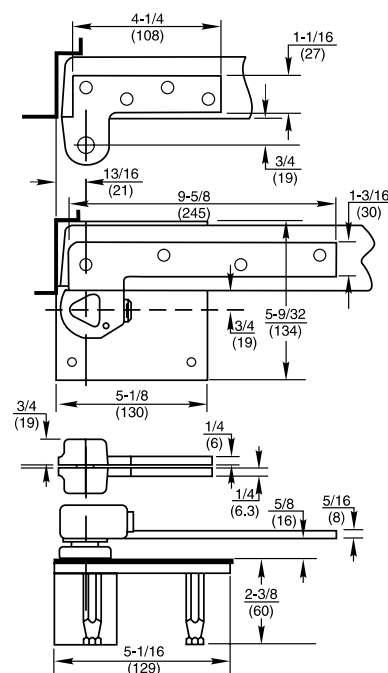
* Door size & weight guidelines are determined using the appropriate number of intermediate pivots

Product Description & Features

- Standard top pivot 180 included
- M19 intermediate pivot required (*order separately*), see page 136
- Bottom pivot mortised into floor
- Available for fire door assemblies up to three hours (*ferrous material*) – specify F117-1/2. Intermediate pivot required by UL. Specify FM19 (*order separately*), see page 136
- For 20-minute label suffix “-20” to the part number
- Non-ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- 3/4" (19mm) offset (*measured from centerline of pivot to face of door*)
- Available for 1-1/2" (38mm) offset (*door weight 350 lbs.*) for doors with cladding or frame molding
- Door edges must be beveled 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

Technical Information

Frame stop required



Model L117

Application

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



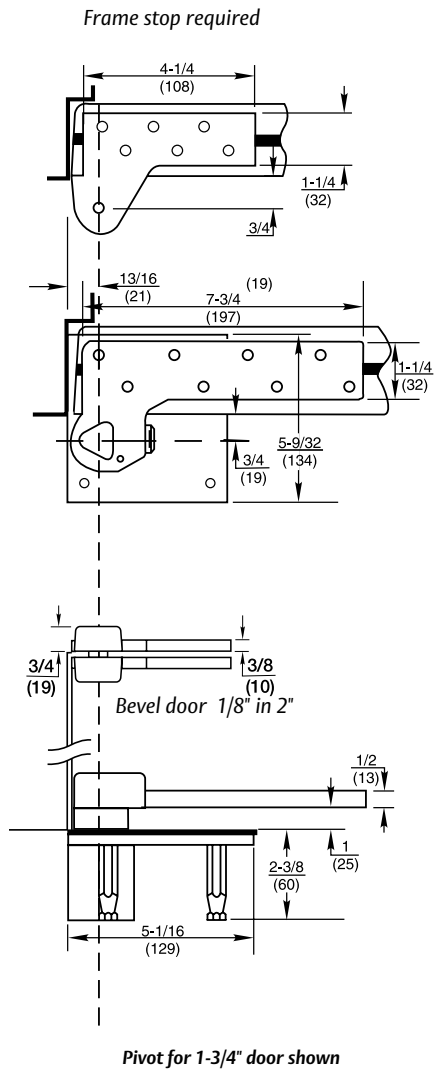
BHMA/ANSI NO: C07111

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

Product Description & Features

- Standard top pivot L180 included
- ML19 intermediate pivot required (order separately), see page 137
- Bottom pivot mortised into floor
- Available for fire door assemblies up to three hours (ferrous material). Specify FL117. Intermediate pivot required by UL. Specify FML19 (order separately), see page 137. Note: UL listing for 1-3/4" thick doors only
- Available to accommodate lead in door thicknesses 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) – specify when ordering
- Additional thrust bearing for greater load capacity
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of door height warrants another intermediate pivot
- For 20-minute label suffix "-20" to the part number
- Non-ferrous base material for top pivot
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Door edges must be beveled in 1/8" in 2"
- Furnished with wood and machine screws
- Extended spindles available in 1/2" (13mm) increments up to 2" (51mm) longer than standard
- Doors will swing 180°, trim permitting

Technical Information



Model 180

Application

Full Mortise
Non-handed

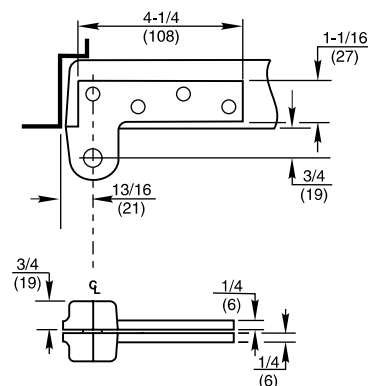


Product Description & Features

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

Technical Information

Frame stop required



Model 180 x 102

Application

Full Mortise
Non-handed

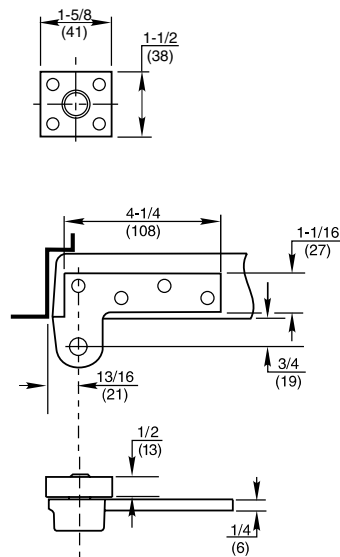


Product Description & Features

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

Technical Information

Frame stop required



Model L180

Application

Lead-Lined/Heavy/High Traffic
Doors
Full Mortise
Non-handed

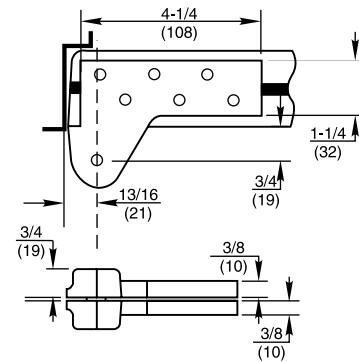


Product Description & Features

- Standard top pivot for L147, L117 pivots and L27 floor closers
- Doors with lead lining under the skin should also use this product
- Screw holes spaced to straddle lead in the middle of the door
- Available to accommodate lead lined door thicknesses: 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) –specify when ordering
- Available for fire door assemblies for 1-3/4" (19mm) doors only (*ferrous material*). Specify FL180
- For 20-minute label suffix “-20” to the part number
- Non-ferrous base material
- 3/4" (19mm) offset (*measured from centerline of pivot to face of door*)
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

Technical Information

Frame stop required



1-3/4" door shown

Model FA180

Application

Asylum Design
Full Mortise
Handed

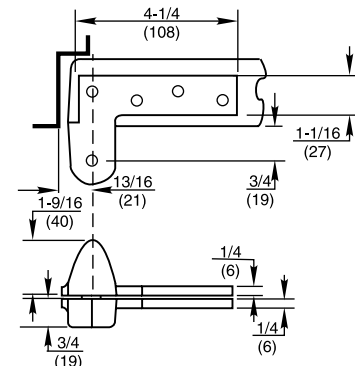


Product Description & Features

- Standard top pivot for SEC27-180 floor closer packages
- Optional top pivot for institutional use or installations where flat surfaces are objectionable
- For fire door assemblies
- Ferrous base material
- 3/4" (19mm) offset (*measured from centerline of pivot to face of door*)
- Furnished with wood and machine Torx® screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

Technical Information

Frame stop required



Model 280

Application

Half Surface
Handed

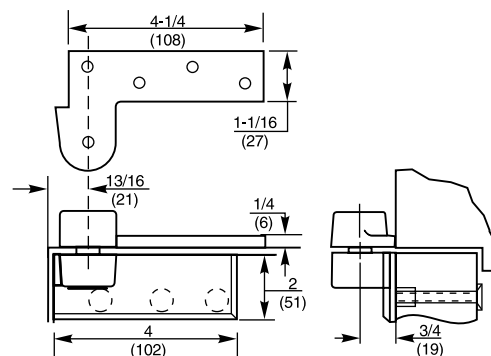
BHMA/ANSI NO: C07501



Product Description & Features

- Flush door and frame application only
- Optional top pivot where door portion cannot be mortised
- Available for fire door assemblies (*ferrous material*) – specify F280
- Non-ferrous base material
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- 1-3/4" door only
- Contact factory if door is not flush
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

Technical Information



Model 380

Application

Half Mortise
Handed

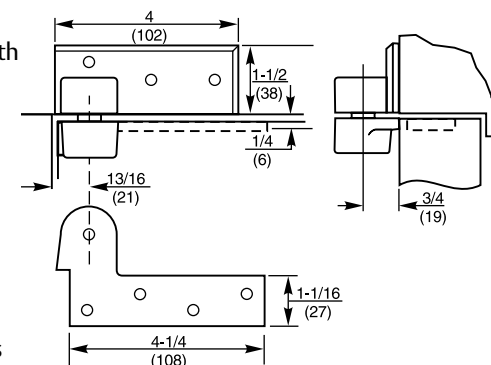
BHMA/ANSI NO: C07511



Product Description & Features

- Flush door and frame application only
- Optional top pivot where jamb portion cannot be mortised
- Designed for channel iron door frames with aluminum, hollow metal or wood doors
- Available for fire door assemblies (*ferrous material*) – specify F380
- Door portion from L180 pivot is available if lead-lined doors are used – specify L380 and door thickness
- Non-ferrous base material
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

Technical Information



Model 480

Application

Full Surface
Handed

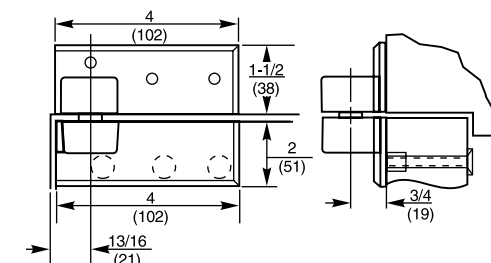
BHMA/ANSI NO: C07521



Product Description & Features

- Flush door and frame application only
- Optional top pivot where door and jamb portion cannot be mortised
- Designed for channel iron door frames and any door where thru-bolting is advantageous
- Available for fire door assemblies (*ferrous material*) – specify F480
- Non-ferrous base material
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- 1-3/4" door only
- Furnished with wood and machine screws
- Available with longer than standard pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only

Technical Information



Model 680

Application

Side Jamb Mounted
Frame Portion
Handed

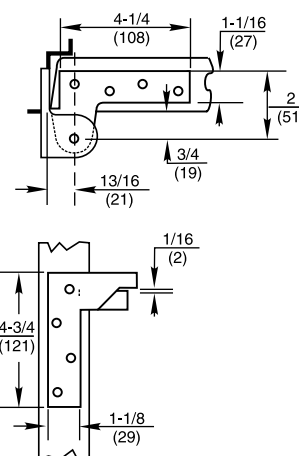


Product Description & Features

- Used where no frame exists above door, or where it is not possible to anchor pivot into header of frame
- Side jamb portion can be surface mounted or mortised
- Non-ferrous base material
- 3/4" (19mm) offset (measured from centerline of pivot to face of door)
- Furnished with wood and machine screws

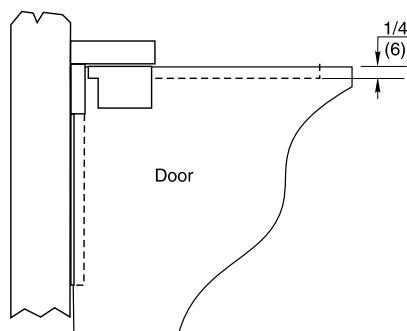
Technical Information

Frame stop required

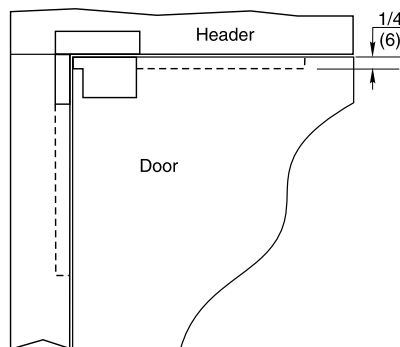


Technical Information

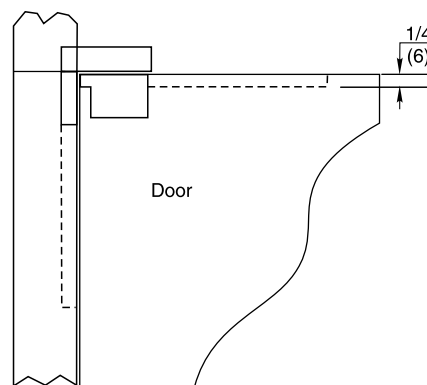
Surface Mount Jamb Double Mortise Door



Mortise Jamb, Header and Door



Mortise Jamb and Door



Model 119

Application

Full Mortise
Handed

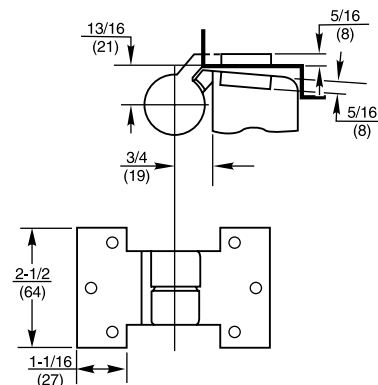
BHMA/ANSI NO: C07382



Product Description & Features

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

Technical Information



Model M19

Application

Full Mortise
Handed

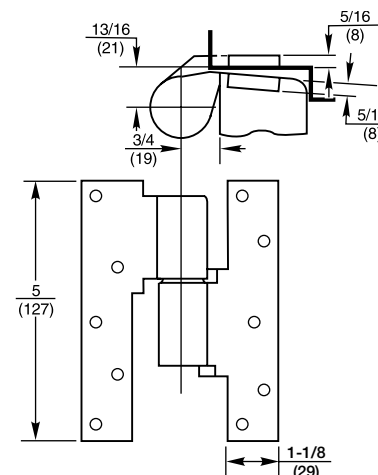
BHMA/ANSI NO: C07321/C07371



Product Description & Features

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

Technical Information



Model M190

Application

Heavy-Duty Full Mortise
Handed

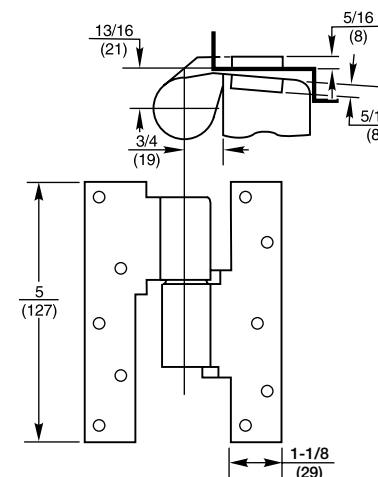
BHMA/ANSI NO: C07321/C07371



Product Description & Features

- Used when frame condition does not allow standard top pivot
- Lateral load-bearing
 - Maintains door alignment
 - Aids in installing floor closers and bottom pivots
 - Heavy-duty needle bearing
 - Non-ferrous base metal
 - 3/4" (19mm) offset standard
 - Available for 1-1/2" (38mm) offset
 - Available for fire door assemblies (*ferrous material*) – specify FM190
 - For 20-minute label suffix "-20" to part number
 - Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
 - Furnished with wood and machine screws

Technical Information

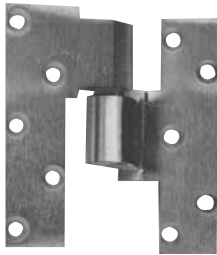


Model ML19

Application

Full Mortise
Lead-Lined, Heavy or
High Traffic Doors
Handed

BHMA/ANSI NO: C07311

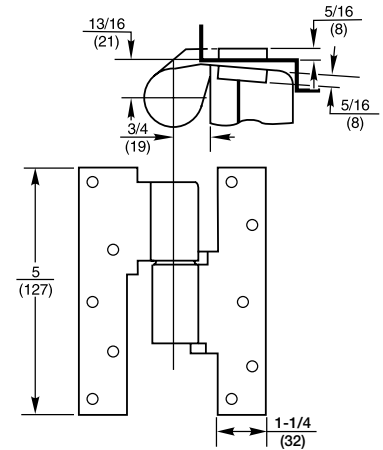


Product Description & Features

Screw holes spaced to straddle lead lining in center of door. Also use on extra heavy or high traffic door

- Load-bearing
- Maintains door alignment
- Aids in installing closers and pivots
- For 20-minute label suffix “-20” to the part number
- Available to accommodate door thicknesses 1-3/4" (44mm), 2" (51mm), 2-1/4" (57mm), 2-1/2" (64mm), or 3" (76mm) – specify thickness when ordering
- Non-ferrous base material
- Available for fire door assemblies – 1-3/4" (44mm) door only – specify FML19
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Furnished with wood and machine screws

Technical Information



Model FA19

Application

Full Mortise
Asylum or High Security
Applications
Handed

BHMA/ANSI NO: C07361

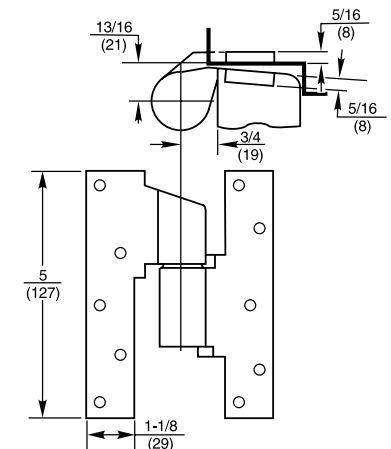


Product Description & Features

Optional intermediate pivot for institutional use or installations where flat surfaces are objectionable

- Maintains door alignment
- Aids in installing bottom pivots
- 3/4" (19mm) offset
- May be used with fire door assemblies
- For 20-minute label suffix “-20” to the part number
- Ferrous base material
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Furnished with wood and machine Torx® screws

Technical Information



Model 219

Application

Half Surface
Handed

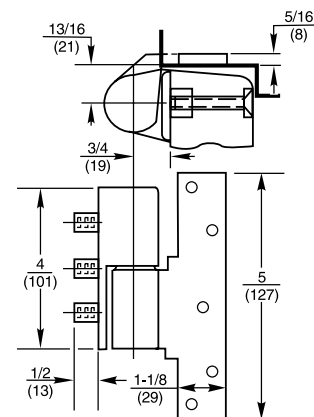
BHMA/ANSI NO: C07331



Product Description & Features

- Flush door and frame applications only
- Optional intermediate pivot where door portion cannot be mortised
- Maintains door alignment
- Available for fire door assemblies (*ferrous material*) – specify F219
- Non-ferrous base material
- 3/4" (19mm) offset only
- 1-3/4" door only
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Furnished with wood and machine screws

Technical Information



Model 319

Application

Half Mortise
Handed

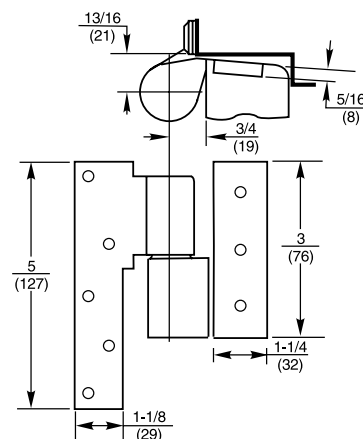
BHMA/ANSI NO: C07341



Product Description & Features

- Flush door and frame applications only
- Optional intermediate pivot where jamb portion cannot be mortised
- Door portion from ML19 pivot is available if lead-lined door is used – specify L319 and door thickness
- Maintains door alignment
- Non-ferrous base material
- 3/4" (19mm) offset only
- Available for fire door assemblies (*ferrous material*) – specify F319
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Furnished with wood and machine screws

Technical Information



Model 419

Application

Full Surface
Handed

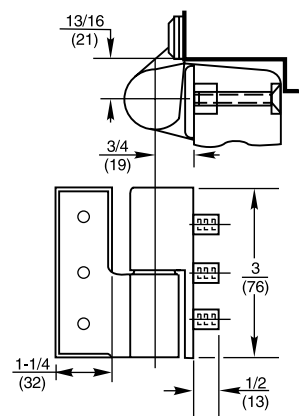
BHMA/ANSI NO: C07351



Product Description & Features

- Flush door and frame applications only
- Optional intermediate pivot where door and jamb portion cannot be mortised
- Maintains door alignment
- Non-ferrous base material
- 3/4" (19mm) offset only
- 1-3/4" door only
- Available for fire door assemblies (*ferrous material*) – specify F419
- Doors up to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Furnished with wood and machine screws

Technical Information



Model E-M19

Application

Offset Hung
Electric Pivot for Power Transfer
Handed

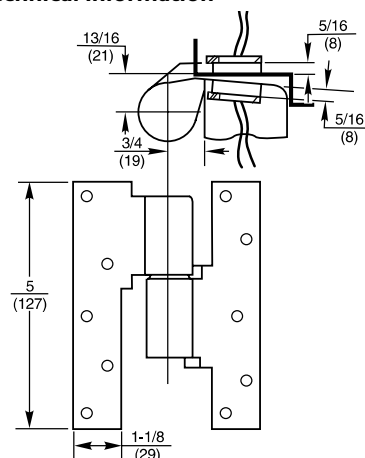


Whenever power transfer pivots are used, the leaves must not be separated

Product Description & Features

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

Technical Information



Hardwiring Made Easy®



Model E-M19U

Application

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

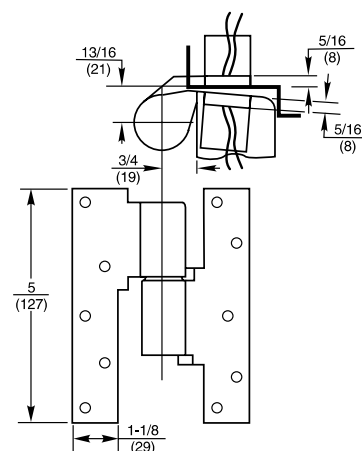


Whenever power transfer pivots are used, the leaves must not be separated

Product Description & Features

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

Technical Information



Pivots and Pivot Sets Electrified Intermediate or Side Jamb Pivots

Model E-ML19

Application

Offset Hung
Lead Lined or Extra Heavy Doors
Electric Pivot for Power Transfer
Handed

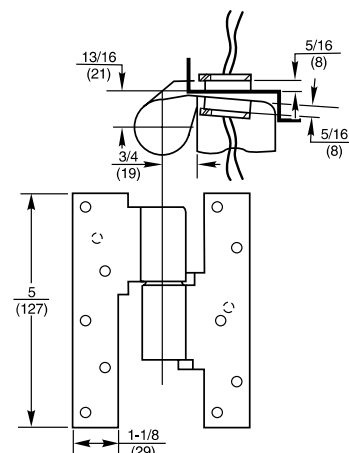


Whenever power transfer pivots are used, the leaves must not be separated

Product Description & Features

- Not load-bearing
- Always use ML19 intermediate pivot to install door
- Door and jamb portion are factory assembled and cannot be separated
- Standard with four, six, eight or twelve wires
- ElectroLynx® option available, suffix "QC#" (number of wires)
- 24-gauge wire is rated at 2 amps for low voltage, class II wiring applications
- Available for fire door assemblies (ferrous base material) specify E-FML19
- For 20-minute label, suffix "-20" to the part number
- 3/4" (19mm) offset
- Furnished with wood and machine screws
- Available 1-3/4" doors only

Technical Information



Hardwiring Made Easy®



Model CS-M19

Application

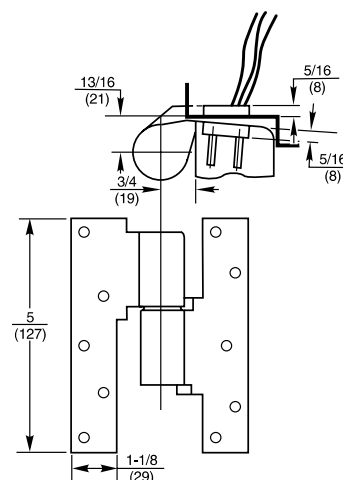
Offset Hung
Electric Pivot for Door
Position Monitoring
Handed



Product Description & Features

- Magnetically activated reed switch in frame leaf of pivot monitors door position
- Always use M19 intermediate pivot to install door
- Not load-bearing
- Adjusting screw is easy to set on-site after installation. Screw is disguised as an installation screw
- Switch rated at 0.3 amps and 28 volts maximum, 3 ea 22-gauge wires
- ElectroLynx® option not available
- 3/4" (19mm) offset
- Available 1-1/2" offset
- Furnished with wood and machine screws

Technical Information



Model CS-E-M19

Application

Offset Hung
Electric Pivot for Door
Position Monitoring
+ Power Transfer
Handed

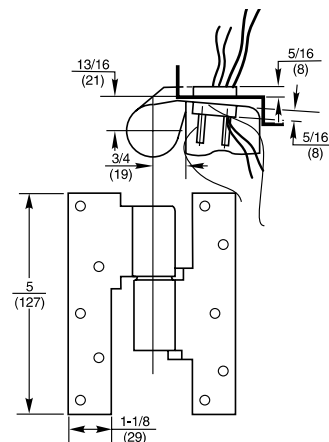


Whenever power transfer pivots are used, the leaves must not be separated

Product Description & Features

- Always use M19 intermediate pivot to install door
- Not load-bearing
- Magnetically activated reed switch in frame leaf of pivot monitors door position
- Adjusting screw is easy to set on-site after installation. Screw is disguised as an installation screw
- Door and jamb portion are factory assembled and cannot be separated
- For power transfer specify four, six, eight or twelve wires. 24-gauge wire is rated @ 2 amps for low voltage, class II wiring application
- Switch rated at 0.3 amps and 28 volts maximum. 3 ea 22 gauge wires only
- ElectroLynx® option available for power transfer only, suffix "QC#" (number of wires) – Specify 4, 6, 8 or 12 wires
- Not available in ferrous material
- 3/4" (19mm) offset
- Furnished with wood and machine screws
- For 20-minute label, suffix -20
- Available 1-1/2" offset

Technical Information



Hardwiring Made Easy®



Model CS-ML19

Application

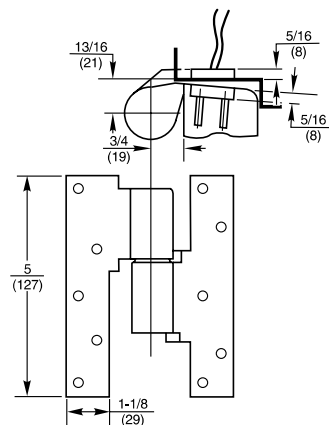
Offset Hung
Lead Lined or Extra Heavy Doors
Electric Pivot For Door Position
Monitoring
Handed



Product Description & Features

- Always use M19 intermediate pivot to install door
- Not load-bearing
- Door and jamb portion are factory assembled and cannot be separated
- Magnetically activated reed switch in frame leaf of pivot monitors door position
- Adjusting screw is easy to set on-site after installation. Screw is disguised as an installation screw
- Switch rated at 0.3 amps and 28 volts maximum, 3 ea 22 gauge wires
- ElectroLynx® option not available
- 3/4" (19mm) offset
- 1-3/4" door only
- Furnished with wood and machine screws

Technical Information



Model F519

Application

Pocket Door Pivot
Non-handed

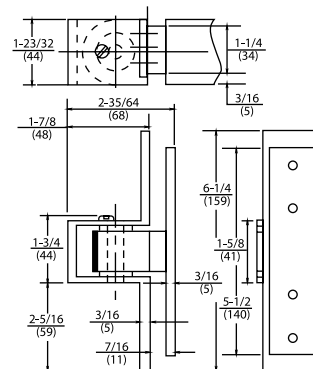
ANSI 156.4 C07611



Product Description & Features

- Full mortise, non-handed pivot for pocket door applications
- Heavy-duty steel pivot with ball bearings
- Allows doors to swing 90°
- Minimum three pocket pivots per door
- Doors 60" (1524mm) to 90" (2286mm) in height require four pocket pivots. Every additional 30" (762mm) of door height warrants another pocket pivot
- UL listed for all labeled pocket fire-door assemblies up to and including 3 hours
- Fire-rated door assemblies must have been tested with pocket pivots

Technical Information



Model E-F519

Application

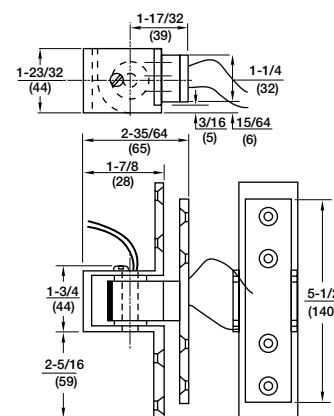
Pocket Door Pivot
Electric Pivot for Power Transfer
Non-handed



Product Description & Features

- Full mortise, non-handed pivot for pocket door applications
- Always use as middle pivot
- Specify with four, six, eight or twelve wires
- ElectroLynx® option available, suffix "QC#" (number of wires)
- 24-gauge wire is rated at 2 amps for low voltage, class II wiring applications
- Heavy-duty steel pivot with ball bearings
- Allows doors to swing 90°
- Door and jamb portions are factory assembled and cannot be separated
- Minimum three pocket pivots per door
- Doors over 90" (2286mm) in height require four pocket pivots. Every additional 30" (762mm) of door height warrants another pocket pivot
- Fire-rated door assemblies must have been tested with pocket pivots

Technical Information



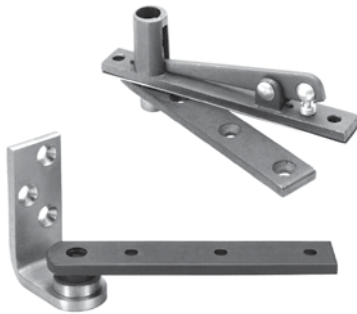
Hardwiring Made Easy®



Model 127-3/4

Application

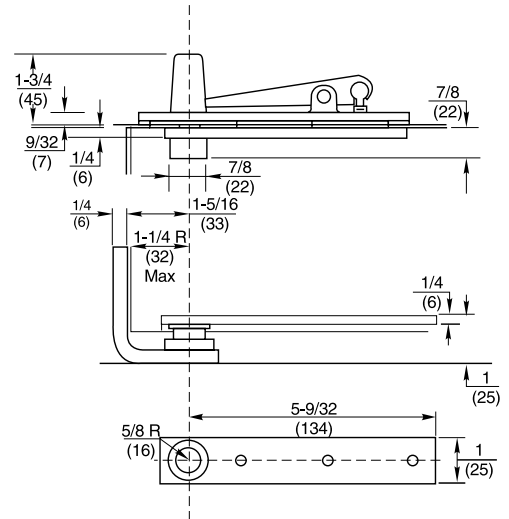
Interior Doors
Weight to 200 lbs.
Door Sizes up to 3'6" x 8'6"
(1067 x 2591mm)
Non-handed



Product Description & Features

- Standard top pivot 320 included
- Bottom pivot mortised into side jamb
- Weight of door borne by floor
- Pivot point centered in thickness of door
- Door must have radius on pivot edge
- Not allowed for use on labeled doors and frames
- Furnished with wood and machine screws
- Available with extended spindles in 1/2" (13mm) increments up to 2" (51mm) longer than standard

Technical Information



BHMA/ANSI NO: C07042

Center hung pivots are door hanging means only. To close doors see floor closer sections of the catalogs.

Model 128-3/4

Application

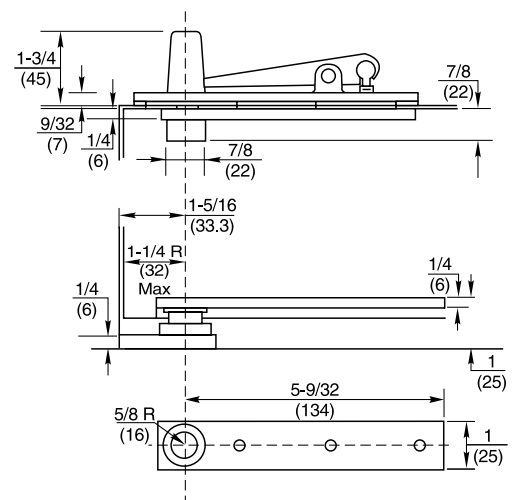
Interior Doors
Weight to 250 lbs.
Door Sizes up to 3'6" x 8'6"
(1067 x 2591mm)
Non-handed



Product Description & Features

- Identical to the 127-3/4 except:
- Bottom pivot mounts directly to floor

Technical Information



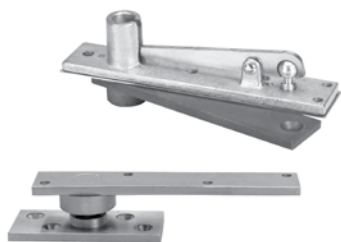
BHMA/ANSI NO: C07032

Center hung pivots are door hanging means only. To close doors see floor closer sections of the catalogs.

Model 370

Application

Exterior or Interior Doors
Weight to 500 lbs.
Door Sizes up to 3'8" x 8'6"*
(1118 x 2591mm)
Non-handed



BHMA/ANSI NO: C07032

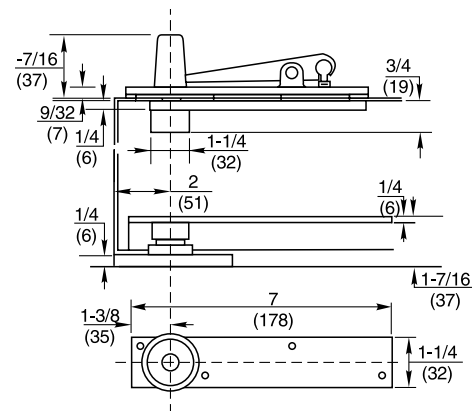
Center hung pivots are door hanging means only. To close doors see floor closer sections of the catalogs.

* For doors taller than 8'6" use top pivot H345 in lieu of 340

Product Description & Features

- Standard top pivot 340 included
- Bottom pivot mounts directly to floor
- Pivot point centered in thickness of door
- Door must have radius on pivot edge
- Pivot set features sealed bearings for protection against weather and debris
- Not allowed for use on labeled doors and frames
- Furnished with wood and machine screws
- Available with extended spindles in 1/2" (13mm) increments up to 2" (51mm) longer than standard

Technical Information



Model 117-3/4

Application

Exterior or Interior Doors
Weight to 600 lbs.
Door Sizes up to 4'0" x 8'6"*
(1219 x 2591mm)
Non-handed



BHMA/ANSI NO: C07021 (modified)

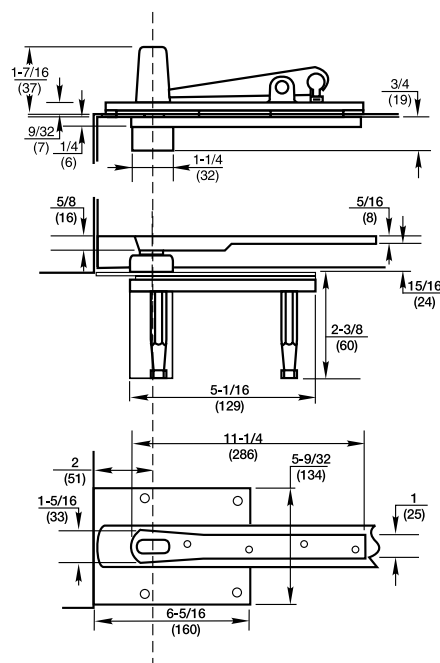
Center hung pivots are door hanging means only. To close doors see floor closer sections of the catalogs.

* For doors taller than 8'6" use top pivot H345 in lieu of 340

Product Description & Features

- Standard top pivot 340 included
- Bottom pivot is mortised into floor
- Pivot point centered in thickness of door
- Door must have radius on pivot edge
- Heavy-duty bearings
- Pivot set features sealed bearings for protection against weather and debris
- Not allowed for use on labeled doors and frames
- Furnished with wood and machine screws
- Available with extended spindles in 1/2" (13mm) increments up to 2" (51mm) longer than standard

Technical Information



Model H117-3/4

Application

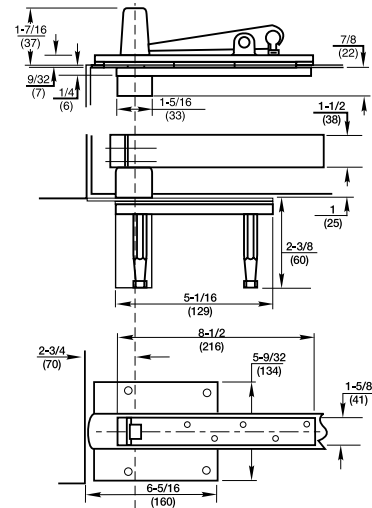
Exterior or Interior Doors
Weight to 1,000 lbs.
Door Sizes up to 4'0"x 8'6"*
(1219 x 2591mm)
Non-handed



Product Description & Features

- Standard top pivot H340 included
- Bottom pivot is mortised into floor
- End load arm for minimum 2" (51mm) thick doors
- Pivot point centered in thickness of door
- Additional surface applied thrust bearing
- Door must have radius on pivot edge
- Pivot set features sealed bearings for protection against weather and debris
- Not allowed for use on labeled doors and frames
- Furnished with wood and machine screws
- Available with extended spindles in 1/2" (13mm) increments up to 2" (51mm) longer than standard

Technical Information



BHMA/ANSI NO: C07011

Center hung pivots are door hanging means only. To close doors see floor closer sections of the catalogs.*

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

Model H117-3/4 x 587 Arm



BHMA/ANSI NO: C07011

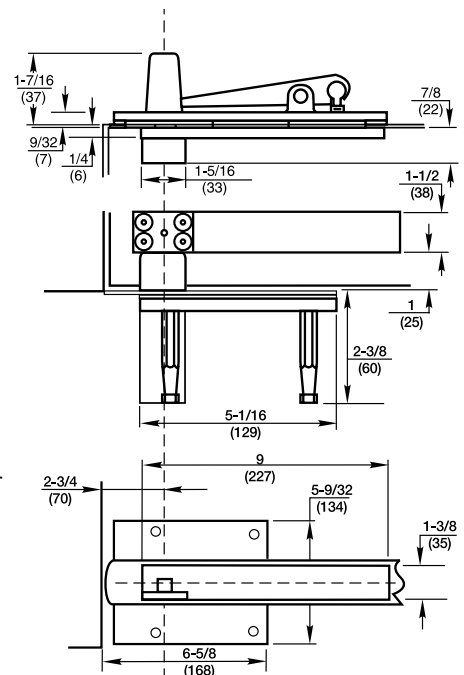
Center hung pivots are door hanging means only. To close doors see floor closer sections of the catalogs.*

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

Product Description & Features

- Standard top pivot H340 included
- Bottom pivot is mortised into floor
- Special side load arm for 1-3/4" thick doors or for moving pivot point toward lock edge of door
- Pivot point centered in thickness of door
- Additional surface applied thrust bearing
- Door must have radius on pivot edge
- Pivot set features sealed bearings for protection against weather and debris
- Not allowed for use on labeled doors and frames
- Furnished with wood and machine screws
- Available with extended spindles in 1/2" (13mm) increments up to 2" (51mm) longer than standard

Technical Information



Model 176

Application

Interior Doors
Weight up to 150#
Door Sizes up to 3'0" x 8'0"
Door Thickness 1-3/8 to 1-3/4
Non Handed

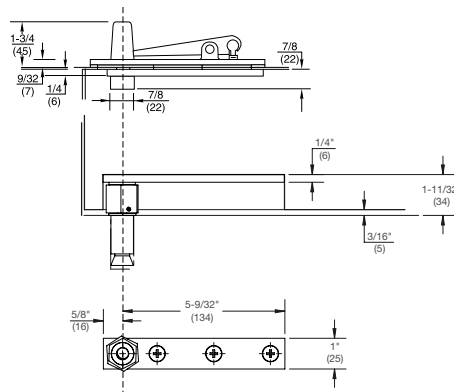


BHMA/ANSI: CO7032

Product Description & Features

- Standard top pivot 320 included
- Bottom pivot mounts directly to concrete floor
- Pivot point centered in thickness of the door
- Door must have radius on pivot edge
- Not allowed for use on labeled doors and frames
- Furnished with wood and machine screws
- 3/8" vertical adjustment
- No spindle extensions available

Technical Information



Model 178

Application

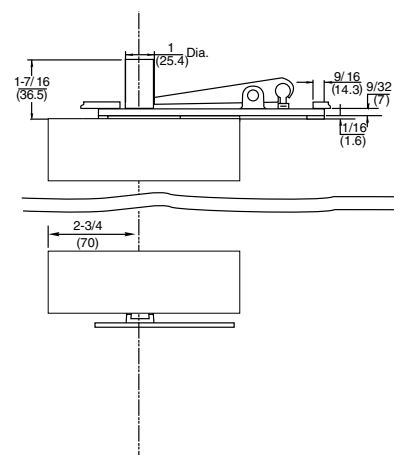
Interior Doors
Weight to 175 lbs.
Door Sizes up to 3'0" x 8'0"
(914 x 2591mm)
Non Handed



Product Description & Features

- Used on full glass doors
- Doors do not return to center
- Accommodates glass thicknesses 3/8"-1/2"
- Includes special floor portion, top and bottom patch fittings and walking beam top pivot

Technical Information



Center hung pivots are door hanging means only.
To close doors see closer sections of the catalogs.*

Model 320

Application

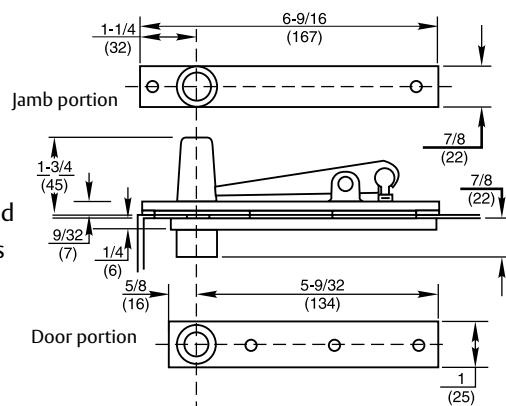
Fully Concealed
Non-handed



Product Description & Features

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

Technical Information



Model 340

Application

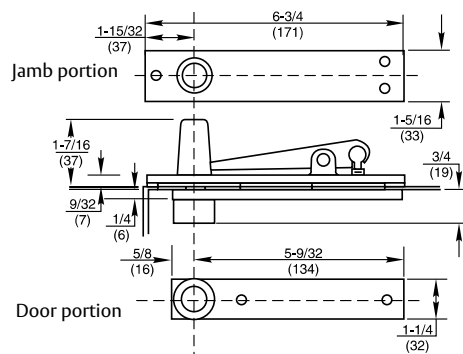
Fully Concealed
Non-handed



Product Description & Features

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

Technical Information



Model H340

Application

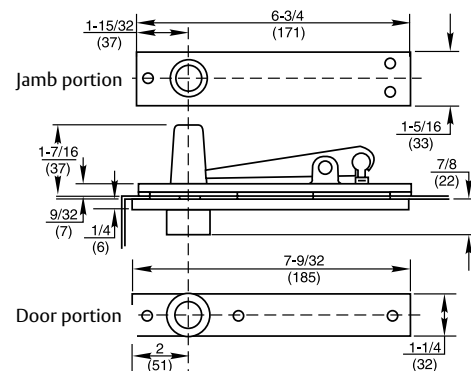
Fully Concealed
Heavy-Duty
Non-handed



Product Description & Features

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

Technical Information



Model 345

Application

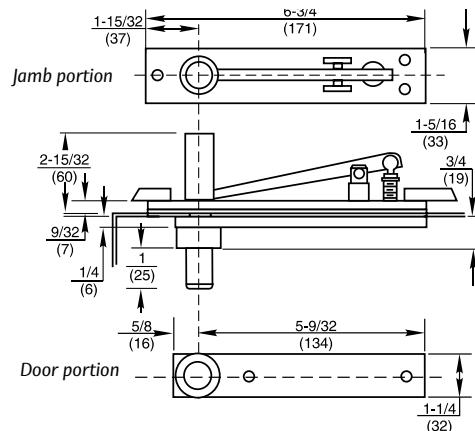
- Fully Concealed
- Center Hung
- Non-handed
- Earthquake Tolerant
- Taller Doors



Product Description & Features

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

Technical Information



Model H345

Application

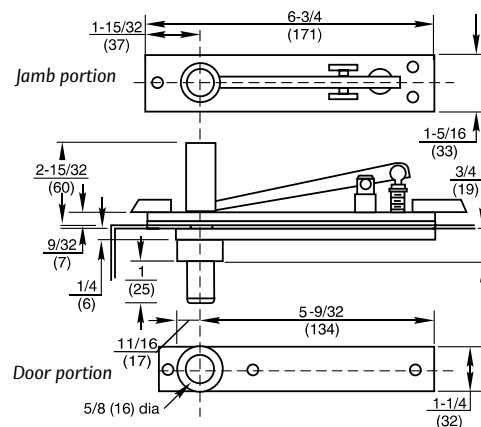
- Fully Concealed
- Center Hung
- Non-handed
- Earthquake Tolerant
- Taller Doors



Product Description & Features

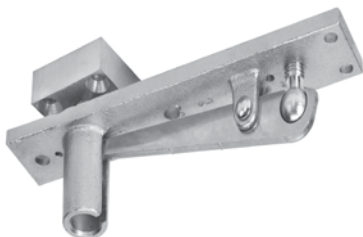
- Ideal for locations where there is a fear of dramatic building settling or for doors over 8'6" in height
- Long pivot pin engages in top of door 1-3/4" (44mm)
- Can be used with any center hung bottom pivot or floor closer. Order pivot set or floor closer LTP (*less top pivot*) with H345 on separate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

Technical Information



Model 340 x 102

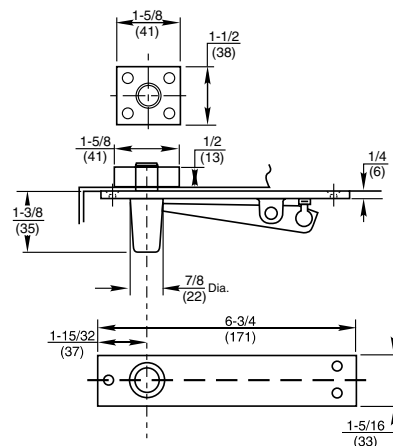
Application
Fully Concealed
Non-handed



Product Description & Features

- Optional top pivot for doors or frames that have conflicts with other hardware
- Can be inverted. The walking beam portion would be installed the header of the frame
- No finish plate supplied
- If inverted, finish plate should be ordered and priced separately (see page 162 for 340 or 320 plate part numbers)
- Oil-impregnated sintered bronze bushing
- Completely concealed when door is closed
- Available with longer than standard pivot pins. Increments are 1/4" (6mm) up to 3/4" (19mm)
- Furnished with wood and machine screws
- For lighter weight doors use 320 x 102

Technical Information



340 x 102 shown

Model 340 x AP3

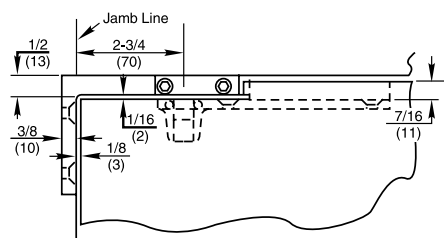
Application
Surface mounted
Handed doors up to 3'6" wide



Product Description & Features

- Used where no frame exists above door, or where it is not possible to anchor pivot into header of frame
- Center hung applications only
- Furnished with 340 door portion
- Part is handed to keep installation plate to inside of room or building
- Furnished with wood and machine screws

Technical Information



Model E-H340

Application

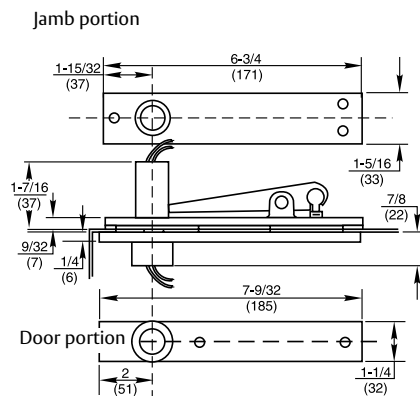
Center Hung
Top Pivot for Power Transfer
Non-handed



Product Description & Features

- Walking beam type pivot – 11/16" (17mm) diameter pivot pin with 3/4" (19mm) engagement
- Can be used with any center hung bottom pivot or floor closer. Order the pivot set LTP (less top pivot) with E-H340 as a separate line
- Heavy-duty needle bearing
- Specify two, four, six, eight or twelve wires
- Two-wire is available in 18 gauge and is not available ElectroLynx®
- 4, 6, 8 and 12 wires are 24 gauge and available in ElectroLynx®. Suffix QC# (number of wires)
- Completely concealed when door is closed
- Available with longer pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only
- Furnished with wood and machine screws

Technical Information



Hardwiring Made Easy®



Model E-H345

Application

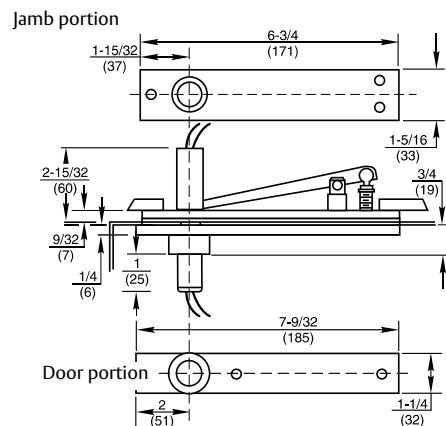
Fully Concealed
Center Hung
Top Pivot for Power Transfer
Non-handed
Earthquake Tolerant
Taller Doors



Product Description & Features

- Optional top pivot
- Longer pivot pin throw engages in top of door 1-3/4" (44mm). Ideal for locations where there is a fear of dramatic building settling
- Can be used with any center hung bottom pivot or floor closer. Order the pivot set LTP (less top pivot) with E-H345 as a separate line
- Used with heavy-duty pivots & floor closers
- Walking beam-type pivot – 11/16" (17mm) diameter pivot pin
- Heavy-duty needle bearing
- For doors over 8'6" in height
- Specify two, four, six, eight or twelve wires
- Two-wire is available in 18 gauge and are not available with ElectroLynx®
- 4, 6, 8 and 12 wires are 24 gauge and available in ElectroLynx®. Suffix QC# (number of wires)
- Furnished with wood and machine screws

Technical Information



Hardwiring Made Easy®



Pivots and Pivot Sets

Electrified Center Hung Top Pivots

Model CS-340

Application

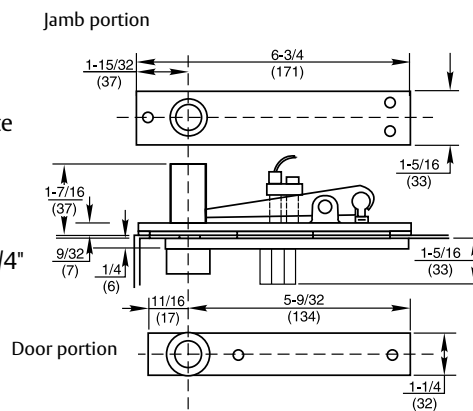
Center Hung
Door Position Monitoring
Non-handed



Product Description & Features

- Walking beam type pivot
- Magnetically activated reed switch in frame of pivot monitors door position
- Adjusting screw is easy to set on-site after installation screw is concealed by cover plate
- Oil-impregnated sintered bronze bearing
- Completely concealed when door is closed
- Available with longer pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only
- Switch rated at 0.3 amps and 28 volts maximum, 3 wires, 22 gauge
- ElectroLynx® option not available
- Furnished with wood and machine screws

Technical Information



Model CS-H345

Application

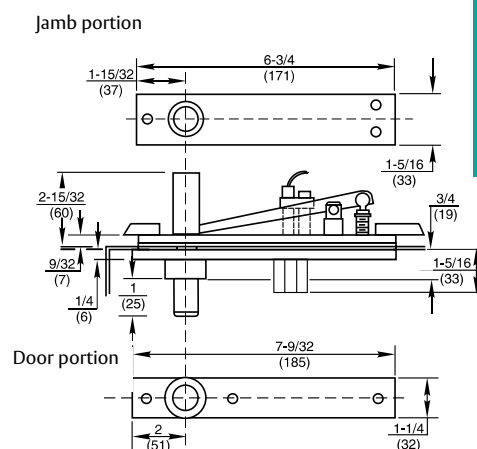
Fully Concealed
Center Hung
Door Position Monitoring
Non-handed
Taller Doors



Product Description & Features

- Longer pivot throw pin engages in top of door 1-3/4" (44mm). Ideal for locations where there is a fear of dramatic building settling or taller doors
- Can be used with any center hung bottom pivot or floor closer
- Magnetically activated reed switch monitors door position
- Adjusting screw is easy to set on-site after installation screw is concealed by cover plate
- Switch rated at 0.3 amps and 28 volts maximum, 3 wires, 22 gauge
- ElectroLynx® option not available
- Heavy-duty needle bearing
- Completely concealed when door is closed
- Furnished with wood and machine screws

Technical Information



Pivots and Pivot Sets Electrified Center Hung Top Pivots

Model CS-E-H340

Application

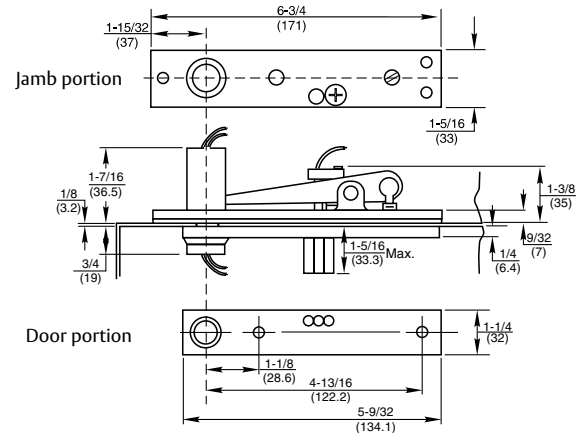
Center Hung
Door Position Monitoring
Power Transfer
Non-handed



Product Description & Features

- Walking beam type pivot – 11/16" (17mm) diameter pivot pin with 3/4" (19mm) engagement
- Magnetically activated reed switch in frame of pivot monitors door position
- Adjusting screw is easy to set on-site after installation screw is concealed by cover plate
- Switch rated at 0.3 amps and 28 volts maximum, 3 wires, 22 gauge
- Power transfer available with 2 each 18 gauge wire; 4,6,8, or 12 each 24 gauge wires; and 4,6,8 or 12 each ElectroLynx® (specify QC# of wires)
- Heavy-duty needle bearing
- Completely concealed when door is in the closed position
- Available with longer pivot pins. Increments are 1/4" (6mm), 1/2" (13mm), 3/4" (19mm) only
- Furnished with wood and machine screws

Technical Information



Hardwiring Made Easy®



Quick Reference of Options

Prefix	Model	Offset	Center Hung	Standard Top Pivot	Available 3-Hour Fire Rated Doors	Handed	Maximum Door Weight
	117-1/4	Yes	No	180	No	Yes	250
F	117	Yes	No	180	Yes	Yes	300
	173	Yes	No	180	No	Yes	150
	173 x 1-1/2	Yes	No	180	No	Yes	100
F	117 x 1-1/2	Yes	No	180	Yes	Yes	150
F	147	Yes	No	180	Yes	Yes	600
F	147 x 1-1/2	Yes	No	180	Yes	Yes	350
F*	L147	Yes	No	L180	Yes*	Yes	800
F	547	Yes	No	NA	Yes	Yes	500
	165	Yes	No	H180	No	Yes	300
	195	Yes	No	180	No	Yes	450
F	117-1/2	Yes	No	180	Yes	Yes	650
F	117-1/2 x 1-1/2	Yes	No	180	Yes	Yes	450
F (1-3/4 dr.)	L117	Yes	No	L180	Yes*	Yes	1750
	127-3/4	No	Yes	320	No	No	200
	128-3/4	No	Yes	320	No	No	250
	370	No	Yes	340	No	No	500
	117-3/4	No	Yes	340	No	No	600
	H117-3/4	No	Yes	H340	No	No	1000
	H117-3/4 x 587	No	Yes	H340	No	No	1000
	176	No	Yes	320	No	No	150
	178	No	Yes	Special	No	No	175

*For 1-3/4" doors only

**Weight for offset product is based on 3/4" offset and the use of an intermediate pivot.

How to Order

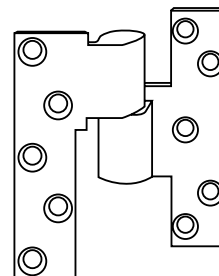
Prefix	L147 Model	3/4" Offset	x LTP Suffix	x RH Hand	x 626 Finish
F Fire-Rated Doors	117-1/4 117 173 147 L147 547 165 195 117-1-1/2 L117 127-3/4 128-3/4 370 117-3/4 H117-3/4 176 178	3/4" 1-1/2" Blank - Center Hung	587 CH Arm for 1-3/4" Dr Extended Spindles Longer Top Pivot Pins LTP Less Top Pivot -20 20-Minute Label Cover Pan (xDepth) SPLO Special Layout # Door Thickness - L Product	RH Right Hand LH Left Hand Blank - Center Hung	605 Bright Brass 606 Satin Brass 611 Bright Bronze 612 Satin Bronze 613 Dark Bronze 618 Bright Nickel 619 Satin Nickel 622 Flat Black 625 Bright Chrome 626 Satin Chrome

*specify finish

M19, M190, ML19, FA19, 219, 319, FM19, FM190

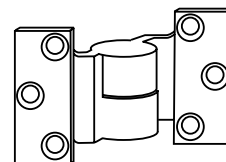
All Electrified M19 Intermediate Pivots

Model	Description
107015-*	Metal Screws for One Leaf
107115-*	Wood Screws for One Leaf
181778-*	Hex Cap
219, 319 and 419 Also Use:	
107059-*	Includes Screws and Backplate
	Torx® Available - Suffix "T"



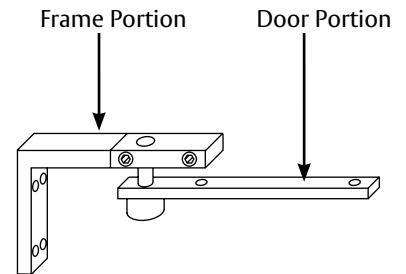
119 Intermediate Pivot

Model	Description
107014-*	Metal Screws for One Leaf
107114-*	Wood Screws for One Leaf
	Torx® Available - Suffix "T"



Angle Pivot-3

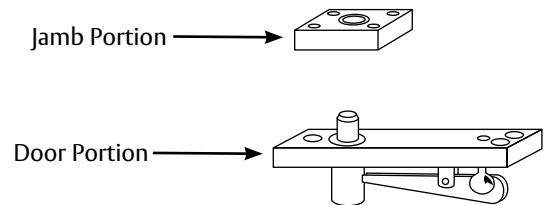
Model	Description
107047*	Includes Screws and Stud
30243	Door Portion
30814**	Frame Portion (handed)



Torx® not available.

Top Pivot 340 x 102 or 320 x 102

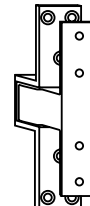
Model	Description
10210 AS	Jamb Portion
3065	Door Portion
640-ASY	Door Portion (320 x 102)
107012*	Jamb Portion Screw Kit
107329	Door Portion Screw Kit



Torx® not available.

F519 Pocket Pivot

Model	Description
619005-*	Screw Kit
	Torx® Available

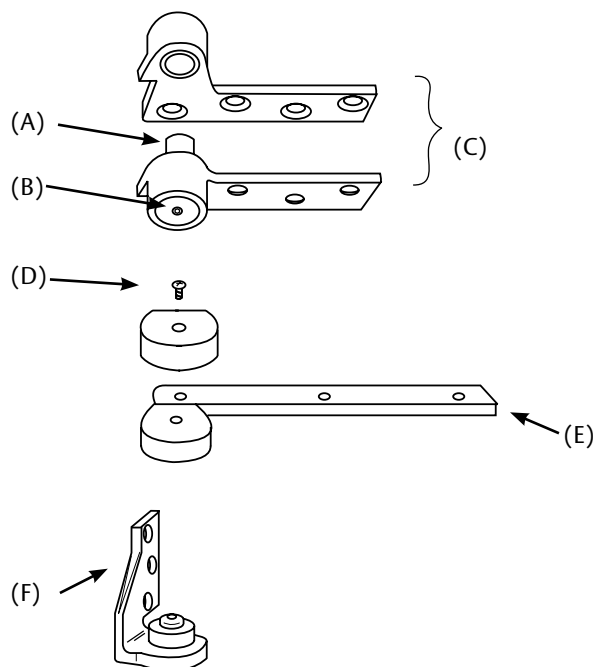


**specify finish*

117-1/4 Pivot Set

Right Hand Shown
3/4" Offset Only

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(D) Arm Cap and Screw 12029-AS
(E) Arm LH 11706LAS
(E) Arm RH 11705RAS
(F) Floor Portion Assy RH 17406R-AS
(F) Floor Portion Assy LH 17406L-AS



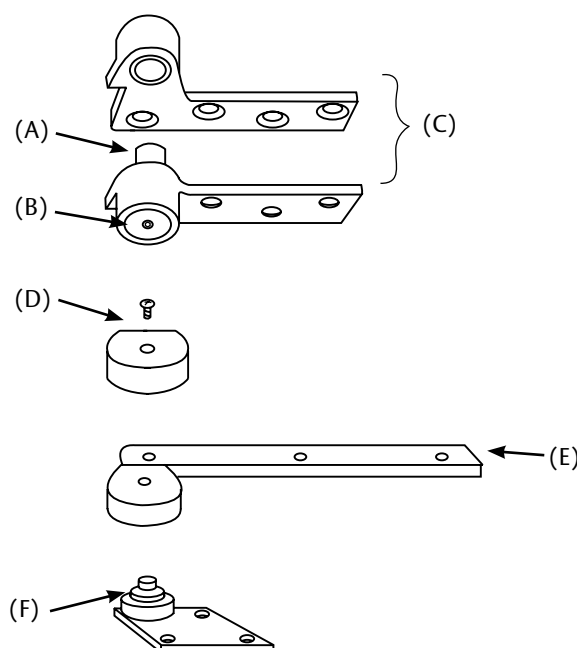
(C) 180 Top Pivot

Screw Kits
180 Screw Kit 107014 - * Machine (2 req.) 107114 - * Wood (2 req.)
117-1/4 Screw Kit 117127 - *

117, F117 Pivot Set

Right Hand Shown
3/4" and 1-1/2" Offset

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(D) Arm Cap and Screw 12029-AS
(E) 3/4" Offset Arm LH 11706LAS
(E) 3/4" Offset Arm RH 11705RAS
(F) 117 Floor Portion Assy 17526-AS
(F) F117 Floor Portion Assy 17559-AS



(C) 180 Top Pivot
(for Fire-Rated Doors,
order F180)

117 x 1-1/2 OS
(E) 1-1/2" Offset Arm LH 11706L15*
(E) 1-1/2" Offset Arm RH 11705R15*

Screw Kits
180 Screw Kit 107014 - * Machine (2 req.) 107114 - * Wood (2 req.)
Bottom Pivot Screw Kit 117127 - *

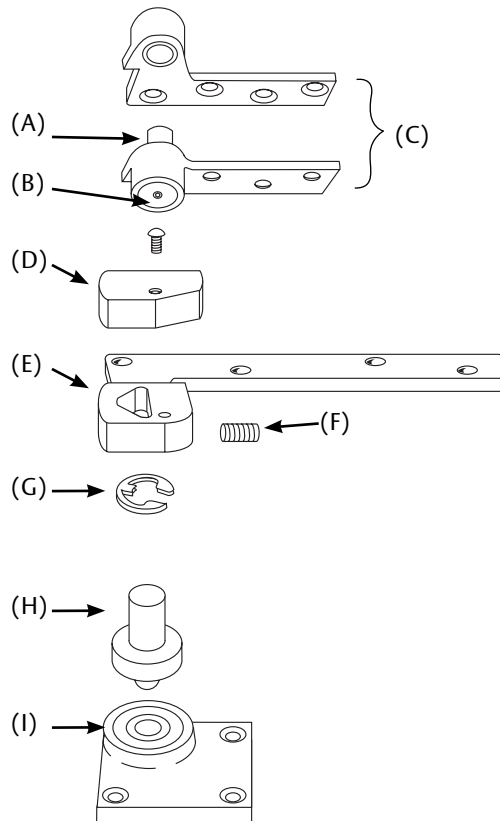
*specify finish

147, F147 Pivot Set

Right Hand Shown
3/4" and 1-1/2" Offset

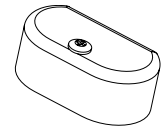
(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(D) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(E) Arm x Locking Screw 3/4" Offset 275177 RH 3/4" Offset 275176 LH
(F) Arm Lock Screw Pkg (5 per) 88905-PKG
(G) Arm Shims (2 per) 107071
(H) Spindle Stud 14714
(I) 147 Floor Portion x Bearing 14721-*AS

*specify finish



(C) 180 Top Pivot
(for Fire-Rated Doors
order F180)

**Pivots prior to 1988
use Arm Cap 012132**



147 & F147 1-1/2 OS

(E) Arm x Locking Screw
1-1/2" Offset 275167-*

Screw Kits

180/F180 Screw Kit
107014 - * Machine (2 req.)
107114 - * Wood (2 req.)

Arm Screw Kit
107044 Machine
107144 Wood

147/F147 Bottom Pivot Screw Kit
(includes "E" ring shims)
107062-*

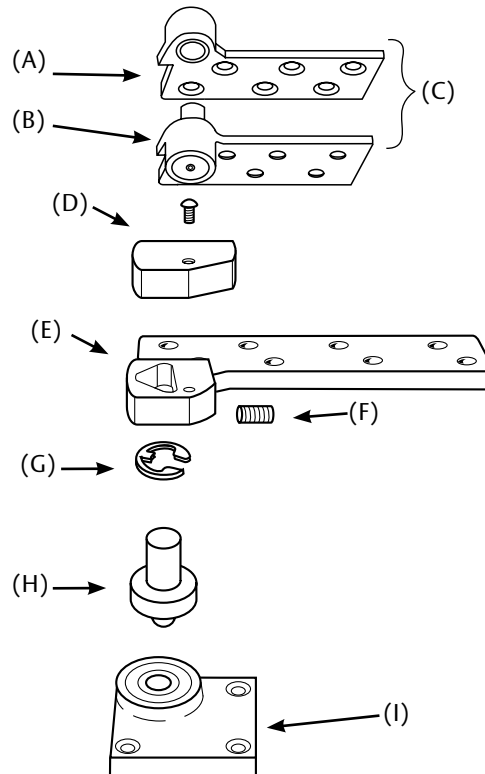
L147, FL147 Pivot Set

Right Hand Shown

3/4" Offset Only

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(D) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(E) Arm x Locking Screw 1-3/4" Door 18550-Asy RH 18650-Asy LH
(E) Arm x Locking Screw 2" Door 18551-Asy RH 18651-Asy LH
(E) Arm x Locking Screw 2-1/4" Door 18552-Asy RH 18652-Asy LH
(E) Arm x Locking Screw 2-1/2" Door 18553-Asy RH 18653-Asy LH
(E) Arm x Locking Screw 3" Door 18554-Asy RH 18654-Asy LH
(F) Arm Lock Screw Pkg (5 per) 88905-PKG

Special Note: FL147 is available
for 1-3/4" doors only



(C) L180 Top Pivot
(for Fire-Rated Doors
order FL180)

(G) Arm Shims (2 per)
107071

(H) Spindle Stud
14714

(I) L147 Floor Portion x
Bearing
14721-*AS

Screw Kits

L180/FL180 Screw Kit
107016 - * Machine (2 req.)
107116 - * Wood (2 req.)

Arm Screw Kit
107048 Machine (2 req.)
107144 Wood (2 req.)

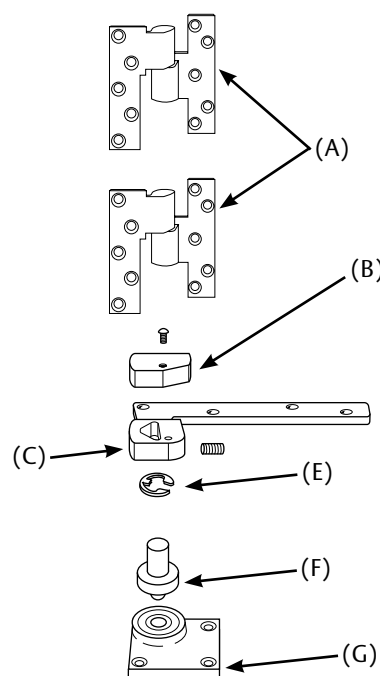
L147/FL147 Screw Kit
(includes "E" ring shim)
107062-*

547/F547 Pivot Set

Right Hand Shown

3/4" Offset Only

(B) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(C) Arm x Locking Screw 275177RH 275176RH
(D) Arm x Locking Screw Pkg (5 per) 88905-Pkg
(E) Arm Shim Kit (2 per) 107071
(F) Spindle Stud 14714
(G) 147 Floor Portion x Bearing 14759 R*AS 14759 L*AS



(A) M190 Intermediate
Pivot (For Fire-Rated
Doors order FM190)

Prior to 1988
see page 160 for
arm cap

147/F147 Bottom Pivot Screw Kit
(includes "E" ring shims)
107062-*

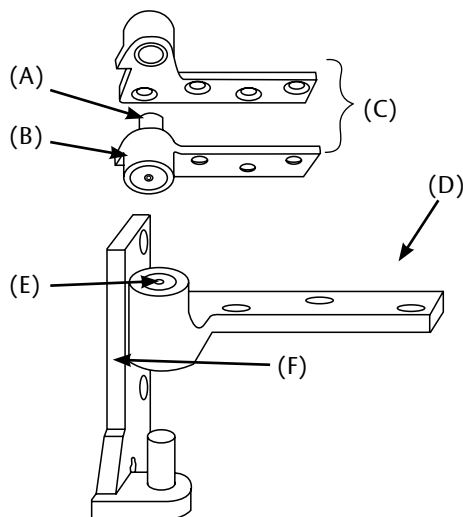
*specify finish

195 Pivot Set

Right Hand Shown

3/4" Offset Only

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(D) Door Portion Asy RH 19503-AS
(D) Door Portion Asy LH 19504-AS
(E) Cap 19511-*
(F) Jamb Portion Asy RH (Includes Stud) 19501-AS
(F) Jamb Portion Asy LH (Includes Stud) 19502-AS

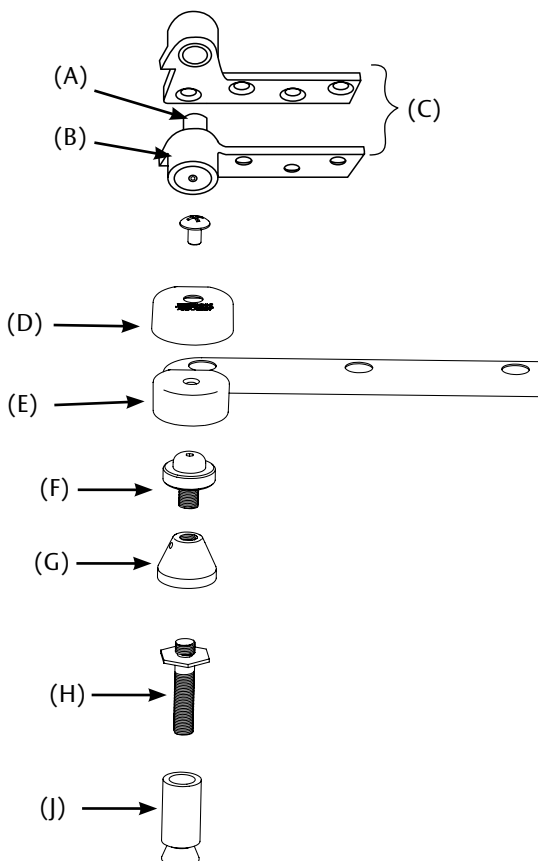


(C) 180 Top Pivot

Screw Kits
180 Screw Kit 107014 - * Machine (2 req.) 107114 - * Wood (2 req.)
195 Screw Kit 107014 - * Machine (2 req.) 107114 - * Wood (2 req.)

173 Pivot Set

(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(D) Arm Cap and Screw 12029-AS
(E) Arm LH 11706L*AS
(E) Arm RH 11705R*AS
(F) Spindle Stud 173003
(G) Spindle collar 173001
(H) Mounting Bolt 173002
(J) Floor Anchor 173010



(C) 180 Top Pivot

Screw Kits
180 Screw Kit 107014 - * Machine (2 req.) 107114 - * Wood (2 req.)
Bottom Arm Screw Kit 173176 Wood and Machine

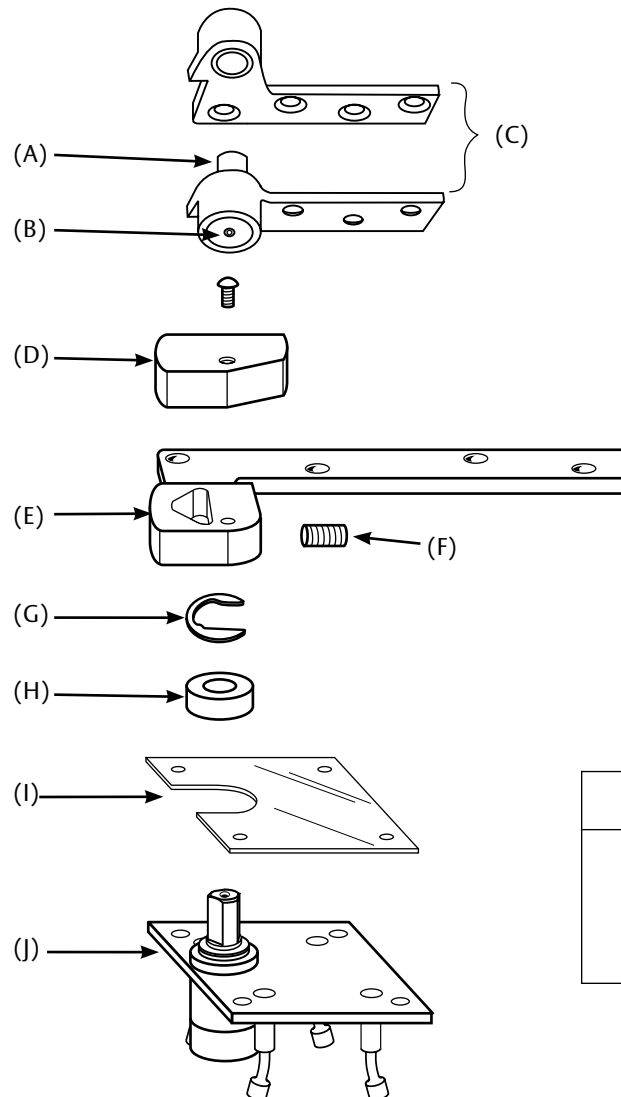
173 x 1-1/2OS
(E) 1-1/2" offset arm LH 11706L15*
(E) 1-1/2" offset arm RH 11705R15*

*specify finish

117-1/2, F117-1/2 Pivot Set

Right Hand Shown
3/4" and 1-1/2" Offset

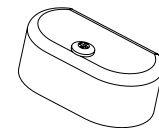
(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(D) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(E) Arm x Locking Screw 3/4" Offset 275177 RH 3/4" Offset 275176 LH
(F) Arm Lock Screw Pkg (5 per) 88905-PKG
(G) Arm Shim Kit (5 per) 275065-PKG
(H) Spindle Shoulder Collar 16301*
(I) Floor Plate x Screws 1174050-*
(J) 117-1/2 & F117-1/2 Floor Portion Assembly X01176350



(C) 180 Top Pivot
(for Fire-Rated Doors
order F180)

1-1/2" Offset Arm
275167-*

**Pivots prior to 1988
use Arm Cap 012132**



Screw Kits

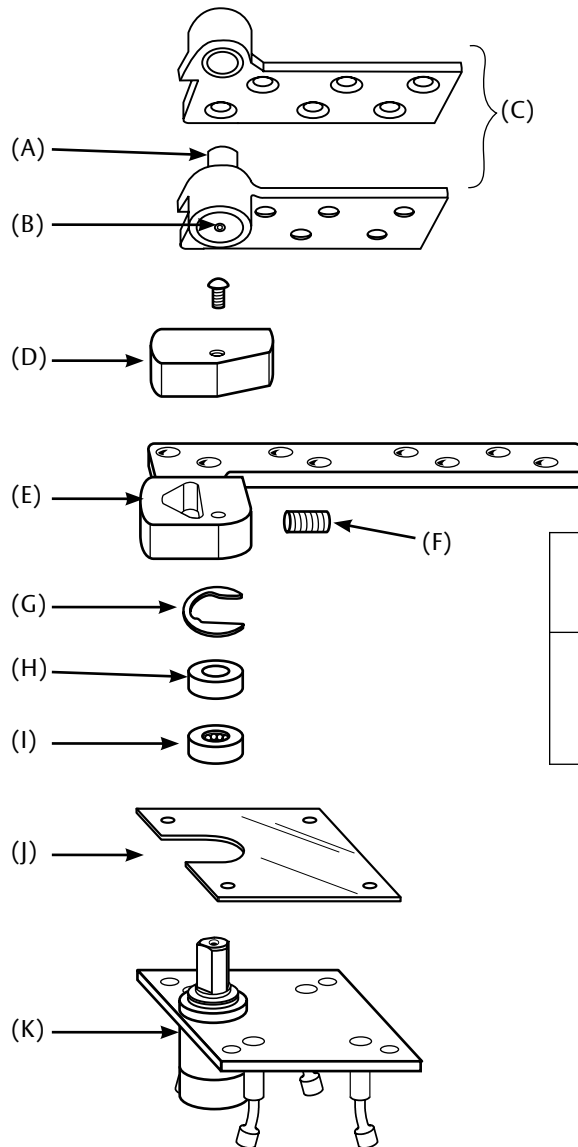
180/F180 Screw Kit 107014 - * Machine (2 req.) 107114 - * Wood (2 req.)
Floor Plate Screw Kit 107004-*
Arm Screw Kit 107044 - * Machine 107144 - * Wood

*specify finish

L117, FL117 Pivot Set

Right Hand Shown
3/4" Offset Only

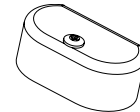
(A) Pivot Stud 181770-ASY
(B) Hex Cap 181778-*
(D) Arm Cap & Screw 012142R*AS (RH, BRS) 012142L*AS (LH, BRS) 012144R*AS (RH, SS) 012144L*AS (LH, SS)
(E) Arm x Locking Screw 1-3/4" Door 18550-ASY RH 18650-ASY LH
(E) Arm x Locking Screw 2" Door 18551-ASY RH 18651-ASY LH
(E) Arm x Locking Screw 2-1/4" Door 18552-ASY RH 18652-ASY LH
(E) Arm x Locking Screw 2-1/2" Door 18553-ASY RH 18653-ASY LH
(E) Arm x Locking Screw 3" Door 18554-ASY RH 18654-ASY LH
(F) Arm Lock Screw Pkg (5 per) 88905-PKG
(G) Arm Shim Kit (5 per) 275060-PKG
(H) Spindle Shoulder Collar 259500-*
(I) Heavy-Duty Thrust-Bearing 41204-PKG
(J) Floor Plate x Screws 1174050-*
(K) Floor Portion Assembly X01176351 Includes 41204-PKG



(C) L180 Top Pivot
(for Fire-Rated Doors
order FL180)

*Note: FL is available for
1-3/4" doors only*

**Pivots prior to 1988
use Arm Cap 012132**



Screw Kits

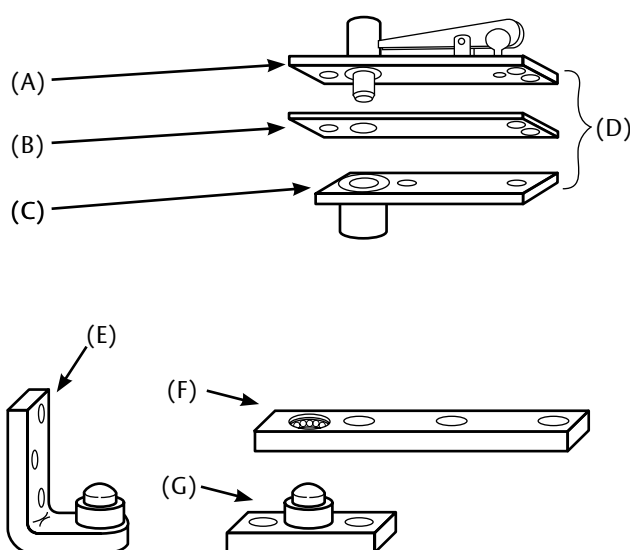
L180/FL180 Screw Kit 107016 - * Machine (2 req.) 107116 - * Wood (2 req.)
Arm Screw Kit 107048 - * Machine (2 req.) 107114 - * Wood (2 req.)
Floor Plate Screw Kit 107004 - * Machine (2 req.)

*Special Note: FL117 is available
for 1-3/4" doors only*

*specify finish

127-3/4 & 128-3/4 Pivot Sets

(A) Top Pivot Jamb Portion 640-ASY
(B) Top Pivot Plate x Screws 12724-*PK(SS) 12720-*PK (BRG)
(C) Top Pivot Door Portion 12716
(E) Jamb Portion & Stud Assembly 127-3/4 Only 12711-*
(F) Arm & Bearing Assembly 12714 Door Portion
(G) Floor Pivot & Stud Assembly 128-3/4 Only 71521-*AS



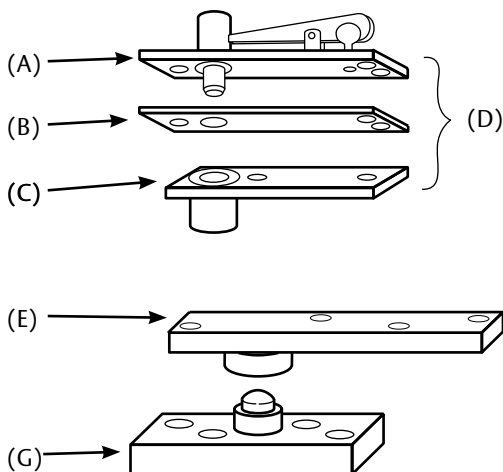
(D) Top Pivot
320

Screw Kits
320 Screw Kit 107340 Machine & Wood
127-3/4 & 128-3/4 Screw Kit 117127-*

*specify finish

370 Pivot Set

(A) Top Pivot Jamb Portion 3065
(B) Finish Plate x Screws 012202-*PK (BRS) 012204-*PK (SS)
(C) Top Pivot Door Portion 30243
(E) Arm 22131
(G) Floor Portion and Stud 22121-*



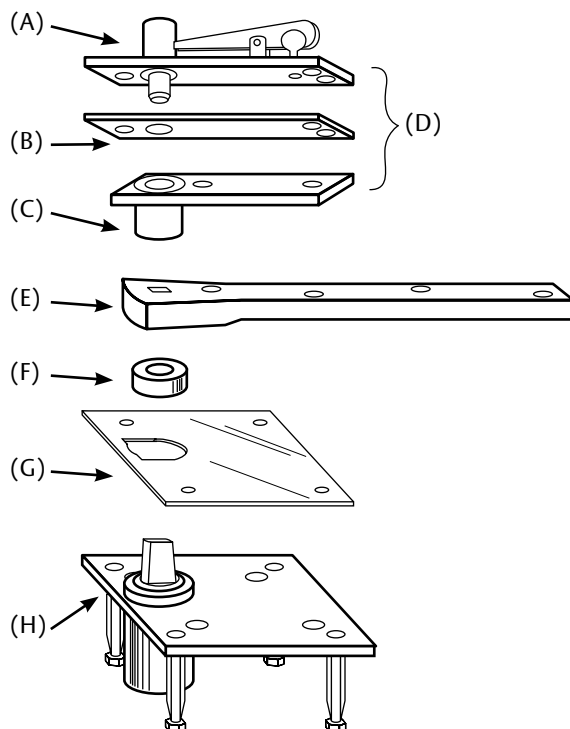
(D) 340 Top Pivot

Screw Kits
340 Top Pivot Screw Kit 107329 Machine & Wood
370 Floor Portion 107370-*

*specify finish

117-3/4 Pivot Set

(A) Top Pivot Jamb Portion 3065
(B) Top Pivot Finish Plate 012202-*PK(BRS) 012204-*PK(SS)
(C) Top Pivot Door Portion 30243
(E) Arm 185.75
(F) Spindle Shoulder Collar 16301*
(G) Floor Plate x Screws 1174020-*
(H) Floor Portion Assembly X01176320

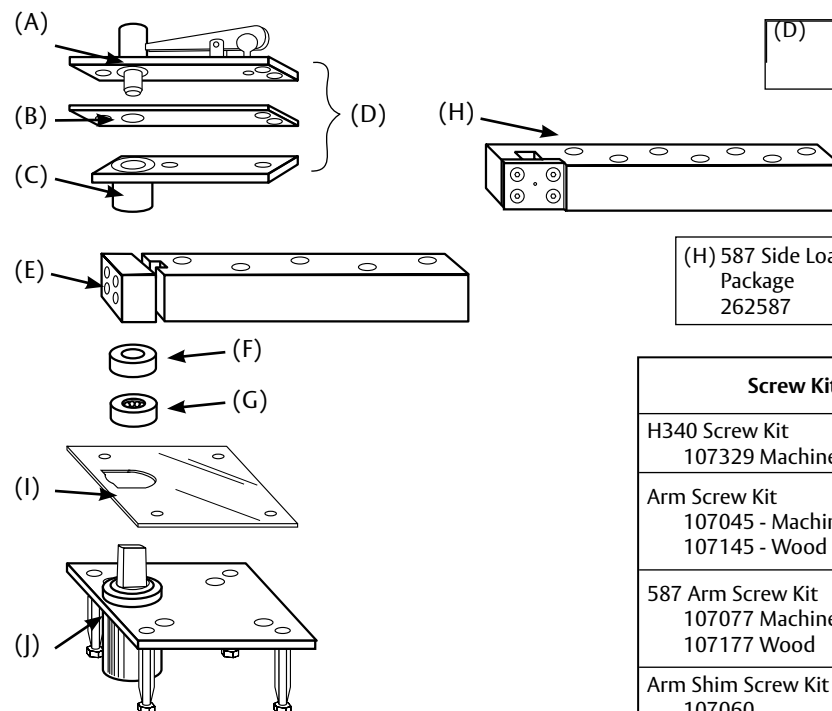


(D) Top Pivot
340

Screw Kits
340 Top Pivot Screw Kit 107329 Machine & Wood
Floor Plate Screws 107004-*
Arm Screw Kit 107064

H117-3/4 Pivot Set

(A) Top Pivot Jamb Portion 308548
(B) Top Pivot Finish Plate 012202-*PK(BRS) 012204-*PK(SS)
(C) Top Pivot Door Portion 30141
(E) Standard End Load Arm Package 262022
(F) Spindle Shoulder Collar 259500-*
(G) Heavy-Duty Thrust Bearing 41204-PKG
(I) Floor Plate x Screws 1174020-*
(J) Floor Portion Assembly X01176322 Includes 41204-PKG



(D) Top Pivot
H340

(H) 587 Side Load Arm
Package
262587

Screw Kits
H340 Screw Kit 107329 Machine & Wood
Arm Screw Kit 107045 - Machine 107145 - Wood
587 Arm Screw Kit 107077 Machine 107177 Wood
Arm Shim Screw Kit 107060
Floor Plate Screw Kit 107004-*

*specify finish

In USA: (800) 457-5670 or www.rixson.com

In Canada: (800) 461-3007 or www.assaabloy.ca

8/10

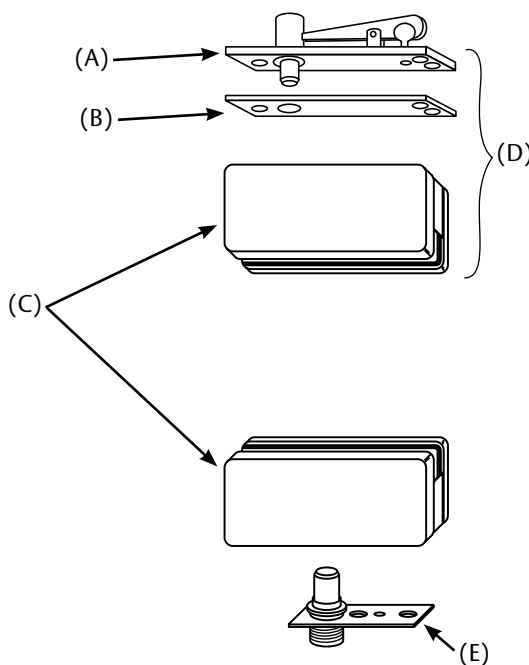
ASSA ABLOY, the global leader in door opening solutions

178 Pivot Sets

(A) Top Jamb Portion 42801
(B) Finish Plate 012202-*PK (BRS) 012204-*PK (SS)
(C) Patch Fitting 7495-*

Top Pivot Screw Kit 107329

*specify finish

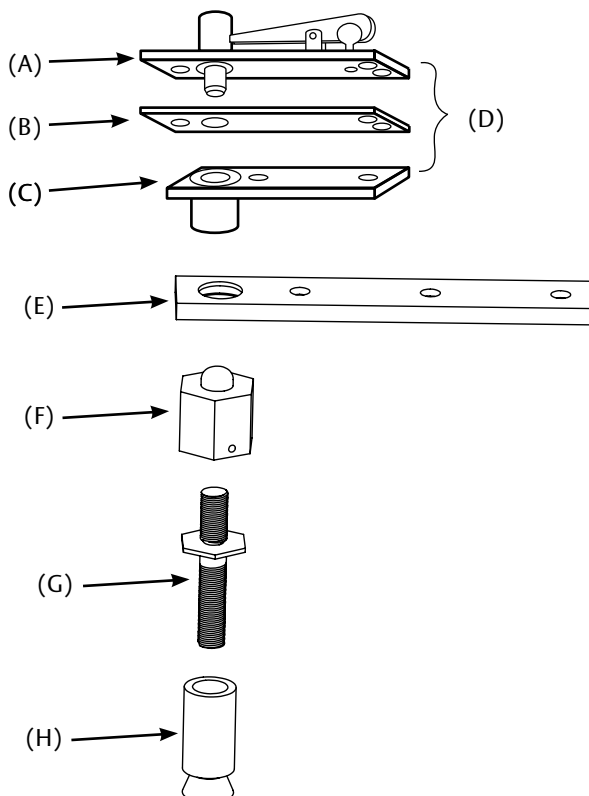


(D) Top Patch 7494-* PK
(E) Bottom Pivot Floor Portion 74104

176 Pivot Sets

(A) Top Pivot Jamb Portion 640-ASY
(B) Top Pivot Plate x Screws 12724-*PK(SS) 12720-*PK (BRG)
(C) Top Pivot Door Portion 12716
(E) Bottom Arm 12704
(F) Sleeve 176001
(G) Mounting Bolt 176002
(H) Floor Anchor 173010

*specify finish



Screw Kits
320 Screw Kit 107340 Machine and Wood
Bottom Arm Screw Kit 173176 Machine and Wood

Checkmate® Stops & Holders

RIXSON®
ASSA ABLOY

Absolute Door Control
and Entire Opening
Protection

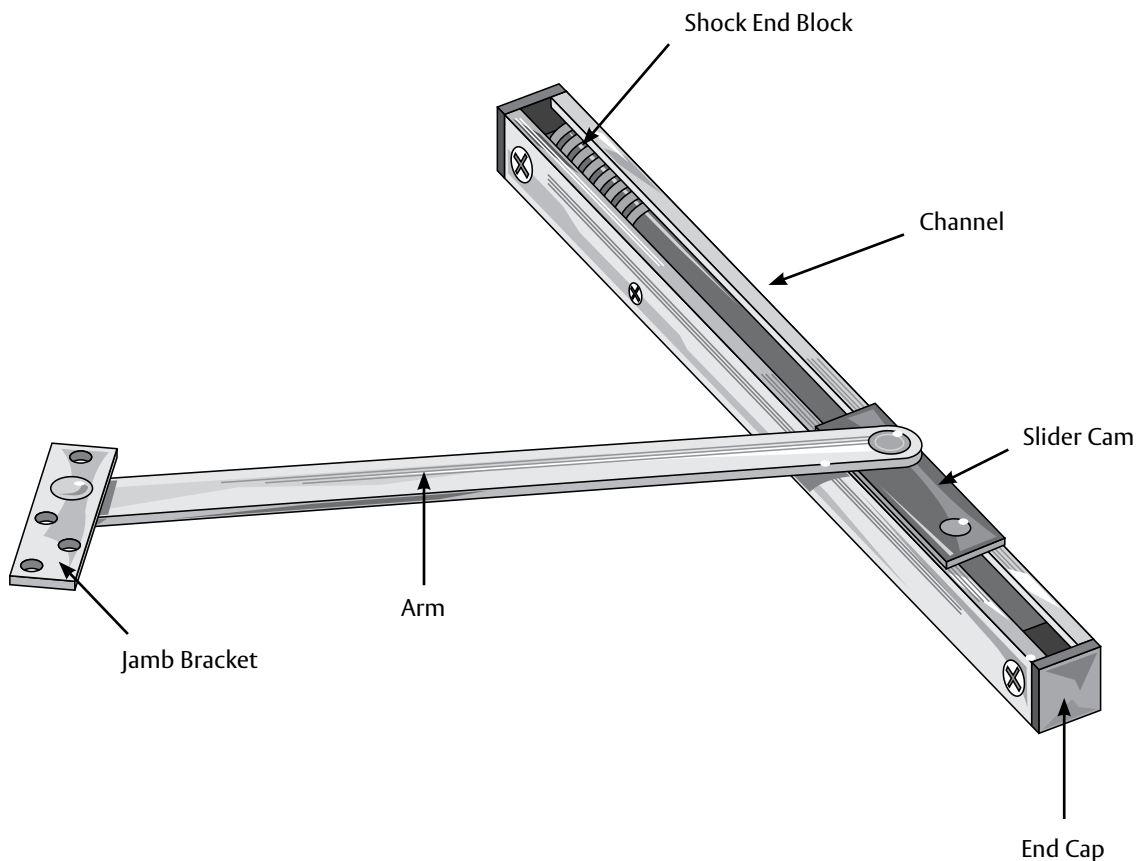


ASSA ABLOY, the global leader in door opening solutions

Introduction

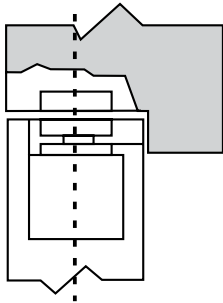
Checkmate® overhead stops and holders are used to extend the life of the door, frame and any door closing devices. They may be necessary if there are strong winds, high traffic or abuse.

- When used in conjunction with a floor closer, you have absolute door control, top and bottom
- Provides positive deadstop at selected degree
- There are 3 functions, 4 ways to order
 - Friction Stay – used on doors without closers to keep doors open
 - Hold Open – door remains held open near deadstop location
 - Stops – door deadstops at a particular degree of opening
 - Multi Function – adaptable as hold open and/or stops
- Available as surface mounted or concealed
- Standard mount on push side of door (*See model descriptions for pull side installations*)
- Thru bolts are furnished with all surface models and must be used for installation.



Contents	Page
Checkmate®: Stops & Holders General Information	166
How to Select Product	168
Options.....	169
Certifications	169
Limited Warranty.....	169
Specifications	169
#1 Heavy-Duty Concealed	170
#1ADJ Heavy-Duty Concealed Adjustable	171
#2 Standard-Duty Concealed Adjustable	172
#5 Standard-Duty Concealed	173
#6 Low Profile Concealed	174
#6ADJ Low Profile Concealed Adjustable	175
#4 Rod-Type Surface Holder	176
#7 Surface Cantilever Holder	177
#8HD Extra Heavy-Duty Double Lever	178
#9 Heavy-Duty Surface	179
#9ADJ Adjustable Heavy-Duty Surface.....	180
#10 Standard-Duty Surface Adjustable.....	181
#55 Standard-Duty Surface.....	182
Parts Drawings	183
How to Order	184

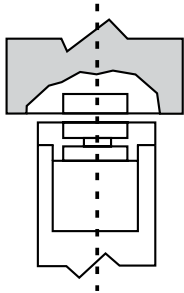
Concealed Mounting



Method A – Standard Installation, Single Acting **Nos. 1, 1ADJ, 2, 5, 6, 6ADJ Series**

For single acting doors, the jamb bracket is mortised into the frame and the channel mortised into the top of the door. Both the bracket and channel are secured with wood or machine screws.

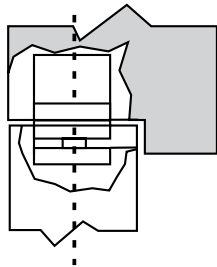
A cutout for the arm is required on the stop side of the door only. A hole must be drilled for the control knob of the No. 1 Series holder only.



Method B – Standard Installation, Double Acting **Nos. 1, 1ADJ, 2, 5, 6, 6ADJ Series**

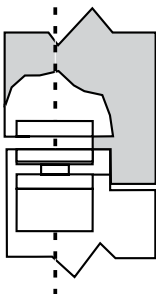
For double acting center hung floor closer or pivot applications.

Mounting is similar to Method A, with the exception that the cutout for the arm is required on both sides of the door.



Method C - Inverted Installation, Single Acting **Nos. 2, 5 Series**

Recommended for doors with minimum top rail depth. The arm and jamb bracket are mortised into the door, and the channel is installed in the header with wood or machine screws. The cutout for the arm is required on the stop side of the door only.

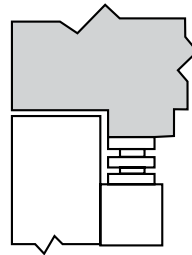


Method D - Rabbeted Door Installation, Single Acting **No. 2, 5 Series**

This method is designed for 1-3/4" doors with 1/2" maximum rabbet. The jamb bracket is mortised into the header and the arm and channel are mortised into the door. Wood or machine screws are used for fastening.

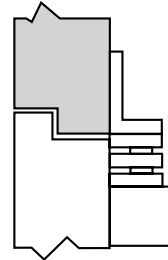
The cutout for the arm is required on the stop side of the door only.

Surface Mounting



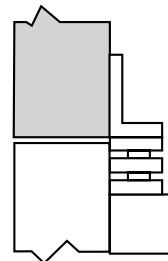
Method No. 1 – Standard Installation (Push side of door) **Nos. 8HD, 9, 9ADJ, 10, 55 Series**

The jamb bracket mounts on the soffit with wood or machine screws. The channel mounts to the door with sex bolts.



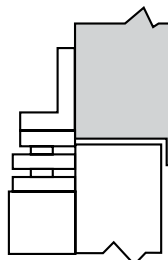
Method No. 2 – Rabbeted Door Installation (Push side of door) **Nos. 8HD, 9, 9ADJ, 10, 55 Series**

A special angle jamb bracket adapter mounts on the header with wood or machine screws. The jamb bracket attaches to the adapter with machine screws. The channel fastens to the door with sex bolts. (Same bracket as used with Method 3 and 5. See catalog for bracket number for each model.)



Method No. 3 - Flush Door Installation (Push side of door) **Nos. 8HD, 9, 9ADJ, 10, 55 Series**

This method of installation is identical to Method No. 2 for Rabbeted Doors. (Same bracket as used with Method 2 and 5. See catalog for bracket number for each model.)



Method No. 5 - Reverse Installation (Pull side of door) **Nos. 9, 9ADJ, 10 and 55 Series**

The jamb bracket adapter is secured to the header with wood or machine screws. The jamb bracket fastens to the adapter with machine screws and the channel mounts on the door with sex bolts. (Same bracket as used with Method 2 and 3. See catalog for bracket number.)

Options

Less Spring – Suffix LS

Heavy duty slide track type stops have a spring in the end of the channel that keeps the slider from deadstopping. If these units are being used with electromechanical closer, where the door must deadstop, the LS option is needed. For non-adjustable models 1 and 9 only.

Angle Jamb Bracket Adapter –

Standard-duty models suffix 5258 (non-handed)

Heavy-duty models suffix 5458 (LH) or 5459 (RH)

When surface mounted units are mounted on a rabbeted door on the push side, flush door and transom on the push side, or in a reverse installation on the pull side of the door a special bracket is needed. Note that not all models can be mounted on the pull side of the door (*See specific model numbers in catalog.*)

Security Screws – Suffix Torx

Security screws can be supplied for exposed fasteners.



5258



5458

Certifications

All Rixson Checkmate® overhead stops and holders are in compliance with ANSI/BHMA 156.8, Grade 1 and 2 Standards. See individual products for sub sections. See individual models for UL Listing.



Limited Warranty

Rixson Checkmate® stops and holders are warranted for 2 years for defect. See *Rixson* price book for specific details of the limited warranty

Specifications

All overhead stops and holders shall be from a single manufacturer.

Standard-duty models used for interior or low to medium traffic doors.

Heavy-duty models used for exterior or high traffic doors or doors subject to abuse.

For extremely abusive areas or high winds use double lever arm type.

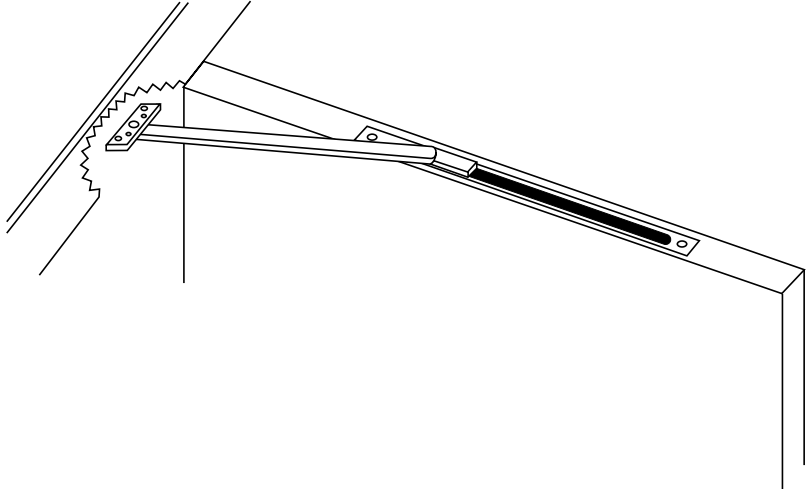
Coordinate deadstop and/or hold open location with concealed floor closers.

Checkmate products provide hold open and/or deadstop.

Concealed Mount – Interior or Exterior – High Traffic Doors

Product Description & Features

- Doors may be single or double acting
- Non-handed
- Slide track design
- Recommended for high traffic, heavy abuse installations
- Heavy shock absorber spring provides 5 -7° compression before dead stop
- LS option omits spring for special applications
- Surface on/off knob on hold open models
- Stop, friction stay or hold open functions
- Complete screw packet for installation in wood and machine screws for door and frame.
- For security areas, Torx® screws available for exposed fasteners
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening
- 1-3/4" minimum door thickness, for thicker doors, note thickness when ordering
- 1-3/16" square channel
- Stop function UL listed for fire door assemblies
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number		
		Friction	H.O.	Stop
*24 - 28	—	1-116	1-126	1-136
28-1/16 - 33	30 - 36	1-216	1-226	1-236
33-1/16 - 38	36-1/16 - 41	1-316	1-326	1-336
38-1/16 - 43	41-1/16 - 46	1-416	1-426	1-436
43-1/16 - 48	46-1/16 - 50	1-516	1-526	1-536

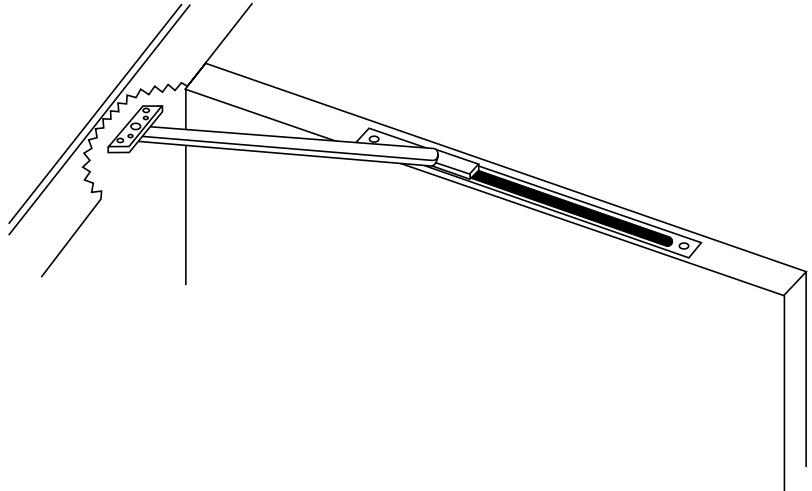
*Butt hung only on this size door. No swing clear hinges.

ANSI No.			
Shipping Weight 4.5 lbs.	Friction	H.O.	Stop
	CO1531	CO1511	CO1541

Concealed Mount – Interior or Exterior – High Traffic Doors

Product Description & Features

- Doors may be single or double acting
- Non-handed
- Slide track design
- Recommended for high traffic, heavy abuse situations
- Heavy shock absorber spring provides 5°-7° compression before dead stop
- Order specifically as a stop or hold open
- Degree of opening is fully adjustable and can be adapted to changing needs
- Complete screw packet kit for installation in wood or metal door and frame
- For security areas, Torx screws available for exposed fasteners
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening (*except 1ADJ for center hung 30-36 door which is 105°)
- 1-3/4" minimum door thickness, for thicker doors consult factory
- 1-3/16" square channel
- Stop function UL listed for fire door assemblies
- Patent-pending
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number	
		H.O.	Stop
*24 - 28	—	1ADJ-126	1ADJ-136
28-1/16 - 33	30 - 36	1ADJ-226	1ADJ-236
33-1/16 - 38	36-1/16 - 41	1ADJ-326	1ADJ-336
38-1/16 - 43	41-1/16 - 46	1ADJ-426	1ADJ-436
43-1/16 - 48	46-1/16 - 50	1ADJ-526	1ADJ-536

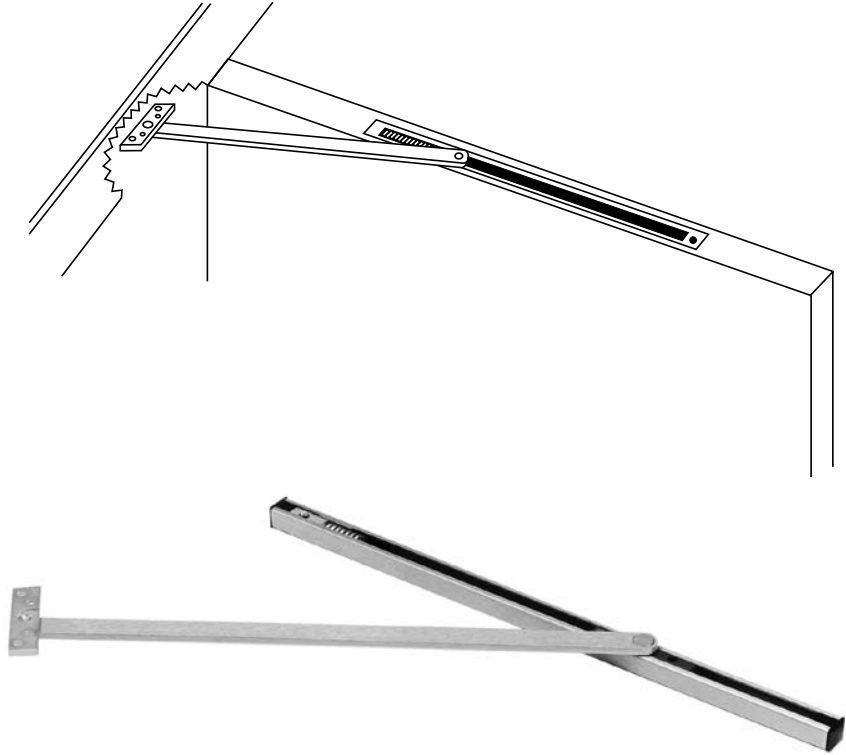
*Butt hung only on this size door. No swing clear hinges.

ANSI No.		
Shipping Weight 4.5 lbs.	H.O.	Stop
	C01511	C01541

Concealed Mount – Interior – Medium Traffic Doors

Product Description & Features

- Doors may be single or double acting
- Non-handed
- Slide track design
- Recommended for medium traffic, medium weight doors
- Degree of opening is fully adjustable and can be adapted to changing needs
- Heavy shock absorber spring provides 5 -7° compression before dead stop
- Can be ordered specifically as a stop, friction stay, or hold open
- Multi-function unit is shipped as a stop. Can be converted to a hold open or friction in the field. 5012-PKG (*Adapter kit*) included
- Complete screw packet kit for installation in wood or metal door and frame
- For security areas, Torx® screws available for exposed fasteners, but heavy-duty units should be considered for high security applications
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening
- 3/4" square channel
- Stop function UL listed for fire door assemblies
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (*in inches*)

Butts Offset Pivots	Center Hung Pivots	Model Number			
		Friction	H.O.	Stop	Multi
*18 - 24	—	2-116	2-126	2-136	2-146
24-1/16 - 30	27 - 32	2-216	2-226	2-236	2-246
30-1/16 - 36	32-1/16 - 38-1/2	2-316	2-326	2-336	2-346
36-1/16 - 42	38-9/16 - 45	2-416	2-426	2-436	2-446
42-1/16 - 48	45-1/16 - 48	2-516	2-526	2-536	2-546

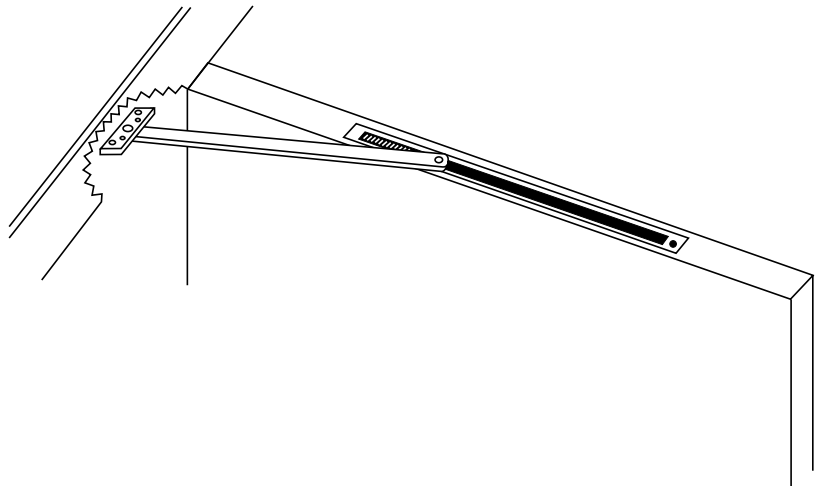
ANSI No.			
Shipping Weight 3.5 lbs.	Friction	H.O.	Stop
	C04532	C04512	C04542

*Butt hung only on this size door. No swing clear hinges.

Concealed Mount – Interior – Medium Traffic Doors

Product Description & Features

- Doors may be single or double acting
- Non-handed
- Slide track design
- Recommended for medium traffic, medium weight interior doors
- Degree of opening determined by templating – not field adjustable.
- Heavy shock absorber spring provides 5-7° compression before dead stop
- Complete screw packet allows for installation in wood or metal door and frame
- For security areas, Torx® screws available for exposed fasteners, but heavy-duty units should be considered for high security applications
- Available in 652 and sprayed finishes, only
- Durable slider cam and shock block
- 110° maximum opening
- 3/4" square channel
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number	
		H.O.	Stop
*18 - 24	—	5-126	5-136
24-1/16 - 30	27 - 32	5-226	5-236
30-1/16 - 36	32-1/16 - 38-1/2	5-326	5-336
36-1/16 - 42	38-9/16 - 45	5-426	5-436
42-1/16 - 48	45-1/16 - 48	5-526	5-536

ANSI No.		
Shipping Weight 3.5 lbs.	H.O.	Stop
	C04512	C04542

*Butt hung only on this size door. No swing clear hinges.

Concealed Mount – Interior or Exterior – Medium Traffic Doors

Product Description & Features

- Doors may be single or double acting
- Non-handed
- Recommended for medium traffic, medium weight interior or exterior doors
- Low profile concealed channel designed for installation in aluminum storefront doors
- Heavy shock absorber spring provides 5-7° compression before dead stop
- Complete screw kit allows for installation in wood or metal door and frame
- For security areas, Torx® screws optional
- Standard architectural finishes
- Durable slider cam
- 110° maximum opening
- 1-3/4" minimum door thickness
- Channel is 1-1/4" wide by 1/2" deep
- Stop function UL listed for fire door assemblies
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory

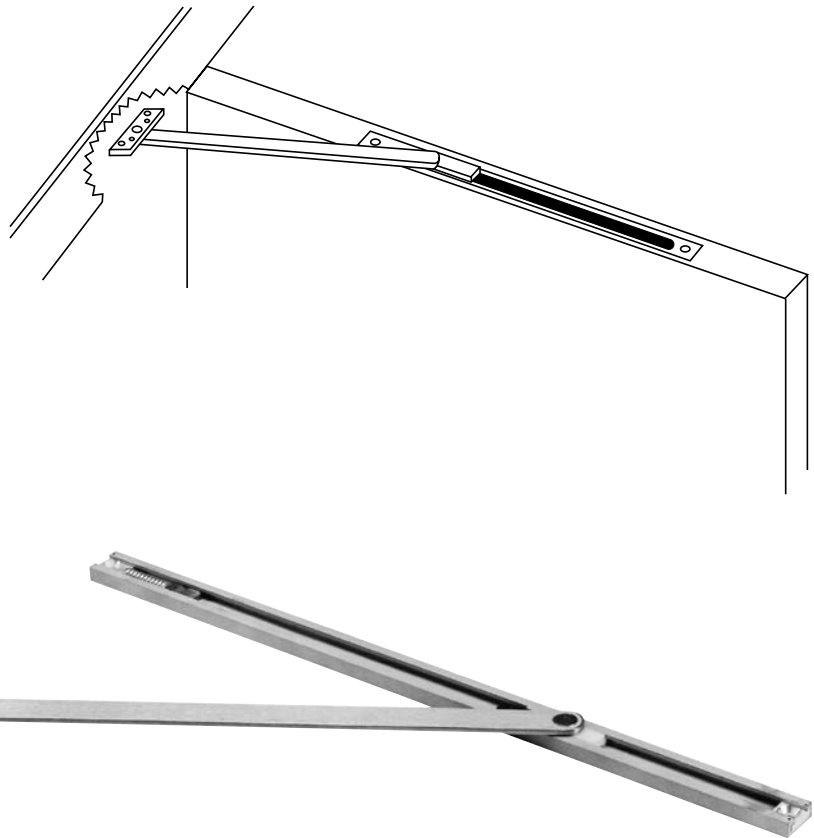


Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number
Door Opening		Stop
*24 - 28	—	6-136
28-1/16 - 33	30 - 36	6-236
33-1/16 - 38	36-1/16 - 41	6-336
38-1/16 - 43	41-1/16 - 46	6-436
43-1/16 - 48	46-1/16 - 50	6-536

*Butt hung only on this size door. No swing clear hinges.

ANSI No.	
Shipping Weight 4.5 lbs.	Stop C01541

Concealed Mount – Interior or Exterior – Medium Traffic Doors

Product Description & Features

- Doors may be single or double acting
- Non-handed
- Recommended for medium traffic, medium weight interior doors or exterior
- Low profile concealed channel design for installation in aluminum doors
- Heavy shock absorber spring provides 5°-7° compression before dead stop
- Degree of opening is fully adjustable and can be adapted to changing needs
- Complete screw packet for installation in wood or metal door and frame
- Hold open adapter kit 666022-PKG to change function in field
- For security areas, Torx screws available for exposed fasteners
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening (except 6ADJ for center hung 30-36 door which is 105°)
- 1-3/4" minimum door thickness, for thicker doors consult factory
- Channel is 1-1/4" wide x 1/2" deep
- Stop function UL listed for fire door assemblies
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory

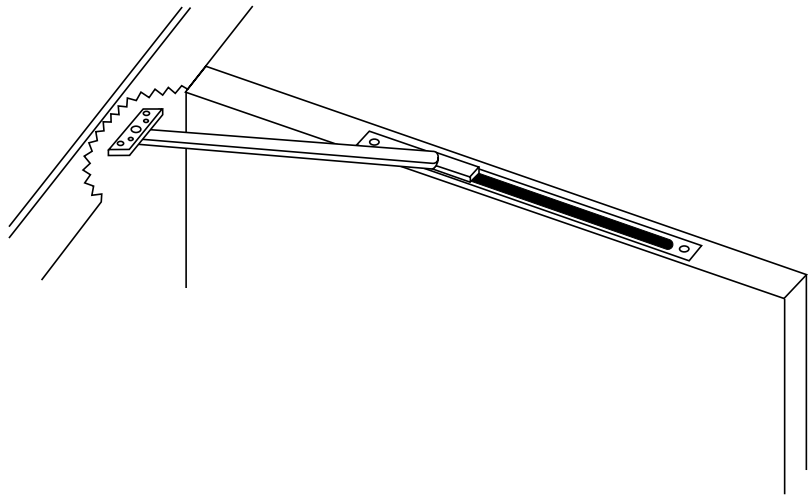


Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number
		Stop
*24 - 28	—	6ADJ-136
28-1/16 - 33	30 - 36	6ADJ-236
33-1/16 - 38	36-1/16 - 41	6ADJ-336
38-1/16 - 43	41-1/16 - 46	6ADJ-436
43-1/16 - 48	46-1/16 - 50	6ADJ-536

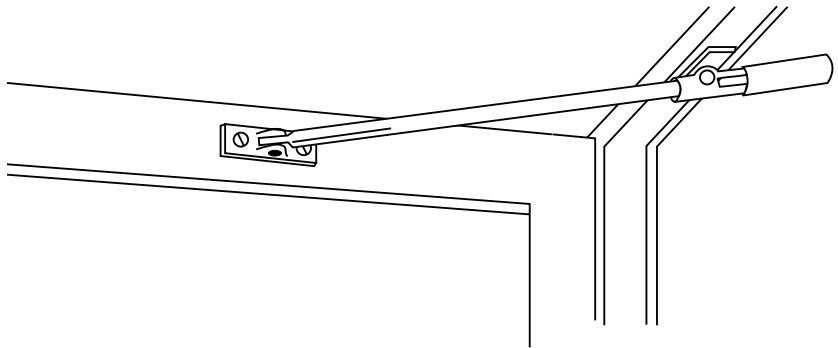
ANSI No.	
Shipping Weight 4.5 lbs.	Stop
	C01541

*Butt hung only on this size door. No swing clear hinges.

Rod-Type Surface Holder – Interior or Exterior Doors

Product Description & Features

- Single acting
- Non-handed
- Rod design
- Recommended for industrial areas
- Hold open and stop combined
- Shock absorber
- Complete screw packet with thru-bolts for door, wood and machine screws for frame
- Standard architectural finishes
- 110° maximum opening
- For security areas, Torx® screws optional
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (in inches)

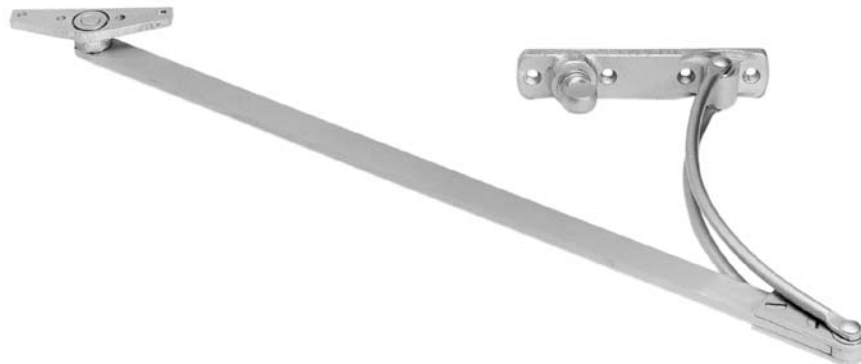
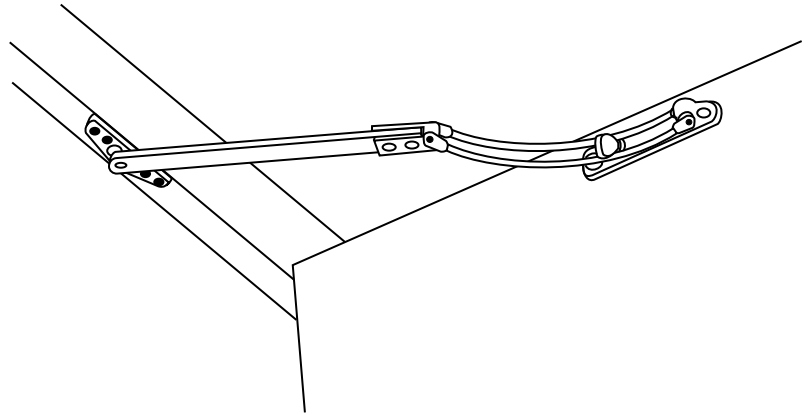
Butts Offset Pivots	Model Number
	Hold Open and Stop
29 - 34-1/2	4-126
35 - 40-1/2	4-226
41 - 46-1/2	4-326
47 - 53	4-426

ANSI No.		
Shipping Weight 3 lbs.	H.O.	Stop
	C08511/C08541	

Surface Mount – Interior or Exterior Doors

Product Description & Features

- Single acting
- Non-handed
- Cantilever design
- Hold open only
- Double spring arm absorbs shock
- Complete screw packet with thru-bolts for door, wood and machine screws for frame
- For security areas, Torx® screws available for exposed fasteners
- Self-lubricating bronze bearings
- Sprayed finishes only
- 110° maximum opening
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (*in inches*)

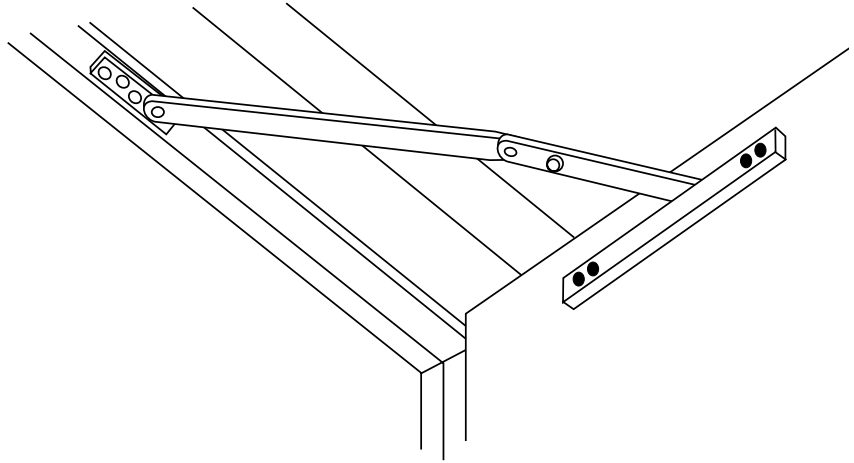
Butts Offset Pivots	Model Number
	Hold Open
24 - 30	7-126
30-1/16 - 34	7-226
34-1/16 - 39	7-326
39-1/16-48	7-426

ANSI No.	
Shipping Weight 7 lbs.	H.O.
	C09551

Surface Mount – Interior or Exterior – High Traffic Doors

Product Description & Features

- Single acting doors push side mounting (only)
- Non-handed
- Double lever design
- Recommended for high traffic, heavy abuse installations
- Extra heavy shock absorber spring provides 6° compression before deadstop
- Available with stop function or thumbturn hold open
- Complete screw packet with thru-bolts for door, wood and machine screws for frame.
- Torx® screws optional for security applications
- Standard architectural finishes
- 110° maximum opening
- 1-3/4" minimum door thickness
- For flush mounting on the push side of the door use angle jamb bracket adapter 5458 LH 5459RH
- Cannot be mounted on pull side of door
- Stop function UL listed for fire door assemblies
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number	
		H.O.	Stop
*24 - 27	26 - 29-1/2	8-126	8-136
27-1/16 - 32-1/2	29-6/16 - 35	8-226	8-236
32-9/16 - 38-3/4	35-1/16 - 42-1/2	8-326	8-336
38-13/16 - 42-1/2	41-9/16 - 45	8-426	8-436
42-9/16 - 48	45-1/16 - 48	8-526	8-536

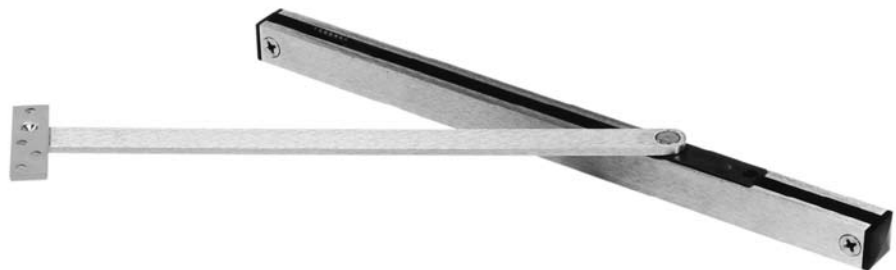
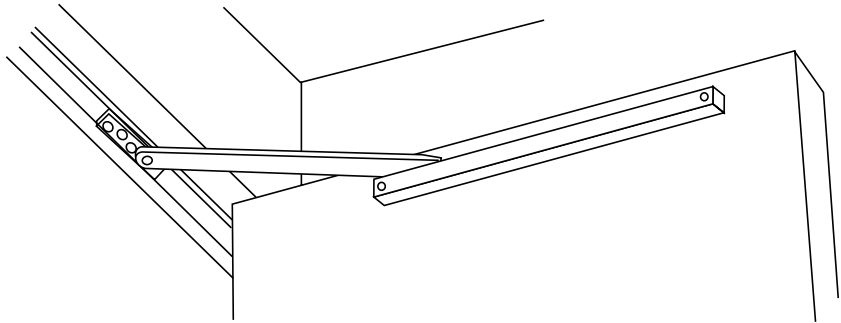
ANSI No.		
Shipping Weight 4.5 lbs.	H.O.	Stop
	C03511	C03541

*Butt hung only on this size door. No swing clear hinges.

Surface Mount – Interior or Exterior – High Traffic Doors

Product Description & Features

- Doors are single acting
- Non-handed
- Slide track design
- Recommended for high traffic, heavy abuse installations
- Heavy shock absorber spring provides 5-7° compression before deadstop
- LS option omits spring for special application
- On/off knob on hold open models
- Stop, friction stay or hold open function
- Complete screw packet with thru-bolts for door, wood and machine screws for frame
- Torx® screws optional for security applications
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening
- 1-3/4" minimum door thickness
- 1-3/16" square channel
- Stop function UL listed for fire door assemblies
- For pull side mounting or flush mounting on push side or for rabbeted push side use angle jamb bracket adapter 5458LH or 5459RH
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number		
		Friction	H.O.	Stop
*24 - 28	25-1/2 - 30	9-116	9-126	9-136
28-1/16 - 33	30-1/16 - 36	9-216	9-226	9-236
33-1/16 - 38	36-1/16 - 41	9-316	9-326	9-336
38-1/16 - 43	41-1/16 - 46	9-416	9-426	9-436
43-1/16 - 48	46-1/16 - 50	9-516	9-526	9-536

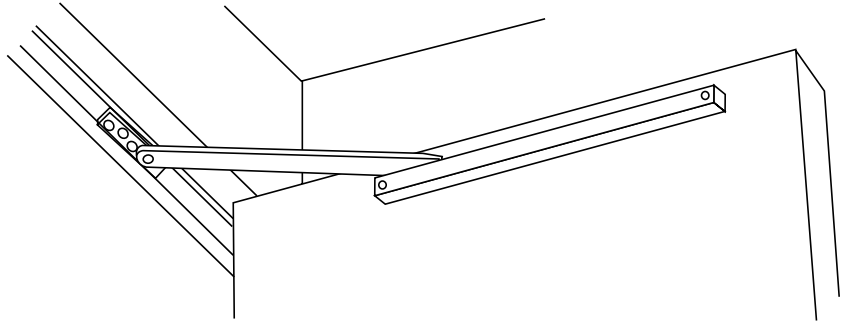
*Butt hung only on this size door. No swing clear hinges.

ANSI No.			
Shipping Weight 4.5 lbs.	Friction	H.O.	Stop
	C02531	C02511	C02541

Surface Mount - Interior or Exterior – High Traffic Doors

Product Description & Features

- Doors are single acting
- Non-handed
- Slide track design
- Heavy shock absorber spring provides 5°-7° compression before dead stop
- Degree of opening is fully adjustable and can be adapted to changing needs
- Complete screw packet with thru-bolts for door, wood and machine screws for the frame
- For security areas, Torx screws available for exposed fasteners
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening (except 9ADJ for center hung 30-36 door which is 105°)
- 1-3/4" minimum door thickness, for thicker doors consult factory
- 1-3/16 square channel
- Stop function UL listed for fire doors
- For pull side mounting or flush and rabbeted mounting on push side use angle jamb bracket adapter 5458LH or 5459RH
- Patent-pending
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Door Opening Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number	
		H.O.	Stop
*24 - 28	25-1/2 - 30	9ADJ-126	9ADJ-136
28-1/16 - 33	30-1/16 - 36	9ADJ-226	9ADJ-236
33-1/16 - 38	36-1/16 - 41	9ADJ-326	9ADJ-336
38-1/16 - 43	41-1/16 - 46	9ADJ-426	9ADJ-436
43-1/16 - 48	46-1/16 - 50	9ADJ-526	9ADJ-536

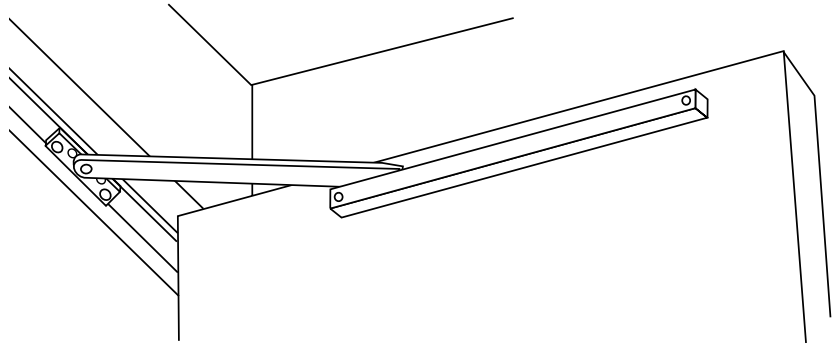
ANSI No.		
Shipping Weight 4.5 lbs.	H.O.	Stop
	C02511	C02541

*Butt hung only on this size door. No swing clear hinges.

Surface Mount – Interior – Medium Traffic Doors

Product Description & Features

- Single acting doors
- Non-handed
- Slide track design
- Recommended for medium traffic, medium weight doors
- Degree of opening fully adjustable and can be adapted to changing needs
- Heavy shock absorber spring provides compression before deadstop
- Can be ordered specifically as a stop, friction stay, or hold open.
- Multi-function unit is shipped as a stop. Can be converted to a hold open or friction in field. 5012-PKG (Adapter kit) included
- Complete screw packet with thru-bolts for door, wood and machine screws for frame
- Torx® screws optional for security applications, but heavy-duty units should be considered for high-security applications
- Standard architectural finishes
- Durable slider cam and shock block
- 110° maximum opening
- 3/4" square channel
- Stop function UL listed for fire door assemblies
- For pull side mounting or flush and rabbeted mounting on push side use angle jamb bracket adapter 5258
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



Checkmate®
Stops & Holders

Door Opening Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number			
		Friction	H.O.	Stop	Multi
*18 - 24	21 - 26-1/2	10-116	10-126	10-136	10-146
24-1/16 - 30	26-9/16 - 32	10-216	10-226	10-236	10-246
30-1/16 - 36	32-1/16 - 38	10-316	10-326	10-336	10-346
36-1/16 - 42	38-1/16 - 45	10-416	10-426	10-436	10-446
42-1/16 - 48	45-1/16 - 48	10-516	10-526	10-536	10-546

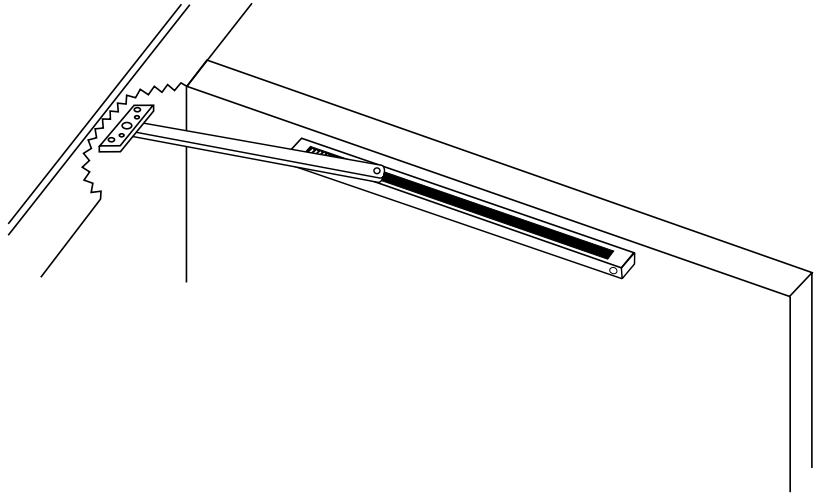
*Butt hung only on this size door. No swing clear hinges.

ANSI No.			
Shipping Weight 3.5 lbs.	Friction	H.O.	Stop
	C05532	C05512	C05542

Surface Mount – Interior – Medium Traffic Doors

Product Description & Features

- Single acting
- Non-handed
- Slide track design
- Recommended for medium traffic, medium weight interior doors
- Degree of opening determined by template. Not field adjustable
- Heavy shock absorber spring provides 5-7° compression before deadstop
- Stop and hold open functions
- Complete screw packet with thru-bolts for door, wood and machine screws for the frame
- Torx® screws optional for security applications, but heavy-duty units should be considered for high-security applications
- Available in 652 and sprayed finishes, only
- Durable slide block and shock block
- 110° maximum opening
- 3/4" square channel
- For pull side mounting or flush and rabbeted mounting on push side use angle jamb bracket adapter 5258
- Hanging means other than standard butts or offset pivots require special templating and pricing. Consult factory



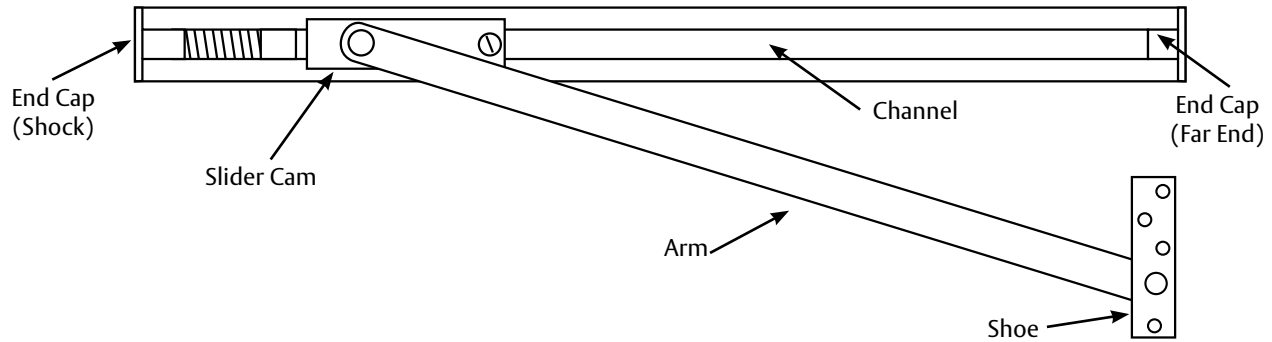
Door Opening Chart (in inches)

Butts Offset Pivots	Center Hung Pivots	Model Number	
		H.O.	Stop
*18 - 24	—	55-126	55-136
24-1/16 - 30	27 - 32	55-226	55-236
30-1/16 - 36	32-1/16 - 38-1/2	55-326	55-336
36-1/16 - 42	38-9/16 - 45	55-426	55-436
42-1/16 - 48	45-1/16 - 48	55-526	55-536

*Butt hung only on this size door. No swing clear hinges.

ANSI No.		
Shipping Weight 3.5 lbs.	H.O.	Stop
	C05512	C05542

Checkmate® Stops & Holders



End Caps #1, 2, 9 & 10 only		
#1 & #9	Shock End Block	6003
	Far End Block	6004
#2 & #5	Far End Block	5059 (2 req.)
#10	Far End Block	5011 (2 req.)
Screw Kits		
#1	Friction or Stop	6487-*
	Hold Open	6998N*
#1ADJ	Stop and Holder	6487-*
#2	Friction or Stop	5999-*
#4	Friction or Stop	5639-*
#6	Friction or Stop	6487-*
#7	Friction or Stop	3880-XXXXA
#8	Friction or Stop	5897-*
#9	Friction or Stop	6468-*
	Hold Open	6997N*
#9ADJ	Stop and Holder	6468-*
#10 & #55	Friction or Stop	5998-*

Arm Assemblies (includes arm, shoe and slider cam)

List as noted in charts below.

eg. 1-236 630 would be 1-23 630R
55-426 612 would be 55-42 612R

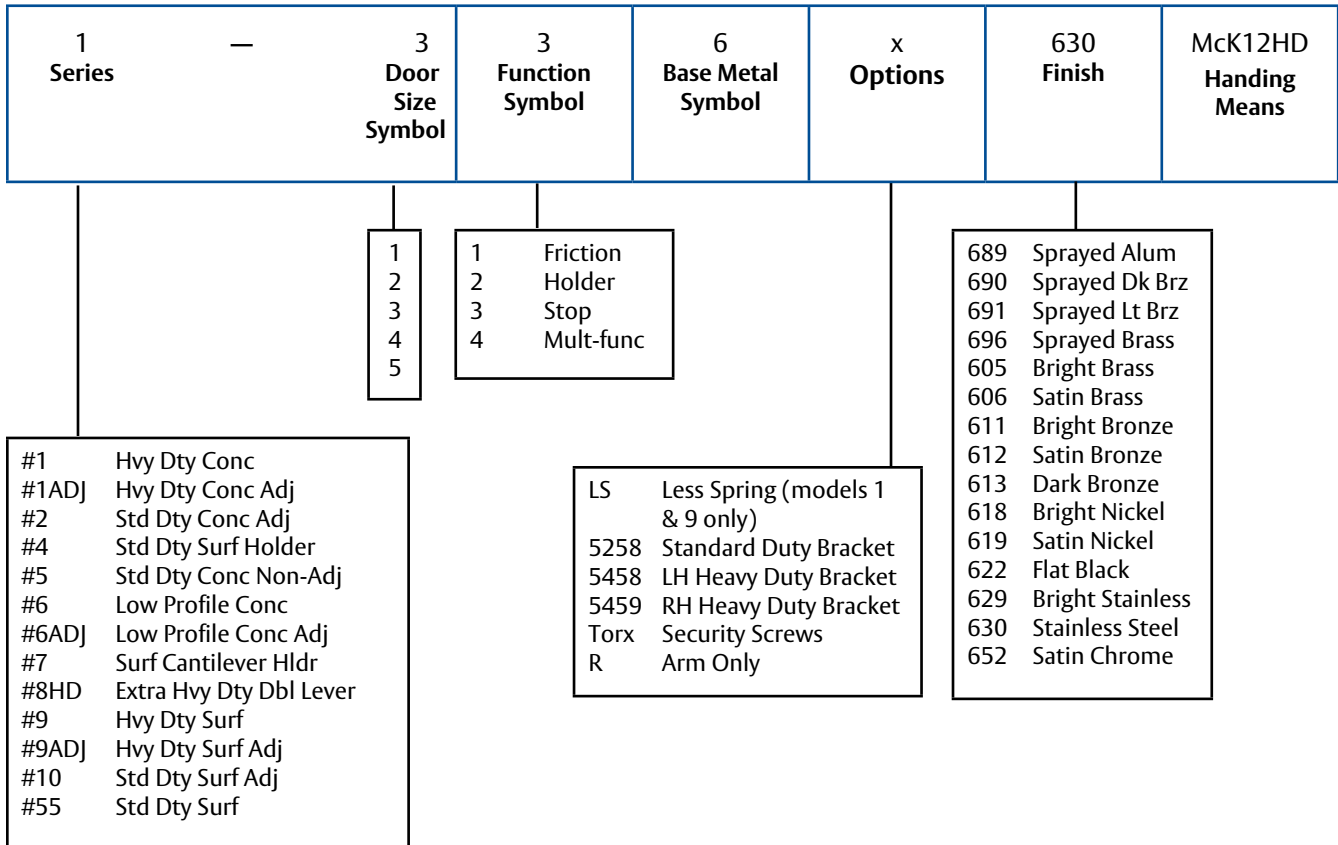
1	Dash	Size	Function	Finish	R
1ADJ	Dash	Size	Function	Finish	R
2	Dash	Size	Function	Finish	R
5	Dash	Size	Function	Finish	R
6	Dash	Size	Function	Finish	R
6ADJ	Dash	Size	Function	Finish	R
9	Dash	Size	Function	Finish	R
9ADJ	Dash	Size	Function	Finish	R
10	Dash	Size	Function	Finish	R
55	Dash	Size	Function	Finish	R

Adapter Kits

2	Hold Open, Friction Adapter	5012-PKG
10	Hold Open, Friction Adapter	5012-PKG

*specify finish

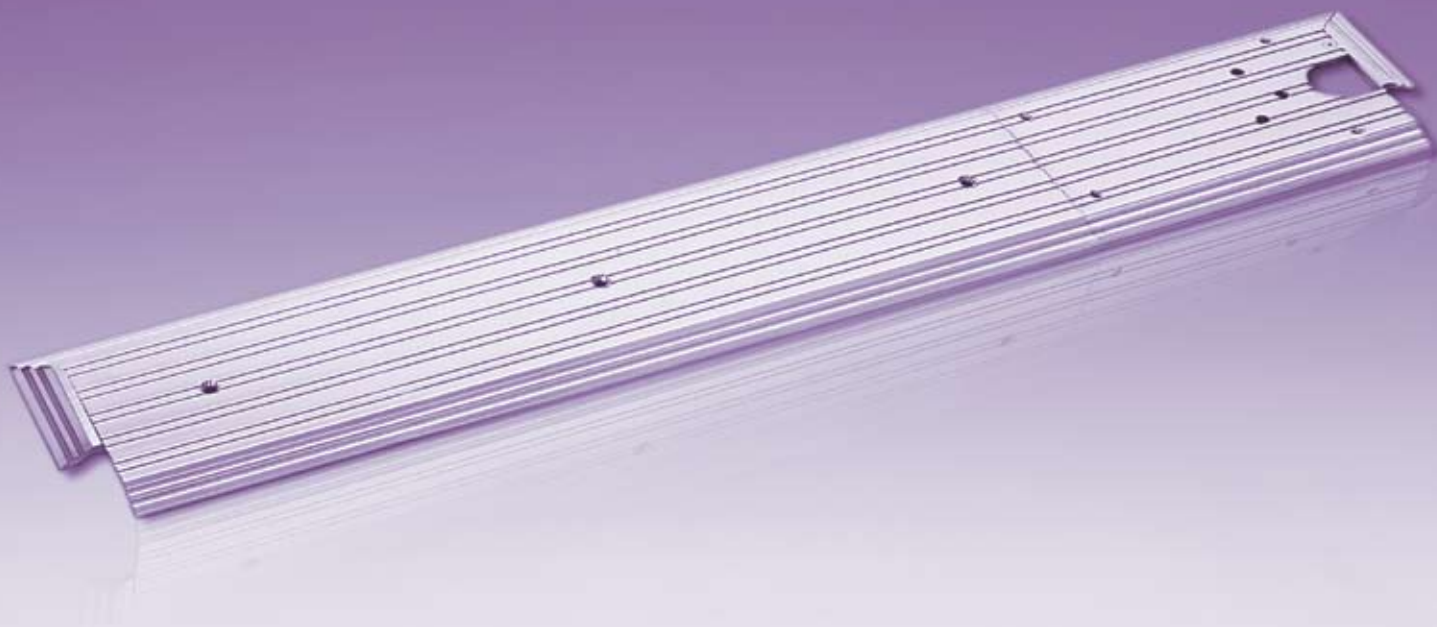
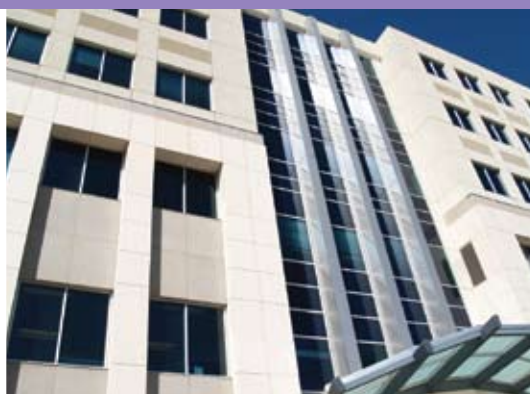
How to Order



Thresholds

RIXSON®
ASSA ABLOY

Finishing Touch
for Floor Closer
Installations



ASSA ABLOY, the global leader in door opening solutions

Introduction

Rixson® thresholds add the finishing touch to the concealment of floor closers and pivot sets.

Ordering the thresholds with the floor closer/pivot

- You are guaranteed that all the valve holes will be in the correct locations
- Thresholds will have separate sections to allow access to the closer

Limited Warranty

Rixson® thresholds carry a 2-year warranty for defect. There is no warranty on finish for plated items. See Rixson® Price Book for specific details of the limited warranty.

Threshold Specifications

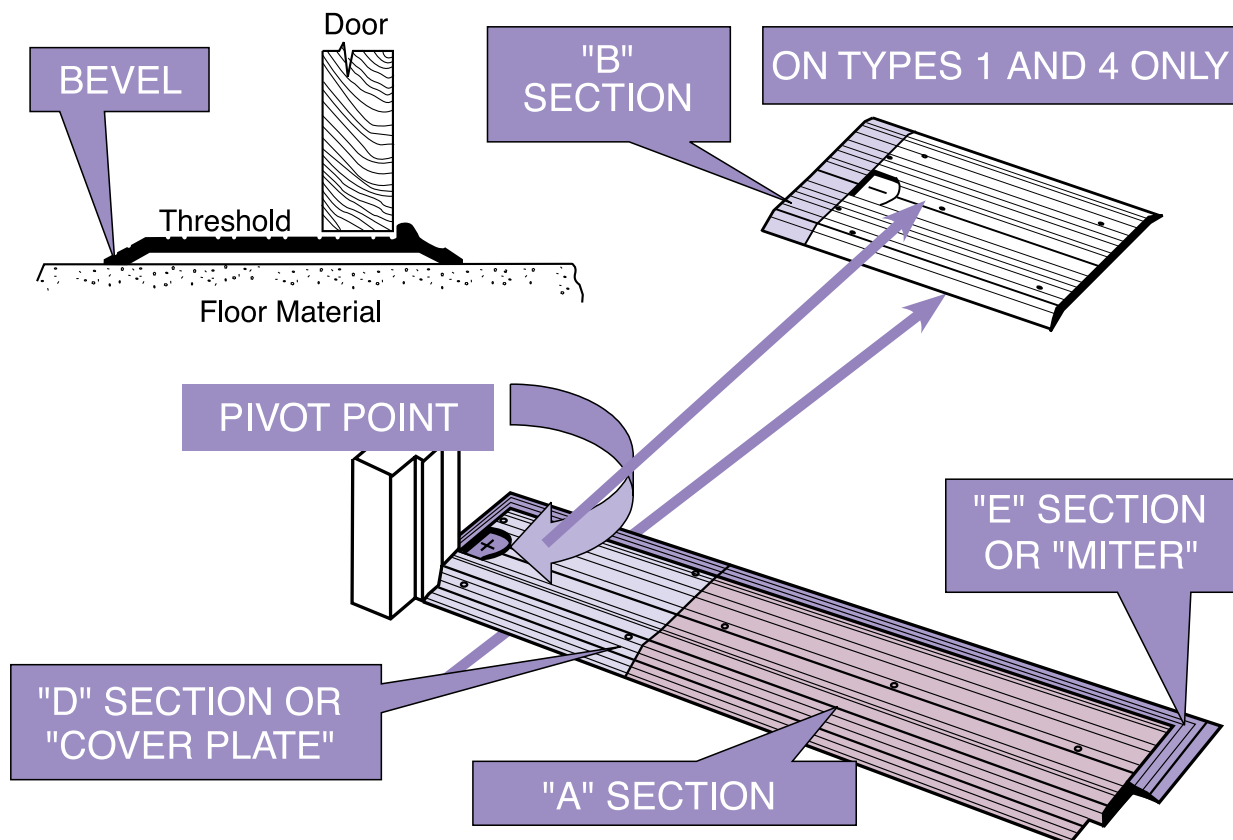
Whenever floor closers are used with thresholds, the threshold must be furnished by the closer manufacturer. This will ensure correct valve locations. All thresholds used with floor closers shall have separate closer cover plate section.

Contents

Page

Thresholds: General Information.....	186
Limited Warranty.....	186
Specifications	186
Definition of Terms	187
Type of Hanging Means & Models	
Center Hung Models 1 and 4.....	188
Offset Hung Models 3 and 5	189
Width of Threshold	190
Options.....	191-193
Finishes	194
How to Order	194

Terms



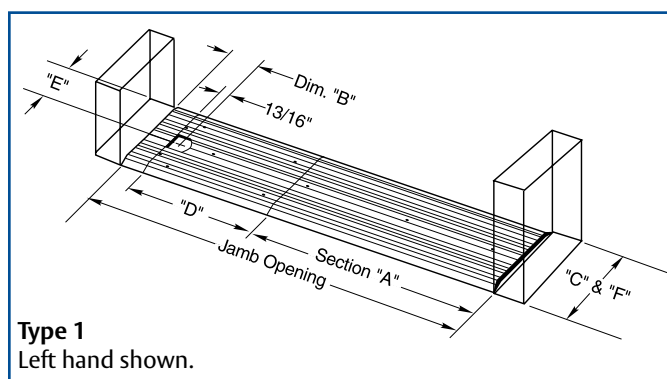
For use with center hung closers (Nos. 28, H28, 30, 40, H40 & 50), independently hung closers (F327 & F53) and pivot sets (Nos. 117-3/4 & H117-3/4)

Type 1

(For doors hung in center of frame)

Can be furnished with No. 201 stop strip on single acting doors (specify door thickness) or No. 301-1/2" step down for special 1/2" sill conditions or 501 step down for special 1/4" sill conditions (see page 192). Straight ends furnished in lieu of mitered returns. Specify overall length (jamb to jamb).

Technical Information

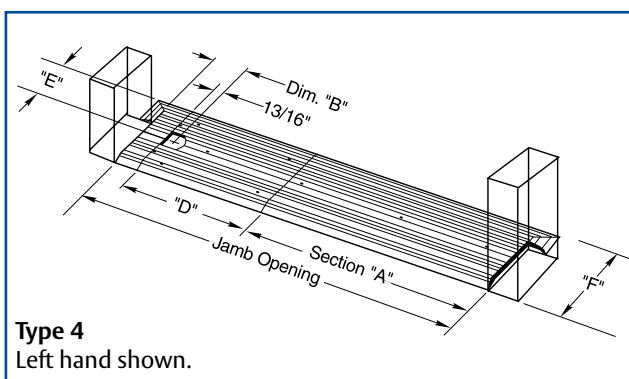


Type 4

(For doors hung flush with face of frame)

Can be furnished with No. 201 stop strip (specify door thickness) on single acting doors. No. 301-1/2" step down can be furnished for special 1/2" sill conditions or 501 step down for special 1/4" sill conditions (see page 192). Four corner miter returns or straight ends can be furnished. Specify overall length (jamb to jamb).

Technical Information



F is the dimension of the A section.

Specification Details

For Center Hung Closers or Pivot Sets	Threshold Type	With No. 201 Stop Strip		dim. "C & F" Purple	dim. "E" Green	dim. "D" Yellow	dim. "B" min. Orange
No. 28 No. 327*	1 or 4 x 700 Normal	No. 700 for doors 2-1/4" thick or less.		7"	3-1/2"	10-1/16"	2"
	1 or 4 x 800	No. 800 for doors 3" thick or less.		8"	4"		
No. 30	1 or 4 x 600 Normal	Stop Strip Not Used		6"	3"	13-1/4"	2"
	1 or 4 x 700			7"	3-1/2"		
No. 40	1 or 4 x 700 Normal	Stop Strip Not Used		7"	3-1/2"	15-1/2"	2"
	1 or 4 x 800			8"	4"		
F53* No. 50 No. 117-3/4 pivot set	1 or 4 x 600 Normal	No. 201 Stop Strip for 1-3/4" doors – for larger doors use next size as listed		6"	3"	Consult Factory	Consult Factory
	1 or 4 x 700	No. 700 for doors 2-1/4" thick or less.	Made single acting with stop strip	7"	4"		
	1 or 4 x 800	No. 800 for doors 3" thick or less.		8"	4"		

Note: When ordering threshold for F327 or F53 closers, you must specify what hanging means being used and degree of swing.

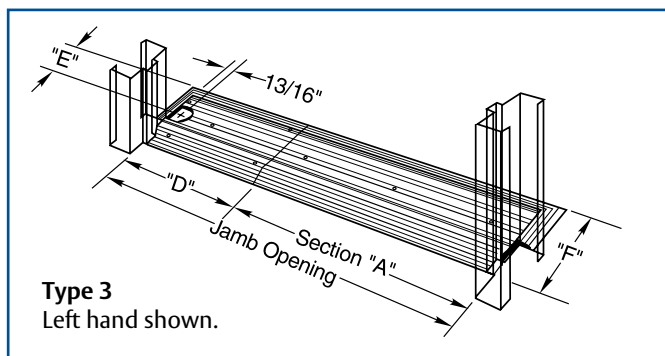
Thresholds Types 3 & 5

**For use with offset hung closers (Nos. 20, 27 Series, 51 Series),
and pivot sets (Nos. 117-1/2 & L117)**

Type 3

For use with all offset closers and pivot sets listed above. Can be furnished with No. 200 stop strip (*specify door thickness*) and No. 301 step down for special 1/2" sill conditions or 501 step down for special 1/4" sill conditions (*see page 192*). 1-1/8" mitered returns on both ends furnished as standard. Specify if straight ends are required and state length. Specify if 1-1/2" offset is required. Specify overall length (*jamb to jamb*).

Technical Information

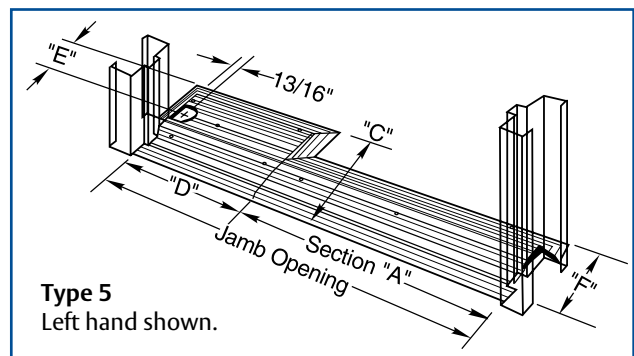


C dimension is the width of the D section

Type 5

For use with offset closers and pivot sets listed above. Can be furnished with No. 200 stop strip (*specify door thickness*) (*see page 192*). 1-1/8" mitered returns are furnished as standard on both ends. Specify if straight ends are required and state length. Specify if 1-1/2" offset is required. Cannot be used with No. 301 step down. Not available in stainless steel. Cannot be ordered in wider widths. Specify overall length (*jamb to jamb*).

Technical Information



F is the dimension of the A section

Specification Details

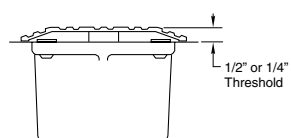
FOR 3/4" OFFSET (3/4" from center of spindle to face of door) Nos. 20, 27, L27 closers Nos. 117-1/2, L117 pivot sets, dim. "D"—10-1/16". QT27, 51,	Door Thickness	1-3/4"				2"				2-1/4"				2-1/2"				2-3/4"				3"							
	Threshold Type	5 x 400 normal or 5 x 500		3 x 700 normal or 3 x 800		5 x 400 normal or 5 x 500		3 x 700 normal or 3 x 800		5 x 500		3 x 800		5 x 500		3 x 800		5 x 500		3 x 800		5 x 500		3 x 800					
	Stop Strip (if used)		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200				
	dim. "C"	7" or 8"	7-3/8" or 8-3/8"	7" or 8"	7-3/8" or 8-3/8"	7" or 8"	7-3/8" or 8-3/8"	7" or 8"	7-3/8" or 8-3/8"	8"	8-3/8"	8"	8-3/8"	7-3/4"	8-1/8"	7-3/4"	8-1/8"	8"	8-3/8"	8"	8-3/8"	8"	8-3/8"	8"	8-3/8"				
	dim. "E"	3-1/2" or 4"								4"																			
	dim. "F"	4" or 5"	4-3/8" or 5-3/8"	7" or 8"	Dim. D = 10-1/16"	4" or 5"	4-3/8" or 5-3/8"	7" or 8"	7-3/8" or 8-3/8"	5"	5-3/8"	8"	8-3/8"	5"	5-3/8"	8"	8-3/8"	5"	5-3/8"	8"	8-3/8"	5"	5-3/8"	8"	8-3/8"				
FOR 1-1/2" OFFSET (1-1/2" from center of spindle to face of door) Nos. 20, 27, closers. Nos. 117-1/2, pivot sets, dim. "D"—10-1/16".	Door Thickness	1-3/4"				2"				2-1/4"				For 1-1/2" offset hung doors thicker than 2-1/4", a special spliced threshold must be used. Consult factory.															
	Threshold Type	5 x 500		3 x 800		5 x 500		3 x 800		5 x 500		3 x 800																	
	Stop Strip (if used)		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200		x no. 200																
	dim. "C"	8"	8-3/8"	8"	8-3/8"	8"	8-3/8"	8"	8-3/8"	8"	8-3/8"	8"	8-3/8"																
	dim. "E"	4"																											
	dim. "F"	5"	5-3/8"	8"	8-3/8"	5"	5-3/8"	8"	8-3/8"	5"	5-3/8"	8"	8-3/8"																

Sizes

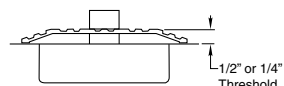
The width of the threshold must be sufficient to completely cover the closer.

THRESHOLD MUST BE WIDE ENOUGH TO COVER CLOSER COMPLETELY

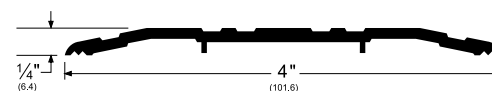
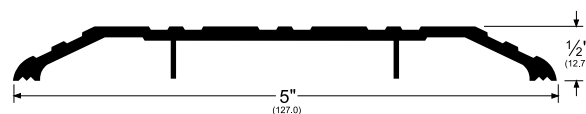
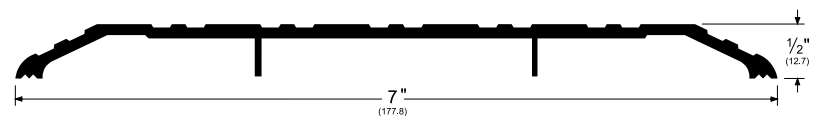
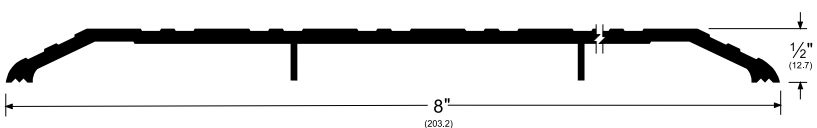
Aluminum or Bronze



27, 28, 30, 40

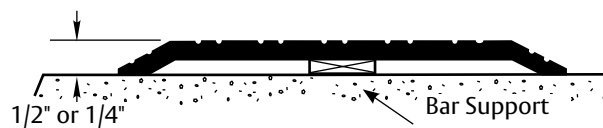


50, 51, 53



Extra-Wide Thresholds

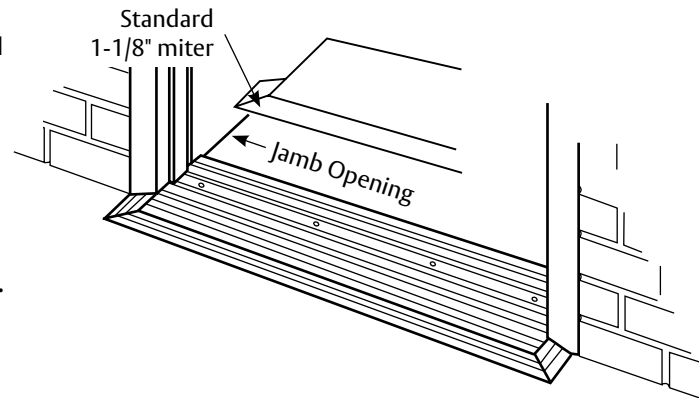
Special widths are available on request. A center bar support is provided as standard. Detailed dimensions required. Not available with Type 5.



Return Miters

Furnished on the pull side of the door. The return miter at the spindle side of the doorway is detachable for easy removal of closer plate section. Four corner miters, to enhance finished appearance, are available upon request.

Technical Information



MITERED DESIGN

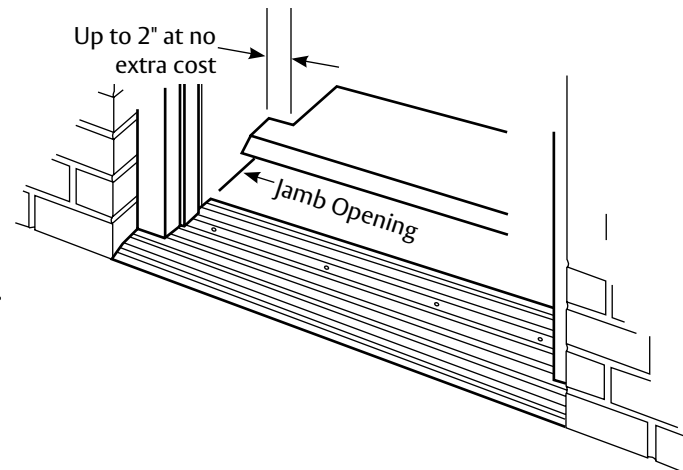
1-1/8" mitered end standard.

Extended mitered ends available – specify length.

Straight Ends

When the threshold abuts a wall at the ends, straight ends up to 2" can be substituted for mitered returns at no additional cost. Provides a continuous, finished appearance.

Technical Information



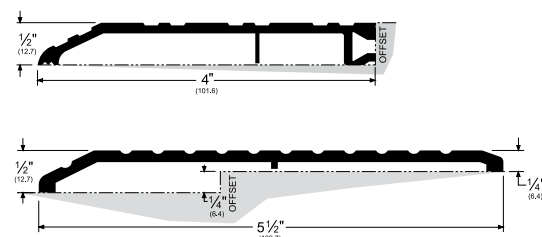
STRAIGHT END DESIGN

Extended straight ends available – specify length.

Bevel Cut Thresholds

Standard width thresholds can be straight rip cut to achieve a flush floor condition. The threshold bevel on the interior side of the door is removed; permits threshold and carpet (or tile) to meet at the same height. A 5/16" bar support (provided) or built-up concrete sill is required. Dimensional details required.

Technical Information

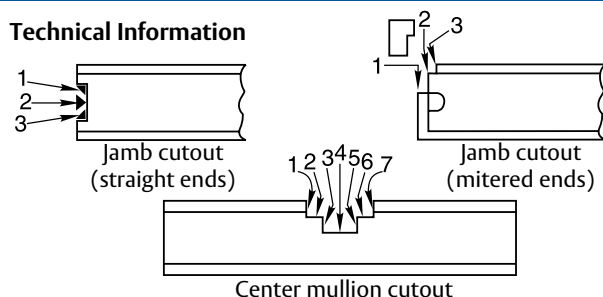


Scribing

Cutting the threshold to fit the door stop is done on the job. Rixson® will do scribing only if accurate dimensions are supplied. Cost is extra, depending upon details.

(Drawings at right indicate number of cuts required to complete various scribing operations.)

Technical Information

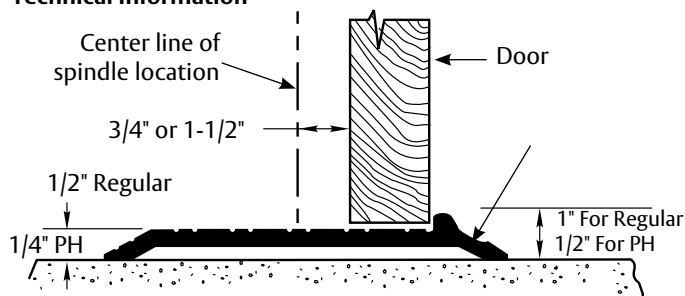


No. 200 Stop Strip

For use on threshold cut for all floor and overhead concealed OFFSET TYPE closers and pivot sets. This adds 3/8" to width of threshold. Where 200 stop strip is used, it is always applied to the bevel on the push side of the threshold.

No. 200 Stop Strip (Offset Hung)

Technical Information



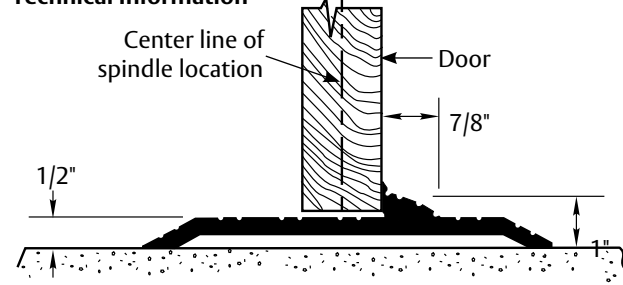
No. 201 Stop Strip

Stop strips are furnished at extra cost, when specified. On single acting doors, a stop strip is recommended to serve as a weather seal on the push side at the bottom of the door.

For use on thresholds prepared for all floor and overhead concealed CENTER HUNG single acting closers, CENTER HUNG pivot sets and BUTT HUNG floor closers. Where 201 stop strip is used, stop strip is always applied on tread surface of threshold on push side, not on the bevel. Not available PH. This product cannot run across entire door width.

No. 201 Stop Strip (Center & Butt Hung)

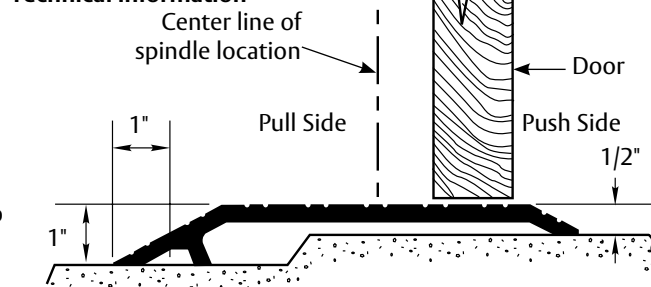
Technical Information



No. 301 Step Down

Designed to accommodate sill conditions where the floor drops 1/2" below sill height. Add 1" to width of threshold. Step down strip may be applied to either push or pull side of thresholds. Not available on Type 5 thresholds. Not available PH.

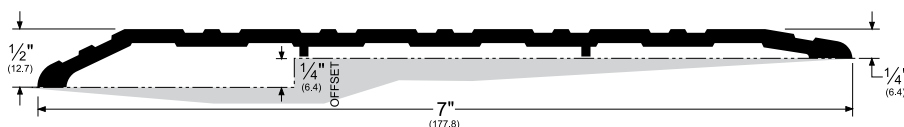
Technical Information



No. 301 Step Down Strip

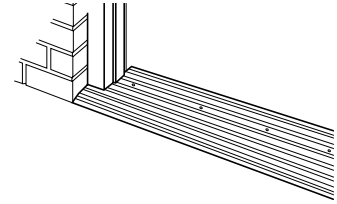
No. 501 Step Down

Designed to accommodate sill conditions where the floor drops 1/4" below sill height. Add 1" to width of threshold. Step down strip may be applied to either push or pull side of thresholds. Not available on type 5.



Thresholds for Overhead and Surface Door Closers

Straight threshold lengths, with or without 1-1/8" mitered or straight ends, are available for Nos. 700, 800, and 0700 overhead concealed closers, or any manufacturer's surface and overhead concealed closer. When ordering, state NO CLOSER PREP.



Anchoring

Thresholds are drilled for installation. They are furnished with wood screws or rawl plug as standard. If machine screws and expansion shields are required, specify "MSES."



MSES

Adjusting Valve Fillers

Used to keep debris from filling adjusting holes, suffix "filler".



Finishes

Thresholds are aluminum or bronze.

When considering thresholds, remember that they are being walked on, rolled over and rained upon. This means that the finish you decide to use can be dramatically affected by those conditions.

The most forgiving base metal is aluminum. Mill aluminum does not tarnish or darken in time. Mill bronze darkens after awhile and the end result is a dark oxidized appearance.

Plated finishes on thresholds are not a good idea. To do a plated finish, a bronze base threshold is plated then lacquered. The first time someone with a pebble in the sole of their shoe walks across the threshold they will scratch the lacquer, then the plating will wear. This leaves the bronze base metal coming through. The wear patterns will be very noticeable. Plated thresholds are not warranted for finish.

Special Drawings

If configuration, other than standard, is required, complete details must be supplied. Allow extra time for approved drawings to be returned. Thresholds will be quoted after factory drawings are approved.

How to Order

PH Prefix	3 Type	x 700 Width	x 200 Option	x 36 Door Opening Width	x 1-3/4 Door Thickness	x RH Hand	x 27N Closer	x AL Finish
Blank = 1/2 high PH = 1/4 high	1 = Center hung 3 = Offset hung 4 = Center hung 5 = Offset hung		Blank = No stop 200 = For use with 3 & 5 only 201 = For use with 1 & 4 301 = Step Down 1/2" 501 = Step Down 1/4" No Closer Prep = attaching screw holes only			Blank = Pair RH = Right hand LH = Left hand		AL Aluminum BZ Bronze 605 Bright Brass 612 Satin Bronze 613 Dark Bronze 625 Bright Chrome 626 Satin Chrome
		400 = 4" (used with #5 or without floor closer) 500 = 5" (used with #5 or without floor closer) 600 = 6" (can't be used with #5 or with floor closer) 700 = 7" 800 = 8"						

Electromagnetic Door Holder/Releases

RIXSON®
ASSA ABLOY

Door Control for Fire and Smoke
Barrier Doors and Other Remote
Door Release Applications

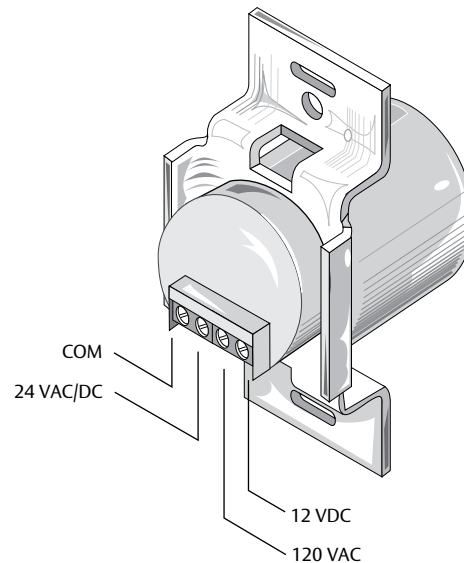


ASSA ABLOY, the global leader in door opening solutions

Introduction

Electromagnetic door holder/releases are designed for virtually any remote door release applications. They must be used in conjunction with closing devices.

- Fire/smoke barrier doors
 - Door releases when tripped by an alarm or smoke detector
- Private offices
 - Door releases when triggered by a remote switch
- All devices come with a wall/floor portion and a door portion (*armature*)
- Circuit normally closed
- Door portions have screws and plates to accommodate surface and concealed mounting



Contents

Page

Electromagnetic Door Holder/Releases: General Information

196

How to Select Product

197

Features

198

Certification

198

Limited Warranty

198

Specifications

198

980 Floor Mounted

199

981 Floor Mounted Back to Back Doors

199

989 Low Projection Wall Mounted

200

990 Low Projection Wall Mounted

200

991 Hazardous Location Wall Mounted

201

993 High Hold Wall Mounted

201

9930 High Hold Floor Mounted

201

994 Wall Mounted Adjustable Armature

202

996 Surface Mounted

202

997 Wall Mounted

203

998 Wall Mounted

203

999 Universal Wall Mounted

204

Wiring Schematics

205

Accessories

205

972H Industrial Swinging Door

206

972S Industrial Sliding Door

206

972U Industrial Overhead Door

206

How to Order

207

Parts Drawings

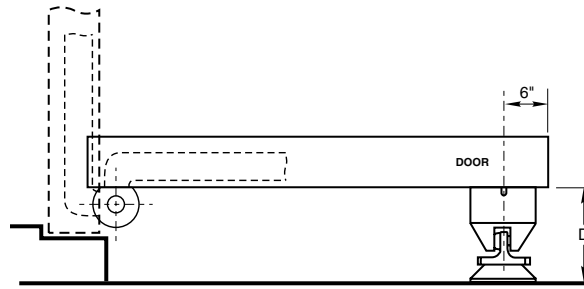
208-212

Prior to determining the product you will need to use, begin by looking at the door and perpendicular wall relationship.

- How far is the face of the door to the wall surface? "D" dimension. Select from chart A

Chart A

If the distance from wall to door is: "D"	Use
7/16 (11)	989
1-13/16 (46)	990
2-5/8 (67)	997
3-5/8 (92)	998
3-3/4 (95)	994
4-1/8 (105)	996
4-3/8 (111)	999
5-1/8 (130)	998 x XK996
6-5/8 (168) min. distance from wall	980
6-3/4 distance between doors	981



900 base has a minimum: 1-1/2"(38mm) extension. Maximum: 10" using combination of spacers [1/2"(13mm), 3/4"(19mm), etc.] Longer armature projections may encourage abuse and/or the weight of the extended rods will pull off the face of the door.

Refer to Diagram B

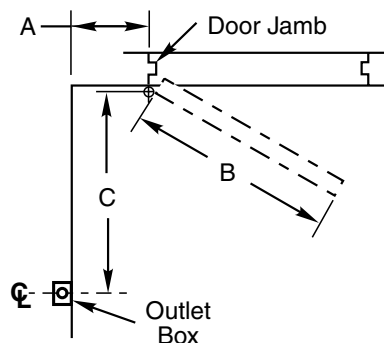
- How far is the centerline of the pivot/hinge from the wall? "A" dimension
- What is width of door? "B" dimension
- At what degree is the door opening? If this dimension is more than 100° consult template.
The armature has a few degrees of adjustment but, before proceeding verify with the product template
- Dimension "C" is from pivot point to junction box centerline

Diagram B

Junction box location should always be as close as possible to the door pull/lever/knob.

A position horizontally farther toward the hinge edge will dramatically lessen the hold open force of the magnet.

A mounting too high on the vertical plane (top of door) will make it more difficult to pull out of hold open.



Electromagnetic Door Holder/Releases

Features, Certifications

Limited Warranty, Specifications

Features

- 25 to 40 pounds holding power, except where noted
- Fail-safe operation; power failure releases door to close
- Positive release button initiates closing motion
- Tri-volt coils on most models see 
- Spotting template included
- For stronger holding forces (50-55 lbs.) specify model and voltage. Not available in tri-volt coils

Certifications

All Rixson® electromagnetic door holder/releases are in compliance with ANSI/BHMA 156.15 Standards. See individual products for sub sections.



- All units UL/ULC listed 
- All units listed by California State Fire Marshal

Limited Warranty

Rixson® electromagnetic door holder/releases are warranted for 2 years for defect. See Rixson® Price Book for specific details of the limited warranty.

Specifications

All electromagnetic door holder/releases shall be supplied by architectural hardware supplier. All units shall have a single coil to accommodate 12VDC, 24VAC, 24VDC and 120VAC. The coils shall be independently wound, employing a fuse. Armatures will have positive release button.

Electromagnetic Door Holder/Releases Floor Mounted Model 980 & 981

Model 980

Application

Floor Mount
Single Door
ANSI/C00021

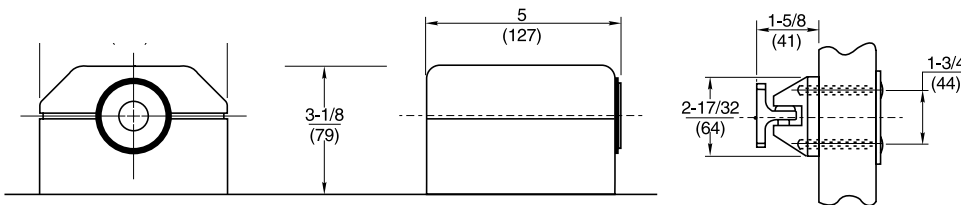
Product Description & Features

- Concealed Wiring
- Total Floor Space Required:
6-5/8" (168mm)
- Mounting Requirements: Conduit
connects directly to floor plate

Technical Information

- Voltage and Current:

120VAC, 60 Hz., .020 amp	}
24VAC/DC, 60 Hz., .020 amp	
12VDC, .040 amp	
- For 50-55 lbs. of holding force, specify voltage
120VAC, 60Hz .017 amp
24VAC, 60Hz .080 amp
24VDC, .068amp
12VDC, .180amp
240VAC, 50/60Hz. .009 amp
- Shipping Weight: 4 lbs. (1.8 kg)



Model 981

Application

Floor Mount
2 Back-to-Back Doors
ANSI/C00031

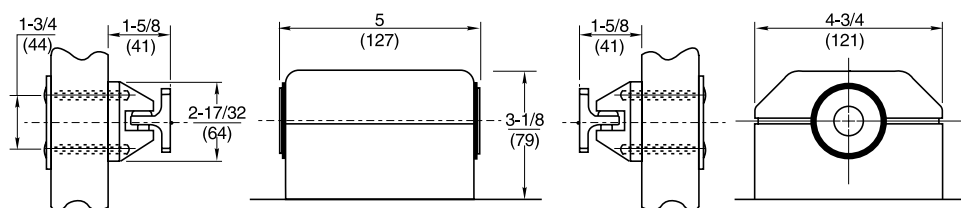
Product Description & Features

- Concealed Wiring
- Floor Space Required: 8-1/4" (210mm)
- Mounting Requirements: Conduit
connects directly to floor plate

Technical Information

- Voltage and Current:

120VAC, 60Hz., .040 amp	}
24VAC/DC, .040 amp	
12VDC, .080 amp	
- For 50-55 lbs. of holding force, specify voltage
120VAC, 60Hz .034 amp
24VAC, 60Hz .016 amp
24VDC, .036 amp
12VDC, .360 amp
240VAC, 50/60Hz. .018 amp
- Shipping Weight: 4-3/4 lbs. (2.2 kg)



Electromagnetic Door Holder/Releases Wall Mounted Model 989 & 990

Model 989

Application

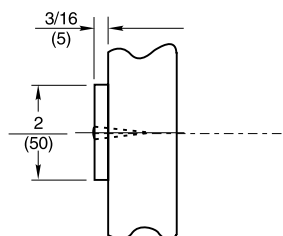
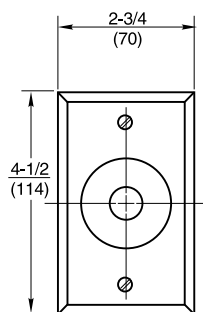
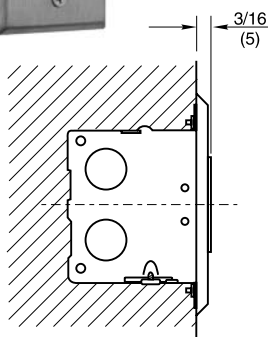
Wall Mount
Low Profile
Concealed Wiring
ANSI/C00011

Product Description & Features

- Total Projection: 7/16" (11mm)
- Mounting Requirements:
2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened

Technical Information

- Voltage and Current:
 - 120VAC, 60Hz., .020 amp
 - 24VAC/DC, 60Hz., .020 amp
 - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
 - 120VAC, 60Hz. .017 amp
 - 24VAC, 60Hz. .080 amp
 - 24VDC, .068amp
 - 12VDC, .180amp
 - 240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2 lbs. (0.9 kg)



Model 990

Application

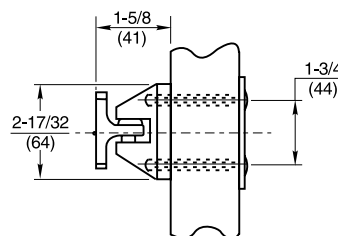
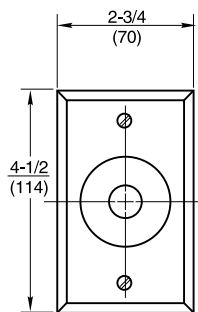
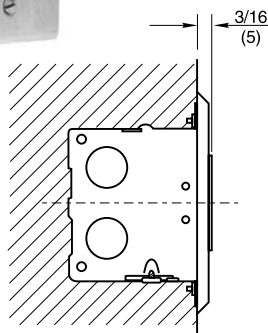
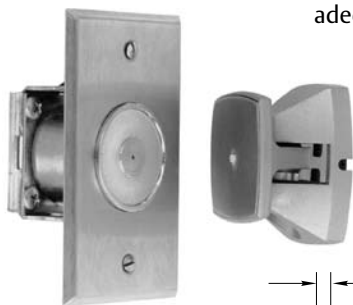
Wall Mount
Low Profile
Concealed Wiring
ANSI/C00011

Product Description & Features

- Total Projection: 1-13/16" (46mm)
- Mounting Requirements:
2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened

Technical Information

- Voltage and Current:
 - 120VAC, 60Hz., .020 amp
 - 24VAC/DC, 60Hz., .020 amp
 - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
 - 120VAC, 60Hz. .017 amp
 - 24VAC, 60Hz. .080 amp
 - 24VDC, .068amp
 - 12VDC, .180amp
 - 240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2 lbs. (0.9 kg)



Electromagnetic Door Holder/Releases Special Purpose Wall Mounted Magnets Model 991 & 993

Model 991

Application

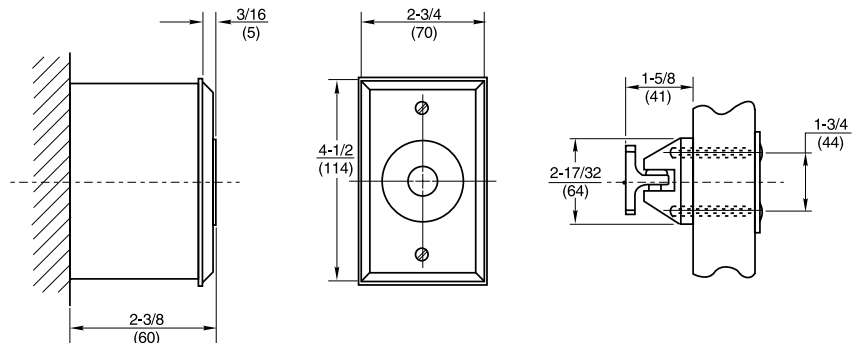
Wall Mount
Surface Wiring
Hazardous Locations
ANSI/C00011

Product Description & Features

- Total Projection: 4" (101mm)
- Approved for class I division 2, class II division 2, groups F and G and class III locations
- Unit includes a sealed surface-mounted junction box

Technical Information

- Voltage and Current:
120VAC, 60Hz., .017 amp
24VAC, .080 amp
12VDC, .180 amp
24VDC, .068 amp
240VAC, 50/60Hz., .009 amp
- Shipping Weight: 3 lbs. (1.4 kg)



Model 993

Application

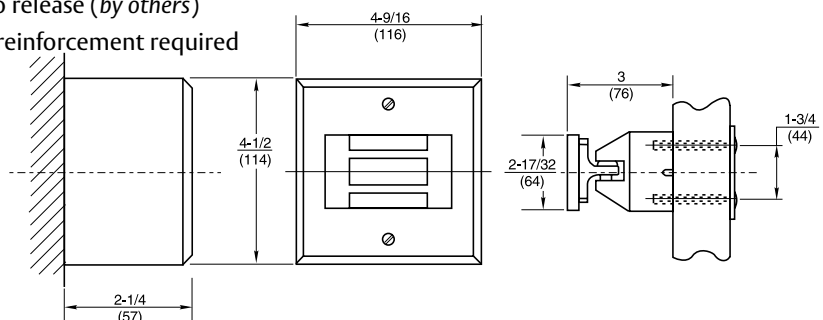
High Hold
Surface or Concealed
Mounting
Floor or Wall Application

Product Description & Features

- 300 lb. holding force
- Total Projection: 5-1/4" (133mm)
- Switch Box Included
4-1/2" x 4-9/16" x 2-5/16"
(114 x 116 x 59mm) deep
- Armature plate thru-bolted to maintain consistent contact with magnet
- Adjusting screw on special heavy-duty armature allows for alignment of contact plate
- 9930 Floor mount available
- Unit has test switch – may be ordered without switch if door will be pulled out of hold open very often
- Use key switch to release (*by others*)
- Substantial wall reinforcement required

Technical Information

- Voltage and Current: 24VAC/DC .25 amp
- Shipping Weight: 3 lbs. (1.4 kg)



Electromagnetic Door Holder/Releases Wall Mounted Model 994 & 996

Model 994

Application

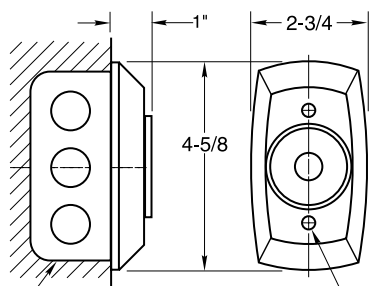
Wall Mount
Adjustable Armature
Concealed Wiring
ANSI/C00011

Product Description & Features

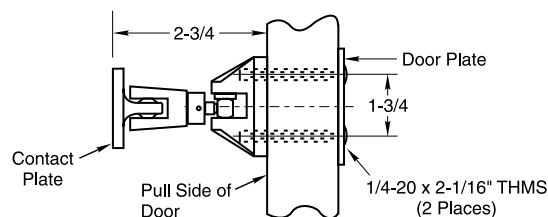
- Total Projection: 3-3/4" (95mm)
- Adjustable armature rotation up and down, back and forth for better alignment.
- Cannot be use with 900 base or spacers.
- Can be used without adjustment piece making it a model 997
- Mounting Requirements:
2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened

Technical Information

- Voltage and Current:
120VAC, 60Hz., .020 amp
24VAC/DC, 60Hz., .020 amp
12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
120VAC, 60Hz. .017 amp
24VAC, 60Hz. .080 amp
24VDC, .068amp
12VDC, .180amp
240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2 lbs. (0.9 kg)



10-32 x 1-1/2" Flat Head Self-Tapping Screws (2 Places)



Model 996

Application

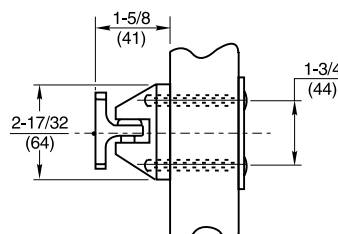
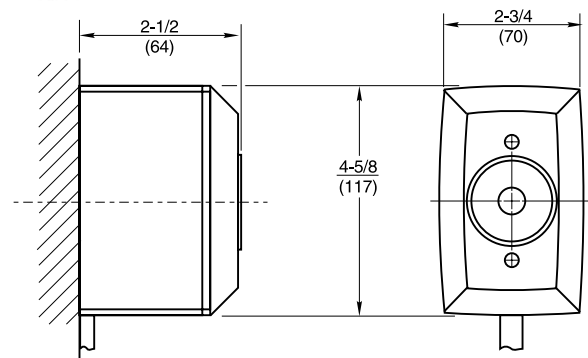
Wall Mount
Surface Wiring
ANSI/C00011

Product Description & Features

- Total Projection: 4-1/8" (105mm)
- Mounting Requirements:
1-1/2" (38mm) deep adapter housing
- Wall must be properly reinforced

Technical Information

- Voltage and Current:
120VAC, 60Hz., .020 amp
24VAC/DC, 60Hz., .020 amp
12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
120VAC, 60Hz. .017 amp
24VAC, 60Hz. .080 amp
24VDC, .068amp
12VDC, .180amp
240VAC, 50/60Hz. .009 amp
- Shipping Weight: 3 lbs. (1.4 kg)



Electromagnetic Door Holder/Releases Wall Mounted Model 997 & 998

Model 997

Application

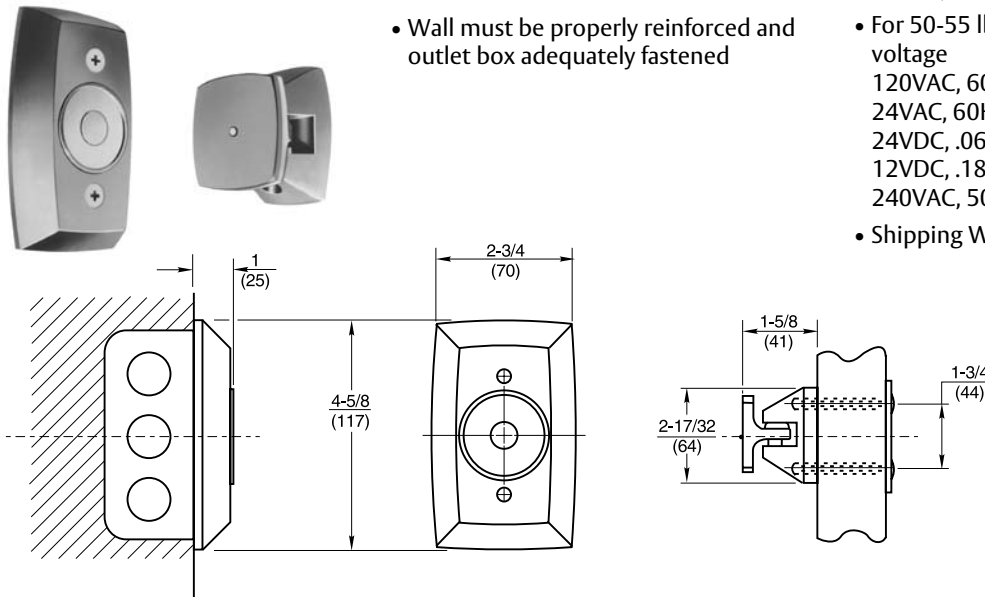
Wall Mount
Concealed Wiring
ANSI/C00011

Product Description & Features

- Total Projection: 2-5/8" (67mm)
- Mounting Requirements:
2" x 4" x 1-3/4" (51 x 102 x 45mm)
outlet box
- Wall must be properly reinforced and
outlet box adequately fastened

Technical Information

- Voltage and Current:
120VAC, 60Hz., .020 amp
24VAC/DC, 60Hz., .020 amp
12VDC, .040 amp
- For 50-55 lbs. of holding force, specify
voltage
120VAC, 60Hz. .017 amp
24VAC, 60Hz. .080 amp
24VDC, .068amp
12VDC, .180amp
240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2 lbs. (0.9 kg)



Model 998

Application

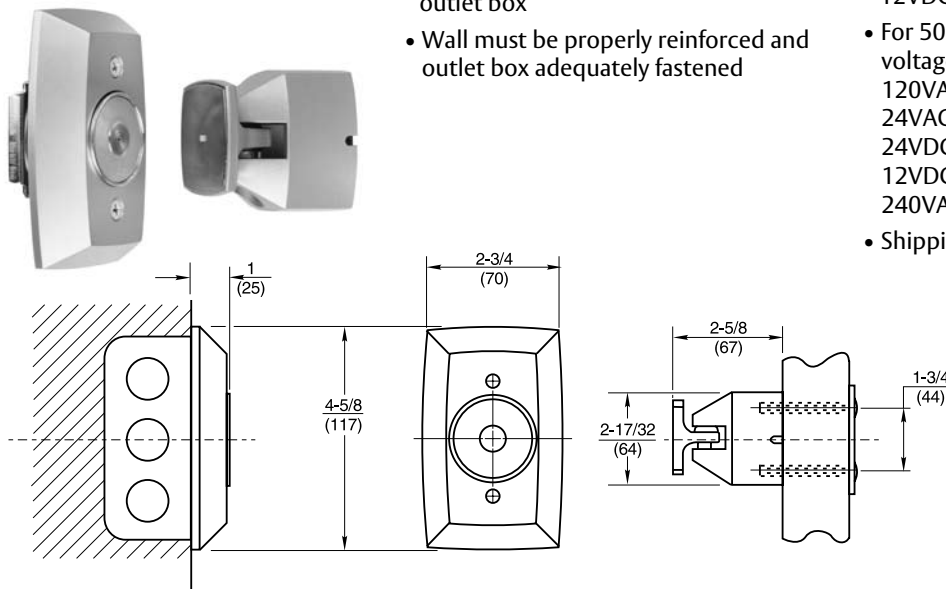
Wall Mount
Concealed Wiring
ANSI/C00011

Product Description & Features

- Total Projection: 3-5/8" (92mm)
- Mounting Requirements:
2" x 4" x 1-3/4" (51 x 102 x 45mm)
outlet box
- Wall must be properly reinforced and
outlet box adequately fastened

Technical Information

- Voltage and Current:
120VAC, 60Hz., .020 amp
24VAC/DC, 60Hz., .020 amp
12VDC, .040 amp
- For 50-55 lbs. of holding force, specify
voltage
120VAC, 60Hz. .017 amp
24VAC, 60Hz. .080 amp
24VDC, .068amp
12VDC, .180amp
240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2-1/2 lbs. (1.1 kg)



Electromagnetic Door Holder/Releases Wall Mounted Model 999

Model 999

Application

Universal Mounting
ANSI/C00011

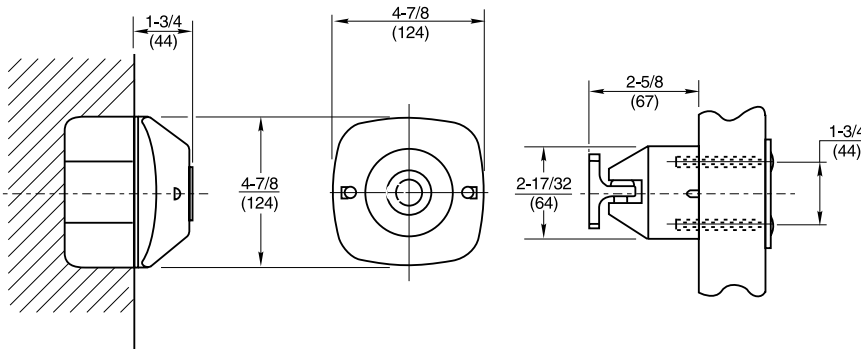
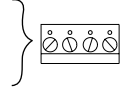


Product Description & Features

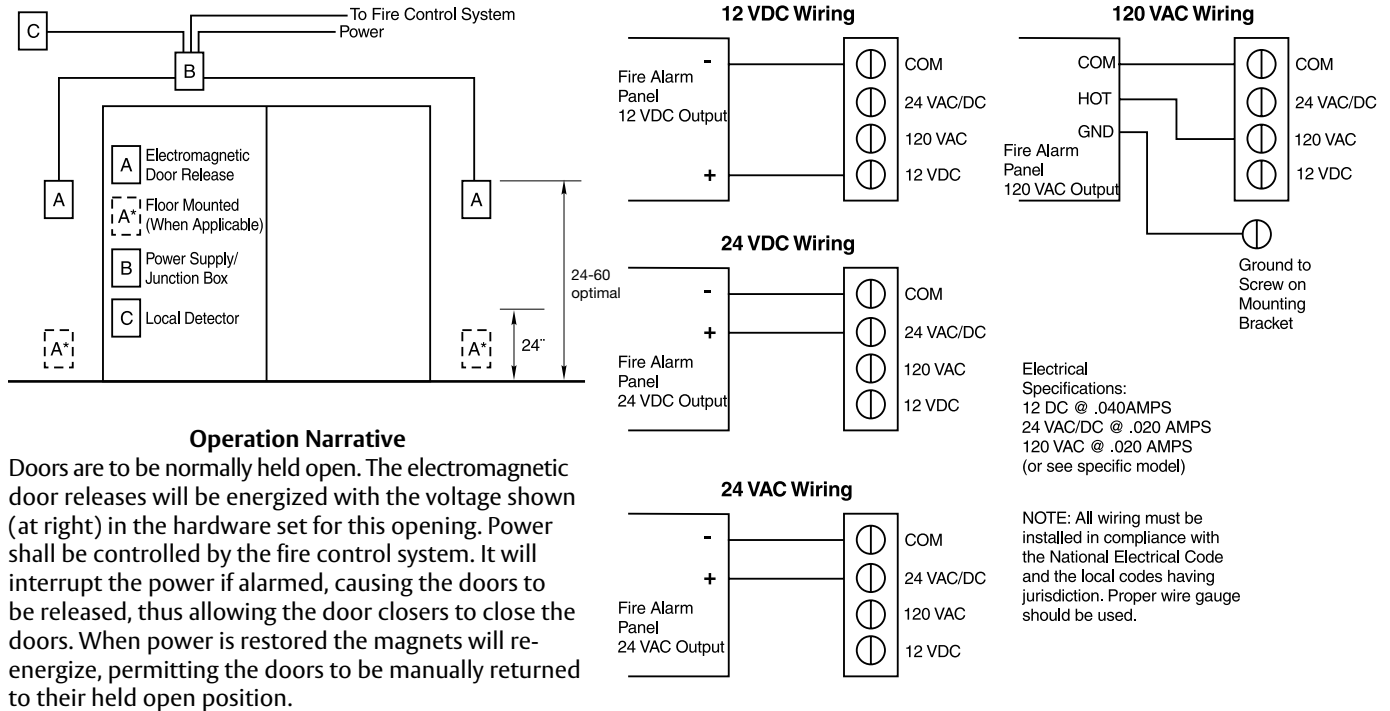
- Base Plate; Concealed Wiring
- Total Projection: 4-3/8" (111mm)
- Mounting Requirements:
2" x 4" (51 x 102mm) outlet box;
4" (102mm) square box; 4" (102mm) octagonal box
- Wall must be properly reinforced and outlet box adequately fastened

Technical Information

- Voltage and Current:
 - 120 VAC, 60 Hz., .020 amp
 - 24 VAC/DC, 60 Hz., .020 amp
 - 12 VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
 - 120VAC, 60Hz .017 amp
 - 24VAC, 60Hz .080 amp
 - 24VDC, .068amp
 - 12VDC, .180amp
 - 240VAC, 50/60Hz. .009 amp
- Shipping Weight: 2-3/4 lbs. (1.2 kg)



Schematics



Accessories

Spacer lengths – must be used with 900 base

For dimensions, see chart below

Spacer Length	Part#
7"	900-700
6"	900-600
5"	900-500
4"	900-400
3"	900-300
2"	900-200
1"	900-100
3/4"	900-75
1/2"	900-50

Base Unit Armature Extension Mounts between armature and contact plate. Part# 900 Cannot be used with model 994

1-1/2" (38mm) Extension (for use only with Models 997, 998 & 994) Mounts behind wall cover. XK996 Part# 996631-*

Armature Extension 90° Bend Part# 900-Z Must be used with 900 base unit. Those two pieces will extend armature 3" longer than the contact plate.

994 Swivel Armature (cannot be used with extension spacers) Part# 900-3

Extension pieces must be used in conjunction with 900 Base Unit

Part# 900-700 = 7"
 Part #900-600 = 6"
 Part# 900-500 = 5"
 Part# 900-400 = 4"
 Part# 900-300 = 3"
 Part# 900-200 = 2"
 Part# 900-100 = 1"
 Part# 900-75 = 3/4"
 Part# 900-50 = 1/2"

Electromagnetic Door Holder/Releases Industrial Use Model 972

Model 972

The Rixson® 972 Industrial Door Release is listed by Underwriters' Laboratories as a substitute for fusible links in such applications as overhead rolling doors, guillotine doors, fire dampers and self-closing windows. These heavy-duty units provide automatic release when triggered by a smoke detector, manual pull station, test button on unit, or other electrically operated switch.

Application

972H for Swinging Doors
972S for Sliding Doors
972U for Overhead Doors

Product Description & Features

Technical Information

- Voltage and Current:
120VAC, 60Hz., .150 amp
24VAC, 60Hz., .150 amp
24VDC, .08 amp
12VDC, .08 amp
- Holding force 75#
- Shipping Weight: 5 lbs. (2.3 kg)
- ANSI/C00041

Code Listings:

- Underwriters' Laboratories, Inc.
- Underwriters' Laboratories of Canada
- State of California (3550-047:13)

How to Order:

Specify model number and voltage.



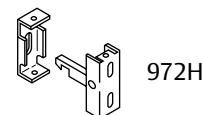
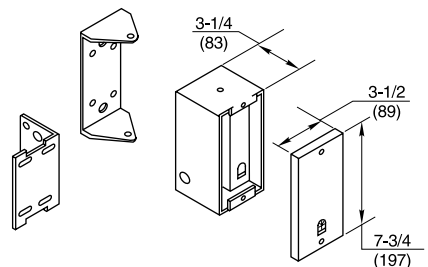
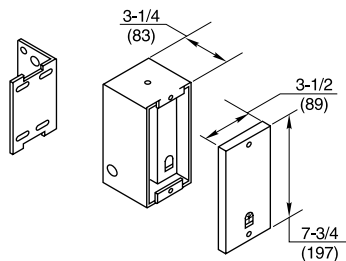
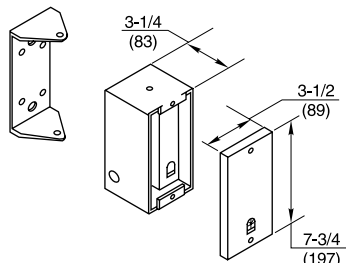
972H for
Swinging Doors



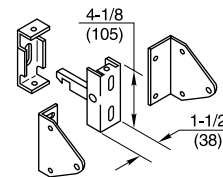
972S for
Sliding Doors



972U for
Overhead Doors



972H



972S

972U



How To Order

998 Series	—	120VAC Voltage	689 Finish
980 Floor Mounted 981 Floor Mounted Back to Back Doors 989 Low Projection Wall Mounted 990 Low Projection Wall Mounted 991 Hazardous Location Wall Mounted 993 High Hold Wall Mounted 9930 High Hold Floor Mounted 994 Wall Mounted Adjustable Armature 996 Surface Mounted 997 Wall Mounted 998 Wall Mounted 999 Universal Wall Mounted 972H Industrial Swing Door Holder 972S Industrial Sliding Door Holder 972U Industrial Overhead/Rolling Door		Voltages BLANK 24VAC/DC 12VDC 12VAC 120VAC 240VAC TRI-VOLT *24VAC/DC *12VDC *120VAC *240VAC	689 Sprayed Alum 690 Sprayed Dk Brz 691 Sprayed Lt Brz 693 Sprayed Black 696 Sprayed Brass

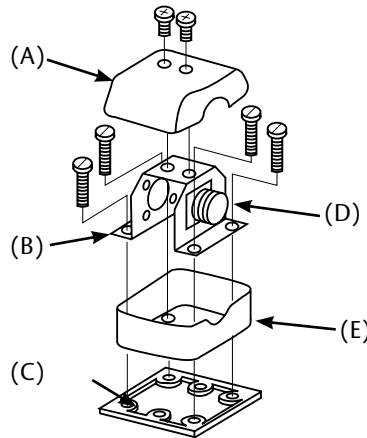
**When voltage is specified, these electromagnetic door holder/releases will have 50-55 lbs. of holding force.*

Used with Model 980/981

Floor Portion

(A) Magnet Housing Cover 980311-*/981311-*
(B) Magnet Support Bracket 981309
(C) Gasket 980095
(D) Magnet **996219-3V
(E) Magnet Housing Base 980312-*/981312-*

**For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for electromagnet assembly part number.



Screw Kits

Screw Kit for 980
980328-*

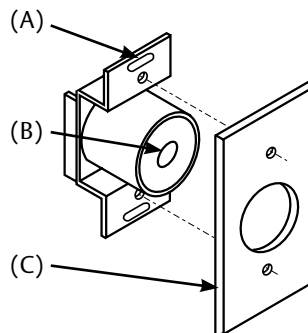
Screw Kit for 981
981328-*

Used with Model 990, 989

Wall Portion

(A) Magnet Bracket 990002
(B) Magnet **996219-3V
(C) Wall Cover Plate 990001

**For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.



Screw Kits

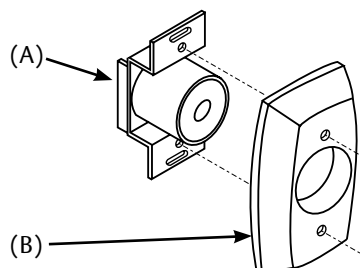
Screw Kit for 990
990300-*

Used with Model 994, 997, 998

Wall Portion

(A) Magnet Assembly and Bracket **998369-3V
(B) Cover 998315-*

*specify finish



Screw Kits

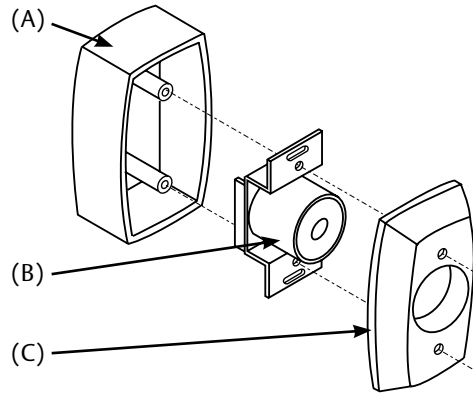
Screw Kit for
994/997/998
998300-*

**For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.

Used with Model 996

Wall Portion

(A) Surface Mounting Box Housing 996501-*
(B) Magnet Assembly and Bracket **996369-3V
(C) Cover 998315-*



Screw Kits
Screw Kit for 996 996325-*

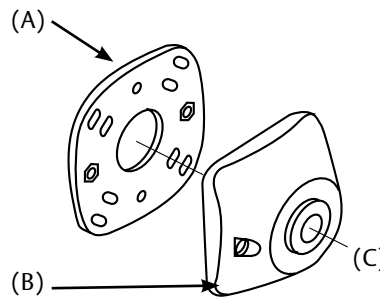
**specify finish*

****For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.**

Used with Model 999

Wall Portion

(A) Base Plate 999105
(B) Cover 999055-*
(C) Magnet **996219-3V



Screw Kits
Screw Kit for 999 999318-*

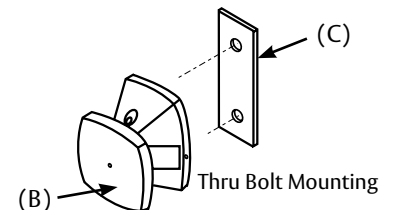
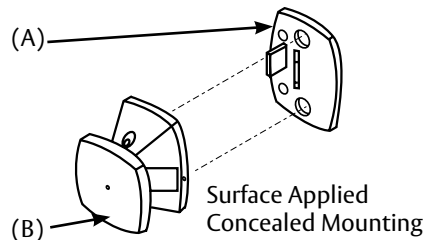
**specify finish*

****For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.**

Used with Model 980/981, 990, 991, 996, 997

Door Portion

(A) **Backup Plate 900314
(B) Door Armature 997510-*
(C) **Door Plate* 998009



****Not Sold Separately – See Screw Kit**

**specify finish*

Door portion screws included with Wall/Floor parts.

Used with Model 998, 999

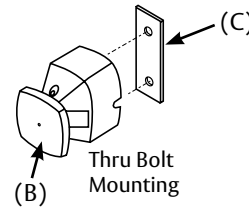
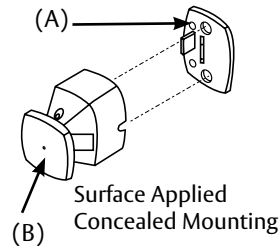
Door Portion

(A) **Backup Plate 900314
(B) Door Armature 998512-*
(C) **Door Plate 998009

**Not Sold Separately –
See Screw Kit

*specify finish

**Door portion screws included with
Wall/Floor parts.**



Used with Model 994

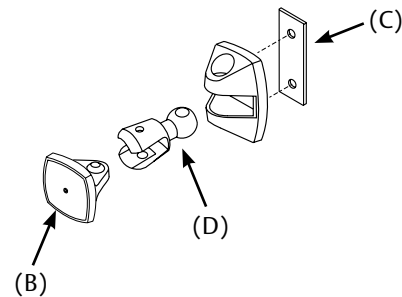
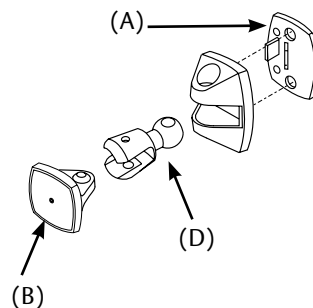
Door Portion

(A) **Backup Plate 900314
(B) Adjustable Armature Part# 994510-*
(C) **Door Plate 998009
(D) Adjustment Piece 900-3*

**Not Sold Separately – See Screw Kit

*specify finish

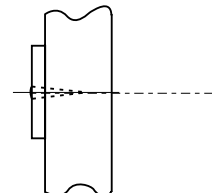
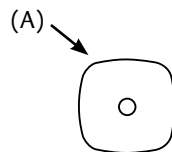
**Door portion screws included with
Wall/Floor parts.**



Used with Model 989

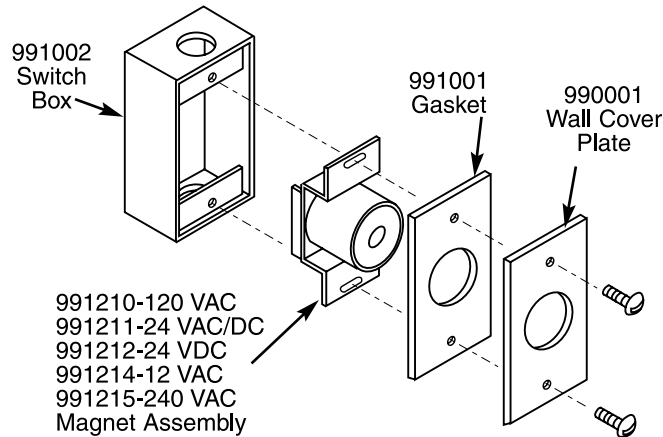
Door Portion

(A) Door Armature Attachment screw included in Kit. Part#444FM



Used With Model 991

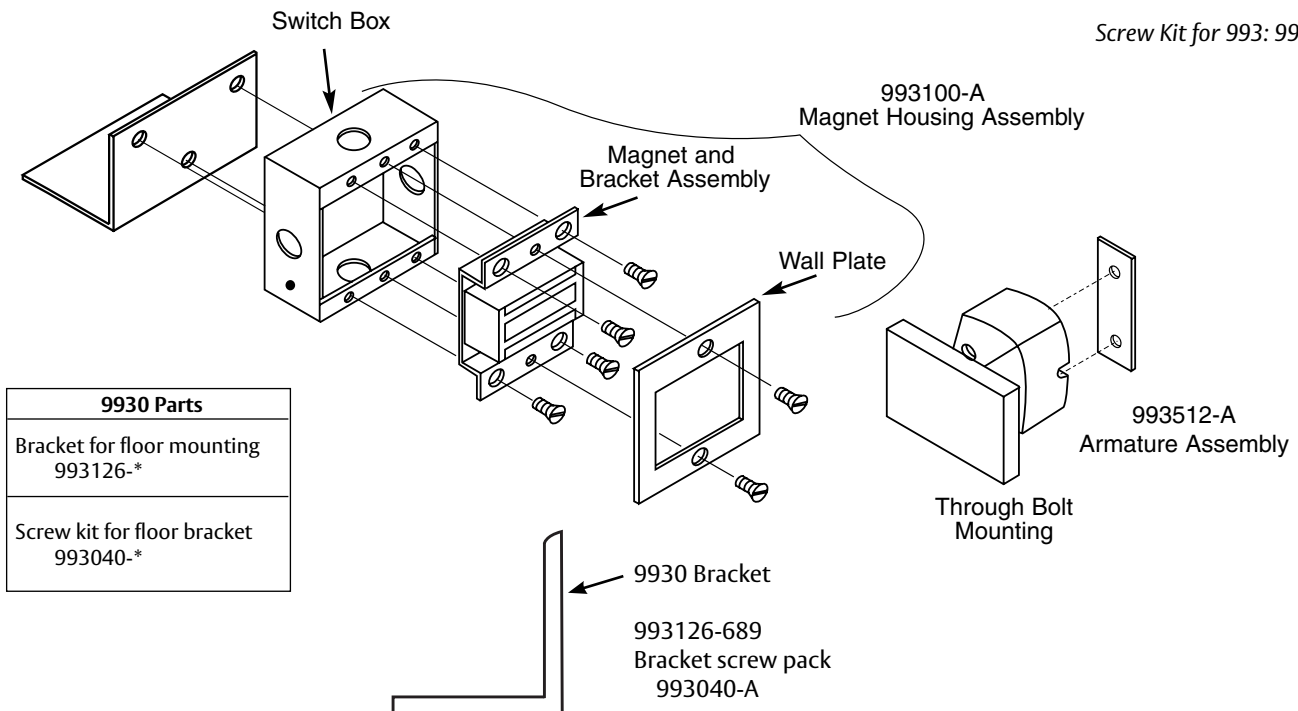
Wall Portion



Screw Kit for 991: 990300-*

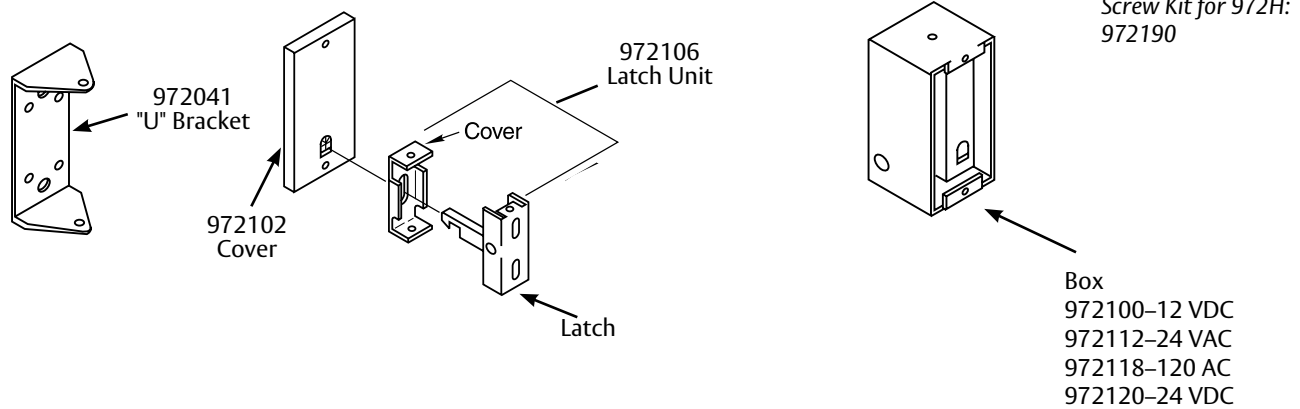
*specify finish

Used With Model 993/9930

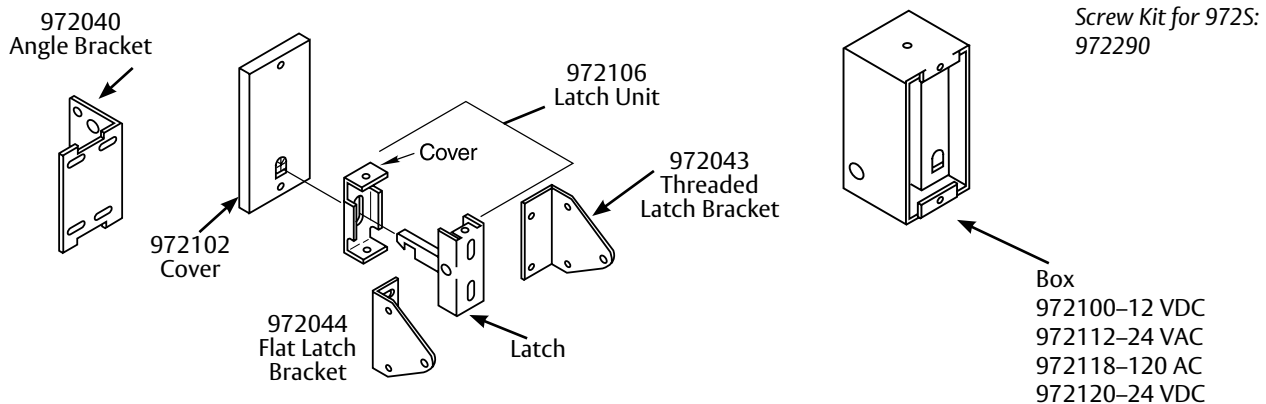


Screw Kit for 993: 993300-A

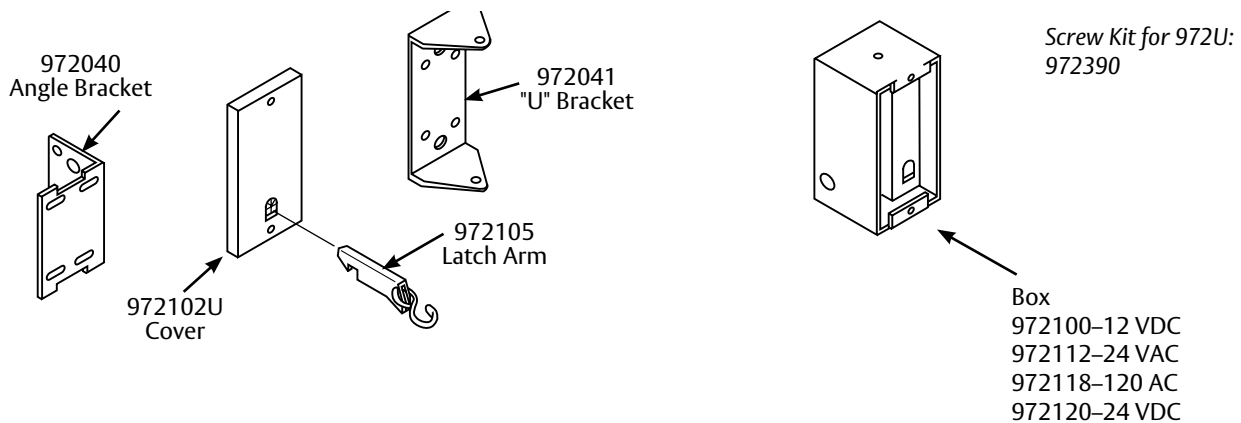
Used With Model 972H



Used With Model 972S



Used With Model 972U

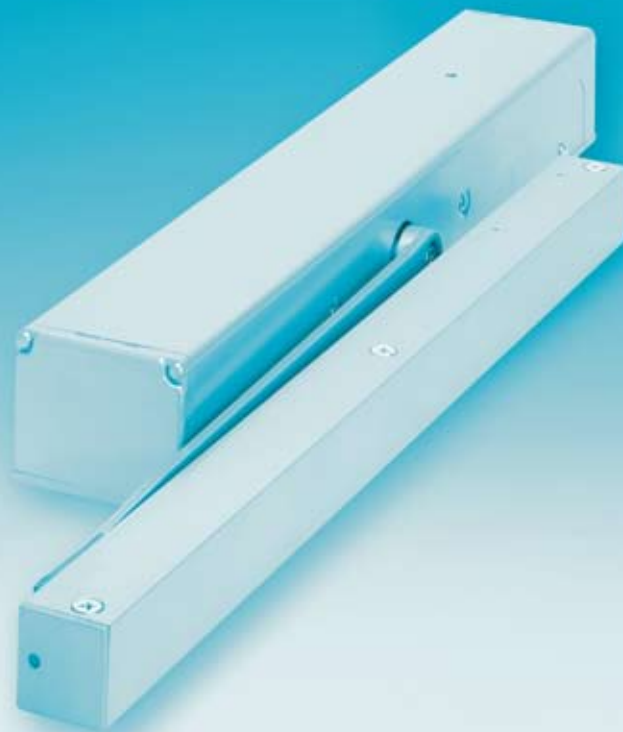


*specify finish

Electrified Closer/Holder

RIXSON®
ASSA ABLOY

Fire/Life-Safety Products
to Protect People
and Property



ASSA ABLOY, the global leader in door opening solutions

Introduction

Rixson® was the first architectural hardware company to have fire/life-safety closers and holders. It remains an industry leader with several distinctly different holding devices. The Smok-Chek® V Series, the Smok-Chek® VI and the Checkmate® 99 serve many purposes. The models come as detected with a built in smoke detector or non-detected models which would be connected only to the alarm system. BE ADVISED THAT THESE PRODUCTS ARE NOT DESIGNED TO BE MANUALLY PULLED OUT OF HOLD OPEN. If continual cycling is necessary use a separate switch to release.

Smok-Chek® V

Electromechanical action

- Single-point hold open
- More durable than electrohydraulic units
- To hold open at 90° door must open to 93°
- Best suited for cross corridor doors

Smok-Chek® VI

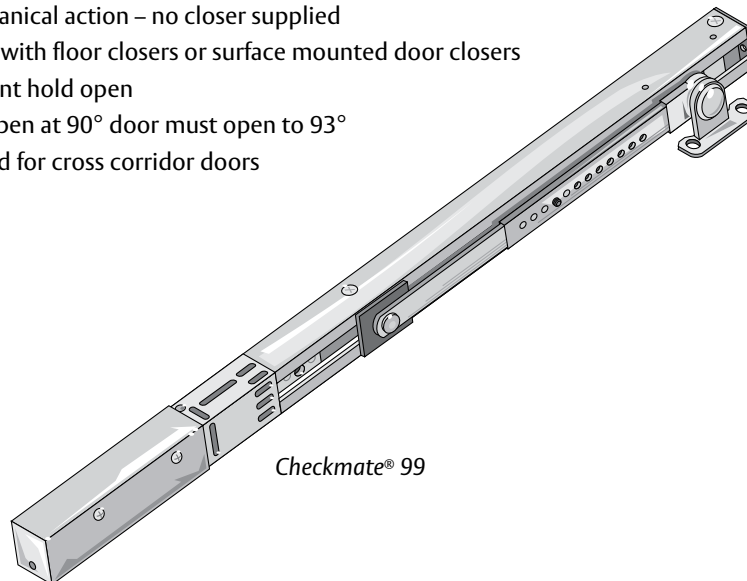
Electrohydraulic action

- Single point units must open 15° past desired hold open position for single-point hold open
- Multi-point units will hold open wherever they are stopped, cam must be adjusted in the field
- Free-Swing arm option – use with multipoint units
 - Door acts as if there is no closer attached until the power is cut and the arm piece brings the door closed
- Best suited for patient room doors using free swing arm option

Checkmate® 99

Electromechanical action – no closer supplied

- For doors with floor closers or surface mounted door closers
- Single point hold open
- To hold open at 90° door must open to 93°
- Best suited for cross corridor doors



Checkmate® 99

Contents	Page
Electrified Closers/Holders: General Information.....	214
Options.....	216
Certifications	216
Limited Warranty.....	216
Specifications	216
 SMOK-CHEK® V	
0600 Non-Detected Pull Side Mounting.....	217
0601 Non-Detected Push Side Mounting.....	217
0602 Non-Detected Holder on Pull Side/Closer on Push Side	218
0100 Non-Detected Pull Side Mounting Holder Only.....	218
0101 Non-Detected Push Side Mounting Holder Only.....	219
How to Order	220
 SMOKE-CHEK® VI	
4 PULL Non-Detected Pull Side Mounting.....	221
6 PULL Detected Pull Side Mounting.....	221
4 PUSH Non-Detected Push Side Mounting	221
6 PUSH Detected Push Side Mounting	221
How to Order	222
 Checkmate® 99	
99-726 Non-Detected Push Side Mounting.....	223
99-626 Detected Push Side Mounting.....	223
99-926 Non-Detected Pull Side Mounting.....	223
99-826 Detected Pull Side Mounting.....	223
How to Order	224
 Parts Drawings	225-230

Electrified Closer/Holder Options, Certifications Limited Warranty, Specifications

Options

Smok-Chek® V

550789 Arm – suffix 550789

For Smok-Chek® V push side units only. This option should be used on double egress with reveals from 3-1/2" to 5-1/2". Should also be used on push side mount where doors need to swing to 180°. Non-detected units only.

Smok-Chek® VI

Detected products

They have an integral smoke detector. They can be stand alone or used to activate other non-detected models.

Non-detected

These are connected to the alarm system or to a detected unit at the same opening.

Free Swing Arm – prefix FS

For Smok-Chek® VI pull side units only. This option essentially disengages the arm from the closing mechanism to make the door swing freely. It is normally used on patient room doors in hospitals. When alarm cuts the power a mechanism on the closer spindle pushes the arm and closes the door.

Double Egress Arm – prefix DE

For Smok-Chek® VI pull side units only. This option can accommodate double egress reveals up to 3".

Infinite Hold Open – Field Adjusted

For Smok-Chek® VI units only. This multi-point hold open should be used only with the FS arm option.

Selective Hold Open – Field Adjusted

For Smok-Chek® VI units only. This selective hold open is single point and is set in the field. Doors must be able to swing 15° beyond desired hold open point. All products are shipped with this feature.

Checkmate 99

May be detected.

Certifications

All units are UL listed 

All Rixson® electrified closer/holders are in compliance with ANSI/BHMA 156.8 and A156.15 Standards. See individual products for sub sections.



Limited Warranty

Rixson Electrified Closer/Holders are warranted for 2 years for defect. See Rixson price book for specific details of the limited warranty.

Specifications

Closer/Holders shall be Smok-Chek® V series. They should be electromechanical type. All holders shall open and hold up to 180°. Units shall have holder on the frame and closer on the door. Product with fall-off will not be acceptable.

Closer/Holders shall be Smok-Chek® VI series. They should be electrohydraulic type. Units should have integral smoke detector, where applicable. All models shall have the ability to be set to multiple point hold open in the field. This product should have free swing option.

Whenever floor closers are specified and an electromechanical hold open is needed, the product should be Checkmate® 99. This separate holder will allow the doors to swing to 110°, depending on the type of closer being used. Units should have integral smoke detector, where applicable.

0600 Pull Side Mounting

Application

Cross corridor doors – swinging in the same direction

Non-handed

Maximum door weight 250 lbs.

Doors up to 4'0"

ANSI C00191

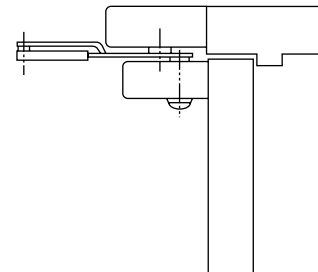


Product Description & Features

- Pull side mount
- Hold open range 85° - 145°
- Mounts on 2" header
- Adjustable spring surface closer
- Maximum reveal 1/8"
- Concealed switch disconnects hold open
- Sprayed finishes

Technical Information

- 24VAC/DC 80ma
- 120VAC 17ma



0601 Push Side Mounting

Application

Cross corridor doors – Double egress – doors swinging in opposite directions

Non-handed

Maximum door weight 250 lbs.

Doors up to 4'0"

ANSI C00231

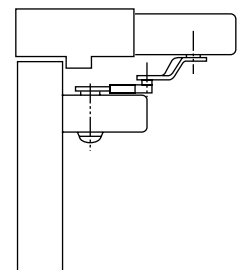


Product Description & Features

- Push side mount
- Hold open range 85° - 135°
- Doors may swing and hold at 180° by using special arm 550789
- Mounts on 2" header
- Adjusted spring surface closer
- Maximum reveal 3-1/2"
- For reveals 3-1/2" - 5-1/25" use special arm 550789
- Concealed switch disconnects hold open
- Sprayed finishes

Technical Information

- 24VAC/DC 80ma
- 120VAC 17ma



0602 Holder Pull Side Mounting/Closer Push Side Mounting

Application

Cross corridor doors – swinging in the same direction

Non-handed

Maximum door weight 250 lbs.

Doors up to 4'0"

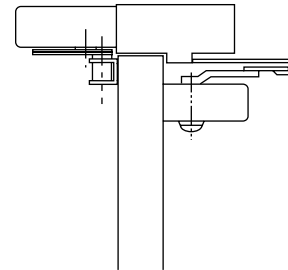
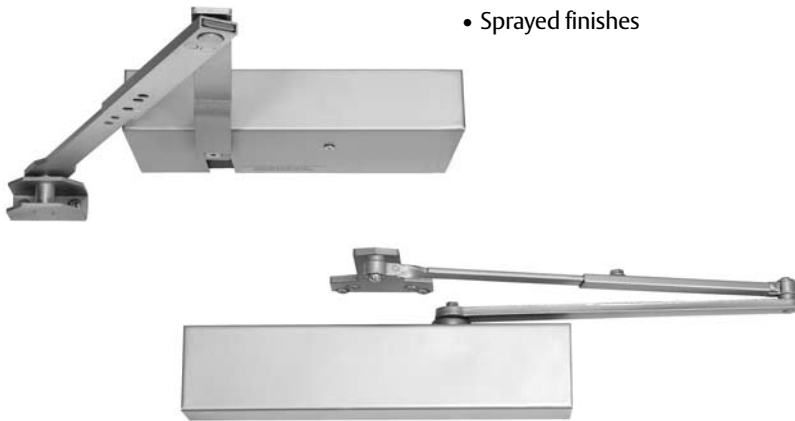
ANSI C00471

Product Description & Features

- Pull side mount for holder
- Push side mount for closer
- Hold open range 85° - 180°
- Mounts on 2" header
- Adjustable spring surface closer
- Maximum reveal 1/8"
- Concealed switch disconnects hold open
- Sprayed finishes

Technical Information

- 24VAC/DC 80ma
- 120VAC 17ma



0100 Holder Pull Side Mounting – No Closer

Application

Cross corridor doors – can be used with floor closers

Non-handed

Maximum door weight 250 lbs.

Doors up to 4'0"

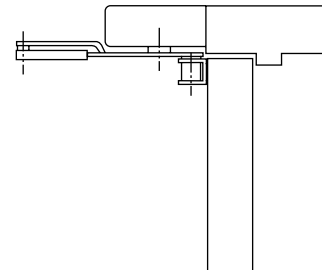
ANSI C00511

Product Description & Features

- Pull side mount for holder
- No closer supplied
- Hold open range 85° - 180°
- Mounts on 2" header
- Maximum reveal 1/8"
- Sprayed finishes

Technical Information

- 24VAC/DC 80ma
- 120VAC 17ma



0101 Holder Push Side Mounting – No Closer

Application

Cross corridor doors – Double egress –
 doors swinging in opposite directions

Non-handed

Maximum door weight 250 lbs.

Doors up to 4'0"

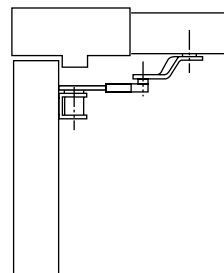
ANSI C00471

Product Description & Features

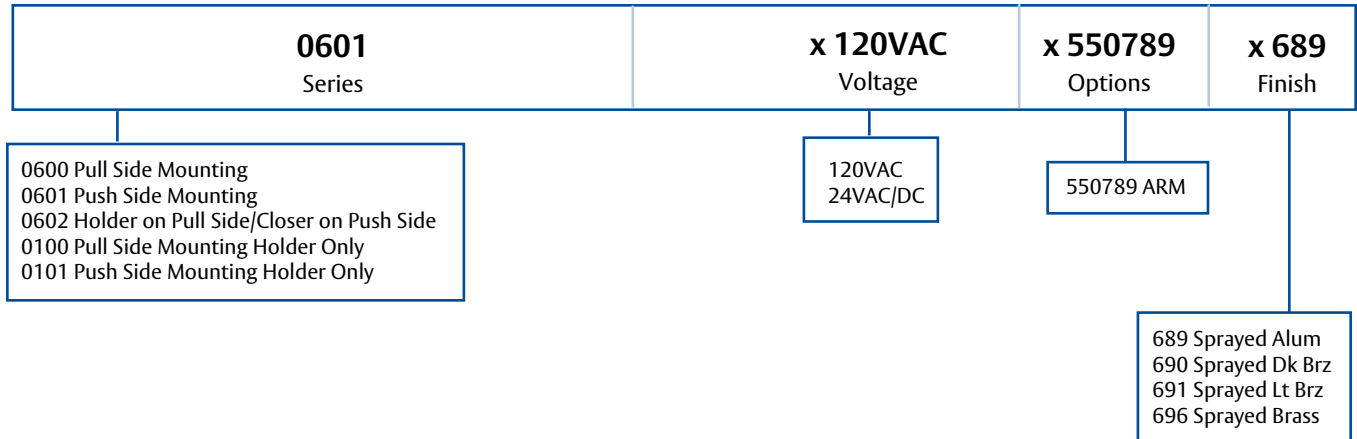
- Push side mount for holder
- No closer supplied
- Hold open range 85° - 135°
- Mounts on 2" header
- Maximum reveal 3-1/2"
- For reveals 3-1/2" - 5-1/2" use special arm 550789
- Sprayed finishes

Technical Information

- 24VAC/DC 80ma
- 120VAC 17ma



How To Order



4 PULL Non-Detected Pull Side Mounting 6 PULL Detected Pull Side Mounting

Application

Patient room doors
Maximum door weight 250 lbs.
Handed
Door width 2'4" - 4'0"
ANSI C00351 or C00361/C00381
Freeswing C00311 or C00321



Product Description & Features

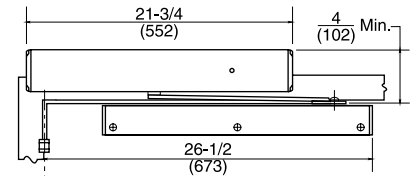
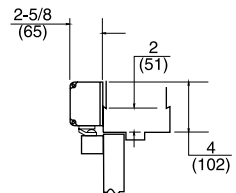
- Pull side mounted
- Free swing arm available (*prefix "FS"*) order closer infinite hold open
- Maximum door opening 175°
Maximum hold open 165°
- Double egress arm available for reveals deeper than 1/8" up to 3" (*prefix "DE"*). Maximum opening 110°
- **Selective Hold Open** (Standard) – single point hold open preset at factory (80°-165°)
- Can be used with smoke detectors or as a slave unit to the 6PUSH
- 2" clearance required above 2" frame
- Sex bolts included standard
- When used in conjunction with 6PULL, 120VAC or 24VDC, the 4 unit must be ordered as 24VDC

- 120VAC input is stepped down to 24VDC solenoid

- Sprayed finishes

Technical Information

- Non-detected 24VDC 70ma
- When ordered with detected unit, must be ordered 24VDC
- Detected 24VDC 16ma standby, 35ma alarm



4 PUSH Non-Detected Push Side Mounting 6 PUSH Detected Push Side Mounting

Application

Patient room doors or stairwell
Maximum door weight 250 lbs.
Handed
Door width 2'4" - 4'0"
ANSI C00311 or C00321
Freeswing C00311 or C00321



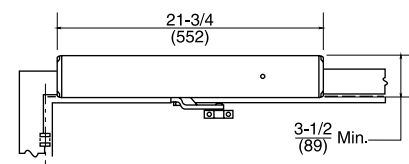
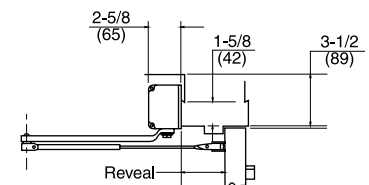
Product Description & Features

- Push side (stop) mounted
- Maximum door opening 180°
Maximum hold open 165°
- **Selective Hold Open** (Standard) – single point hold open preset at factory (85°-165°)
- Can be used with smoke detectors or as a slave unit to the 6PUSH
- When used in conjunction with 6PUSH, 120VAC or 24VAC/DC, the 4 unit must be ordered as 24VAC/DC
- 120VAC input is stepped down to 24VDC solenoid

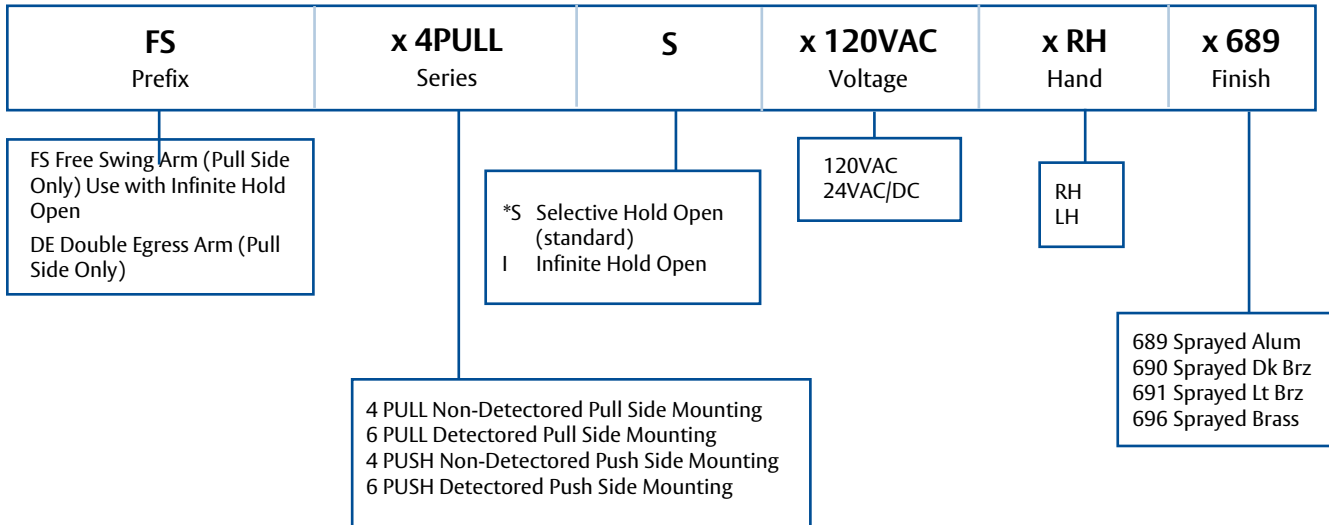
- Sprayed finishes

Technical Information

- Non-detected 24VDC 70ma
- When ordered with detected unit, must be ordered 24VDC
- Detected 24VDC 16ma standby, 35ma alarm



How To Order



**All models ship from the factory as selective hold open.
Infinity hold open must be called out on order.*

99-726 Non-Detected Push Side Mount 99-626 Detected Push Side Mount

Application

Used with independent closers

Non-handed

For doors 2'8" to 4'0" (non-detected)
3'0" to 4'0" (detected)

ANSI C00511 or C00521

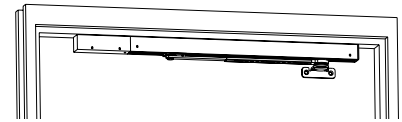


Product Description & Features

- Surface mounted
- Single acting
- Sprayed finishes
- 85° - 110° hold open
- Push side
- Detected or non-detected
- Surface or concealed wiring
- Holding force 25-35 lbs.
- When used in conjunction with detected model, unit must be 24VDC

Technical Information

- Non-detected 120VAC 18ma, 24VDC 90ma
- Detected 24VDC 16ma stand by, 35ma alarm



99-926 Non-Detected Pull Side Mount 99-826 Detected Pull Side Mount

Application

Used with independent closers

Non-handed

For doors 2'8" to 4'0" (non-detected)
3'0" to 4'0" (detected)

ANSI C00471 or C00481

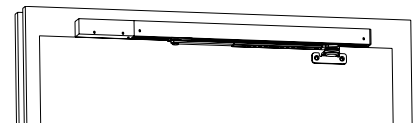


Product Description & Features

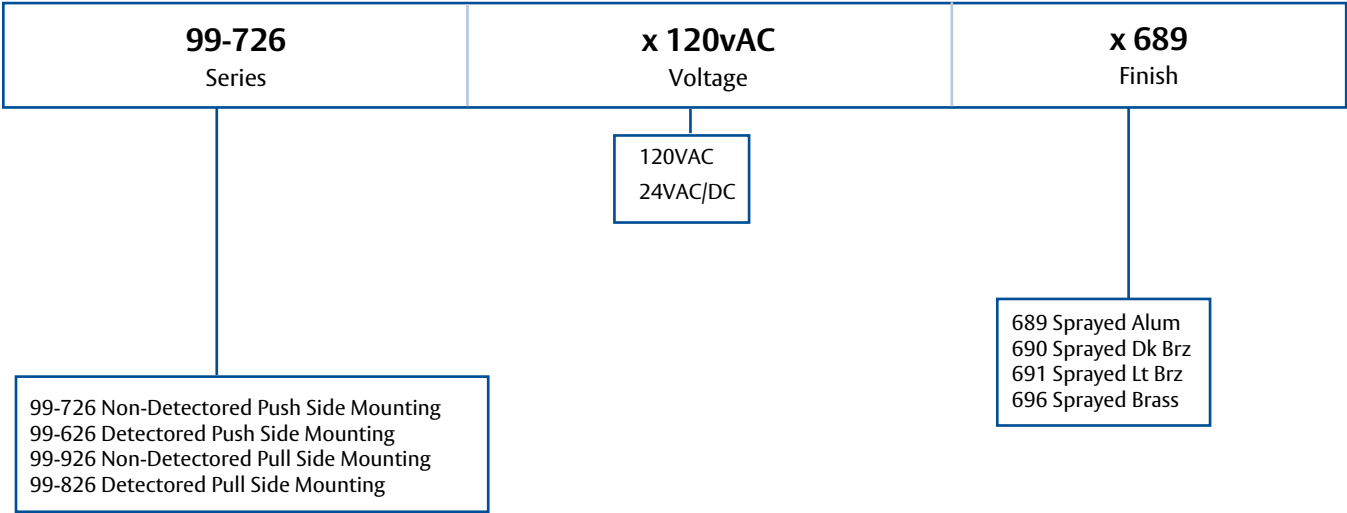
- Surface mounted
- Single acting
- Sprayed finishes
- 85° - 110° hold open
- Pull side
- Detected or non-detected
- Surface or concealed wiring
- Holding force 25-35 lbs.
- When used in conjunction with detected model, unit must be 24VDC

Technical Information

- Non-detected 120VAC 18ma, 24VDC 90ma
- Detected 24VDC 16ma stand by, 35ma alarm
- 24VDC 105ma standby, 125ma alarm

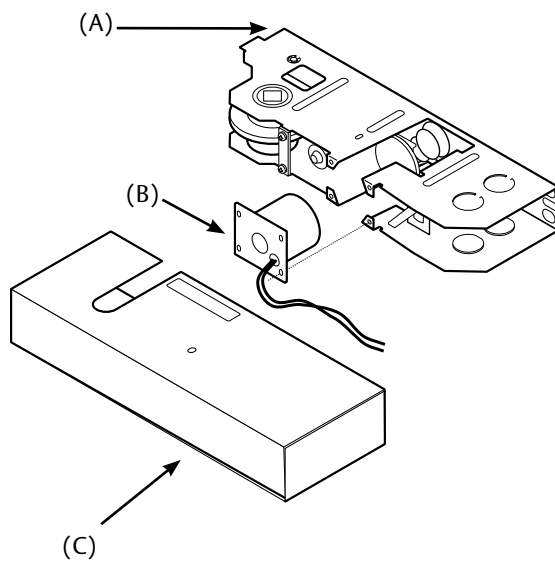


How to Order

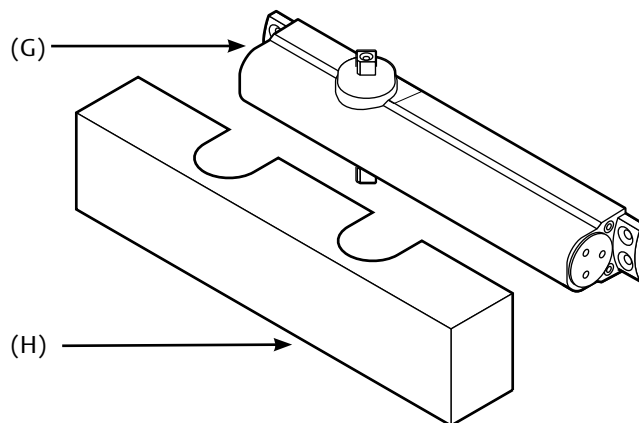


SMOK-CHEK® V

(A)	Holder Assembly 550100 120VAC 550101 24VAC/DC
(B)	Magnet 930105 120VAC 930106 24VAC/DC
(C)	Holder Cover 550106-* (non-detected)
(G)	Closer Body 85010163-*
(H)	Closer Cover 233069K*



**Discontinued, available until inventory depleted.*

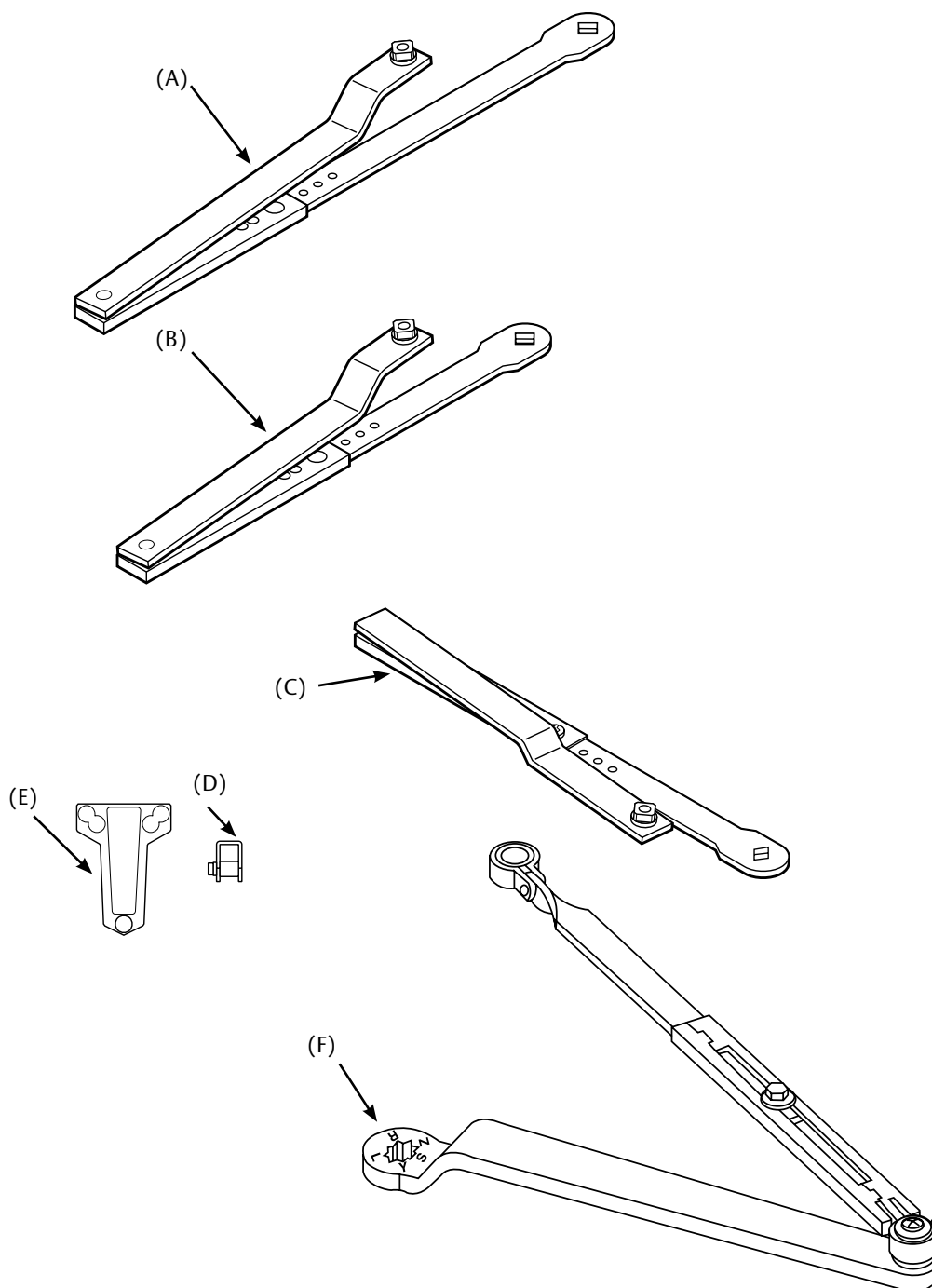


Screw Packs
550221-* for models with closers
550131-* for models without closers

**specify finish*

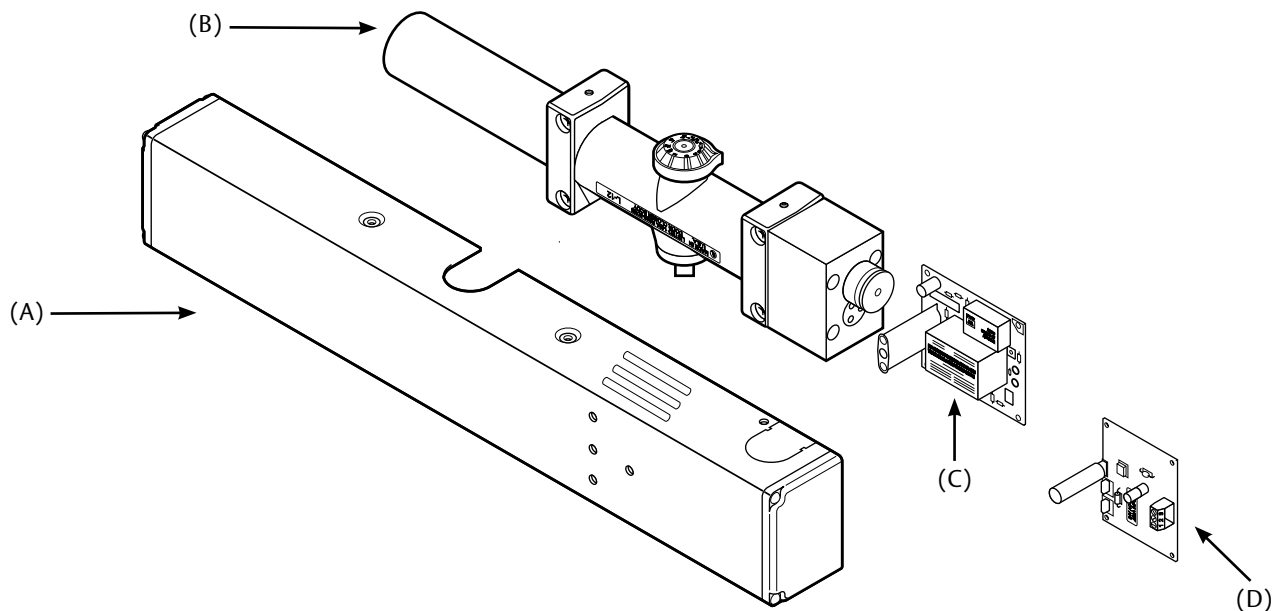
SMOK-CHEK® V

(A) Deep Reveal Push Side Arm 550789-*
(B) Push Side Arm 550136K*
(C) Pull Side Arm 550120K-*
(D) Door Pivot Bracket (Used with 0602 models) 565118T689
(E) PA Bracket (Used with 0602 models) 40-1600-0450-078
(F) Arm (used with 0602 models) 20-7700-0192



*specify finish

SMOK-CHEK® VI



(A) Cover 15-7200-0500-* (Non-detected)
(A) Cover 15-7200-0501- *(Detected)

(B) Body Only 15-7204-0500-078 (RH, 120VAC) 15-7204-0501-078 (RH, 24VAC/DC) 15-7204-0502-078 (LH, 120VAC) 15-7204-0503-078 (LH, 24VAC/DC)

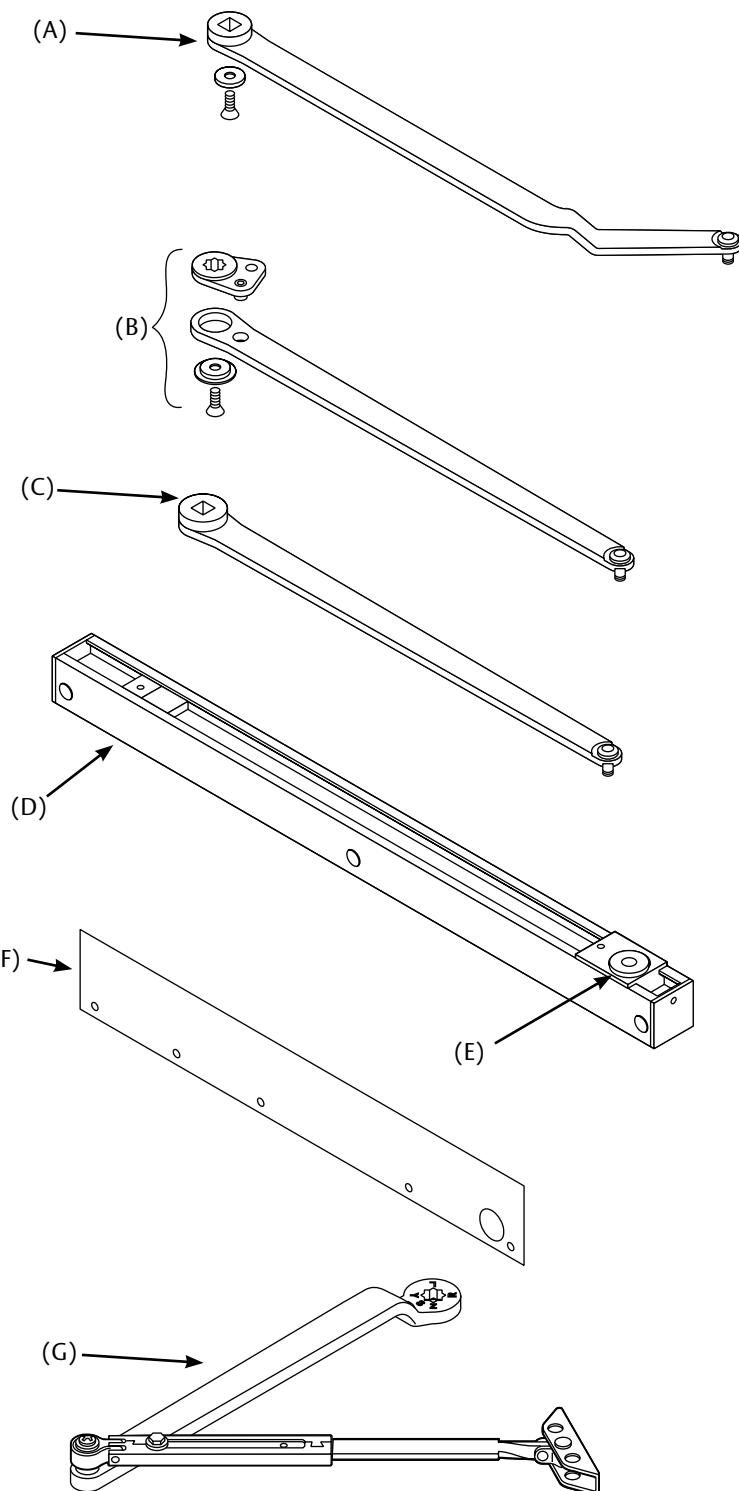
(C) Ionization Detector Module 15-7200-0503-078 (120VAC or 24VAC/DC) Detected units only

(D) PC Board 42-7200-0032-500 24V (Detected) 42-7200-0034-500 120V (Detected)
(D) PC Board 42-7200-0035-500 24V (Non-detected) 42-7200-0036-500 120V (Non-detected)

*specify finish

SMOK-CHEK® VI

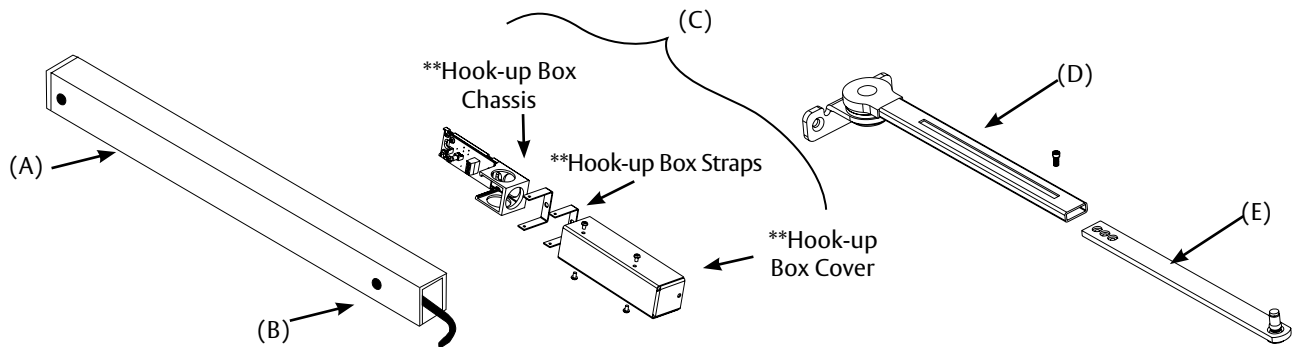
(A) Double Egress Pull Side 15-7200-0506-* (RH) 15-7200-0507-* (LH)
(B) Free Swing Arm 15-7200-0502-*
(C) Pull Side Arm 15-7200-0510-*
(D) Pull Side Track 15-7200-0504-*
(E) Slider Assembly 20-7700-0337-000
(F) Decorative Back Plate 15-7200-0508-*(Non-detected) 15-7200-0509-*(Detected)
(G) Push Side Arm 15-7200-0505-*



Sex Bolt Package
15-7200-0382-*

*specify finish

Models 99-726 and 99-926



(A) Slider Assembly (not visible) 20-0099-0337-500		
(B) Channel 99-726	20-0099-0202-*	24V
	20-0099-0203-*	120V
(B) Channel 99-926	20-0099-0206-*	24V
	20-0099-0207-*	120V
(C) Hook-up Box Assembly 99-726 20-0099-0379-* 120V		
(C) Hook-up Box Assembly 99-926 20-0099-0378-* 24V		
(D) Arm Bracket & Tube 20-0099-0516-*		
(E) Adjusting Rod 20-0099-0343-*		

Screw Kit
20-0040-0534-*

*specify finish

** Not sold separately. Part of hook-up box assembly

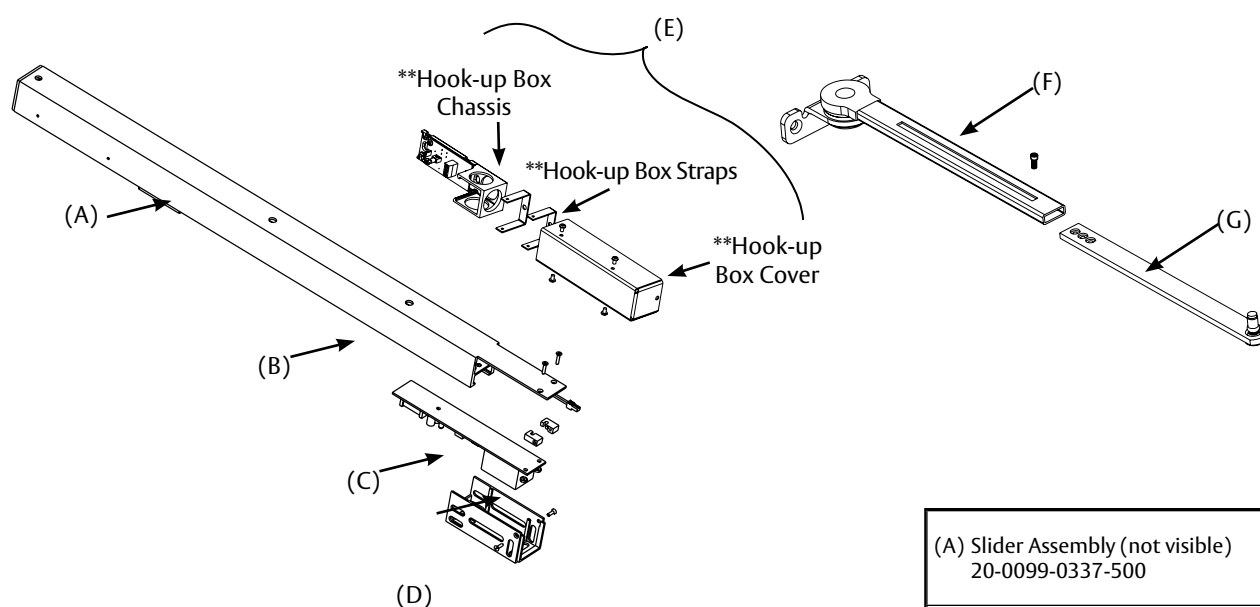
In USA: (800) 457-5670 or www.rixson.com

In Canada: (800) 461-3007 or www.assaabloy.ca

6/10

ASSA ABLOY, the global leader in door opening solutions

Models 99-626 and 99-826



(A) Slider Assembly (not visible)
20-0099-0337-500

(B) Channel
99-626 20-0099-0200-*

(B) Channel
99-826 20-0099-0204-*

(C) Detector
20-7700-0353

(D) Cover
20-7700-9307

(E) Hook-up Box Assembly
99-626 20-0099-0381-* 120V
99-826

(E) Hook-up Box Assembly
99-626 20-0099-0380-* 24V
99-826

(F) Arm Bracket & Tube
20-0099-0516-*

(G) Adjusting Rod
20-0099-0343-*

Screw Kit
20-0040-0534-*

*specify finish

** Not sold separately. Part of hook-up box assembly

Automatic Door Opener

RIXSON®
ASSA ABLOY

Low Energy Opener
For Entries with Existing
or New Floor Closers

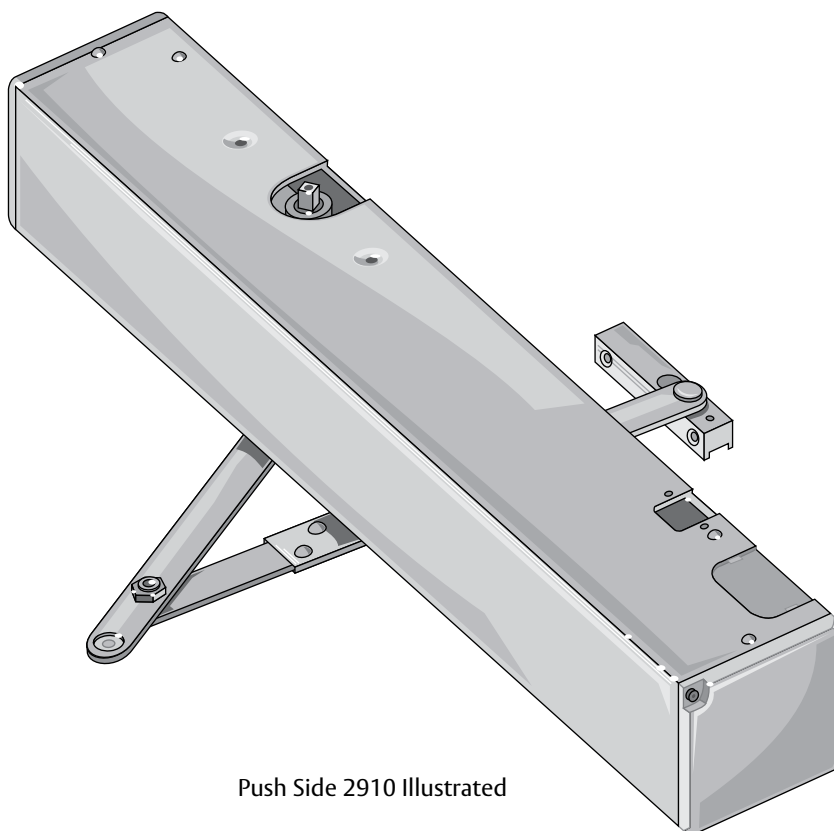


ASSA ABLOY, the global leader in door opening solutions

Introduction

When a floor closer is the way to close the door but, the convenience of an automatic opener is required, Rixson 2900 is the perfect solution.

- Surface mounted overhead low energy operator
 - No need for special power supply (120 volt input)
 - No need for railing systems
- Opener only — door is hung and closed by a floor closer
 - This allows all the features of the floor closer to be utilized when the door is automated
- Can be used on new installations or on existing floor closer installations that need to be automated
- Order opener and closer separately



Push Side 2910 Illustrated

Contents	Page
Automatic Door Opener: General Information	232
Options.....	234
Certifications	234
Limited Warranty.....	234
Specifications	235
 2920 Automatic Opener Pull Side Mount.....	 236
2925 Automatic Opener Pull Side Mount x Double Egress	236
2910 Automatic Opener Push Side Mount.....	236
2915 Automatic Opener Push Side Mount x Deep Reveal.....	236
2910-D Automatic Opener Push Side Mount x Drop Plate	236
2915-D Automatic Opener Push Side Mount x Drop Plate x Deep Reveal.....	236
 Technical Details.....	 238
Accessories	240
Parts Drawings	242
How to Order	244

Automatic Door Opener Options, Certifications Limited Warranty

Options

The Rixson® 2900 is a “low energy” power door operator designed to automatically open the door with a lower energy opening force. The appropriate floor closer will control the door closing functions.

The American with Disabilities Act (ADA) is a law administered by the U.S. Department of Justice. Its guidelines under ADA Regulation for Title III are detailed on the ADA website: www.ada.gov.

The Rixson® 2900 aids in complying with ADA and ANSI A156.19 requirements. It functions using an A/C motor and hydraulic pump to activate a heavy-duty floor closer. The Rixson® 2900 is your best choice in a low energy power door operator with its:

Ease of installation and setup

- Simple instructions
- Uses push-button settings for door open positions

Application versatility and ease of adjustment

- Handed units
- Push side or pull side mounted units available
- Interfaces with electrified hardware and integrates with access control systems

Allows the floor closer to act normally during close cycles or if power is turned off

- Spring force provides the feel of a normal manual door closer
- Door can be opened manually if desired

Operation startup options

- Wall switches
- Motion sensor
- Radio frequency transmitter
- Push and Go

Hold Open options

- 0-30 seconds (5 seconds minimum required for ADA and ANSI A156.19)
- Choice of indefinite hold open feature

Obstruction detection

- Door closes if it hits an obstruction while opening
- Door re-opens once if it hits an obstruction while closing

FUNCTIONS

- Push Side or Pull Side Applications
- Open/Close Obstruction Detection
- Motor Startup Delay adjustment
- Vestibule Function Delay adjustment (For sequencing two or more units)
- Door Hold Open Delay adjustment
- Single Pole Double Throw (SPDT) Relay Output
- SPDT Relay Output time is adjustable and shall not exceed 1amp @ 30VDC
- SPDT Alarm Output
- Indefinite Hold Open function
- Presence Detector Input
- 24 VDC @ 500 mA Auxiliary Output
- Power input 120VAC 60HZ (+10% -15%)
- Current draw 1.5 amp
- Selector Mode Switch (3 position)
 - ☐ OFF – Turns unit off. Disables all functions except smoke ventilation
 - ☐ ON – Turns unit on
 - ☐ HOLD OPEN – Activates the unit to the hold open position indefinitely

Certifications

Rixson® low energy openers are in compliance with ANSI/BHMA 156.19 Standards. See individual products for sub sections.



Limited Warranty

Rixson® 2900 Power Openers are warranted for 2 years for defect. See Rixson® Price Book for specific details of the limited warranty.

Specifications

Heavy-weight, high traffic doors that require automatic opening shall use the low energy operator in conjunction with a heavy-duty floor closer. Operator shall be for opening of door only.

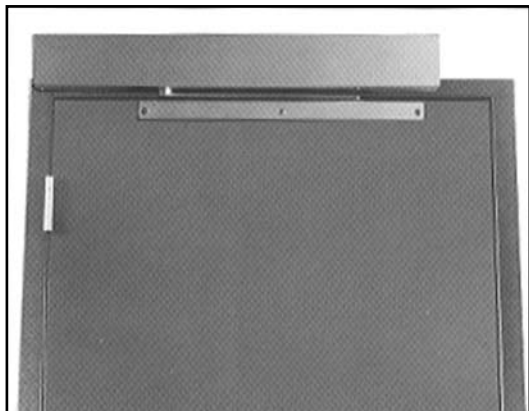
Door closer shall be installed in the floor and shall have separate and independent closing speeds with backcheck turned to lightest setting.

Door controls (interior/exterior) for swinging doors shall be low energy operators. Low energy operation to cycle the door open as controlled by the body/pump and motor assembly adjustments. Floor closer unit shall provide conventional door closer opening forces unless the power operator motor is activated by an initiating device. Motor assist shall be adjustable from 0 to 30 seconds in 5 second increments. Motor assist shall restart the time cycle with each activation of the initiating device. Unit shall have a three-position selector mode switch that shall permit unit to be switched "ON" to monitor for function activation, switched to "H/O" for indefinite hold open function or switched to "OFF," which shall deactivate all control functions (except smoke ventilation function) but will allow standard door operation by means of the floor closer. Door opening shall be adjustable to provide compliance with the requirements of the Americans with Disabilities Act (ADA) and ANSI standards A117.1 and A156.19.

All openers to have push button controls for setting door open position. All openers to have open obstruction detection and close obstruction detection built into the unit. All openers to have motor start-up delay, vestibule interface delay, electric lock delay and door hold open delay up to 30 seconds. All openers to have inputs for smoke ventilation doors, which allow doors to power open upon fire alarm activation and hold open indefinitely or until fire alarm is reset. All openers to have a presence detector input to prevent a closed door from opening or a door that is fully opened from closing. All openers to have a hold open toggle input to allow remote activation for indefinite hold open; door closes the second time the input is activated. All openers to have vestibule inputs to allow sequencing operation of two units. All openers to have a 24VDC @ 500mA output for controlling electric strikes, electromagnetic locks or radio frequency receivers. All openers to have an SPDT relay for interfacing with latch retraction exit devices, electric strikes, etc. All openers to be hard wired with power input of 120VAC @ 60HZ.

Automatic Door Opener Standard and Drop Plate Applications

Standard Applications



RH Shown

2920/2925

Hinge (Pull) Side of Door

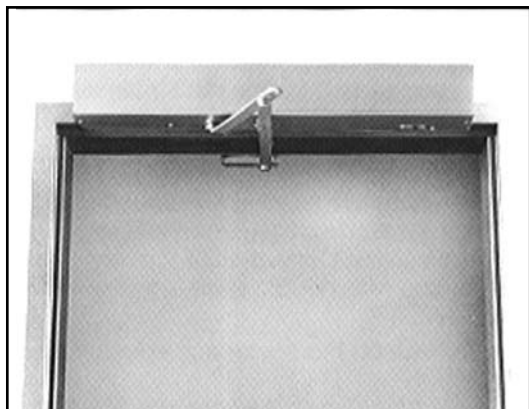
- Spring-buffered stop assembly in slide track

2920 Rigid Arm and Slide Track

- 1/8" (3mm) maximum frame reveal

2925 Double Egress Arm and Slide Track

- From 1/8" to 3" (3 to 76mm) frame reveal
- Specify hand when ordering



LH Shown

2910/2915

Stop (Push) Side of Door

Heavy-Duty Double Lever Arm

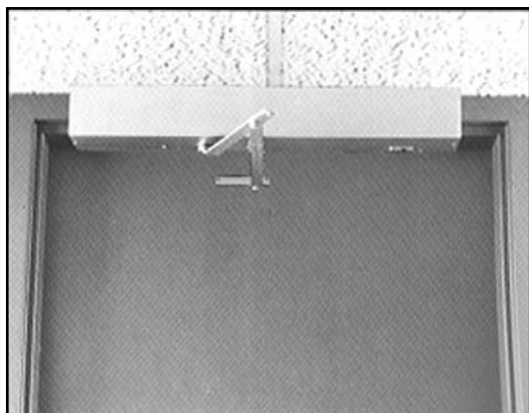
- Maximum frame reveals as charted
- Spring-buffered stop in arm shoe assembly

SERIES	REVEAL RANGE	
2910	2-1/4" to 4-3/4"*	(57 to 121mm)*
2915	4-13/16" to 7-3/8"	(122 to 187mm)

* Reveals less than 2-1/4" (57mm) may be achieved by field cutting the adjusting rod

NOTE: Maximum door opening degree determined by floor closer.

Drop Plate Applications



LH Shown

2910-D/2915-D

Stop (Push) Side of Door

Heavy-Duty Double Lever Arm

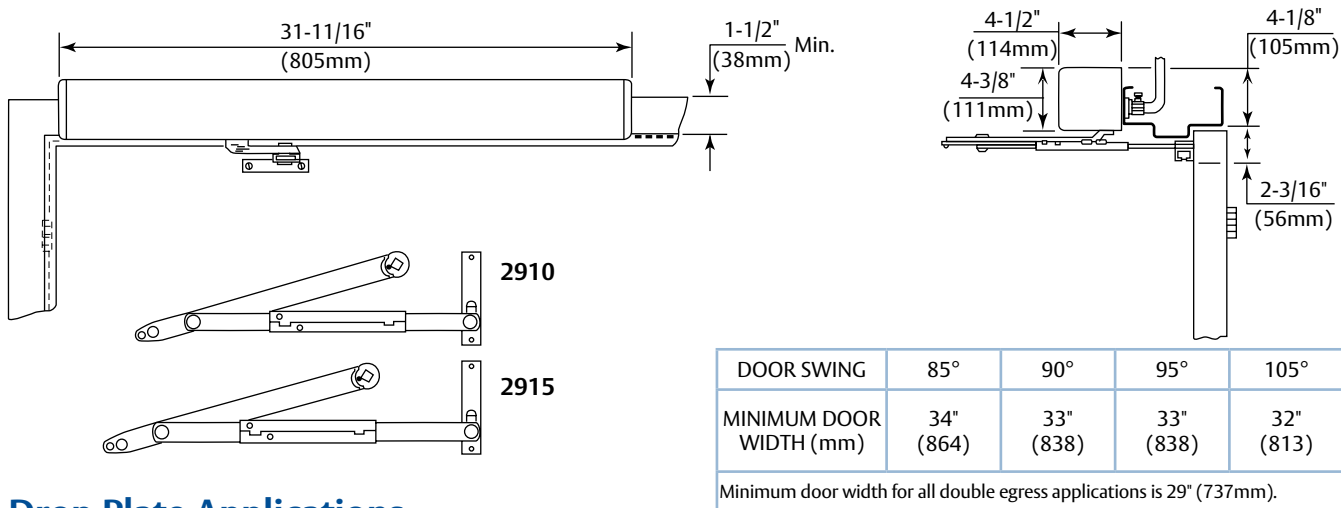
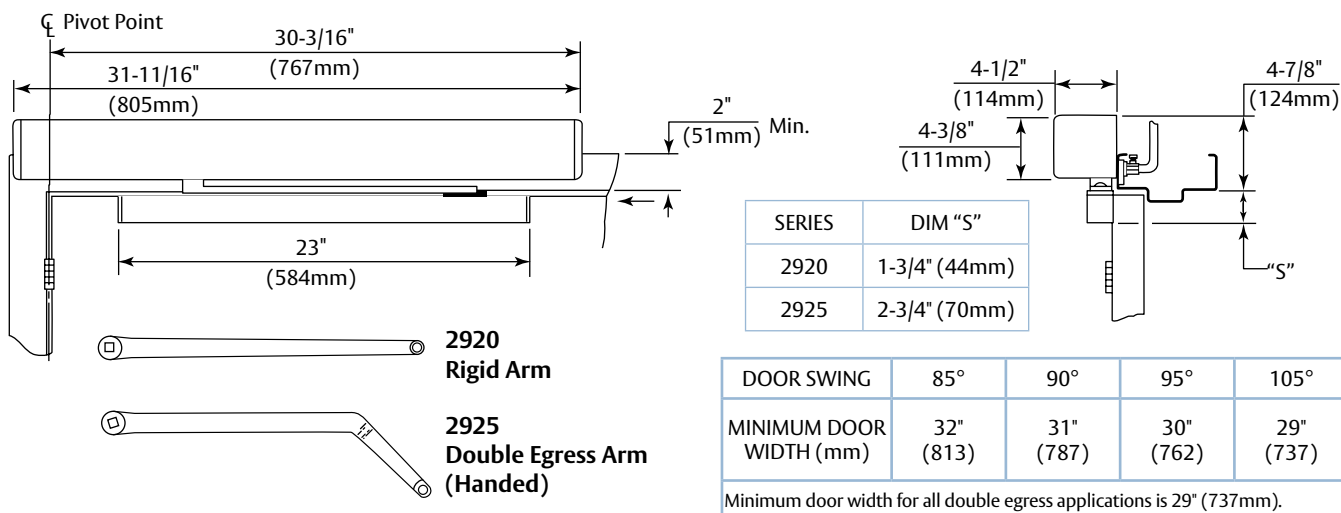
- Maximum frame reveals as charted
- Spring-buffered stop assembly in arm shoe

SERIES	REVEAL RANGE	
2910-D	2-1/4" to 4-3/4"*	(57 to 121mm)*
2915-D	4-13/16" to 7-3/8"	(122 to 187mm)

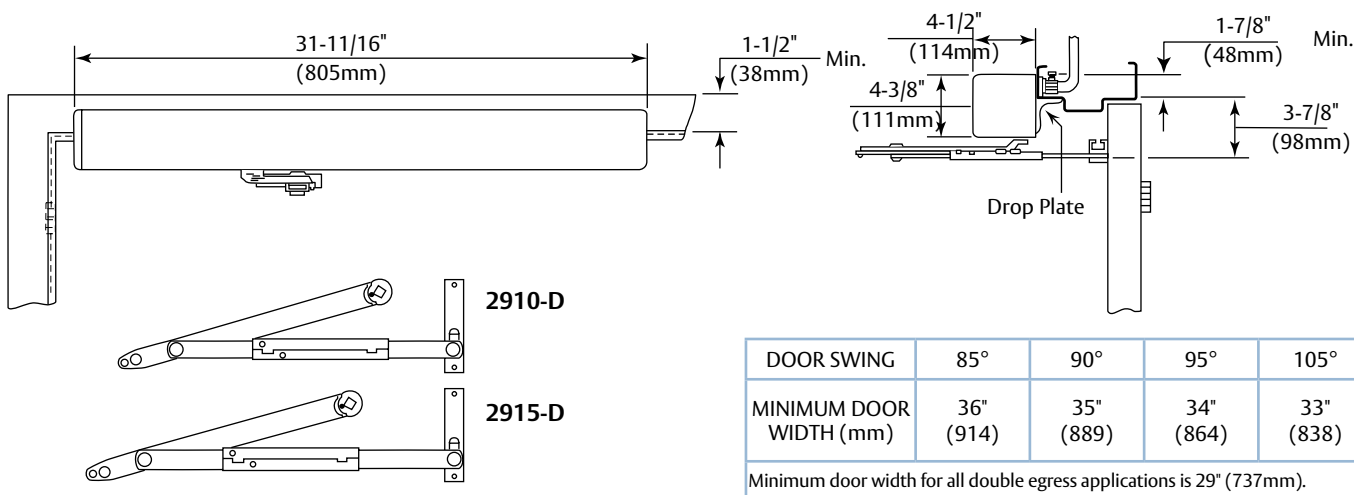
* Reveals less than 2-1/4" (57mm) may be achieved by field cutting the adjusting rod

NOTE: Door opening degree determined by floor closer.

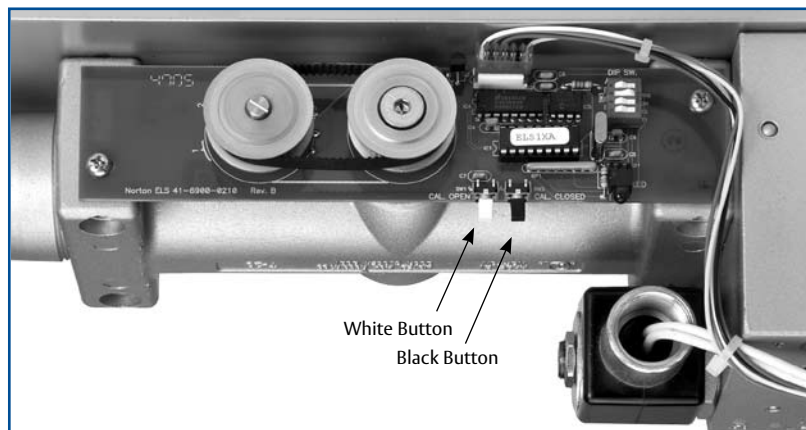
Standard Applications



Drop Plate Applications



Technical Details



ELS – Electronic Limit Switch:

Used for open door setting, Push and Go selection, obstruction timing and Power Operator/Power Assist Function.

- WHT Button – Used for Door Open setting
- BLK Button – Used for Door Closed setting

Dip Switch Settings

- 1 - Obstruction Detection Delay
- 2 - Obstruction Detection Delay
- 3 - Aviation Mode (Push and Go)
- 4 - Power Assist/Power Operator Mode

See Close-up on pg 239



SW1 Dip Switches

- 1 - P/A – **Door Operator Function Switch** - OFF position selects Operator Mode. ON position selects the Assist Mode.
- 2 - A/D – **Alarm Delay Timer** – OFF = 30 second delay. ON = 60 second delay. Used with terminal JP1-1
- 3 - Not used – OFF
- 4 - Not used – OFF



Timer Adjustments

- SW2 – **Motor Delay** – Delays motor start-up to allow unlocking of electric hardware.
- SW3 – **Solenoid Delay** – Sets the length of time that the relay will stay energized or de-energized. Used for JP4-3, 4 and 5 relay. Allows electric hardware to stay energized long enough for automatic door opening.
- SW4 – **Vestibule Delay** – Sets the length of time between receipt of the IN Vestibule signal and the motor start-up.
- SW5 – **Hold Open Delay/Assist Delay** – Sets length of time door holds open at the fully open position for operator function. Sets length of time motor and pump assembly will operate to reduce opening force of door for assist function. When time elapses the door will operate as a standard door closer.

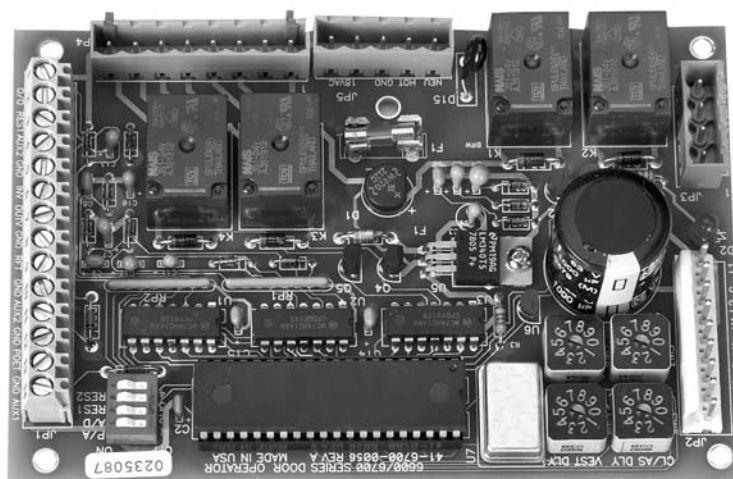
Technical Details

2900 Control Board JP-1 Terminal: (Input Controls) – wall switches, motions sensors, 2nd Rixson 2900, etc.

- 1 - O/O – **Override Open** – Input for blow open or smoke ventilation application - Upon initiation of a closed signal from a fire/smoke alarm panel, the door will open and remain open until signal is terminated. Use with any JP-1 ground.
- 2 - RES 1 – Not used
- 3 - AUX2 – **Auxiliary Two** – This is one of two secondary initiating switch input contacts. (JP-10 is the other.) Use with any JP-1 ground to initiate operation.
- 4 - GND – **Ground**
- 5 - INV – **IN Vestibule** – Used for vestibule function. This contact must be connected to the JP-1-6 terminal from another unit to receive an initiating signal. Use this contact with any JP-1 ground.
- 6 - OUTV – **Out Vestibule** – Used for vestibule function - This contact must be connected to terminal JP-5 of another unit to send an initiating signal. Use this contact with any JP-1 ground.
- 7 - GND – **Ground**
- 8 - RFT – **Toggle** (Maintained Hold Open) – This input can be used with any normally open switch. The first initiation of this contact will open door and hold it open. A second initiation of this contact will release and close the door. Use with any JP-1 ground.
- 9 - GND – **Ground**
- 10 - AUX2 – **Auxiliary Two** – Same as JP1-3 above.
- 11 - GND – **Ground**
- 12 - PDET – **Presence Detector** – Permits wiring of a sensor to prevent a closed door from opening or a door that is fully open from closing. Use with any JP-1 ground.
- 13 - GND – **Ground**
- 14 - AUX1 – **Auxiliary One** – Primary initiating switch contact. Initiates door power cycle. For vestibule function, the switch on the initiating side of door is connected to this terminal. Use with any JP-1 ground.

JP-4 Terminal: (Output Controls) – electric strikes, latch retraction exit devices, mag locks, etc.

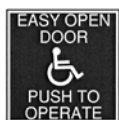
- 1 - GND – **Ground**
- 2 - +24VDC
- 3 - NO1 – **Relay Contact** – Normally open relay dry contact that is switched when any auxiliary inputs are initiated. Delay can be set for up to 12 seconds. Use with JP4-4 CO-1.
- 4 - CO1 – **Relay Contact** – Common relay contact for use with terminals JP4-3 and JP4-5.
- 5 - NC1 – **Relay Contact** – Normally closed relay contact that is switched when any auxiliary inputs are initiated. Delay can be set for up to 12 seconds. Use with JP4-4 CO1.
- 6 - NO2 – **Alarm Delay** – Normally open dry relay contact that is switched when any auxiliary inputs are initiated. The relay will stay switched for 30 or 60 seconds ().
- 7 - CO2 – **Alarm Delay** – Common contact for use with terminals JP4-6 and JP4-8.
- 8 - NC2 – **Alarm Delay** – Normally closed dry contact that is switched when any auxiliary inputs are initiated. The relay will stay switched for 30 or 60 seconds ().



Accessories

#29679 Operational Signs

(Packaged with unit) – Supplied with 2900 Operator



#29425 (1 per)



#29426 (1 per)



#29427 (2 per)



#29431 (1 per)



#29430 (1 per)



#29428 (2 per)

Motion Sensor #29663



- Uni-directional
- Black cover
- SPDT relay
- Adjustable angle pattern
- 24 VDC input
- Must not be placed where motion of door can be sensed

Switch Post #29677

- 6"W x 4"D x 40"H x 3/16" wall thickness
- Durable exterior grade powder coat 42" high
- Finish in gray or dark bronze. Specify when ordering
- Standard formed plastic cap (2" high)
- Surface mounted (above ground)
- Radio Frequency Transmitter included (4" x 4" face plate)

Switch Post #29678

- 6"W x 4"D x 40"H x 3/16" wall thickness
- Durable exterior grade powder coat 42" high
- Finish in gray or dark bronze. Specify when ordering
- Standard formed plastic cap (2" high)
- Surface mounted (above ground)
- Switch included (4" x 4" face plate)



Note: For additional accessories consult factory.

#29681 Signage Kit

(Packaged with 29661, 29662, 29669, 29673, 29675, 29684, 29685, 29686 switches)



#29429 (1 per switch)

Supplied with wall switches

#29682 Signage Kit

(Packaged with 29660, 29672, 29674, 29676 switches)

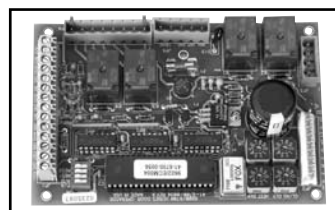


#29432 (1 per switch)

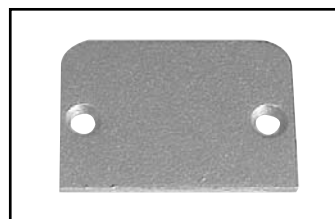


#29433 (1 per switch)

Miscellaneous Parts



#296700PCB – Control Board



#29668 Security Plate – Conceals the ON/OFF/HOLD OPEN switch to deter tampering. Packed standard with the Rixson 2900.

Accessories

Activating Door Switches



29660



29661

29660, 29661

4" x 4" Face Plate

- 4-1/2" x 4-1/2" SS Back Plate
- 15 amp @ 125VAC
- Flush Mounted – Hard Wired
- Fits single or 2 gang electrical box
- **29660** – Stainless Steel with Black Letters
- **29661** – Blue Powder Coat with White Letters



29574



29576

29574RF, 29576RF, 29685HW, 29575HW

6" x 6" Face Plate

- Stainless Steel with Blue Letters
- 29574 – Flush Mounted - Wireless used with RF1 option and 29671 kit

* Requires that the unit be equipped with Radio Frequency Receiver (RF1 suffixed units) or purchased with a 29671 conversion kit.



29662



29672

29662, 29672

1-11/16" x 4-1/2" Face Plate

- 1-11/16" x 4-1/2" Back Plate
- SPDT UL listed Switch-Mom.
- 15 amp @ 125VAC
- Fits 1 -3/4" Frame
- **29662** – Stainless Steel with Red Button
- **29672** – Stainless Steel with Black Letters

Note: All hard-wired switches are Momentary Contact SPDT, UL Listed.



RF1 – Radio Frequency Option with Door Opener

29687 kit ordered separately

A Radio Frequency receiver used to control the Rixson 2900 from a remote location. Wireless. (Factory wired and mounted).

Actuators ordered separately:

- 26572RF
- 26581RF
- 26383RF
- 29574RF
- 29576RF
- 29577RF

Transmitters

- 9 volt battery
- Temperature: -4° F to 122° F
- Used with RF1



26572 – Key Fob

- 1-1/2"w x 2-3/16"h x 9/16" d
- Two channel



26581

- 2-3/8"w x 4-3/16"h x 15/16" d
- Single channel



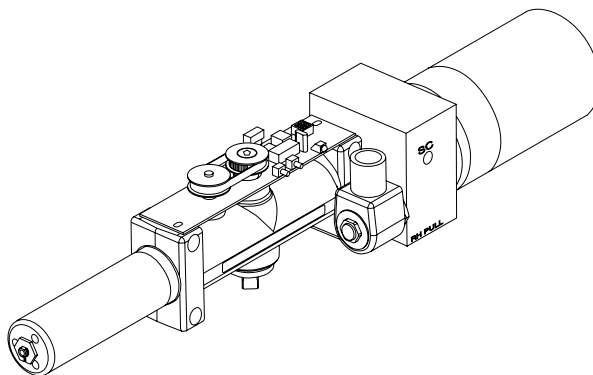
26582

- 2-3/8"w x 4-3/16"h x 15-16" d
- Two channel

Automatic Door Opener Door Opener Parts Drawings

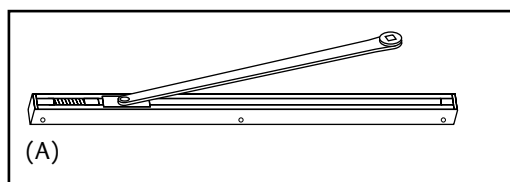
Body Pump and Motor Assemblies

Right Hand Body Pump and Motor Assembly
292LAP-R (2920, 2925)
291LAP-R (2910, 2915)
Left Hand Body Pump and Motor Assembly
292LAP-L (2920, 2925)
291LAP-L (2910, 2915)
PC Board 296700PCB

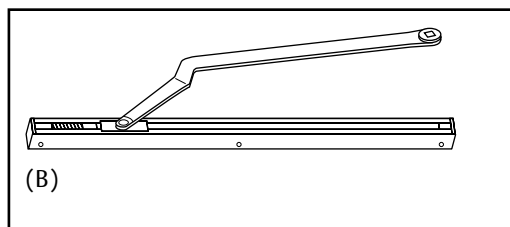


Arm and Track Assemblies

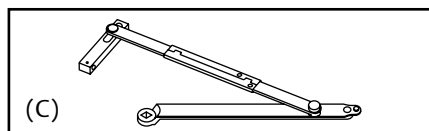
(A)	Arm and Track Assembly 2926610-1
	Arm Assembly
	297210-1Arm
	296610-1Track



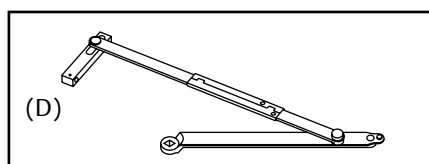
(B)	Arm and Track Assembly (LH) 296650-1L
	Arm and Track Assembly (RH) 296650-1R
	Arm Assembly 297250-1L (LH)
	Arm Assembly 297250-1R (RH)
	Track Assembly 296610-1T



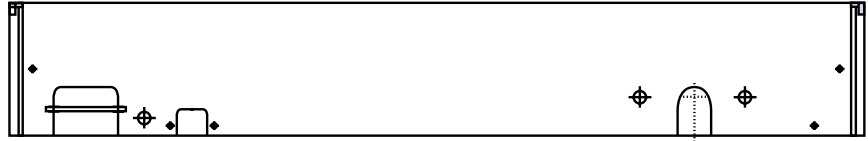
(C)	Arm Assembly 296660-1
	Rod & Snubber Assembly 296660-11



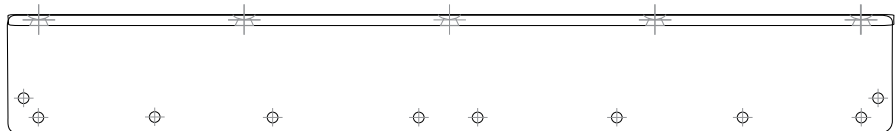
(D)	Arm Assembly 296670-1
	Rod & Snubber Assembly 296670-11



RFI Kit 29671

2900 Cover

41-6900-0914

Drop Bracket 2910-15DPL

41-6900-0913

Automatic Door Opener How to Order

How to Order

2920 Model	R	RF1 Suffix	689 Finish
2920 Automatic Opener Pull Side Mount 2925 Automatic Opener Pull Side Mount x Double Egress 2910 Automatic Opener Push Side Mount 2915 Automatic Opener Push Side Mount x Deep Reveal	R Right Hand L Left Hand	RF1 Radio Frequency Control Requires 26572 26581 26383 29574 29576 29577 Switches to operate. Order Separately D Drop Plate	689 Sprayed Alum 690 Sprayed Dk Brz 691 Sprayed Lt Brz 696 Sprayed Brass

401 Series Deadbolt

RIXSON®
ASSA ABLOY

Heavy-Duty Electric Deadbolts for Use
with Swinging, Sliding and Vertical Lift in
Mortise, Rim and Fence Gate Mountings



ASSA ABLOY, the global leader in door opening solutions

Introduction

Electric deadbolts are used in commercial and industrial buildings of all kinds. They are adaptable to any security system and ideal as auxiliary locks on doors where access control is desired.

Basic models of the 401 series are shown on the following pages, along with complete information about their functions and electrical characteristics. Optional features are also shown for each model, which make them adaptable to a wide variety of security requirements. The choice of some optional features, however, may increase the normal manufacturing lead time.

These electric deadbolts are solenoid actuated, to either lock (fail secure) or unlock (fail safe) with the loss of power, and to be controlled by remote switches or card-access devices. They are listed by Underwriters' Laboratories as burglary-protection devices.

Standard Features

- Jamb Mounted
- Compact, Heavy-Duty Construction
- Solenoid Actuated – Power surge, continuous-duty solenoid
- Tapered Deadbolt – Helps locate hole in keeper that may be slightly misaligned
- Door-Position Switch (DPS) – An internal switch to ensure that the deadbolt extends only when door is closed
- Listed by Underwriters' Laboratories, Inc. – Burglary Resistant Electric Deadbolt (*UL Standard No. 1034, Burglary-Resistant Electric Locking Mechanisms.*)
- Mortise Mounting
- Non-Handed – Reversible. Operates horizontally and vertically
- Housing Size – 4-1/2" H x 9" L x 1-3/4" W - designed to accommodate all optional features
- Supplied with Mortise Keeper, Wiring Diagram and Mounting Screws

Specifications

Jamb mounted solenoid activated deadbolt shall have tapered bolt that deadlocks when extended. Door position roller switch to prevent bolt extension while door is open. Spring loaded locking mechanism ensures that bolt (remains locked – [fail secure] (NFS) or becomes unlock or unlocks – fail safe (FS) upon power failure. For surface mounting, use 401-RM rim mounting and 401-90 rim keeper. Fence gate mounting 401-118 for fence gates with side post. Optional rim key cylinder mechanical operation with 401-80 series cylinder holder.

Limited Warranty

Rixson® 401 Deadbolts are warranted for 2 years for defect. See Rixson® Price Book for specific details of the limited warranty.

Contents	Page
401 Deadbolt: General Information	246
Limited Warranty.....	246
Specifications	246
 401 Fail Safe	248
401R Fail Secure	248
401D Fail Safe Double Solenoid.....	249
401DR Fail Secure Double Solenoid	249
 Options and Accessories	
401RM Rim Mounted Lock.....	250
401-80 Rim Mounting.....	251
401-80 Hinge Side Mounting	251
401-80 Stop Side Mounting	251
401-118 Fence Gate Mounting	252
 Parts Drawings	253-254
How to Order	255

401 Electric Deadbolt

Application

- For use with swinging, sliding, power operated and vertical lift doors.
- Model 401 (Fail Safe) – Locked when energized – unlocks automatically in case of power failure. Under normal operation, deadbolt extends when door is closed and control switch is in "lock" position.
- Model 401R (Fail Secure) – Unlocked when energized – locks automatically in case of power failure. Under normal operation, deadbolt extends when door is closed and control switch is in "lock" position.



Operating Voltages

- Voltage: 24VDC, 6.25 amps inrush, 0.42 amps seated.
- Solenoid Voltage: 120VAC or VDC (optional). **Note:** Junction box is supplied with 120V deadbolts (to comply with UL requirements).
- Indication Switches: Single pole, double-throw type (SPDT). Ratings: 10 amps @ 125 or 250VAC. (Optional only.)

Note: All deadbolts are actuated by DC solenoids. When primary power source is AC, the deadbolt is supplied with an internal bridge rectifier.

Product Description and Features

- **Indication Switches** – Internal switch(es) to monitor the position of the deadbolt. This feature can be used for remote door monitoring, to control alarms, indicating lights, interlocks and automatic door operators. One or two switches can be supplied, depending on circuit requirements.

Specify switch options by letters:

BL – a switch that indicates when the deadbolt is fully extended.

BUL – a switch that indicates when the deadbolt is fully retracted.

Note: When door is open, the door-position switch tripper can be manually depressed, thereby giving a false indication that the door is locked. This can be eliminated, if desired, by installing a door-position indication switch and wiring it in series with the indication switch(es) in the deadbolt. Then, a "secure" signal can be produced only after three conditions have been met: 1) door-position switch tripper is depressed 2) deadbolt is extended and deadlocked, and 3) door is closed BL/BUL.

- **Manual Release** – The deadbolt may be modified for overriding the electric operation, allowing for manual unlocking from one side only. Specify "MR". This feature may be adapted by the customer for a customized unlocking system, or by the following, factory-supplied accessory items, which must be purchased separately (see page 251 for options):

Detention or commercial rim key cylinders (by others).

Key Cylinder Holders – Holds and protects the key cylinder used for manual unlocking. They are available in three styles, depending on where the holder is located (see pages 251):

- **Hinge** – For the hinge side of a door frame, when the 401 Electric Deadbolt is mortised into either the door header or jamb.
- **Stop** – For the stop side of a door frame, when the 401 Electric Deadbolt is mortised into either the door header or jamb.
- **Rim** – For mounting to the surface of either a rim housing (401-RM) or fence-gate housing (401-118).

Finishes

606, 612, 613, 625, 626

401D Electric Deadbolt

Application

- For use with swinging, sliding, power operated and vertical lift doors.
- Double solenoid provides bolt action in both directions
- Model 401D (Fail Safe) – Locked when energized – unlocks automatically in case of power failure. Under normal operation, deadbolt extends when door is closed and control switch is in "lock" position.
- Model 401DR (Fail Secure) – Unlocked when energized – locks automatically in case of power failure. Under normal operation, deadbolt extends when door is closed and control switch is in "lock" position.



Operating Voltages

- Voltage: 24VDC, 6.25 amps inrush, 0.42 amps seated.
- Solenoid Voltage: 120VAC or VDC (optional). Note: Junction box is supplied with 120V deadbolts (to comply with UL requirements)
- Indication Switches: Single pole, double-throw type (SPDT). Ratings: 10 amps @ 125 or 250VAC. (Optional only)

Note: All deadbolts are actuated by DC solenoids. When primary power source is AC, the deadbolt is supplied with an internal bridge rectifier.

Product Description and Features

- **Indication Switches** – Internal switch(es) to monitor the positions of the deadbolt. This feature can be used for remote door monitoring, to control alarms, indicating lights, interlocks and automatic door operators. One or two switches can be supplied, depending on circuit requirements

Specify switch options by letters:

BL – a switch that indicates when the deadbolt is fully extended.

BUL – a switch that indicates when the deadbolt is fully retracted.

Note: When door is open, the door-position switch tripper can be manually depressed, thereby giving a false indication that the door is locked. This can be eliminated if desired by installing a door-position indication switch and wiring it in series with the indication switch(es) in the deadbolt. Then, a "secure" signal can be produced only after three conditions have been met: 1) door-position switch tripper is depressed 2) deadbolt is extended and deadlocked, and 3) door is closed BL/BUL.

- **Manual Release** – The deadbolt may be modified for overriding the electric operation, allowing for manual unlocking from one side only. Specify "MR". This feature may be adapted by the customer for a customized unlocking system, or by the following, factory-supplied accessory items, which must be purchased separately (see page 251 for options):

Detention or commercial rim key cylinders (by others)

Key Cylinder Holders – Holds and protects the rim key cylinder used for manual unlocking. They are available in three styles, depending on where the holder is located (see page 251):

- **Hinge** – For the hinge side of a door frame, when the 401 Electric Deadbolt is mortised into either the door header or jamb
- **Stop** – For the stop side of a door frame, when the 401 Electric Deadbolt is mortised into either the door header or jamb
- **Rim** – For mounting to the surface of either a rim housing (401-RM) or fence-gate housing (401-118)

Finishes

606, 612, 613, 625, 626

401RM Rim Housing

Application

For use when rim-mounting the 401 Electric Deadbolt.

401-RM

RIM HOUSING – A two-piece housing which encases a 401 Deadbolt for mounting on the surface of a door frame. The housing and cover are made of 10-gauge, cold-rolled steel and have a primed finish. The 401 Deadbolt must be purchased separately.

401-RM-MR

Allows mounting of manual release cylinder holders.

401-125

DOUBLE-SIZE RIM HOUSING – To accommodate two 401 Deadbolts for mounting over pairs of doors.

401-90

ADJUSTABLE RIM KEEPER – Must be purchased separately. It is adjustable from 1" to 2", from centerline of bolt to face of door. If more than 2" is required, a 2" to 3" adjustable rim keeper is available.

Standard Finish

Standard finish, 600, prime

Optional Finish

BHMA	Description
606	Satin brass
612	Satin bronze, clear coated
613	Oxidized satin bronze, oil rubbed
625	Bright chromium plated
626	Satin chromium plated



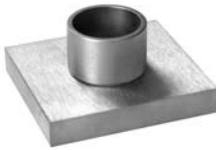
401 Manual Release

Available optionally for the manual release device is a cylinder commercial key holder. Rim key cylinder must be ordered separately by others. This unit engages directly with the manual release cam and provides key operation of the 401 Deadbolt. Different applications of the manual release feature require special cylinder holders, shown below.

Model #	Description
401-80 Rim	Commercial Cylinder Holder for rim mounted application. Attaches to 401 Deadbolt housing.
401-80 Hinge	Commercial Cylinder Holder for door header or jamb – hinge side.
401-80 Stop	Commercial Cylinder Holder for door header or jamb – stop side.

Finishes

600, 606, 612, 613, 625, 626 and galvanized



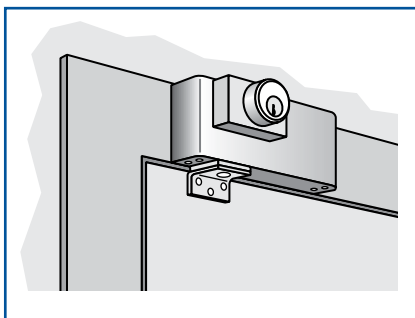
401-80 Rim



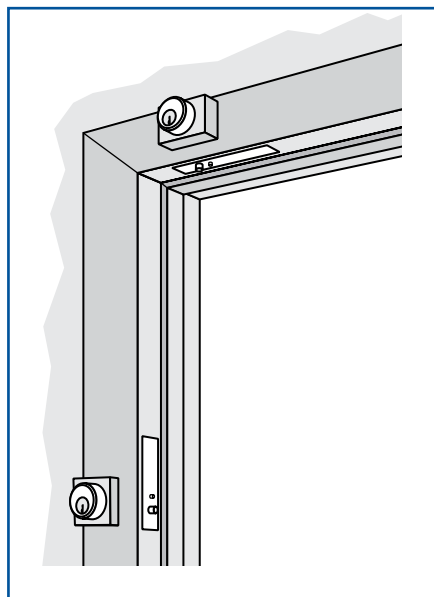
401-80 Hinge



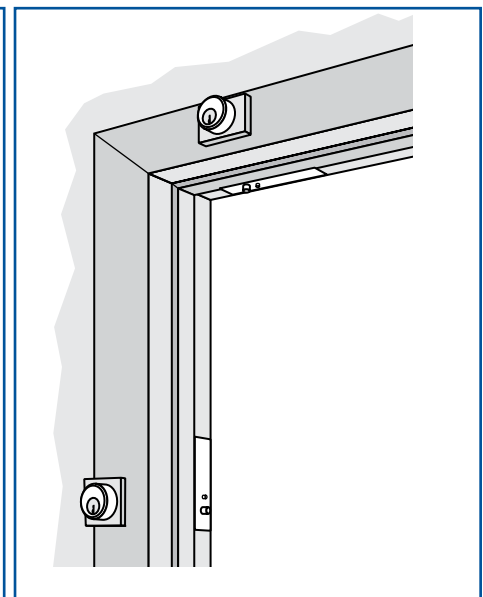
401-80 Stop



401 Rim Mounting



401 Hinge Side Mounting



401 Stop Side Mounting

401-118 Fence Gate Mounting

Application

For mounting a 401 Deadbolt on swinging fence gates.

- Remote gate control
- Emergency locking or unlocking



Note: The 401 Deadbolt and 401-110 Locking Tongue must be ordered separately. Specify hand (LH or RH) when ordering.

Product Features

401-118

FENCE GATE HOUSING—A two-piece housing which encloses a 401 Deadbolt for mounting on a fence post. The housing and mounting angle are made of 7-gauge steel, and the cover is 10-gauge steel, all having a galvanized finish. This housing is adjustable and designed to suit most conditions. (*Fence posts: 1-1/2" to 5" diameter; gap between posts when closed: 1-1/2" to 5".*)

Options

Manual Release

Key operation which overrides other controls (*see page 251*).

401-110

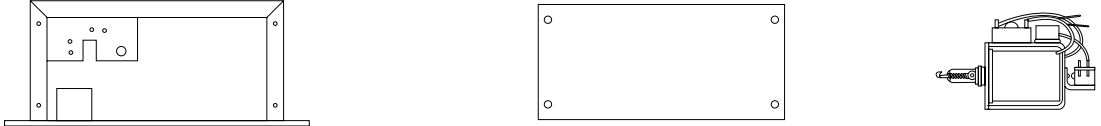
LOCKING TONGUE—Designed for use with above housing, and must be ordered separately. The locking tongue is made of steel with a galvanized finish. This locking tongue mounts on the gate post and is adjustable to suit most conditions. (*Gate posts: 1-1/2" to 5" diameter.*)

Specify if gap between posts is between 1.50" - 3.25" (P.N. 0120003-001) or 3.25" - 5.00" (P.N. 0120003-002)

Finishes

600, 606, 612, 613, 625, 626 and galvanized

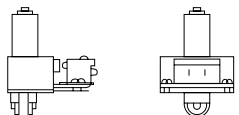
401 Deadlock

			
Standard Case 0100379-000 (401-73) 9" x 4-3/8"	Standard Cover Plate 0100385-700 (401-74)	Cover Plate for Manual Release 0101588-700 RH 0101588-800 LH	Solenoid & Rectifier 24VDC 0760110-031 120VDC 0760110-032 24VAC 0760110-033 120VAC 0760110-034 (401-178)

				
Face Plate 0101297-700 600 0100386-100 606 0101297-600 602	Face Plate 0100386-400 613 0100386-300 605 0100386-200 626	Bell Crank 0100379-900 (401-5)	Deadlock Lever 0120119-001 (401-6M)	Deadlock Spring 0100379-700 (401-10)

401 Deadbolt

				
Manual Release Cam Assembly 0100399-600 (401-26)	Tapered Bolt 0101299-200 (401-177)	Mortise Keeper Assembly 0761507-001PK (401-60)	Cone Compression Spring 0030002-001	Pull Spring 0030909-001 (401-9)

				
BL Limit Switch Assembly 0761205-001 (401-14)	BUL Limit Switch Assembly 0761204-001 (401-13)	"DPS" Switch Assembly 0930240-003 (401-99)	Connecting Link 0100381-600 (401-11)	Bridge Rectifier 0051902-001

	Quantity	Kind	Part #	Where Used
Screw List	20	8-32 x 1/4" Flat Head Machine Screws	0021900-482pk	Solenoid
	10	2-56 x 3/8" Round Head Machine Screws & Lock Washers	0022100-133pk	Limit Switch
	4	6-32 x 3/16" Flat Head Machine Screws	06356203-XXX	Face Plate
	20	12-24 x 1/2" Flat Head Machine Screws	0022301-375pk	Case Mounting & Covers

How to Order

401 Model	x 24VAC Voltage	x BL Switches	x MR Suffix	x 689 Finish
401 Fail Safe 401R Fail Secure 401D Fail Safe Double Solenoid 401DR Fail Secure Double Solenoid	24VAC 24VDC 120VAC 120VDC	BL BUL BL/BUL	MR Manual Release	600 Prime Coat 606 Satin Brass 612 Satin Bronze 613 Oil Rubbed Bronze 625 Bright Chrome 626 Satin Chrome

Consult catalog/price book for available finishes on specific products

Engineered Solutions

RIXSON®
ASSA ABLOY

We make the most
unusual openings possible.



ASSA ABLOY, the global leader in door opening solutions

Introduction

When Finnish architect Oscar C. Rixson opened his door hardware manufacturing company, in Chicago, in 1900, his first products were highly traditional – surface door closers, window and sash hardware. But, soon Rixson and his engineers were moved to create specialty products that allowed the beauty of the buildings to take center stage.

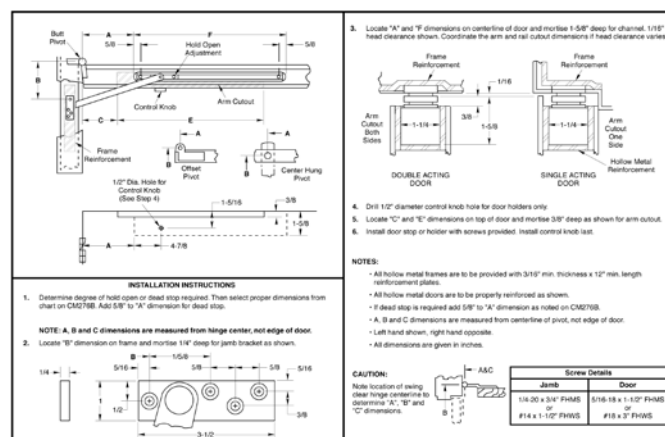
Today, architects, around the globe, select Rixson products to transform their wildest and most creative design dreams into structures of elegance and excellence. No other hardware manufacturer caters to special openings created by imaginative designers like Rixson.

If you're ready to think beyond the ordinary, let Rixson help inspire you. With more than 5,000 special layout products for entryways of all sizes, there's no limit to where your dreams can take you.



Standard Product – Changed Location on Door

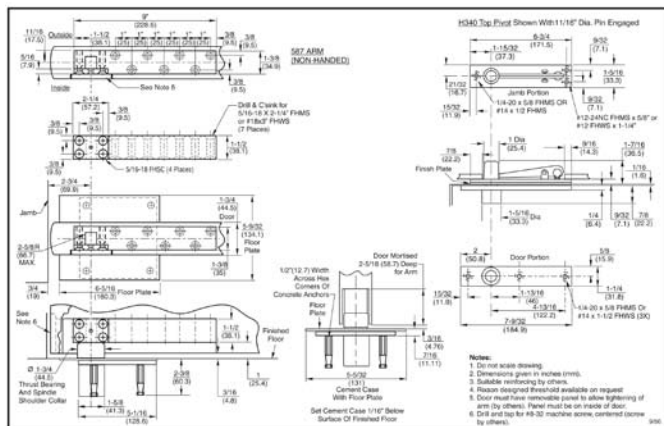
Where does the door hardware go on the door? With Rixson, just about anywhere you need it to. Our special layout templates allow you to move the position of a closer or holder to accommodate other hardware on the door.



Checkmate #2 mounted with continuous hinges

Non-Standard Applications

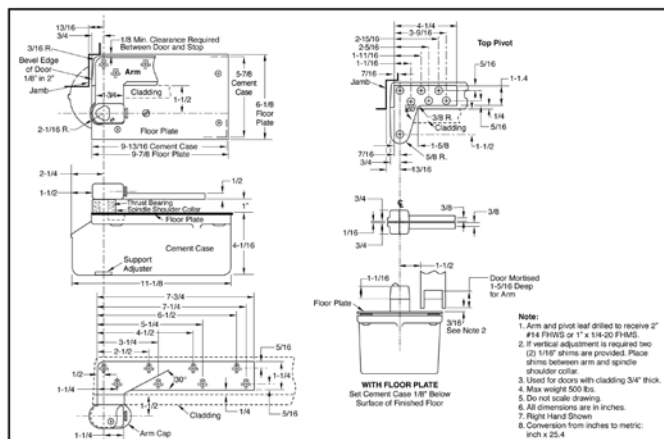
You're not like other designers – and neither are your designs. With Rixson, standard catalogued products can be used in very un-standard ways. So, go ahead and create that hidden room. Only you'll know how the bookcase transforms to a secret passageway.



H117-3/4 x 587 Pivot Set
Photo Courtesy of Gary Katz

Concealed Door

When is a door not a door? When it's a chameleon ... concealed to look like part of the surrounding environment. With a Rixson special layout, an extended offset can accommodate cladding on a door to match the surrounding wall.



L27 x with Cladding

Standard Products for Finishing Touches

They say the devil is in the details. But so is the difference ... and that's what sets you and your projects apart from the rest. With *Rixson* products, you can add polish and pizzazz with finishing touches like extended offsets for special trims. Don't forget cover pans for closer installation under your beautiful floors.

Engineered
Solutions



Tarrant County Courthouse

Dream Those Dreams!

You're one of those people who like a challenge. Just let someone tell you it can't be done. We understand. We don't have anything against normal doors – we're just a bit partial to those that are really tall, wide, heavy or unusual. And we don't let something like "guidelines" stop us. We exist to bend to rules – just call our engineers and ask.



You give us the facts; we'll give you a solution.

Requests for design help must include header, sill, side jamb and door details; usage; weight, fire-rated and if you want the door to be self-closing or pivot. All drawings must be submitted in PDF format.

Please contact Technical Support at 866-474-9766 or visit www.rixson.com.