# Heavy-Duty Floor Closers

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



ASSA ABLOY, the global leader in door opening solutions

### RIXSON<sup>®</sup> ASSA ABLOY

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### HEAVY-DUTY FLOOR CLOSERS GENERAL INFORMATION

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

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

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

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

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



#### Bottom arm attached directly to closer spindle

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

#### Helical torsion spring

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

#### Advantages of concealed floor closers

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

#### Many different models to choose from

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



### HEAVY-DUTY FLOOR CLOSERS HOW TO SELECT A 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)

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

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

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

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

#### For doors of other sizes consult factory

#### 3. EXPECTED FREQUENCY OF DOOR OPENING

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

How to Determine Hand of Door

Left Hand **Right Hand** 

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

#### Sealed Closer – Prefix SC

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

#### Delayed Action – Prefix DA

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

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#### Physically Handicapped – Prefix PH

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

#### Wood Door – Prefix W

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

#### Fire Rated – Prefix F

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

#### Twenty Minute Label – Suffix -20

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

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

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

#### Less All Parts – Suffix LAP

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

#### Less Floor Plate – Suffix LFP

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

#### Less Cement Case – Suffix LCC

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

#### Less Top Pivot – Suffix LTP

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

#### Degree of Swing – Follows Model Number

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

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

#### Non Hold Open – Suffix N

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

#### Automatic Hold Open – Suffix A

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

#### Selective Hold Open - Suffix S

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

#### Hand- Suffix RH or LH

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

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

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

#### Cold Weather Fluid - Suffix CWF

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

#### Extended Spindle – Suffix Extra Length

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

#### 1-1/2" Offset - Suffix 1-1/2

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

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

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

#### Special Layouts – Suffix SPLO#

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

#### CERTIFICATIONS BHMA

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

#### LIMITED WARRANTY

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

#### SPECIFICATION

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



### ASSA ABLOY

### HEAVY-DUTY FLOOR CLOSERS 3/4" OFFSET HUNG

#### MODEL 27

#### Application

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





#### ANSI/C06041/C06051

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

#### Product Description & Features

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

#### Technical Information

(Frame stop required)







#### MODEL 27-180

#### Application

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





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

#### Product Description & Features

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

#### Technical Information

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(Frame stop required)









### ASSA ABLOY

### HEAVY-DUTY FLOOR CLOSERS 3/4" OFFSET HUNG

#### MODEL 127

#### 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

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\* 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 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)
- Cycolac, rustproof cement case
- Standard top pivot: #180 included
- For arch top doors or applications where a 180 top pivot cannot be used, supply at least two each M190 load-bearing intermediate pivots, mounted together at the top of the vertical edge. Do not use 119 intermediate pivot.
- Intermediate pivot(s) recommended for non fire rated opening: 119 (order separately), see page 18
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies) prefix "F". This package will be supplied with a steel top pivot (F180) and a non-hold open closer. Intermediate pivot required: FM19, (order separately), see page 18
- UL labeled closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Extended spindles available in 1/2" increments up to 2" longer than standard

#### Technical Information

(Frame stop required)





For the Top Pivot Outline See Page 9



#### MODEL 427

#### 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
- 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)
- Cycolac rustproof cement case
- Standard top pivot: #180 x 102 included
- Intermediate pivot(s) recommended: 119 (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
- 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)









### ASSA ABLOY

### HEAVY-DUTY FLOOR CLOSERS INDEPENDENTLY HUNG

#### MODEL F327

#### 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/C06031

#### 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 the 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
- Cycolac 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 spindle available in 1/2" increments up to 2" longer than standard

#### Technical Information

(Frame stop required)



### HEAVY-DUTY FLOOR CLOSERS 3/4" OFFSET HUNG

### RIXSON ASSA ABLOY

#### MODEL L27

#### 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, 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
- For arch top doors or applications where an L180 top pivot cannot be used, supply at least two each ML19-load bearing intermediate pivots, mounted together at the top of the vertical edge
- Intermediate pivot(s) required: ML19 (order separately), see page 19
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies) prefix "F". This package will be supplied with steel top pivot (FL180) and non-hold open closer. Furnish intermediate pivot FML19, order separately, see page 19. Note: UL listing for 1-3/4" thick doors only.
- UL labeled closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

#### Technical Information

(Frame stop required)







\* 1-3/4" door thickness shown



#### MODEL L27-180

#### Application

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





ANSI/C06071

#### Product Description & Features

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

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

#### Technical Information

HEAVY-DUTY FLOOR CLOSERS

(Frame stop required)







## 3/4" OFFSET HUNG

### HEAVY-DUTY FLOOR CLOSERS 3/4" OFFSET HUNG

#### MODEL Q27/QT27

#### 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

#### 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°)
- 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")
- Cycolac rustproof cement case
- Vertical door adjustment
- Standard top pivot: #180 included
- For arch top doors, consult factory
- 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
- UL labeled closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard
- Maximum door swing 95°

#### Technical Information





### RIXSON<sup>®</sup> ASSA ABLOY



#### MODEL HM27

#### 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)









ANSI/C06041/C06051

#### **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 thru-bolts
- Built-in positive dead stop prevents door from swinging beyond the desired opening degree (85°, 90°, 95°)
- Maximum door swing 95°
- 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)
- Cycolac 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
- UL labeled 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**

3/4" OFFSET HUNG

HEAVY-DUTY FLOOR CLOSERS

(Frame stop required)





### HEAVY-DUTY FLOOR CLOSERS 3/4" OFFSET HUNG



#### MODEL 20

#### 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 18
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- For fire rated openings (up to 3 hour assemblies prefix F. This package will be supplied with a steel top pivot (F180) and non hold open closer. Intermediate pivot required; FM19 (order separately). See page 18
- UL labeled closers cannot have PH option
- For 20-minute labeled doors suffix -20 to the part number
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

#### **Technical Information**

(Frame stop required)









# HEAVY-DUTY FLOOR CLOSERS

#### MODEL 119

#### Application

- Full Mortise
- Handed



ANSI/C07382

#### MODEL M19/M190

#### Application

- Full Mortise
- Handed



ANSI/C07321/C07371

#### 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
- Bevel door 1/8" in 2"
- Furnished with wood and machine screws

Technical Information



#### 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 for 3/4"
  - cladding
- 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
- Bevel door 1/8" in 2"
- For arch top doors or applications where a 180 top pivot cannot be used, supply at least two each M190 load bearing intermediate pivots, mounted together at the top of the vertical edge with a bottom pivot or floor closer
- Furnished with wood and machine screws

#### **Technical Information**



# HEAVY-DUTY FLOOR CLOSERS

#### MODEL ML19

#### Application

- Heavy-Duty Full Mortise
- Handed



#### ANSI/C07311

#### MODEL FA19

#### Application

- Full Mortise
- Handed



#### ANSI/C07361

#### 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
- Bevel door 1/8" in 2"
- For arch top doors or applications where a 180 top pivot cannot be used, supply at least two each ML19 load bearing intermediate pivots, mounted together at the top of the vertical edge with a bottom pivot or floor closer
- Furnished with wood and machine screws

Optional intermediate pivot for institutional use or

installations where flat surfaces are objectionable

• May be used with fire door assemblies

warrants another intermediate pivot

Doors up to 90" (2286mm) in height should use one

intermediate pivot. Each additional 30" (762mm)

Furnished with wood and machine Torx® screws

**Product Description & Features** 

Maintains door alignmentAids in installing bottom pivots

Not load bearing3/4" (19mm) offset

• Ferrous base material

• Bevel door 1/8" in 2"

#### Technical Information



#### Technical Information



#### ASSA ABLOY, the global leader in door opening solutions

### RIXSON ASSA ABLOY



#### MODEL 28 X 554 ARM

#### Application

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





ANSI/C06021

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

#### Product Description & Features

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)
- Cycolac, rustproof cement case
- Standard top pivot: #340 included
- Not allowed for fire rated doors
- Frame stop required on the header at the lock side. If not supplied by frame manufacturer, recommend use of 60131 (see Door Control Accessories page 8).
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

#### Technical Information

HEAVY-DUTY FLOOR CLOSERS

CENTER HUNG SINGLE ACTING

(Frame stop required at lock edge)





Pivot edge of door must be radiused.



#### MODEL 28

#### Application

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





ANSI/C06021

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

#### Product Description & Features

Centering arm with adjusting screws in face of door

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

#### Technical Information

(Frame stop required at lock edge)





Pivot edge of door must be radiused.



### ASSA ABLOY

### HEAVY-DUTY FLOOR CLOSERS CENTER HUNG SINGLE ACTING

#### MODEL H28

#### Application

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



ANSI/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 8).
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

#### Technical Information

(Frame stop required at lock edge)





Pivot edge of door must be radiused.

#### MODEL H28 X 587 ARM

#### Application

• Side Load Arm



#### Product Description & Features

Identical to Model H28 except:

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

#### Technical Information







#### MODEL 328

#### 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
- Cycolac, 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 8).
- For extended spindles, contact the factory

#### Technical Information

(Frame stop required at lock edge)





#### MODEL 428 (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" (nonhold 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
- Cycolac, rustproof cement case
- Frame stop required at header on lock side
- 605, 629 and 630 finishes only

#### Technical Information

(Frame stop required at lock edge)





#### MODEL EH28

#### Application

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



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

#### MODEL EH28 X 587 ARM

#### Application

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



#### Product Description & Features

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

#### Technical Information

(Frame stop required at lock edge)



Not available with ElectroLynx®

Pivot edge of door must be radiused.

#### Product Description & Features

Identical to Model EH28 except:

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









### ASSA ABLOY

### HEAVY-DUTY FLOOR CLOSERS CENTER HUNG DOUBLE ACTING

#### MODEL 30

#### Application

- Double Acting, Non-handed
- Interior or Exterior^ Doors
- Weight to 200 lbs.
- Sizes up to 4'0" x 8'6"\*



#### ANSI/C06012

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

#### MODEL 40

#### Application

- Double Acting, Non-handed
- Interior or Exterior^ Doors
- Weight to 300 lbs.
- Sizes up to 4'0" x 8'6"\* (1219 x 2591mm)



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
- 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



Pivot edge of door must be radiused.

#### 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". (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)
- 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



Pivot edge of door must be radiused.



#### MODEL H40

#### Application

- Double Acting, Non-handed
- Interior or Exterior^ Doors
- Weight to 1000 lbs.
- Sizes up to 4'0" x 8'6"\* (1219 x 2591mm)



#### ANSI/C06012

- \* For doors taller than 8'6" use to
- pivot H345 in lieu of H340 ^ Primary means of egress should <u>not</u> 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". (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)
- 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

#### MODEL H40 X 587 ARM

#### 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 pivot edge of door. Minimum 2-3/4" backset

#### Technical Information





### Technical Information



Pivot edge of door must be radiused.



### HEAVY-DUTY FLOOR CLOSERS OPTIONAL CENTER HUNG TOP PIVOTS

#### 345 TOP PIVOT

#### Application

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



ANSI/C07021

#### Product Description & Features

Ideal for locations where 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 floor 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



#### H345 TOP PIVOT

#### Application

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



ANSI/C07011

#### Product Description & Features

Ideal for locations where dramatic building settling is possible or for doors over 8'6" in height

- Long pivot pin engages in top of door 1-3/4" (44mm)
- Can be used with heavy-duty (H) center hung floor closer. Order the floor closer LTP (less top pivot) and the H345 top pivot separately
- Walking beam-type pivot 11/16" (18mm) diameter pivot pin
- Heavy-duty needle bearing
- Completely concealed when door is closed
- Furnished with wood and machine screws

#### Technical Information



## HEAVY-DUTY FLOOR CLOSERS QUICK REFERENCE OF OPTIONS, HOW TO ORDER

## RIXSON<sup>®</sup> ASSA ABLOY

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	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	Ν	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 Ope	n	x 1/2" Ext Spo Suffix		< RH Hand	x 626 Finish
SC Sealed Closer DA Delayed Action PH Lighter Spring W Wd Dr (center F Fire Rated Doc (offset) — Not available with 27 127 427 F327 L27 Q27 Q12 HM2 20	n (ADA) hung) rs PH 28 H28 328 428 * 428 * 328 428 * 428	S Selective H (model 27	Hold Open Iold Open	554 587 Ext Sp -20 8.5# LAP LCC LTP — SPLO	(extra length	m required) er Fluid sbel Spring Only the Case t eeed depth) sss )	LH Le Blank Da 605 606 611 612 613 613 613 613 618 619 622 625	ght Hand ft Hand buble Acting Bright Brass Satin Brass Bright Bronze Satin Bronze Oil Rubbed Bronze Dark Oxidized Satin Bronze - equivalent Bronze - equivalent Bright Nickel Satin Nickel Flat Black Bright Chrome Satin Chrome
for quote,	prior to ordering. must be furnished for l							l 428 available in 5, 629 & 630



#### 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)
(М	)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

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

#### MODEL 127/427

12028 (LH)



Model 427

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

12028 (LH)

180 x 102

180 x 102

Ο

Ο

Top Pivot



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(A) -

0 0

0

\*specify finish

(I)	3/4" Offset Top Pivot 180 F180 (Fire Rated) 180 x 20 (20 Minute)
U)	Bottom Arm Package 652050R* (RH) 652050L* (LH) (Includes C, D and attaching screws)
(E)	Spindle Shoulder Collar
	259000-*
(F)	

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(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	

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#### MODEL F327

Right Hand Shown Independently Hung











(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

#### MODEL L27

(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)	(B)
(D) Arm x Locking Screw 1-3/4" Door 18550-Asy (RH) 18650-Asy (LH)	
2" Door 18551-Asy (RH) 18651-Asy (LH)	
2-1/4" Door 18552-Asy (RH) 18652-Asy (LH)	(G)
2-1/2" Door 18553-Asy (RH) 18653-Asy (LH)	
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
	3/4" Offset Top Pivot F180 F1180 Fire Rated
	L180 x 20 20 Minute
	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)
	Floor Plate with Screws 274050R* (RH) NHO 274050L* (LH) NHO 274750R* (RH) SHO 274750L* (LH) SHO
	Closer Body (Specify Complete Model No. x LAP) (Includes G)
(J) C	Cement Case with Screws 253001-PKG

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

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### HEAVY-DUTY FLOOR CLOSERS PARTS DRAWINGS

#### MODEL Q27/QT27

Right Hand Shown 3/4" Offset Only

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





#### MODEL HM27

## Right Hand Shown 3/4" Offset

(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) 274050L* (LH) (NHO) 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

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



#### MODEL 20

#### Right Hand Shown 3/4" Offset

(A)	Pivot Stud 181770-ASY
(B)	Hex Cap 181778-*
(C)	Arm Cap & Screw O12142R*AS (RH, BRS) O12142L*AS (LH, BRS) O12144R*AS (RH, SS) O12144L*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)
(~	) 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

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

(A)



#### 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 8 Washer (2) of each 107032-*
(L)	Arm Spindle Collar 259000-*

1 · · · :	Floor Plate with Screws 284020R* (RH) NHO
	284020L* (LH) NHO
	284720R* (RH) SHO
	284720l* (LH) SHO

Wood Door Arm Package 340 Top Pivot (B) 282126 (D,E, F,J) (C) . (D) W28 Wood Door Plate & Shim Pkg Ч 0 D) 107066 (Includes 46145 & 46445) (E) **\$ == 3|** (P) Bottom Arm Package (E-K) (F) 282026-\* (G) (H) 0 (P) 554 Concealed Arm Package 80 (I) 282554 (|)(Includes 107064) (K) (L) 6 D (N) Closer Body (N)(Specify Complete Model No. x LAP) (O) Cement Case with Screws 253000-PKG (O)内 Screw Kits 340 Screw Kit 107329 Machine & Wood Arm Screw Kit 107048-\* Machine (2) Req 107144-\* Wood (2) Req 554 Arm Screw Kit 107064 Floor Plate Screw Kit 107004-\*

\*specify finish

Cement Case Screw Kit 107046



#### MODEL H28

(A)	Jamb Portion 308548
	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 NHO
284020R* (RH

	284020R* (RH 284020L* (LH)
	SHO 284720R* (RH) 284720L* (LH)
(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 107145-* Wood		
Arm Screw Kit 107045 Machine 107145 Wood		
Floor Plate Screw Kit 107004-*		
Cement Case Screw Kit 107046		

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#### MODEL 328/428

(A)	Jamb Portion 42801
(B)	Finish Plate 012202-*PK (BRS) 012204-*PK (SS)
(C)	Patch Fitting Cover 7495 - *
(J)	Bottom Pivot Insert 74101
(K)	Top Pivot Insert 74102



(D)	Top Patch 7494-* PK (Includes C and K)
(E)	Bottom Patch 7495-* PK (Includes C and J)
(F)	Floor Plate with Screws NHO
	NHO 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







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### HEAVY-DUTY FLOOR CLOSERS PARTS DRAWINGS

#### MODEL 30



107048 Machine 107144 Wood Floor Plate Screw Kit (2 req.)

107004-\* Cement Case Screw Kit 107014

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#### MODEL 40

<ul> <li>(A) Jamb Portion 3065</li> <li>(B) Finish Plate 012202-*PK (BRS) 012204-*PK (SS)</li> <li>(C) Door Portion 30243</li> <li>(E) Arm Plate Shims (.062) 46045-PKG (5)</li> <li>(E) Arm Plate Shims (.187) 46145-PKG (5)</li> <li>(F) Arm Plate &amp; Stud Assy 46445</li> <li>(G) Arm &amp; Arm Set Screw 302026</li> <li>(H) Arm Set Screw Only 26087-PKG (5)</li> <li>(I) Arm Alignment Screw &amp; Washer (2) 107032-*</li> <li>(J) Arm Spindle Collar 259000</li> </ul>		
<ul> <li>O12202-*PK (BRS) O12204-*PK (SS)</li> <li>(C) Door Portion 30243</li> <li>(E) Arm Plate Shims (.062) 46045-PKG (5)</li> <li>(E) Arm Plate Shims (.187) 46145-PKG (5)</li> <li>(F) Arm Plate &amp; Stud Assy 46445</li> <li>(G) Arm &amp; Arm Set Screw 302026</li> <li>(H) Arm Set Screw Only 26087-PKG (5)</li> <li>(I) Arm Alignment Screw &amp; Washer (2) 107032-*</li> <li>(J) Arm Spindle Collar</li> </ul>		3065
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	(B)	012202-*PK (BRS)
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	(C)	
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	(E)	
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	(E)	
302026 (H) Arm Set Screw Only 26087-PKG (5) (I) Arm Alignment Screw & Washer (2) 107032-* (J) Arm Spindle Collar	(F)	
26087-PKG (5) (II) Arm Alignment Screw & Washer (2) 107032-* (J) Arm Spindle Collar	(G)	
& Washer (2) 107032-* (J) Arm Spindle Collar	(H)	
	(I)	& Washer (2)
	(J)	





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262587

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

(Includes G and attaching screws)

#### 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









(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

(H)

#### CONTACT US AT:

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