

ASSA ABLOY, the global leader in door opening solutions



HEAVY-DUTY FLOOR CLOSERS

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

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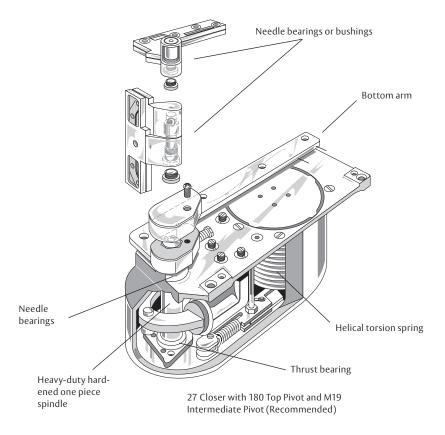
Floor closers provide the best mechanical means to support and control a door. They are designed to work with the laws of physics to provide long-lasting performance and reliability.

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

- 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

Choose from many different models

- 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)



3/4" OFFSET HUNG

Application

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

Product Description & Features

- 180 top pivot included
- M19 intermediate pivot(s) required (order separately)
- Available non-hold open (N) or selective hold open (S) at same degree as dead stop
- 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
- Vertical door adjustment
- Available with floor plate or threshold installation (floor plate shown)
- Cycolac, rust-proof cement case
- 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

Optional Features

- Delayed action option-prefix "DA" (non-hold open closers only)
- Cold weather fluid available specify "CWF" (not available for closers with "DA")
- Sealed closer option specify "SC"
- Available 1-1/2" offset, for doors with 3/4" cladding or frames with applied molding, maximum door weight 250 lbs.
- Extended spindles available in 1/2" increments up to 2" longer than standard
- 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

Compliance

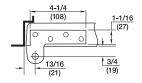
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs.)
- For fire rated openings (up to 3 hour assemblies) prefix "F". This package will be supplied with a F180 steel top pivot and a non-hold open closer. FM19 intermediate pivot required (order separately)
- UL listed closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number
- ANSI/C06041/C06051

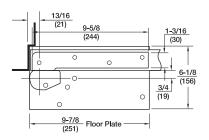


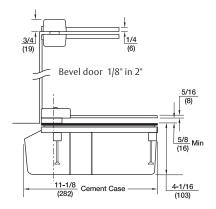


Technical Information

(Frame stop required)









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

Model 27-180

Application

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

Product Description & Features

- 180 top pivot included
- M19 intermediate pivot(s) required (order separately)
- Available non-hold open (N) or automatic hold open (A)
- Maximum opening 180°, auxiliary floor or wall stop recommended
- Separate and independent valves for closing speed and latch speed
- Adjustable hydraulic backcheck
- Vertical door adjustment
- Available with floor plate or threshold installation (floor plate shown)
- Cycolac, rustproof cement case
- 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
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) warrants another intermediate pivot
- Not available with delayed action (DA)
- Furnished with wood and machine screws

Optional Features

- Cold weather option specify "CWF"
- Sealed closer option specify "SC"
- Available 1-1/2" offset, for doors with 3/4" cladding or frames with applied molding, maximum door weight 250 lbs.
- Extended spindles available in 1/2" increments up to 2" longer than standard

Compliance

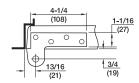
- Models available to meet ICC/ANSI A117.1 low opening force requirements, prefix "PH". (For 8-1/2 lbs. of opening force prefix "PH" and suffix "8-1/2 lbs.")
- For fire rated openings (up to 3 hour assemblies) prefix "F". This package will be supplied with a F180 steel top pivot and a non-hold open closer. FM19 intermediate pivot required (order separately)
- UL labeled closers cannot have PH option
- For 20-minute labeled doors suffix "-20" to the part number

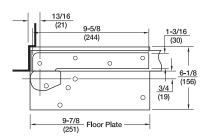


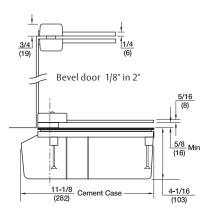


Technical Information

(Frame stop required)





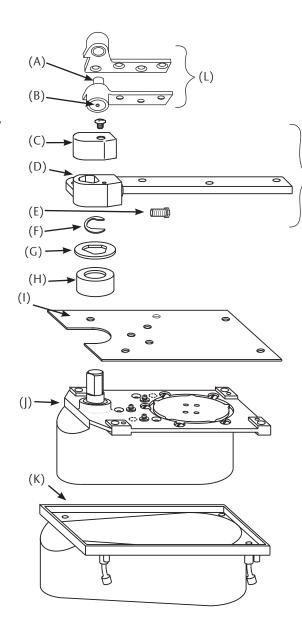




^{*} Door size & weight guidelines are determined using the appropriate number of intermediate pivots

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-*
- (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
- (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)



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

(M) FOR $27 \times 1-1/2$ " OFFSET

1-1/2" Offset Top Pivot 180 x 1-1/2" (standard) 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*



HOW TO ORDER

	PH Prefix	27 Mode	I	90 Degree of Swin	g	N Hold Open		x 1/2" Ext Spdl Suffix		x RH Hand	x 626 Finish
SC DA PH W F	Sealed Closer Delayed Action Lighter Spring (ADA) Wd Dr (center hung) Fire Rated Doors (offset) — Not available with PH	27 127 427 F327^ L27 Q27 Q127 HM27 20	28 H28 328 428 *30 *40 *H40	85 90 95 105 180 *(90 & 100 for 30-40 series only	A S	Non- Hold Open Automatic Hold O Selective Hold Ope (model 27 & 28) 554 587 Ext 1-1, CW -20 8.54 LAP LFP LCC LTP — — SPL6	4 7 Spdl 2" /F #	Concealed Arm Side Load Arm Longer Spindle (extra length re Offset Cold Weather F 20 Minute Labe Optional PH Spi Closer Body On Less Floor Plate Less Cement Ca Less Top Pivot Cover Pan (need Door Thickness (for L Product) Special Layout #	luid I ring ly se d depth	618 619 622 625 626	Bright Brass Satin Brass Bright Bronze Satin Bronze Oil Rubbed Bronze Dark Oxidized Satin Bronze - equivalent Bright Nickel Satin Nickel Flat Black Bright Chrome Satin Chrome Black Suede Powder White Suede Powder

 $^{^{\}wedge} Hanging\ means\ template\ must\ accompany\ request\ for\ quote,\ prior\ to\ ordering.$ $^{\ast} Degree\ must\ be\ furnished\ for\ hold\ open\ units\ only.$



OFFSET HUNG

	20	27	27-180	127	427	HM27 ⁶	L27	L27-180	Q27, QT27 ⁷
Application	Replacement	Standard	Standard	Deep reveal	Deep reveal or alcove	Hollow metal doors and frames	Lead-lined, heavy or high traffic	Lead-lined, heavy or high traffic	Arm allows closer to be removed without demounting door
3/4" offset standard	•	•	•	•	•	•	•	•	•
1-1/2" offset optional ¹		•	•				consult factory	consult factory	
Handed	•	•	•	•	•	•	•	•	•
Exterior door		•	•	•	•	•	•	•	•
Interior door	•	•	•	•	•	•	•	•	•
Non-hold open	•	•	•	•	•	•	•	•	•
Selective hold open		•		•	•	•	•		•
Automatic hold open			•					•	
Door weight	200 lbs.	450 lbs.	450 lbs.	250 lbs.	250 lbs.	250 lbs.	1500 lbs.	1500 lbs.	350 lbs.
Maximum door swing ²	180°	105°	180°	105°	105°	95°	105°	180°	95°
Maximum door width	36"	48"	48"	48"	48"	48"	48"	48"	48"
Standard top pivot (included)	180	180	180	180	180x102	N/A	L180	L180	180
Intermediate pivot (order separately) ³	M19	M19	M19	119	119	N/A	ML19	ML19	(1) M19 included
Standard 1-3/4" door thickness	•	•	•	•	•	•	•	•	•
Optional door thicknesses available ⁴							•	•	
Extended spindles available ⁵	•	•	•	•	•	•	•	•	•
Options	PH, F, -20	SC, DA, PH, F, CWF, -20	SC, PH, F, CWF, -20	SC, DA ,PH, F, CWF, -20	SC, DA, PH, CWF	SC, DA, PH, F, CWF, -20	SC, DA, PH, F, CWF, -20	SC, PH, F, -20	SC, DA, PH, F, CWF, -20
Furnished with wood and machine screws	•	•	•		•	•	•	•	•

Note: All offset closers have positive deadstop except models F327 and 20

- 1. Recommended door weight will be less when 1-1/2" offset is specified
- Door swing must be specified when ordering several models. Models 27, 127, 427 and L27; specify 85°, 90°, 95° or 105°. Q/QT models; specify 85°, 90° or 95°
 Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Each additional 30" (762mm) of
- door height warrants another intermediate pivot
- 4. Can accommodate the following door thicknesses: 2", 2-1/4", 2-1/2" or 3". Specify when ordering

- 4. Call accommodate the following door thicknesses. 2 ,
 5. 1/2" increments up to 2"
 6. Shipped with (3) special hinges
 7. Q: includes floor plate, QT: for threshold applications
 8. Delayed Action only available with NHO closers
- 9. CWF not available for closers with DA

Optional Features	Designation			
Sealed Closer	SC			
Delayed Action ⁸	DA			
Physically Handicapped	PH			
Fire Rated	F			
Cold Weather Fluid ⁹	CWF			
20 minute label	-20			

