

## 4000 Series mounted closers

### APPLICATIONS

- For aluminum, hollow metal, or wood swinging doors and frames.
- Can be used with hinge or pivot mounted door.
- Adapter plates and other installation accessories available for unusual conditions.

### FEATURES COMMON TO 4000 SERIES

- Each closer (except 4050, 4050T, 4040XP, 4040XPT, 4030, 4030T) is designed for a specific mounting; hinge side, top jamb, or parallel arm. 4040XP closer with regular or hold-open arm mounts hinge side or top jamb. 4030, 4040XP and 4050 regular parallel arm closers include 62PA SHOE required to parallel arm mount either regular or hold-open arm.
- Handed for right or left swinging doors, except for 4000T, 4030, 4030T, 4040XP, 4050, 4050T and 4040XPT.
- Closers to meet ADA reduced opening force requirements except 4000T.
- Adjustable hydraulic backcheck cushions opening swing prior to 90°.
- Separate regulation of general closing speed and latching speed.
- Joints in regular arm and shoe adapt to uneven trim.
- Reversible shoe to boost latching power on double lever arms.
- Available in a wide range of standard or optional custom powder coat finishes to blend with door and frame.
- Plated finishes available to accent door and frame.
- Not designed for exterior mounting or exposed to elements.

### DESIGN ASSISTANCE

LCN has been providing reliable solutions to unique door control problems since 1925. Design and specification assistance are only a phone call away.

Contact LCN for assistance or technical information at **877-671-7011** or **FAX 800-248-1460 (Order Entry)**, Fax **815-879-1495** for Product Support.

### WARRANTY

30 year limited warranty; 25 year limited warranty (4050). See General Information Section for complete warranty details.

### SPECIFICATIONS

Refer to "SPECIFICATIONS" section for suggested architectural specifications.

### MATERIALS

- High strength **cast iron** or **cast aluminum** (4050) cylinder.
- **Forged steel** main arms.
- One piece **forged steel** piston.
- **Double heat treated** pinion.
- LCN's **all weather "Liquid X" fluid** performs to temperature ranges from 120°F (49°C) to -30°F (-35°C) without any seasonal adjustment.
- LCN's standard **all weather fluid** performs to temperature ranges from 120°F (49°C) to -30°F (-35°C).
- **High efficiency, full complement**, low friction bearings.
- Tamper resistant regulating screws.
- Full rack and pinion hydraulic action.
- Quiet, low friction track and roller combination for all single lever arm (track style) closers.

### FINISHES

- Available in six standard or optional custom powder coat finishes to blend with door and frame.
- LCN's powder coat finishes surpass 100 hours of salt spray which is over four times the ANSI standard for corrosion resistance.
- For installations where a higher level of corrosive resistance is required, LCN offers an optional special rust inhibiting (SRI) pre-treatment. Closers that combine the exclusive LCN powder coat finish and the SRI pre-treatment exceed the ANSI standard for corrosion resistance even further.
- Plated finishes are available as an option to accent door and frame. (SRI not available with plated finishes).

### LISTINGS & APPROVALS

UL listed for self-closing doors without hold-open under "SWINGING DOOR CLOSERS"(GVEV) file R1943.

Tested and certified under ANSI Standard A156.4 Grade One. Consult factory for details.

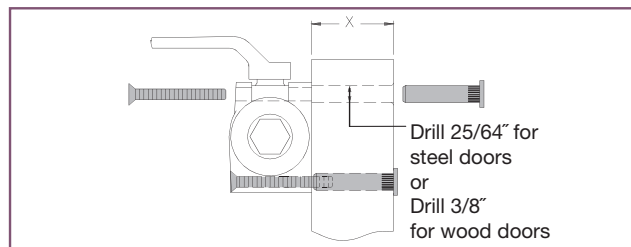
Consult factory for other listings such as; cUL, California State Fire Marshal, Bureau of Standards and Appeals.

### POSITIVE PRESSURE

LCN closers have been certified for three hours by UL to be in compliance with UL 10C. Contact LCN for specific details on door closer fire ratings.

### FASTENERS

4010, 4010T, 4020, 4020T, 4040XP, 4040XPT, 4050, 4050T, 4110, 4110T Series closers are shipped with: A standard SELF-REAMING and TAPPING SCREW (SRT) pack that contains Phillips head SRT screws to install the closer. 4000T series closers are shipped with: A standard WOOD and MACHINE SCREW (WMS) pack that contains Phillips head wood and machine screws to install the closer. 4030, 4030T series closers are shipped with: A standard WOOD and SELF-TAPPING MACHINE SCREW (WMS) pack that contains Phillips head wood and self-tapping machine screws to install the closer. Standard LCN thru bolts (TB) can be installed on 1-3/4" (44 mm) thick doors with 1/4"-20 machine screws. Optional thru bolt (TB) sizes are available for 1-5/8" (41 mm) or 1-3/8" (35 mm) door thickness, but this must be specified when ordering.

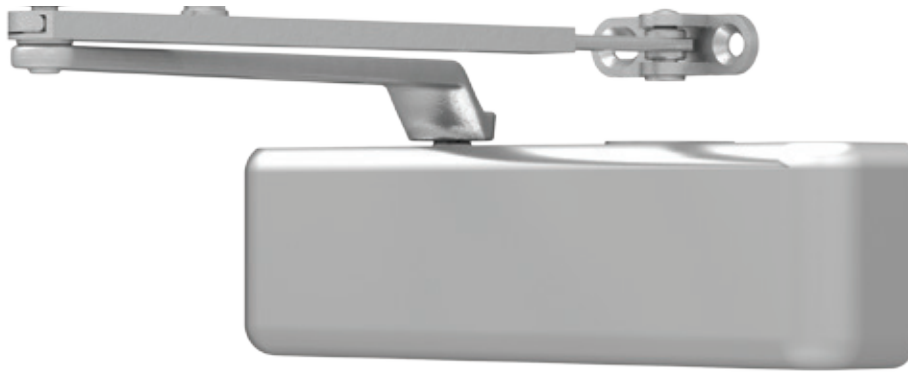


#### Notes:

1. For Thru Bolts, specify door thickness if other than 1-3/4" (44mm), represented in diagram as dimension "X".
2. Phillips head, metric machine screws are available, please specify.
3. LCN recommends the use of wood screws, available in optional WMS screw packs, for wood door applications.

### MAINTENANCE

Closers mounted according to LCN installation instructions require no periodic maintenance or adjustments.

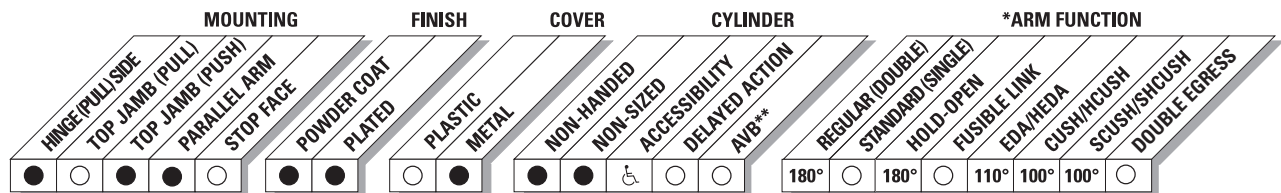


The 4030 is a cast iron, universal closer designed specifically for doors in moderate traffic conditions. This versatile closer compliments the rest of the heavy duty 4000 Series and offers the choice of three mountings and multiple arm options.

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	<b>Cover</b>	Metal, Standard
<b>Body Construction</b>	<ul style="list-style-type: none"> <li>■ Cast Iron Body</li> <li>■ Full Complement Bearing</li> <li>■ 1-1/8" Diameter Piston</li> <li>■ 1/2" Diameter Single Heat Treated Pinion Journal</li> </ul>	<b>Fasteners</b>	Self Reaming and Tapping Screws (SRT)
<b>Fluid</b>	All Weather Fluid	<b>Mounting</b>	Hinge (Pull Side), Top Jamb (Push Side), Parallel Arm (Push Side)
<b>Handing</b>	Non-Handed	<b>Arms</b>	Regular arm
<b>Templating</b>	Peel-n-Stick templates - 1-23/32" x 6-17/16" Mounting Hole Pattern	<b>Finishes/Colors/Powder Coat</b>	<ul style="list-style-type: none"> <li>■ Aluminum (689)</li> <li>■ Statuary Bronze (690)</li> <li>■ Light Bronze (691)</li> <li>■ Black (693)</li> <li>■ Dark Bronze (695)</li> <li>■ Brass (696)</li> <li>■ Custom colors optional</li> </ul>
<b>Size</b>	Adjustable Spring Size 1-4		<ul style="list-style-type: none"> <li>■ Optional SRI primer - powder coat only</li> <li>■ Optional plated finishes</li> </ul>
<b>Warranty</b>	30 years		

**Special Templates**

Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



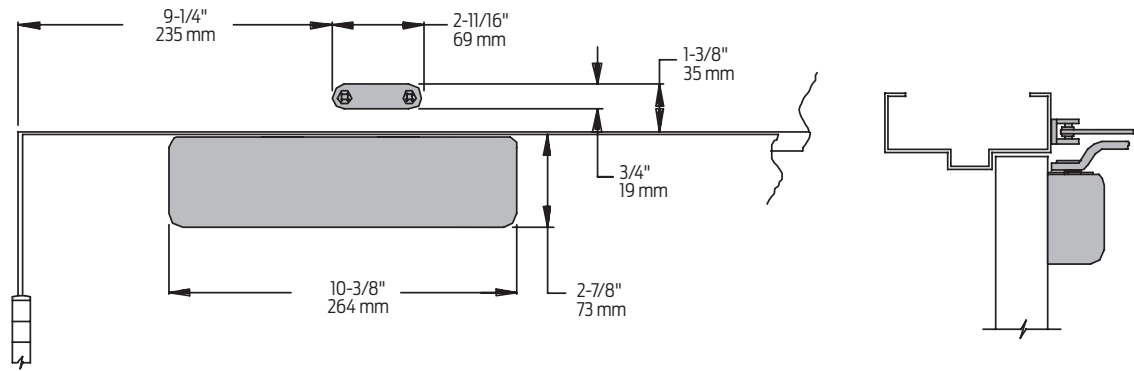
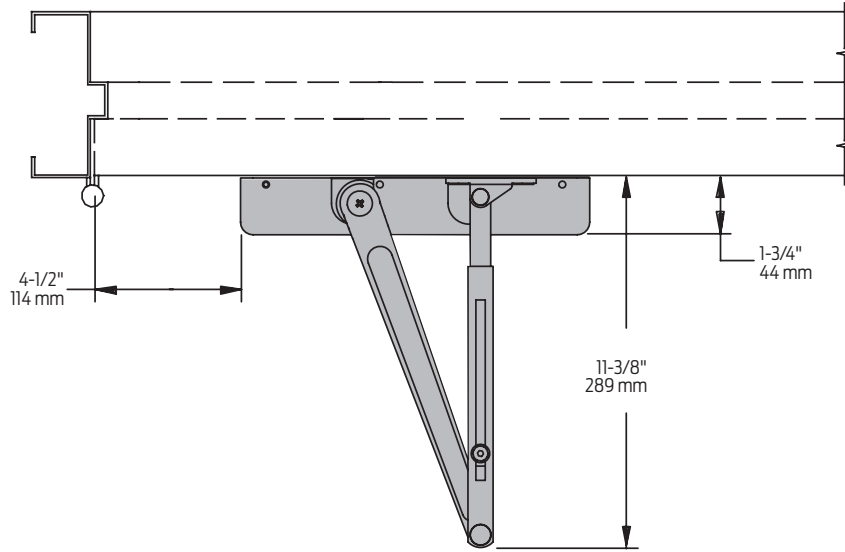
● AVAILABLE  
○ NOT AVAILABLE

♿ Closer available with less than 5.0 lbs. opening force on 36" door.  
\* Maximum opening/hold-open point with standard template. See individual closer series for degrees of opening per installation.  
\*\* Advanced Variable Backcheck

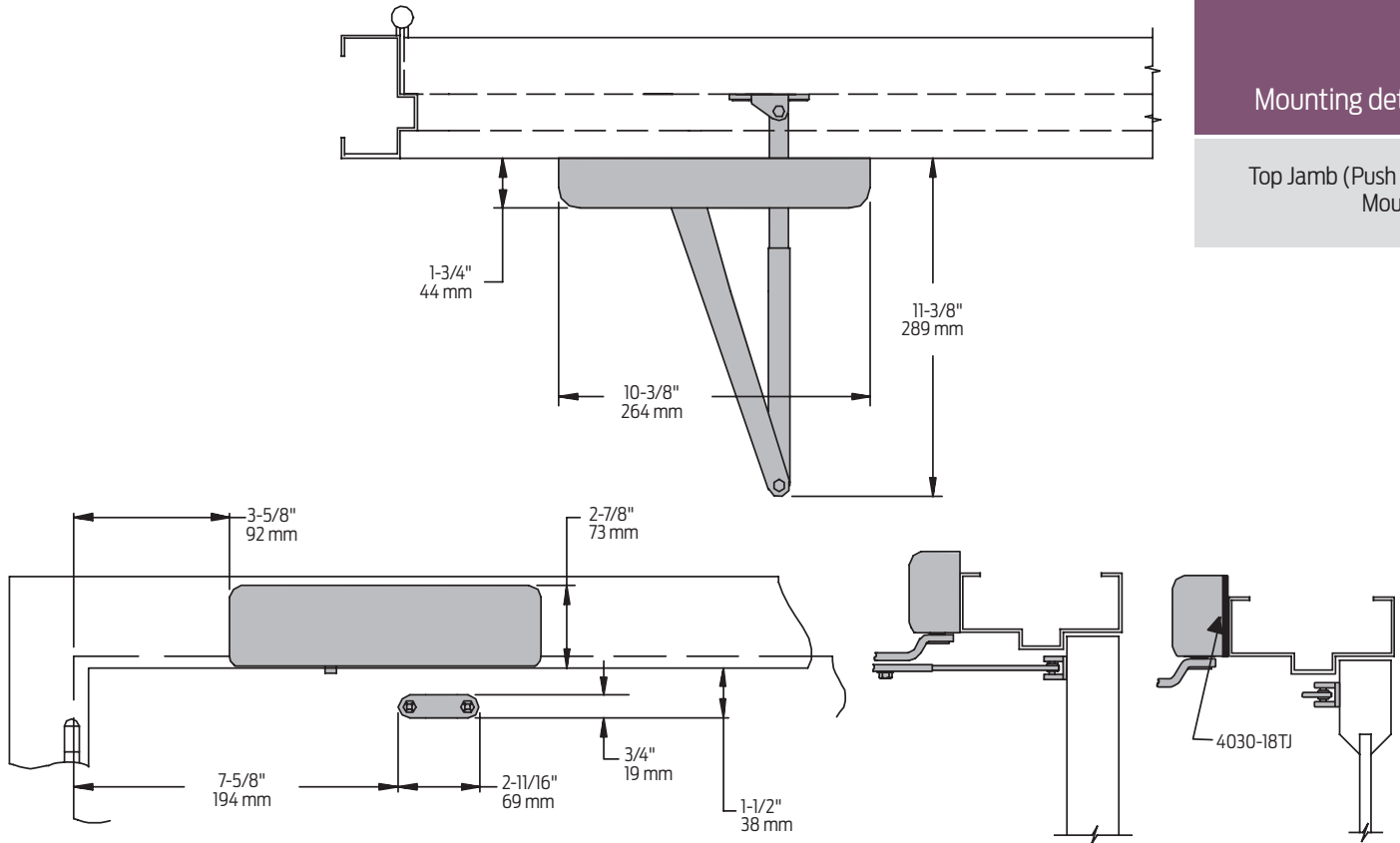
# 4030 Series

## Mounting details

### Hinge (Pull) Side Mounting

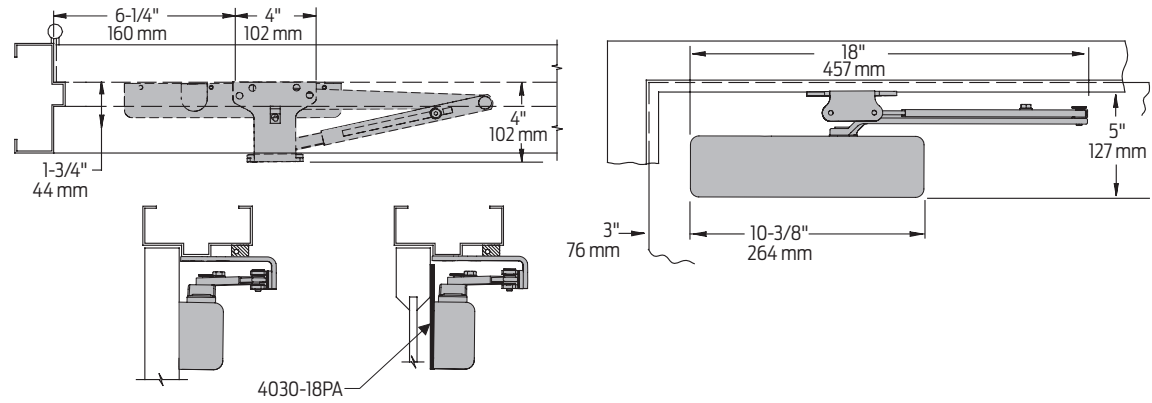


<b>Butt Hinges</b>	Should not exceed 5" (127 mm) in width
<b>Auxiliary Stop</b>	Recommended at hold-open point or where a door cannot swing 180°
<b>Reveal</b>	Should not exceed 3/16" (5 mm) for regular arm or 3/16" (5 mm) for hold-open arm
<b>Top Rail</b>	Requires 2-7/8" (73 mm) minimum
<b>Clearance</b>	1-3/4" (44 mm), behind door required for installation
<b>Maximum Opening</b>	<ul style="list-style-type: none"> <li>■ Can be templated for 180°</li> <li>■ Hold-open points up to maximum opening with hold-open arm</li> </ul>

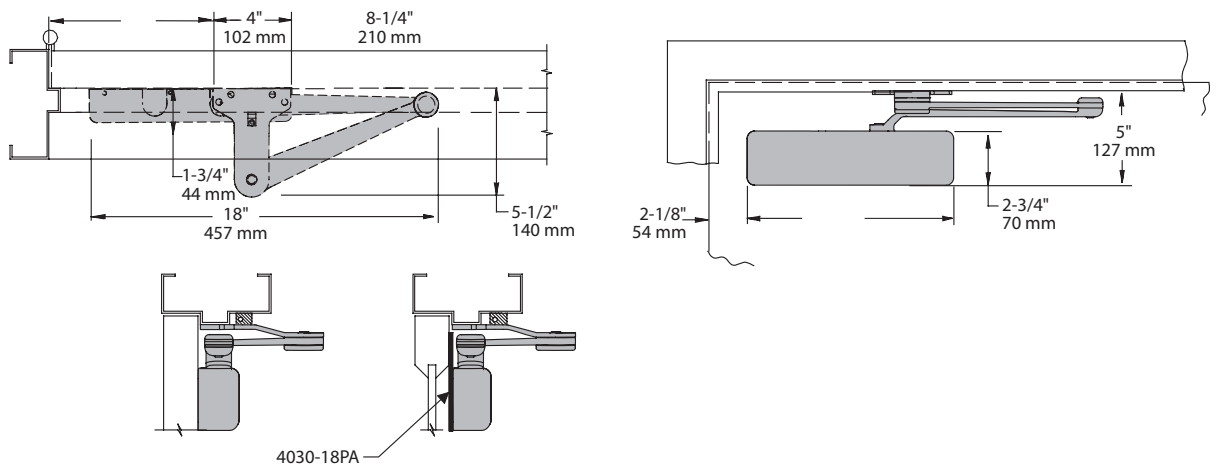


<b>Butt Hinges</b>	Should not exceed 5" (127 mm) in width
<b>Auxiliary Stop</b>	Recommended at hold-open point or where the door cannot swing 180°
<b>Reveal</b>	<ul style="list-style-type: none"> <li>■ up to 3-1/2" (89 mm) allows 180° opening</li> <li>■ up to 7-1/2" (191 mm) with long arm allows for 140° opening</li> </ul>
<b>Top Rail</b>	Requires 1-1/2" (38 mm) minimum from stop
<b>Head Frame</b>	<ul style="list-style-type: none"> <li>■ Less than 2-1/4" (57 mm) requires PLATE, 4030-18TJ</li> <li>■ Plate requires 1-1/2" (38 mm) minimum</li> </ul>
<b>Maximum Opening</b>	<ul style="list-style-type: none"> <li>■ Can be templated for 180°</li> <li>■ Hold-open points up to maximum opening with hold-open arm</li> </ul>

**Parallel arm mount**



**EDA mount**

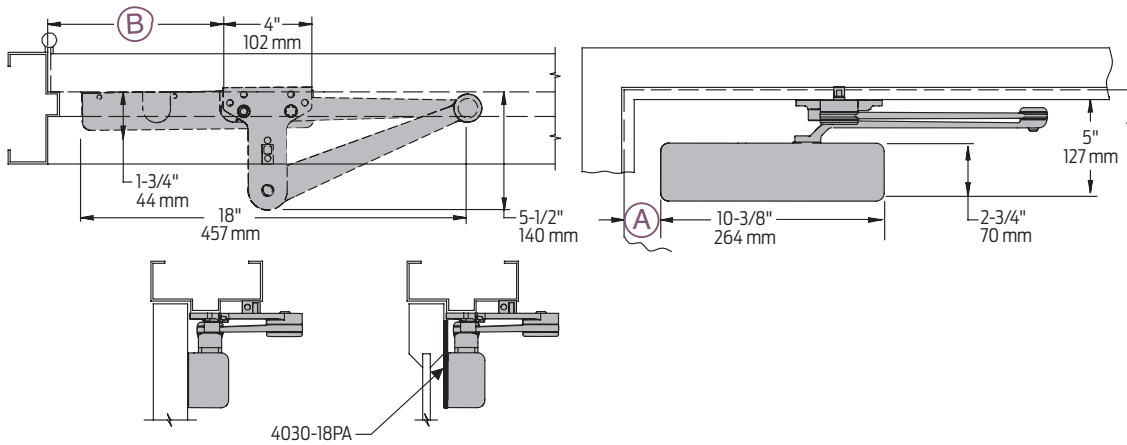


<b>Butt Hinges</b>	Should not exceed 5" (127 mm) in width
<b>Auxiliary Stop</b>	Recommended at hold-open point or where a door cannot swing maximum opening
<b>Clearance</b>	<ul style="list-style-type: none"> <li>For 4030-62PA shoe is 4" (102 mm) from door face</li> <li>EDA arm is 5-1/2" (140 mm) from door face</li> </ul>
<b>Top Rail</b>	<ul style="list-style-type: none"> <li>Less than 5" (127 mm) measured from the stop requires PLATE, 4030-18PA</li> <li>Plate requires 1-3/4" (44 mm) minimum</li> </ul>
<b>Stop Width</b>	Minimum 1" (25 mm)
<b>Head Frame</b>	Flush or single rabbeted requires PA SHOE ADAPTER, 4030-419
<b>Blade Stop</b>	Clearance, requires 1/2" (13 mm) BLADE STOP SPACER, 4030-61
<b>Auxiliary Shoe</b>	<ul style="list-style-type: none"> <li>4030-62A allows installation of regular arm with overhead holder/stop</li> <li>Special templating required</li> </ul>
<b>EDA Arm</b>	Requires SHOE SUPPORT, 4030-30 for fifth screw anchorage where reveal is less than 3-1/16" (78 mm)
<b>Maximum Opening</b>	<ul style="list-style-type: none"> <li>REGULAR or HOLD-OPEN arms can be templated for 180°</li> <li>EDA template allows 110° maximum opening</li> <li>Hold-open points up to maximum opening with hold-open arm</li> </ul>

*Notes:*

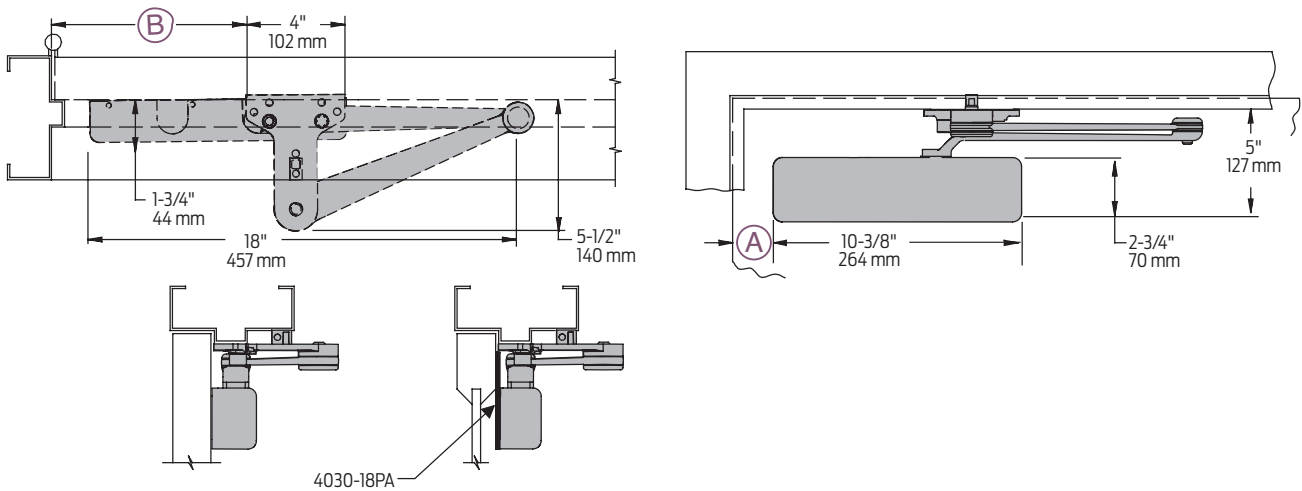
- 4030 closers ordered with EDA arms include 4030-201 FIFTH HOLE SPACER to support the shoe
- REGULAR or HOLD-OPEN arm mounting requires PA SHOE, 4030-62PA for regular or HOLD-OPEN arms. Add prefix "P" to closer description (eg. P4031.)
- P4031 closer includes 4030-201 FIFTH HOLE SPACER to support PA SHOE

**CUSH mount**



**Spring CUSH mount**

Spring Cush dead stop points are approximately 5° greater than templated stop point.



<b>Clearance</b>	For CUSH or SPRING CUSH shoe is 5-1/2" (140 mm) from door face		
<b>Head Frame</b>	Flush or rabbeted requires CUSH FLUSH PANEL ADAPTER, 4030-419		
<b>CUSH or Spring CUSH ARM</b>	Requires SHOE SUPPORT, 4030-30 for fifth screw anchorage where reveal is less than 3-1/16" (78 mm)		
<b>Maximum opening</b>	CUSH and SPRING CUSH arms can be templated for maximum opening/hold-open point at:		
	85°: A = 3-5/8 (92 mm) B = 9-3/4" (248 mm)	90°: A = 3" (76 mm) B = 9-1/8" (232 mm)	100°*: A = 1-7/8" (48 mm) B = 8" (203 mm)

\*100° mounting will not work with swing clear hinges.

**Note:**

• 4031 closers ordered with CUSH or SPRING CUSH arms include 4030-201 FIFTH HOLE SPACER to support the shoe

### Cylinders



**4031-3071**  
Cast Iron Cylinder Assembly

- Non-handed
- Standard

### Covers



**4030-72MC**  
Metal Cover

- Non-handed
- Standard

### Installation Accessories



**4030-18TJ**  
Plate

- Required for top jamb mounting where head frame is less than 2-1/4" (57 mm) or flush ceiling condition exists
- Requires 1-1/2" (38 mm) minimum



**4030-18PA**  
Plate

- Required for parallel arm mounting where top rail is less than 5" (127 mm), measured from the stop
- Requires 1-3/4" (44 mm) minimum



**4030-30**  
CUSH Shoe Support

- Provide anchorage for fifth screw used with CUSH arms where reveal is less than 3-1/16" (78 mm)



**4030-61**  
Blade Stop Spacer

- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop



**4030-62A**  
Auxiliary Shoe

- Requires a top rail of 7" (178 mm)
- Replaces -62PA for parallel arm mounting of regular arm with some overhead holder/stop
- Optional



**4030-419**  
PA Flush Panel Adapter

- Provides horizontal mounting surface for PA or CUSH shoe on single rabbetted or flush frame



**4030-62PA**  
PA Shoe

- Required for parallel arm mounting

**Arms**



**4030-3077**  
Regular Arm

- Non-handed
- Mounts hinge side or top jamb
- P4031 closer includes PA SHOE, 4030-62PA is required for parallel arm mounting



**4030-3077LD**  
Light Duty Arm

- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Optional



**4030-3077L**  
Long Arm

- Non-handed
- Includes LONG ROD AND SHOE, 4030-79LR for top jamb mount with deep reveals
- Optional



**4030-3049**  
Hold-Open Arm

- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Hold-open adjustable at shoe
- Optional



**4030-3049L**  
Long Hold-Open Arm

- Non-handed
- Includes LONG HEAD AND TUBE, 4030-3048L for top jamb mount with deep reveals
- Optional



**4030-3077EDA**  
Extra Duty Arm

- Non-handed
- Extra duty arm features solid forged steel main and forearm for potentially abusive installations
- Optional



**4030-3049EDA**  
Hold-Open EDA Arm

- Handed
- Arm, provides hold-open function adjustable at shoe
- Optional



**4030-3077CNS**  
Cush-n-Stop® Arm

- Non-handed
- Solid forged steel main arm and forearm with stop in soffit shoe
- Optional



**4030-3049CNS**  
Hold-Open CUSH Arm

- Non-handed
- Provides hold-open function with templated stop/hold-open points
- Handle controls hold-open function
- Optional



**4030-3077SCNS**  
Spring CUSH Arm

- Non-handed
- For abusive applications
- Features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional



**4030-3049SCNS**  
Spring HCUSH Arm

- Non-handed
- For abusive applications
- Features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold-open function
- Optional



### How-to-order 4030 Series closers

#### 1. Select finish

- Standard Powder Coat \_\_\_\_\_  
Aluminum, Dark Bronze, Statuary,  
Light Bronze, Black, Brass.

#### Closer options

##### Finish

- Custom Powder Coat (RAL) \_\_\_\_\_
- Plated Finish, US \_\_\_\_\_
- SRI primer (use with powder coat finishes only)

##### Arm

- Regular w/62PA (Rw/PA)
- Regular w/62A (R/62A)
- Long (LONG)
- Hold-Open (H)
- Hold-Open w/62PA (Hw/PA)
- Long Hold-Open (HLONG)
- Light Duty (LD)
- Light Duty w/62A (LD/62A)
- Light Duty w/62PA (LD/PA)
- Light Duty Long (LDL)
- EDA
- HEDA (specify right or left hand)
- Cush-N-Stop (CUSH)
- HCush-N-Stop (HCUSH)
- Spring Cush (SCUSH)
- Spring HCush (SHCUSH)

#### Closer will be shipped with:

- Standard cylinder
- Standard metal cover
- Regular arm
- Wood and self-tapping machine screw pack unless options listed below are selected.

#### Optional Screw Packs

- TB\*, Wood & Machine Screw (TBWMS)  
\* Specify door thickness if other than 1-3/4".

#### Installation Accessories

- Plate, 4030-18TJ
- Plate, 4030-18PA
- CUSH Shoe Support, 4030-30
- Blade Stop Spacer, 4030-61
- Auxiliary Shoe, 4030-62A
- PA Flush Panel Adapter, 4030-419

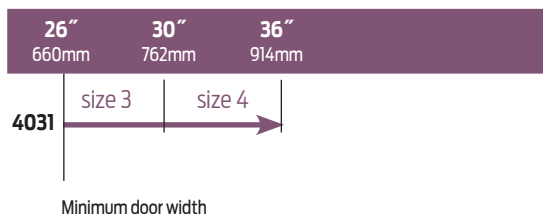
#### Special Template

- ST- \_\_\_\_\_

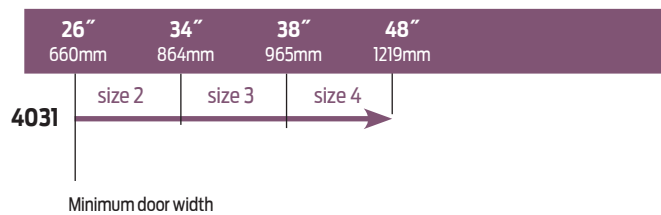
### Table of sizes

- Non-sized 4031 cylinder is adjustable from sizes 1 to 4 and is shipped set to size 3.

#### Exterior (and Vestibule) door width



#### Interior door width



→ Indicates recommended range of door width for closer size.

### Reduced opening force 4030 Series closers

**CAUTION!** Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to AUTOMATIC OPERATORS section for information on systems that meet reduced opening force requirements without effecting closing power.

	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	4031	4031	4031
	5.0* lbs.	4031	4031	4031

\* Maximum opening force.