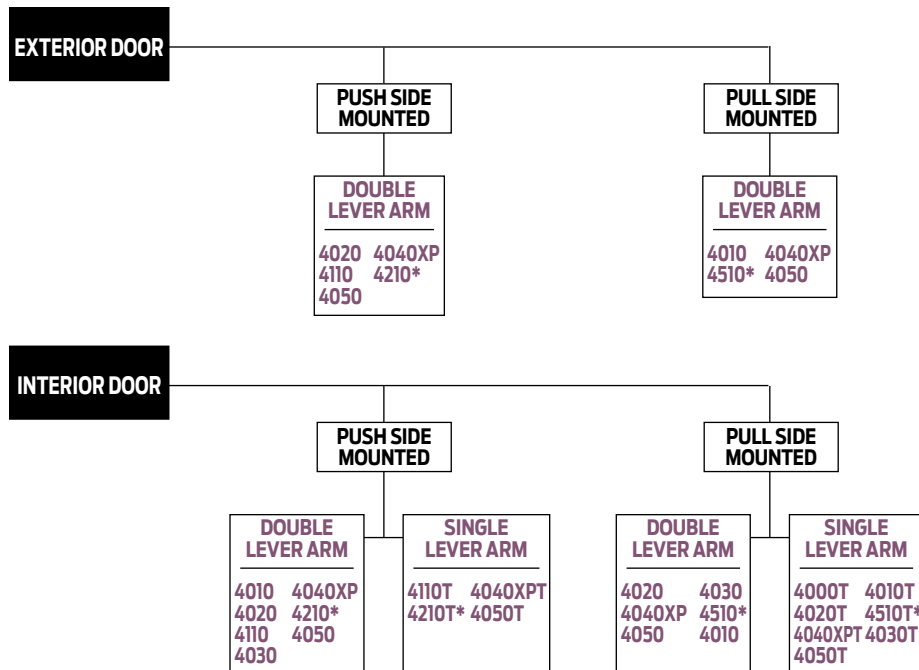


## Product selection guide

Surface mounted 4000 Series LCN closers feature a modern design engineered for each application, easy installation, and superior performance. This guide is based on the desired mounting of the closer.



\* INDICATES HIGH SECURITY CLOSER. REFER TO THAT SECTION OF THE CATALOG.

## Product comparison

This chart shows a basic comparison of 4000 Series closers. Refer to the specific closer chapter for complete details.

CLOSER SERIES	MOUNTING					FINISH		COVER		CYLINDER			*ARM FUNCTION										
	HINGE (PULL SIDE)	TOP JAMB (PULL)	TOP JAMB (PUSH)	PARALLEL ARM	STOP FACE	POWDER COAT	PLATED	PLASTIC	METAL	NON-HANDED	NON-SIZED	ACCESSIBILITY	DELAYED ACTION***	AVB**	REGULAR (DOUBLE)	STANDARD (SINGLE)	HOLD-OPEN	FUSIBLE LINK	ED/MHEDA	CUSH/MCUSH	SCUSH/SHCUSH	DOUBLE EGRESS	
4010	●	○	○	○	○	●	●	●	●	○	●	♿	●	○	140°	○	140°	140°	○	○	○	○	○
4010T	●	○	○	○	○	●	●	●	●	○	○	♿	○	○	○	180°	120°	○	○	○	○	100°	
4020	○	○	●	○	○	●	●	○	●	○	●	♿	●	○	180°	○	140°	140°	○	○	○	○	
4020T	○	●	○	○	○	●	●	○	○	○	○	♿	○	○	○	180°	100°	○	○	○	○	○	
4030	●	○	●	●	○	●	●	○	●	●	●	♿	○	○	180°	○	180°	○	110°	100°	100°	○	
4030T	●	●	○	○	●	●	●	○	●	●	●	♿	○	○	○	180°	180°	○	○	○	○	○	
4040XP	●	○	●	●	○	●	●	●	●	●	●	♿	●	○	120°	○	120°	○	180°	110°	110°	○	
4040XPT	●	○	○	○	●	●	●	●	●	●	●	♿	○	○	○	120°	110°	○	○	○	○	95°	
4050	●	○	●	●	○	●	○	●	●	●	●	♿	●	○	180°	○	180°	○	180°	110°	110°	○	
4050T	●	●	○	○	●	●	○	●	●	●	●	♿	○	○	○	180°	180°	○	○	○	○	95°	
4110	○	○	○	●	○	●	●	○	●	○	●	♿	●	●	○	○	180°	180°	180°	110°	110°	○	
4110T	○	○	○	○	●	●	●	○	○	○	○	♿	○	○	○	110°	100°	○	○	○	○	○	
4000T	●	○	○	○	○	●	●	●	○	●	○	○	○	○	○	90°	○	○	○	○	○	○	

● 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.

\*\*\* Delay Action for 4040XP incorporates standard 4041 cylinder.

## 4000 Series surface 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.
- **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.

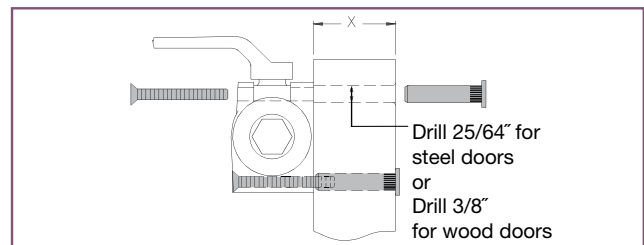
Consult factory for other listings such as; cUL, California State Fire Marshal, Bureau of Standards and Appeals.

### 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.

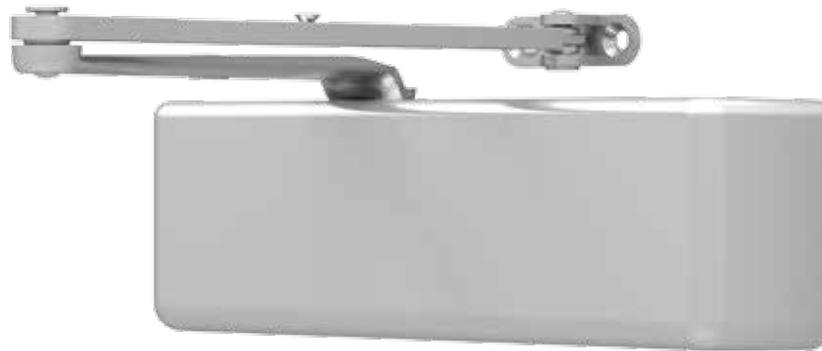


Notes:

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.

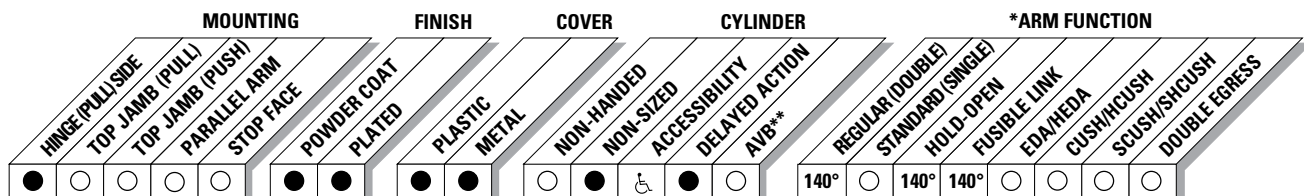


The 4010 is LCN's best performing heavy duty closer designed specifically for institutional and other rugged high traffic applications.

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	<b>Cover</b>	<ul style="list-style-type: none"> <li>■ Plastic, Standard</li> <li>■ Metal, Optional</li> </ul>
<b>Body Construction</b>	<ul style="list-style-type: none"> <li>■ Cast Iron Body</li> <li>■ Full Complement Bearing</li> <li>■ 1-1/2" Diameter Piston</li> <li>■ 11/16" Diameter Double 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)
<b>Handing</b>	Handed	<b>Arms</b>	Regular Arm
<b>Templating</b>	Peel-n-Stick templates - 2-1/2" x 6" 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 1-5 or Sized 6		<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.



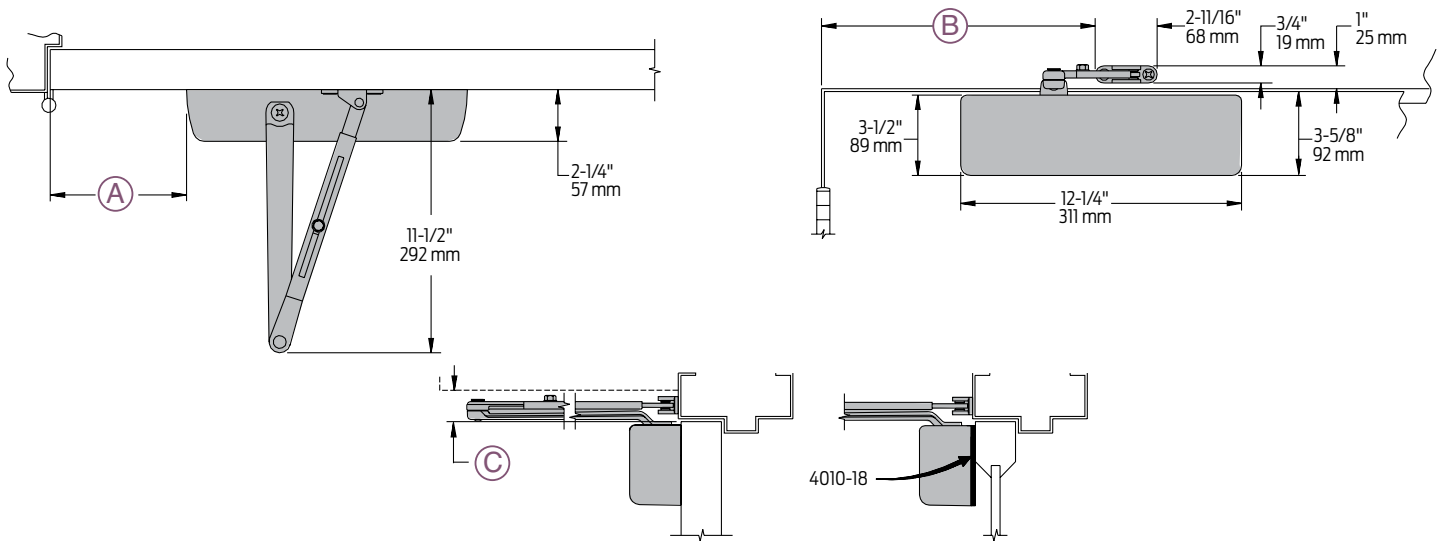
● AVAILABLE  
○ NOT AVAILABLE

♿ Closer available with less than 5.0 lbs. opening force on 36" door.  
\* Maximum opening/hold-open point with standard template.  
\*\* Advanced Variable Backcheck.

# 4010 Series

## Mounting details

### Hinge (Pull) Side Mounting

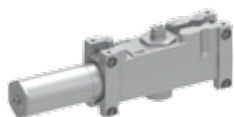


<b>Butt Hinges</b>	Should not exceed 5" (127 mm) in width				
<b>Auxiliary Stop</b>	Recommended at hold-open point or where a door cannot swing 140°				
<b>Reveal</b>	Should not exceed 3/4" (19 mm). Should not exceed 1/8" (3 mm) for Fusible link arm				
<b>Top Rail</b>	<ul style="list-style-type: none"> <li>Less than 3-3/4" (95 mm) requires PLATE, 4010-18</li> <li>Plate requires 2" (51 mm) minimum</li> <li>Clearance of 2-1/4" (57 mm) behind door required for 90° installation</li> </ul>				
<b>Delayed Action</b>	<ul style="list-style-type: none"> <li>Add suffix "DEL" to selected cylinder</li> <li>Not available with 4016 cylinder</li> <li>Delays closing from maximum opening to approximately 70°.</li> <li>Delay time adjustable up to approximately 1 minute</li> </ul>				
<b>Maximum Opening</b>	<p>Can be templated for:</p> <table border="0"> <tr> <td>100°: A = 5-15/16" (151 mm)</td> <td>140°: A = 4-3/16" (106 mm)</td> </tr> <tr> <td>B = 11-15/16" (303 mm)</td> <td>B = 10-3/16" (259 mm)</td> </tr> </table> <p>Hold-open points up to maximum opening with hold-open arm</p>	100°: A = 5-15/16" (151 mm)	140°: A = 4-3/16" (106 mm)	B = 11-15/16" (303 mm)	B = 10-3/16" (259 mm)
100°: A = 5-15/16" (151 mm)	140°: A = 4-3/16" (106 mm)				
B = 11-15/16" (303 mm)	B = 10-3/16" (259 mm)				
<b>Arm Clearance</b>	<p>Regular arm: C = 1-1/16" (27 mm)</p> <p>Hold-open arm: C = 1-3/8" (35 mm)</p> <p>Fusible link arm requires: C = 1-5/8" (41 mm)</p>				

**Note:**

• Hold-open points up to maximum opening with hold-open arm

## Cylinders



**4011(6)-3071**  
Cast Iron Cylinder Assembly

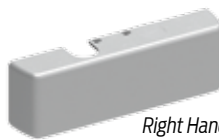
- Handed
- Standard

## Covers



**4010-72**  
Plastic Cover

- Non-handed
- Standard



*Right Hand Shown*

**4010-72MC**  
Metal Cover

- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

## Installation Accessories



**4010-18**  
Plate

- Required where top rail is less than 3-3/4" (95 mm)
- Requires minimum 2" (51 mm) top rail

## Arms



**4010-3077**  
Regular Arm

- Non-handed



**4010-3049**  
Hold-Open Arm

- Handed
- Provides hold-open function, adjustable at elbow
- Optional



**4010-3049FL**  
Fusible Link Arm

- Handed
- Releases hold-open function when exposed to temperatures above 165° F. 1/8" (3 mm) maximum reveal
- Optional

*NOTE: Check local codes before specifying FL arms. NOT A life safety product!*

### How-to-order 4010 Series closers

#### 1. Select cylinder size

- 4011 (adjustable from size 1 to 5)
- 4016 (DEL not available)

#### 2. Specify hand

- RH
- LH

#### 3. Select finish

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

#### Closer will be shipped with:

- Standard cylinder
- Standard cover
- Regular arm
- Self-reaming and tapping screws unless options listed below are selected.

### Closer options

#### Cylinder

- Delayed Action (DEL)

#### Cover

- Metal (MC)

#### Arm

- Hold-Open (H)
- Fusible Link, 165°F (FL)

#### Finish

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

#### Screw Pack

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

#### Installation Accessories

- Plate, 4010-18

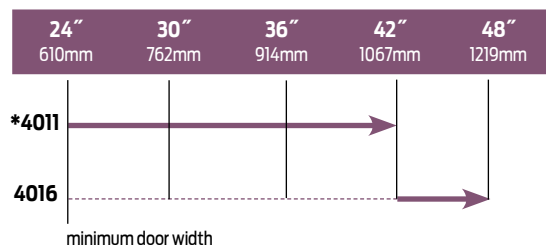
#### Special Template

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

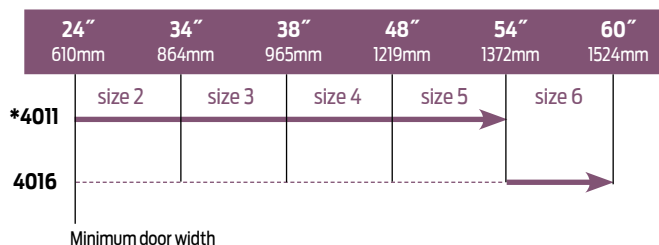
### Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4011 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4010 Series cylinders available in size 6
- Delayed action not available with 4016 cylinder

#### Exterior (and Vestibule) door width



#### Interior door width




→ Indicates recommended range of door width for closer size.  
\* Adjustable Size 1 thru 5.

### Reduced opening force 4010 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 POWER OPERATORS section for information on systems that meet reduced opening force requirements without effecting closing power.

	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	4011	4011	4011
5.0* lbs.	4011	4011	4011	

\* Maximum opening force.