

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.

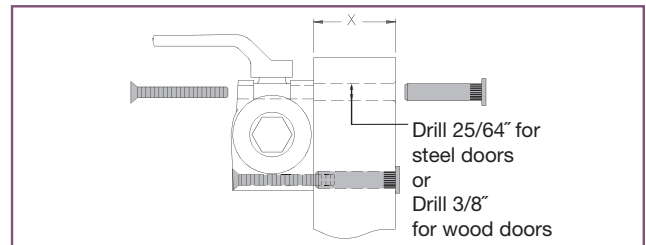
Consult factory for other listings such as; cUL, California State Fire Marshal, Bureau of Standards and Appeals.

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.

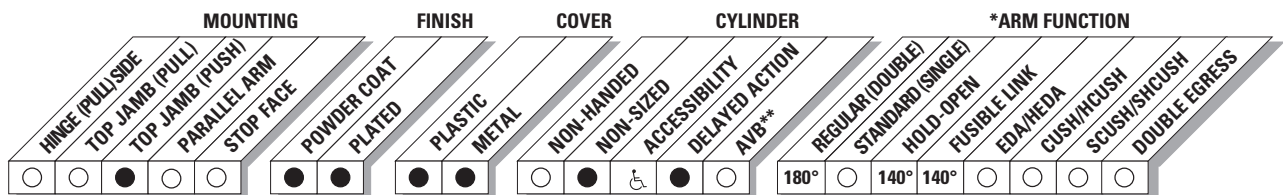


The 4020 is LCN's best performing heavy duty closer designed specifically for institutional and other rugged high traffic applications.

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	Cover	<ul style="list-style-type: none"> ■ Plastic, Standard ■ Metal, Optional
Body Construction	<ul style="list-style-type: none"> ■ Cast Iron Body ■ Full Complement Bearing ■ 1-1/2" Diameter Piston ■ 11/16" Diameter Double Heat Treated Pinion Journal 	Fasteners	Self Reaming and Tapping Screws (SRT)
Fluid	All Weather Fluid	Mounting	Top Jamb (Push Side)
Handing	Handed	Arms	Regular arm
Templating	Peel-n-Stick templates - 2-1-2" x 6" Mounting Hole Pattern	Finishes/Colors/ Powder Coat	<ul style="list-style-type: none"> ■ Aluminum (689) ■ Statuary Bronze (690) ■ Light Bronze (691) ■ Black (693) ■ Dark Bronze (695) ■ Brass (696) ■ Custom colors optional
Size	Adjustable 1-5 or Sized 6		<ul style="list-style-type: none"> ■ Optional SRI primer - powder coat only ■ Optional plated finishes
Warranty	30 years		

Special Templates

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



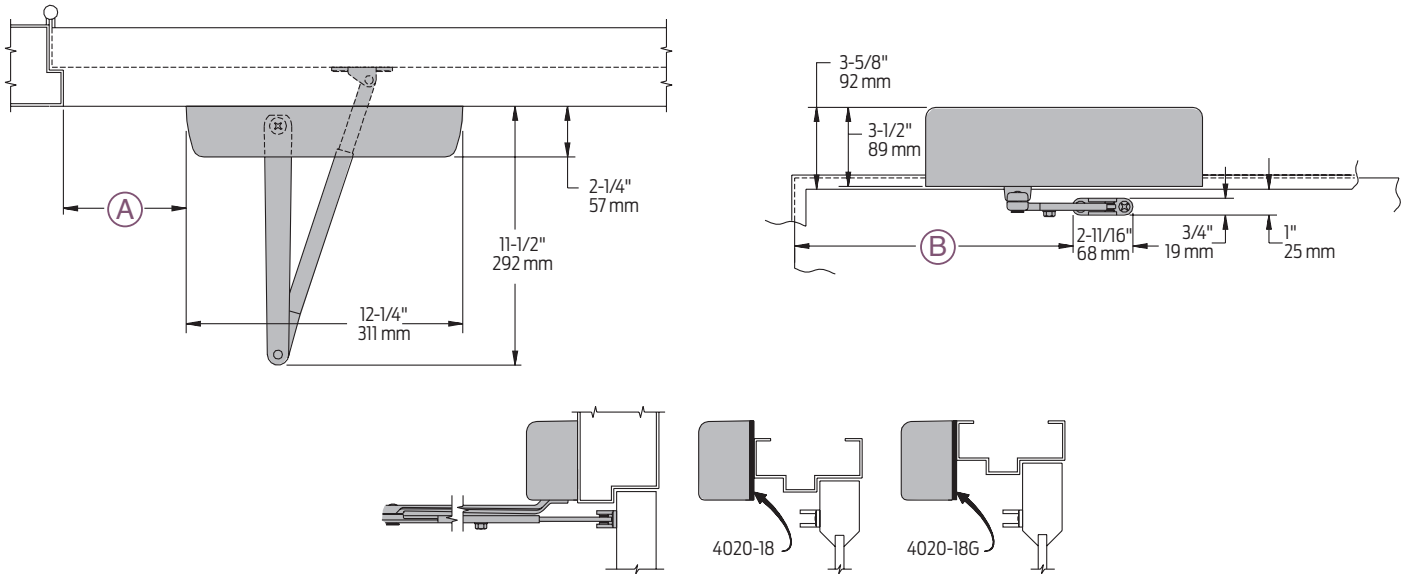
● AVAILABLE
○ NOT AVAILABLE

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

4020 Series

Mounting details

Top Jamb (Push) Side Mounting



Butt Hinges	Should not exceed 5" (127 mm) in width												
Auxiliary Stop	Recommended at hold-open point or where the door cannot swing 180°												
Reveal	<ul style="list-style-type: none"> 2-9/16" (65 mm) allows 180° opening with regular arm 4-13/16" (122 mm) allows up to 140° opening with regular arm 8" (203 mm) allows up to 140° opening with LONG ARM where standard rod and shoe is replaced with optional long rod and shoe (4020-79LR) 												
Head Frame	Less than 3-7/16" (87 mm) requires PLATE, 4020-18 Use PLATE, 4020-18G for flush ceiling condition. Either plate requires 1-3/4" (44 mm) frame minimum.												
Top Rail	<ul style="list-style-type: none"> Requires minimum 1-1/2" (38 mm) Closer on 4020-18 plate requires 2" (51 mm) minimum Closer on 4020-18G plate requires 2-3/4" (70 mm) minimum 												
Delayed Action	<ul style="list-style-type: none"> Add suffix "DEL" to selected cylinder. Not available with 4026 cylinder Delays closing from maximum opening to approximately 75° Delay time adjustable up to approximately 1 minute 												
Maximum Opening	Can be templated for:												
	<table border="0"> <tr> <td>100°:</td> <td>A = 6" (152 mm)</td> <td>140°:</td> <td>A = 4" (102 mm)</td> <td>180°:</td> <td>A = 2" (51 mm)</td> </tr> <tr> <td></td> <td>B = 12 3/8" (314 mm)</td> <td></td> <td>B = 10 3/8" (264 mm)</td> <td></td> <td>B = 8 3/8" (213 mm)</td> </tr> </table>	100°:	A = 6" (152 mm)	140°:	A = 4" (102 mm)	180°:	A = 2" (51 mm)		B = 12 3/8" (314 mm)		B = 10 3/8" (264 mm)		B = 8 3/8" (213 mm)
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	B = 12 3/8" (314 mm)		B = 10 3/8" (264 mm)		B = 8 3/8" (213 mm)								

Notes:

- Hold-open points up to maximum opening or 140°, whichever is less, for hold-open or fusible link arm
- For hold-open beyond 140°, use 4110 Series closer

Cylinders



4021(6)-3071
Cast Iron Cylinder Assembly

- Handed
- Standard

Covers



Left Hand Shown

4020-72
Plastic Cover

- Handed
- Standard



Right Hand Shown

4020-72MC
Metal Cover

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

Arms



4020-3077
Regular Arm

- Non-handed



4020-3077L
Long Arm

- Non-handed
- Includes 4020-79LR for deep reveals. (see page 14 for allowable reveals)
- Optional



4020-3049
Hold-Open

- Handed
- Provides hold-open function, adjustable at elbow
- 5-3/4" (146 mm) maximum reveal, 140° hold open
- Optional



4020-3049FL
Fusible Link

- Handed
- Releases hold-open function, adjustable at shoe, when exposed to temperatures above 165° F
- 3-7/8" (98 mm) maximum reveal
- Optional

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

Installation Accessories



4020-18
Plate

- Required where head frame is less than 3-7/16" (87 mm)
- Requires minimum 1-3/4" (44 mm) minimum head frame and 2" (51 mm) top rail
- 3-7/8" (98 mm) maximum reveal



4020-18G
Plate

- For flush ceiling condition
- Requires minimum 1-3/4" (44 mm) minimum head frame and 2-3/4" (70 mm) top rail

How-to-order 4020 Series closers

1. Select cylinder size

- 4021 (adjustable from size 1 to 5)
- 4026 (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, 4020-18
- Plate, 4020-18G

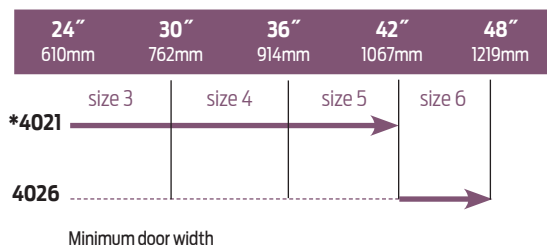
Special Template

- ST- _____

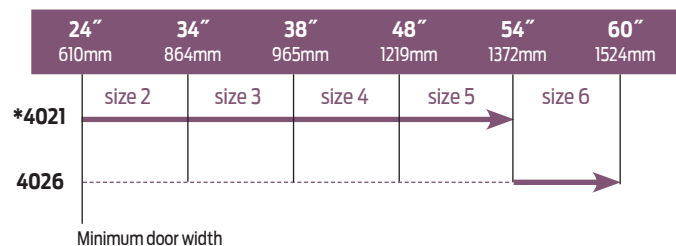
Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4021 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4020 Series cylinders available in size 6
- Delayed action not available with 4026 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 4020 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.	4021	4021	4021
5.0* lbs.	4021	4021	4021	

* Maximum opening force.