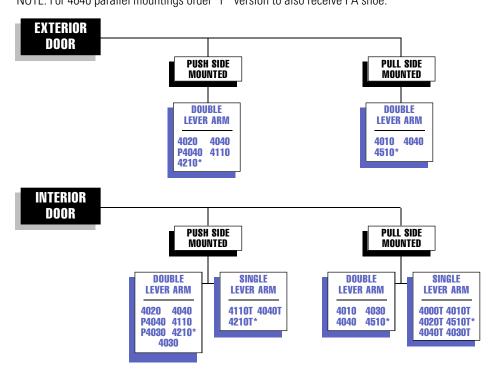
4000 SERIES

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.

NOTE: For 4040 parallel mountings order "P" version to also receive PA shoe.



^{*} INDICATES HIGH SECURITY CLOSER. REFER TO THAT SECTION OF THE CATALOG. "P" = PARALLEL ARM MOUNTING

PRODUCT COMPARISON

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

						NTING			FII	HSH		COV	ER				MBE							URM E	UNCT	ION
CLOSER		35. P13	A SEE	d Pull	SPUSH SPUSH	AST FACE	POHOL	A COM		ASTIC MICE	şi.		Strike.	SED ON SE	d a	SUT'S	ACTION			CHIAN	Taracina C	did of	SSIBLE S	JAMES CO	A HOL	st stiller
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4010 4010T		ŏ	ŏ	ŏ	ŏ	ě	- I	-		0		ŏ	ँ	<u>6</u>	ŏ	ŏ	ŏ		Ö	180	120	0	ŏ	ŏ	ŏ	
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4040		0			0	•				•		•		8	0	0	0		120	0	120	0	180	190	110	
4040XP		0			0							•		Ь	0	0			120	0	120	0	180	110	110	
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4110T	0	0	0	0		•				0		0	0	Ł.	0	0	0		0	110	100	0	0	0	0	
4000T		0	0	0	0							•	0	0	0	0	0		0	90	0	0	0	0	0	

AvailableNot available

^{***} Advanced Variable Backcheck



LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PRINCETON, IL, USA 61356-0100 PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com ©2010 Ingersoll-Rand Company

Loser 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.

4000 SERIES

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 4040, 4040T, 4030, 4030T) is designed for a specific mounting; hinge side, top jamb, or parallel arm. 4040 closer with regular or hold-open arm mounts hinge side or top jamb. P4030 & P4040 closers include 62PA SHOE required to parallel arm mount either regular or hold-open arm.
- ► Handed for right or left swinging doors, except 4000T, 4030, 4030T, 4040, and 4040T.
- 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 for over 75 years. Design and specification assistance are only a phone call away.

Contact LCN for assistance or technical information at **800-526-2400** or FAX **800-248-1460 (Customer Service)**, Fax **815-879-1495** for Application Engineering.

WARRANTY

10 year limited warranty. See General Section for complete warranty details.

SPECIFICATIONS

Refer to "SPECIFICATIONS" section for suggested architectural specifications.

MATERIALS

- ► High strength cast iron cylinder.
- ► Forged steel main arms.
- ► One piece forged steel piston.
- ► Double heat treated pinion.
- ► **All weather fluid** eliminates seasonal adjustments temperatures ranging 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 closers.

FINISHES

► Available in six standard or optional custom powder coat finishes to blend with door and frame.

- ► LCN's powder coat finish surpasses 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) pretreatment. 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.

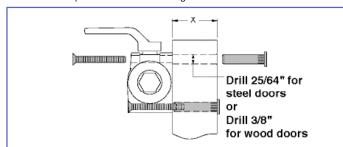
Consult factory for other listings such as; cUL, California State Fire Marshal, Bureau of Standards and Appeals.

POSITIVE PRESSURE

LCN closers have been certified for three hours by UL to be in compliance with UBC 7-2 (1997) and UL 10C. Contact LCN for specific details on door closer fire ratings.

FASTENERS

4010, 4010T, 4020, 4020T, 4040, 4040T, 4110, 4110T series closers are shipped with: A standard SELF-REAMING and TAPPING SCREW (SRT) pack contains Philips head SRT screws to install the closer 4000T series closers are shipped with: A standard WOOD and MACHINE SCREW (WMS) pack contains Philips 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.



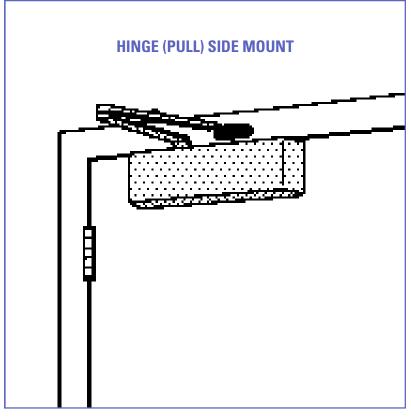
Notes:

- 1. For Thru Bolts, specify door thickness if other than 1 3/4" (44mm).
- 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.

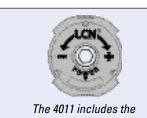




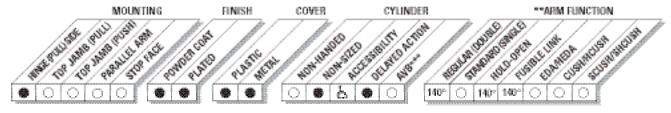
- Standard 4010 series closer is shipped with regular arm, standard plastic cover, and self reaming and tapping screws. See 4010 Series pages 5 & 6 for options.
- ► Size 6 (4010) cylinder for interior doors to 5'0" and exterior doors to 4'0".
- ► Non-sized cylinder (4011) adjustable for interior doors to 4'6" and exterior doors to 3'6".
- Closer mounts hinge side, specify right or left swinging door.
- ► 4011 cylinder meets ADA requirements. See 4010 Series page 7.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► The 4010 Series is UL and cUL listed with regular or fusible link arms for self-closing doors.
- ► Tested and certified under ANSI Standard A156.4, grade one.

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

- ► Ten Million Cycles
- Cast Iron
- ► Forged Steel Main Arm
- Double Heat Treated Steel Pinion
- ► All Weather Fluid
- ► LCN_® Fast[™] Power Adjust
- Fast & Accurate Installation
- UL & cUL Listed



The 4011 includes the LCN_o FAST™ Power Adjust, a revolutionary visual indicator for Spring Power Adjustment.



AvailableNot available

Late Closer available with less than 5.0 lbs. opening force on 36" door.

**Maximum opening/hold-open point with standard template.

*** Advanced Variable Backcheck



HINGE (PULL) SIDE MOUNTING

MAXIMUM OPENING

Can be templated for 100°,

- (A) = 5 15/16" (151 mm)
- $B = 11 \ 15/16" \ (303 \ mm)$ or 140° .
 - (A) = 43/16" (106 mm)
 - (B) = 10 3/16'' (259 mm)

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

Arm Clearance above door.

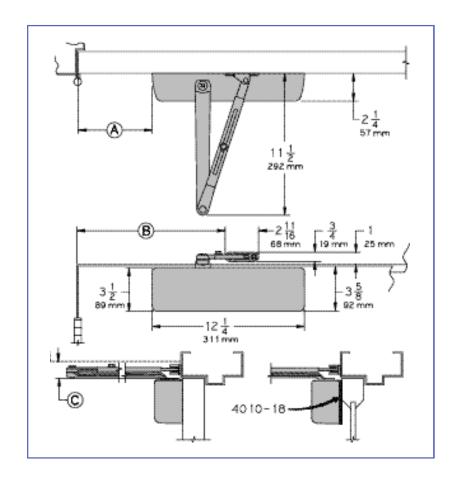
Regular arm requires \bigcirc =

1 1/16" (27 mm).

Hold-open arm requires \bigcirc =

1 3/8" (35 mm).

Fusible link arm requires $\mathbb{C} = 15/8"$ (41 mm).



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing 140°.
- ► **Reveal** should not exceed 3/4" (19 mm). Fusible link arm should not exceed 1/8" (3 mm).
- ► **Top Rail** less than 3 ³/4" (95 mm) requires PLATE, 4010-18. Plate requires 2" (51 mm) minimum.
- ► **Clearance** of 2 1/4" (57 mm) behind door required for 90° installation.
- ► **Delayed Action** Add suffix "DEL" to selected cylinder.

Not available with 4016 cylinder.

Delays closing from maximum opening to approximately 70°.

Delay time adjustable up to approximately 1 minute.

Options

- ► Size 6 or non-sized cylinder.
- Delayed action cylinder.
- ► Hold-open or fusible link arm.
- Metal cover.

Special Templates

Customized installation templates or products may be available to solve unusual applications.

Contact I CN for assistance.



CYLINDERS

CYLINDER, 4010-3071

Standard, handed cast iron cylinder assembly. For various applications see "Table of Sizes" on 4010 Series page 7.



COVER, 4010-72

Standard, non-handed plastic cover.



Optional, handed cover. Required for plated finishes and custom powder coat finishes.

ARMS

REGULAR ARM, 4010-3077

Non-handed arm.

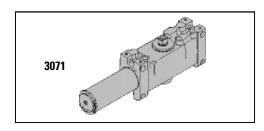
HOLD-OPEN ARM, 4010-3049

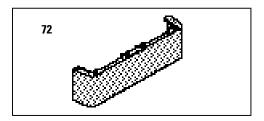
Optional, handed arm provides hold-open function, adjustable at elbow.

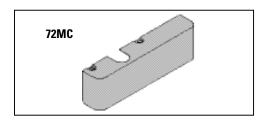
FUSIBLE LINK ARM, 4010-3049FL

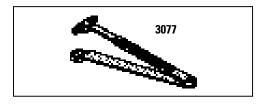
Optional, handed arm releases hold-open function when exposed to temperatures above 165° F.

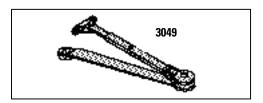
1/8" (3 mm) maximum reveal. NOTE: Check local codes before specifing FL arms. NOT A LIFE SAFETY PRODUCT!

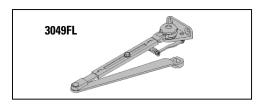














INSTALLATION ACCESSORIES

PLATE, 4010-18

Required where top rail is less than 3 3/4" (95 mm). Plate requires minimum 2" (51 mm) top rail.

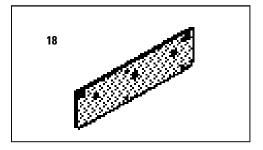




TABLE OF SIZES Select closer based on width of door.

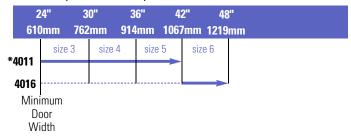
The spring power of non-sized 4011 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3.

Sized 4010 series cylinder available in size 6.

Delayed action not available with 4016 cylinder.

Indicates recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH



INTERIOR DOOR WIDTH

_	4" mm	34 864i	l" 38 mm 965	•		' 60" nm 1524mm
*4011	size 2		size 3	size 4	size 5	size 6
4011						
4016					.]	-
Minii Do Wid	or	* /	Adjustable	Size 1 thru 5.		

REDUCED OPENING FORCE 4010 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"
Ģ.	8.5* lbs.	4011	4011	4011
	5.0* lbs.	4011	4011	4011

^{*} Maximum opening force

HOW-TO-ORDER

. SELECT CYLINDER SIZE	
1010 SERIES CLOSERS	
1044-10-OIIDLII	

I. SELEGI GYLINDEK SIZE
$\ \square$ 4011 (adjustable from size 1 to 5
☐ 4016 (DEL not available)
2. SPECIFY HAND
□ RH
□ LH
3. SELECT FINISH
☐ Standard Powder Coat

Closer will be shipped with:

Aluminum, Dark Bronze, Statuary,

- STANDARD COVER,

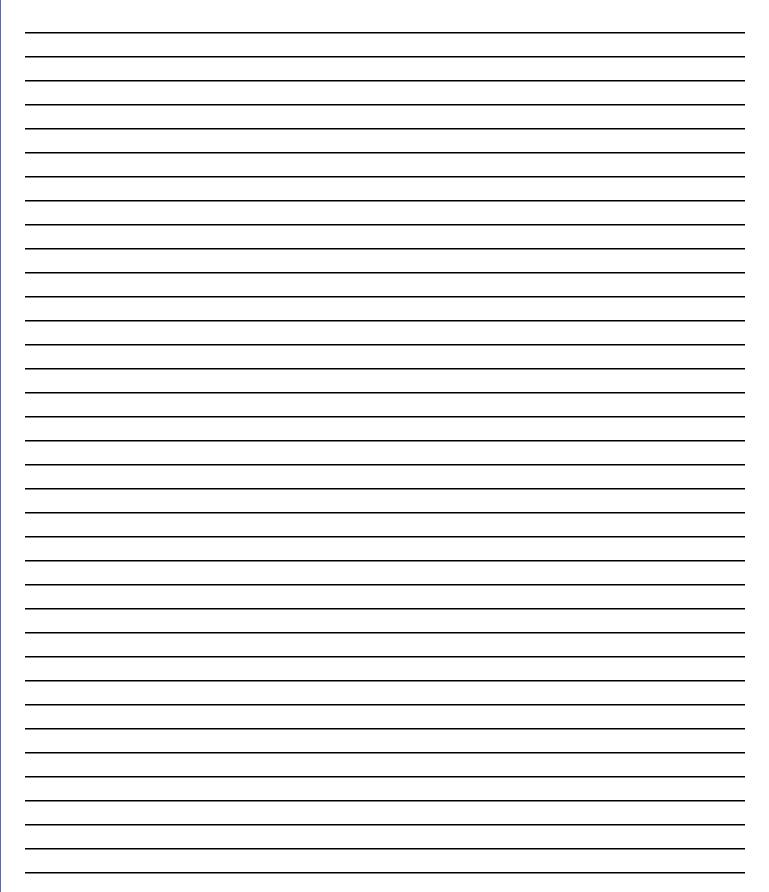
Light Bronze, Black, Brass.

- REGULAR ARM,
- SELF-REAMING and TAPPING SCREWS. unless options listed below are selected.

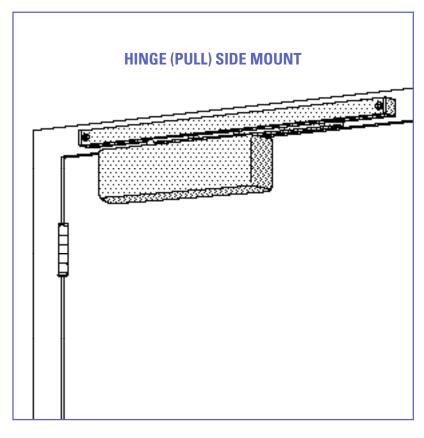
CLOSER OPTIONS
CYLINDER
□ Delayed Action (DEL)
COVER
☐ Metal (MC)
ARM
☐ Hold-Open (H)
☐ Fusible Link, 165°F (FL)
FINISH
☐ Custom Powder Coat (RAL)
(handed metal cover required)
☐ Plated Finish, US
(handed metal cover required)
☐ SRI primer
SCREW PACK
☐ TB* & SRT Screw (TBSRT)
☐ Wood & Machine Screw (WMS)
☐ 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



Notes

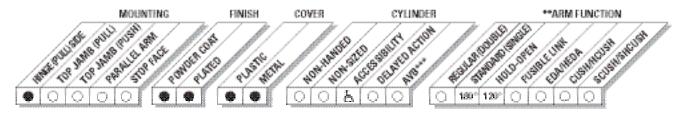






The 4010T SMOOTHEE® is LCN's best performing heavy duty track closer designed specifically for interior doors in institutional and other rugged high traffic applications.

- Cast Iron
- Forged Steel Arm
- ► Double Heat Treated Steel
 Pinion
- ► All Weather Fluid
- ► Fast & Accurate Installation
- UL & cUL Listed
- Standard 4010T series closer is shipped with standard arm, standard track, track roller, standard plastic cover, and self reaming and tapping screws. See 4010T Series pages 11 & 12 for options.
- Sized cylinders for interior doors to 4'0".
- Closer mounts hinge side, specify right or left swinging door.
- Closers to meet ADA requirements. See 4010T Series page 13.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► 4010T-DE available for double egress frames. See 4010T Series page 11.
- ► The 4010T Series is UL and cUL listed with a standard track for self-closing doors.
- ► Tested and certified under ANSI Standard A156.4, grade one.



- Available
- O Not available
- Closer available with less than 5.0 lbs. opening force on 36" door.
- ** Maximum opening with standard template.
- *** Advanced Variable Backcheck



HINGE (PULL) SIDE MOUNTING

MAXIMUM OPENING

Templating allows 180° with standard arm, limited to 120° when optional bumper is installed.

Consult factory if door will be held open at 180°

Hold-open points at , 90°, 95°, 100°, 105°, 110° or 120°, depending on the clip location in track.

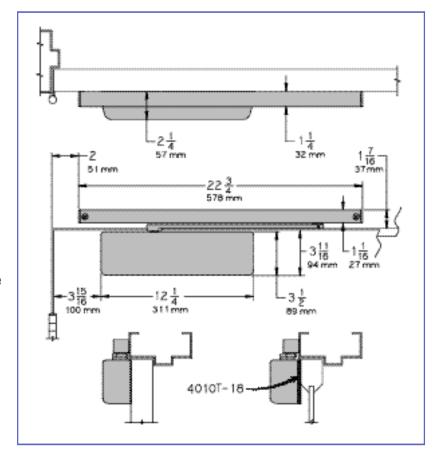
Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.

Options

- Standard track with bumper, hold-open track, hold-open track with bumper.
- Double egress arm.
- Metal cover.

Special Templates

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



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.

- ► **Reveal** should not exceed 1/8" (3 mm) for standard arm. Should not exceed 3 5/16" (84 mm) for double egress arm.
- ► **Top Rail** less than 3 3/4" (95 mm) requires PLATE, 4010T-18. Plate requires 2" (51 mm) minimum.
- ► **Head Frame** requires 1 1/2" (38 mm) minimum.
- ► Clearance of 2 1/4" (57 mm) behind door required for 90° or 180° installation.



CYLINDERS

CYLINDER, 4010T-3071

Standard, handed cast iron cylinder assembly. For various applications see "Table of Sizes" on 4010T Series page 13.

COVERS

COVER, 4010T-72

Standard, non-handed plastic cover.

METAL COVER, 4010T-72MC

Optional, handed cover. Required for plated finishes and custom powder coat finishes

ARMS

STANDARD ARM, 4010T-3077T

Handed arm.

Arm does not include track roller.

DOUBLE EGRESS ARM, 4010T-3077DE

Optional, handed arm for double egress doors and frames. Arm does not include track roller. Maximum reveal is 3 5/16" (84mm).

TRACKS

STANDARD TRACK, 4010T-3038

Standard, non hold-open, non-handed track.
Will accept hold-open clip and/or bumper assembly.

STANDARD TRACK with BUMPER, 4010T-3038B

Optional non hold-open, non-handed track with bumper assembly installed.

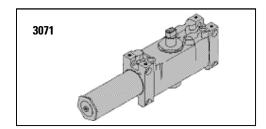
Will accept hold-open clip.

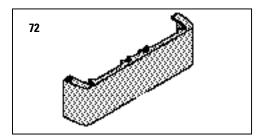
HOLD-OPEN TRACK, 4010T-3038H

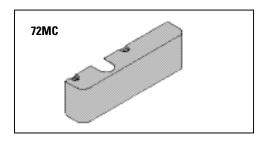
Optional, non-handed track with hold-open clip installed. Will accept bumper assembly.

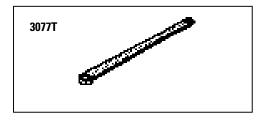
HOLD-OPEN TRACK with BUMPER, 4010T-3038HB

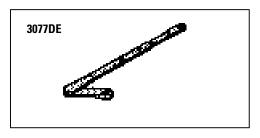
Optional, non-handed track with hold-open clip and bumper assembly installed.

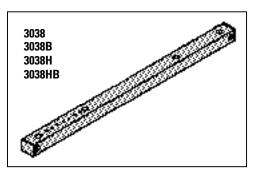












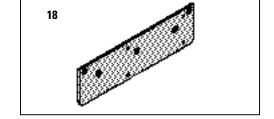
LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PRINCETON, IL, USA 61356-0100 PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com 3/10



INSTALLATION ACCESSORIES

PLATE, 4010T-18

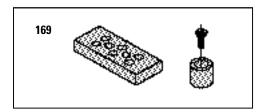
Required where top rail is less than 3 3/4" (95 mm). Plate requires minimum 2" (51 mm) top rail.



TRACK BUMPER, 4010T-169

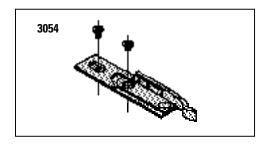
Mounts in track to assist backcheck, does not replace auxiliary stop. Limits maximum opening.

Consists of bumper, bumper post, and mounting screw.



HOLD-OPEN CLIP, 4010T-3054

Mounts in track to provide hold-open function. Hold-open point controlled by clip location. Consists of clip and mounting screws.



TRACK ROLLER, 4010T-3034

Quiet, low friction roller assembly. Shoulder dimension "X" = 1/16" (2mm).

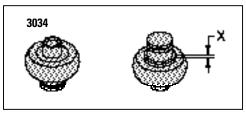




TABLE OF SIZES Select closer based on width of door. Sized 4010T series cylinders available in size 1,3 or 4. Closing power of all 4010T Series closers may be increased 15%.

Indicates recommended range of door width for closer size.

INTERIOR DOOR WIDTH



**Note: Using this closer on double-egress doors and frames requires the closer to be ordered with a "DE" suffix (i.e., 4014T DE). Standard "DE" option will accommodate pull side reveals up to 3 5/16". For deeper reveals, consult factory.

REDUCED OPENING FORCE 4010T 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.

F	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	N/A	N/A	N/A
	5.0* lbs.	4011T	4011T	4011T

^{*} Maximum opening force

HOW-TO-ORDER 4010T SERIES CLOSERS

1. SPECIFY CYLINDER SIZE
□ 4011T (ADA)
□ 4013T
□ 4014T
2. SPECIFY HAND
□ RH
□ LH
3. SPECIFY FINISH
☐ Standard Powder Coat
Aluminum, Dark Bronze , Statuary,
Light Bronze, Black, Brass.
Closer will be shipped with:
- STANDARD COVER,
- STANDARD ARM,
- TRACK ROLLER,
- STANDARD TRACK,
- SELF-REAMING and TAPPING SCREWS,
unless options listed below are selected.
CLOSER OPTIONS
COVER
☐ Metal (MC)
☐ Metal (MC) ARM
☐ Metal (MC)ARM☐ Double Egress (DE)**
 □ Metal (MC) ARM □ Double Egress (DE)** TRACK
 □ Metal (MC) ARM □ Double Egress (DE)** TRACK □ Regular with Bumper (BUMPER)
 □ Metal (MC) ARM □ Double Egress (DE)** TRACK □ Regular with Bumper (BUMPER) □ Hold-Open (HO)

 Metal (MC) ARM Double Egress (DE)★★ TRACK Regular with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) FINISH Custom Powder Coat (RAL)

 Metal (MC) ARM Double Egress (DE)★★ TRACK Regular with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) FINISH Custom Powder Coat (RAL)
 Metal (MC) ARM Double Egress (DE)★★ TRACK Regular with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) FINISH Custom Powder Coat (RAL)
 Metal (MC) ARM Double Egress (DE)★★ TRACK Regular with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) FINISH Custom Powder Coat (RAL)

* Specify door thickness if other than 1 3/4".



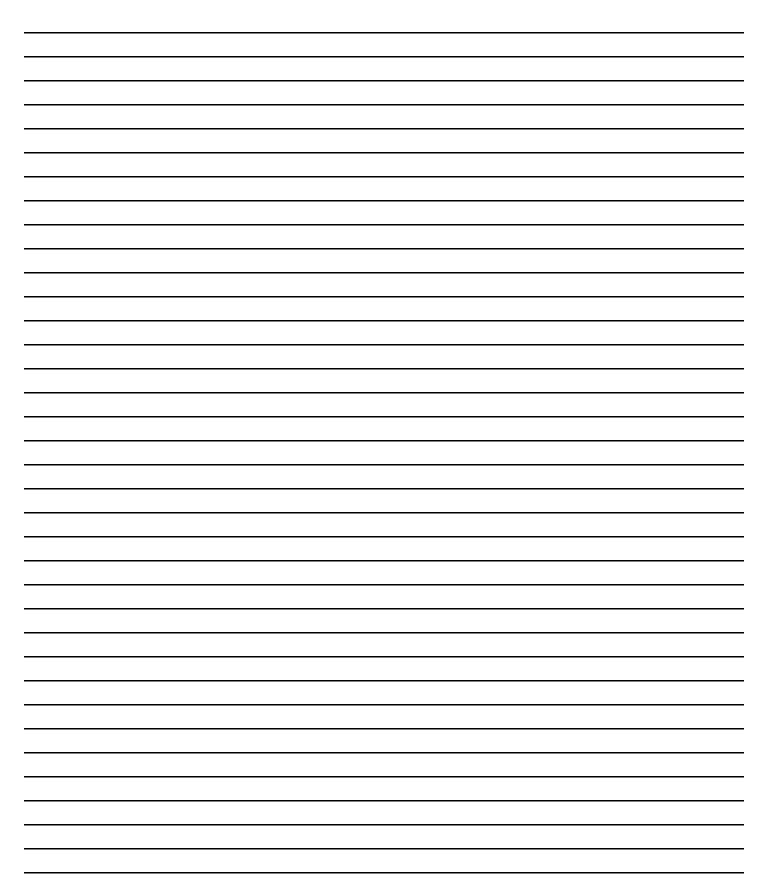
INSTALLATION ACCESSORY

☐ Plate, 4010T-18

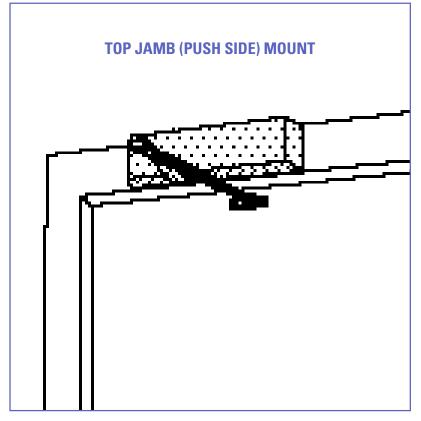
SPECIAL TEMPLATE

ST-____

Notes



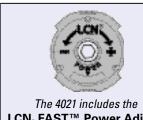




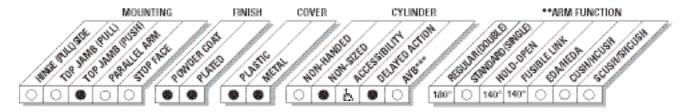
- ► Standard 4020 series closer is shipped with regular arm, standard plastic cover, and self reaming and tapping screws. See 4020 Series page 17 for options.
- ► Size 6 cylinder for interior doors to 5'0" and exterior doors to 4'0".
- ► Non-sized cylinder (4021) adjustable for interior doors to 4'6" and exterior doors to 3'6".
- ► Closer mounts top jamb (push side), specify right or left swinging door.
- ► 4021 cylinder meets ADA requirements. See 4020 Series page 18.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► The 4020 Series is UL and cUL listed with regular or fusible link arms for self-closing doors.
- ► Tested and certified under ANSI Standard A156.4, grade one.

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

- ► Ten Million Cycles
- Cast Iron
- ► Forged Steel Main Arm
- ► Double Heat Treated Steel **Pinion**
- ► All Weather Fluid
- ► LCN® Fast™ Power Adjust
- ► Fast & Accurate Installation



LCN_® FAST™ Power Adjust, a revolutionary visual indicator for Spring Power Adjustment.



- Available O 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

TOP JAMB (PUSH SIDE) MOUNTING

MAXIMUM OPENING

Can be templated for 100° ,

- $(\widehat{A}) = 6'' (152 \text{ mm})$
- (B) = 12 3/8" (314 mm)

140°,

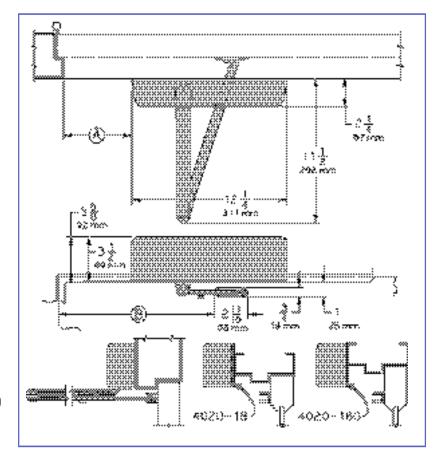
- (A) = 4'' (102 mm)
- (B) = 10 3/8" (264 mm)

or 180°.

- (A) = 2'' (51 mm)
- (B) = 83/8" (213 mm)

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



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point or where the door cannot swing 180°.
- ▶ Reveal of 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 S H O E (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) minimum.
- ► **Top Rail** 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 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.

Options

- Size 6 or non-sized cylinder.
- Delayed action cylinder.
- ► Hold-open, or fusible link arm.
- Metal cover.

Special Templates

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



CYLINDERS

CYLINDER, 4020-3071

Standard, handed cast iron cylinder assembly. For various applications see "Table of Sizes" on 4020 Series page 18.

COVERS

COVER, 4020-72

Standard, handed plastic cover.

METAL COVER, 4020-72MC

Optional, handed cover. Required for plated finishes and custom powder coat finishes.

ARMS

REGULAR ARM, 4020-3077

Non-handed arm.

LONG ARM, 4020-3077L

Optional non-handed arm includes 4020-79LR for deep reveals. (see page 16 for allowable reveals)

HOLD-OPEN ARM, 4020-3049

Optional, handed arm provides hold-open function, adjustable at elbow. 5 3/4" (146 mm) maximum reveal, 140° hold open.

FUSIBLE LINK ARM, 4020-3049FL

Optional, handed arm releases hold-open function, adjustable at shoe, when exposed to temperatures above 165° F. 3 7/8" (98 mm) maximum reveal. NOTE: Check local codes before specifing FL arms. NOT A LIFE SAFETY PRODUCT!

INSTALLATION ACCESSORIES

PLATE, 4020-18

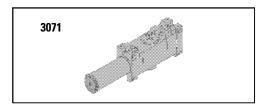
Required where head frame is less than 3 7/16" (87 mm). Plate requires minimum 1 3/4" (44 mm) minimum head frame and 2" (51 mm) top rail.

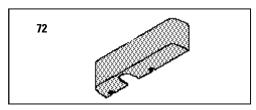
3 7/8" (98 mm) maximum reveal.

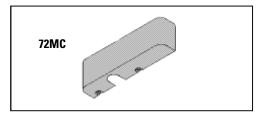
PLATE, 4020-18G

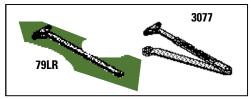
For flush ceiling condition.

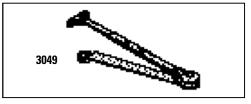
Plate requires minimum 1 3/4" (44 mm) minimum head frame and 2 3/4" (70 mm) top rail.

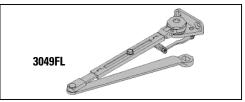


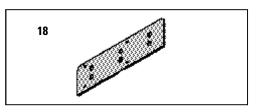


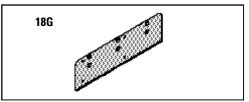












LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PRINCETON, IL, USA 61356-0100 PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com



TABLE OF SIZES Select closer based on width of door.

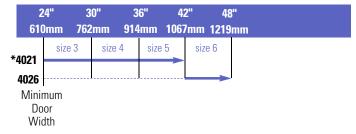
The spring power of non-sized 4021 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3.

Sized 4020 series cylinder available in size 6.

Delayed action not available with 4026 cylinder.

Indicates recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH



INTERIOR DOOR WIDTH

2	24"	34	l" 38	3" 48	3" 54"	60"	
61	Omm	864	mm 965	mm 1219	mm 1372n	nm 1524mm	
*4021	size 2		size 3	size 4	size 5	size 6	
4026	imum		teuih∆ *	able Size 1 thru !]	-	
Door Width			rajust	ubio 0120 1 tilla (,		

REDUCED OPENING FORCE 4020 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"
Ė	8.5* lbs.	4021	4021	4021
	5.0* lbs.	4021	4021	4021

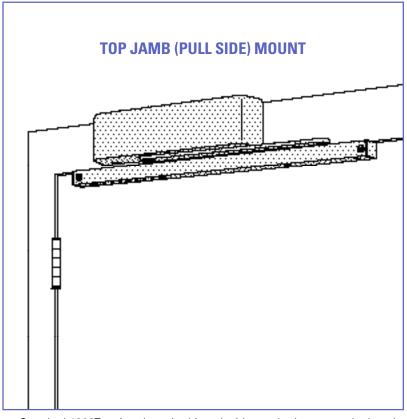
^{*} Maximum opening force

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 COVER,	
- REGULAR ARM,	
- SELF-REAMING and TAPPING SCREWS,	
unless options listed below are selected.	
uniess 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	
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'	٠.
INSTALLATION ACCESSORIES	
☐ Plate, 4020-18	

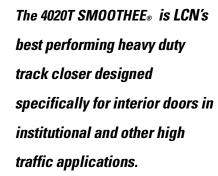


□ Plate, 4020-18GSPECIAL TEMPLATE□ ST-_____

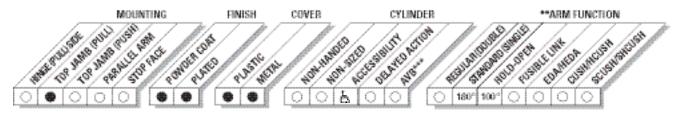


► Standard 4020T series closer is shipped with standard arm, standard track, track roller, standard plastic cover, and self reaming and tapping screws. See 4020T Series pages 21 & 22 for options.

- Sized cylinders for interior doors to 4'0".
- ► Closer mounts top jamb (pull side), specify right or left swinging door.
- ► Closers to meet ADA requirements. See 4020T Series page 23.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- ► Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► The 4020T Series is UL and cUL listed with a standard track for selfclosing doors.
- ► Tested and certified under ANSI Standard A156.4, grade one.



- Cast Iron
- ► Forged Steel Arm
- ► Double Heat Treated Steel **Pinion**
- All Weather Fluid
- ► Fast & Accurate Installation
- UL & cUL Listed



- Available O 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



TOP JAMB (PULL SIDE) MOUNTING

MAXIMUM OPENING

Templating allows 180° with standard track arm, limited to 100° with optional bumper installed.

Consult factory if door will be held open at 180°

Hold-open points at 80°, 85°, 90°, 95°, or 100° with hold-open tracks.

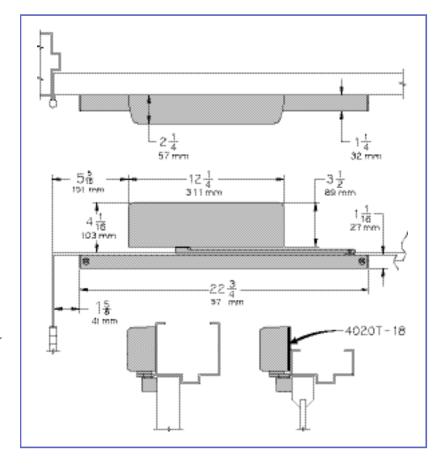
Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.

Options

- Standard track with bumper, hold-open track, hold-open track with bumper.
- Metal cover.

Special Templates

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



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.

- ► **Reveal** should not exceed 1/8" (3 mm).
- ► **Head Frame** less than 3 7/8" (98 mm), requires PLATE, 4020T-18. Plate requires 1 3/4" (44 mm) minimum.
- ► Clearance of 1 1/2" (38 mm) behind door required for 90° or 180° installation.



CYLINDERS

CYLINDER, 4020T-3071

Standard, handed cast iron cylinder assembly. For various applications see "Table of Sizes" on 4020T Series page 23.

COVERS

COVER, 4020T-72

Standard, handed plastic cover.

METAL COVER, 4020T-72MC

Optional, handed cover. Required for plated finishes and custom powder coat finishes.

ARMS

STANDARD ARM, 4020T-3077T

Handed arm.

Roller not included with arm.

TRACKS

STANDARD TRACK, 4020T-3038

Standard, non hold-open, non-handed track.
Will accept hold-open clip and/or bumper assembly.

STANDARD TRACK with BUMPER, 4020T-3038B

Optional non hold-open, non-handed track with bumper assembly installed.

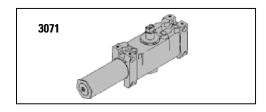
Will accept hold-open clip.

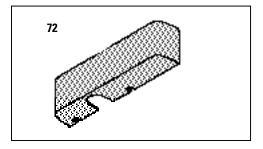
HOLD-OPEN TRACK, 4020T-3038H

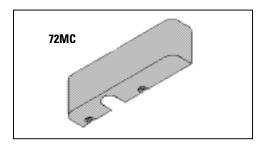
Optional, non-handed track with hold-open clip installed. Will accept bumper assembly.

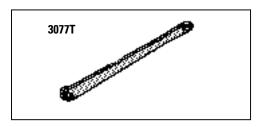
HOLD-OPEN TRACK with BUMPER, 4020T-3038HB

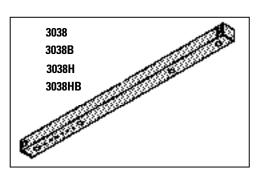
Optional, non-handed track with hold-open clip and bumper assembly installed.









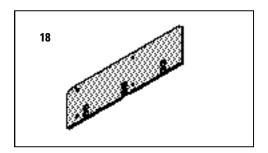




INSTALLATION ACCESSORIES

PLATE, 4020T-18

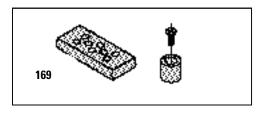
Required where head frame is less than 3 7/8" (98 mm). Plate requires minimum 1 3/4" (44 mm) frame face.



TRACK BUMPER, 4020T-169

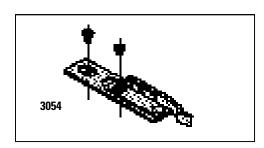
Mounts in track to assist backcheck, not replace auxiliary stop. Limits maximum opening.

Consists of bumper, bumper post, and mounting screw.



HOLD-OPEN CLIP, 4020T-3054

Mounts in track to provide hold-open function. Hold-open point controlled by clip location. Consists of clip and mounting screws.



TRACK ROLLER, 4020T-3034

Quiet, low friction roller assembly. Shoulder dimension "X"= 1/16" (2mm).

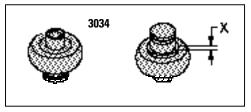




TABLE OF SIZES Select closer based on width of door. 4020T Series cylinders available in size 1, 3 or 4. Closing power of all 4020T Series closers may be increased 15%. Specify next higher size closer where strong drafts exist

Indicates recommended range of door width for closer size.

INTERIOR DOOR WIDTH



REDUCED OPENING FORCE 4020T 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"
F	8.5* lbs.	N/A	N/A	N/A
	5.0* lbs.	4021T	4021T	4021T

^{*} Maximum opening force

HOW-TO-ORDER 4020T SERIES CLOSERS

I. SELECT CYLINDER SIZE
□ 4021T (ADA)
□ 4023T
□ 4024T
2. SPECIFY HAND
□ RH
□ LH
3. SPECIFY FINISH
☐ Standard Powder Coat
Aluminum, Dark Bronze , Statuary,
Light Bronze, Black, Brass.
Closer will be shipped with:
- STANDARD COVER,
- STANDARD ARM,
- TRACK ROLLER,
- STANDARD TRACK,
- SELF-REAMING and TAPPING SCREWS
unless options listed below are selected.
umess options hated below are selected.
CLOSER OPTIONS
COVER
□ Metal (MC)
FINISH
☐ Custom Powder Coat (RAL)
(handed metal cover required)
□ Plated Finish, US
(handed metal cover required)
□ SRI primer
TRACK
☐ Standard with Bumper (BUMPER)
□ Hold-Open (HO)
☐ Hold-Open with Bumper (HBUMPER)
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 ACCESSORY

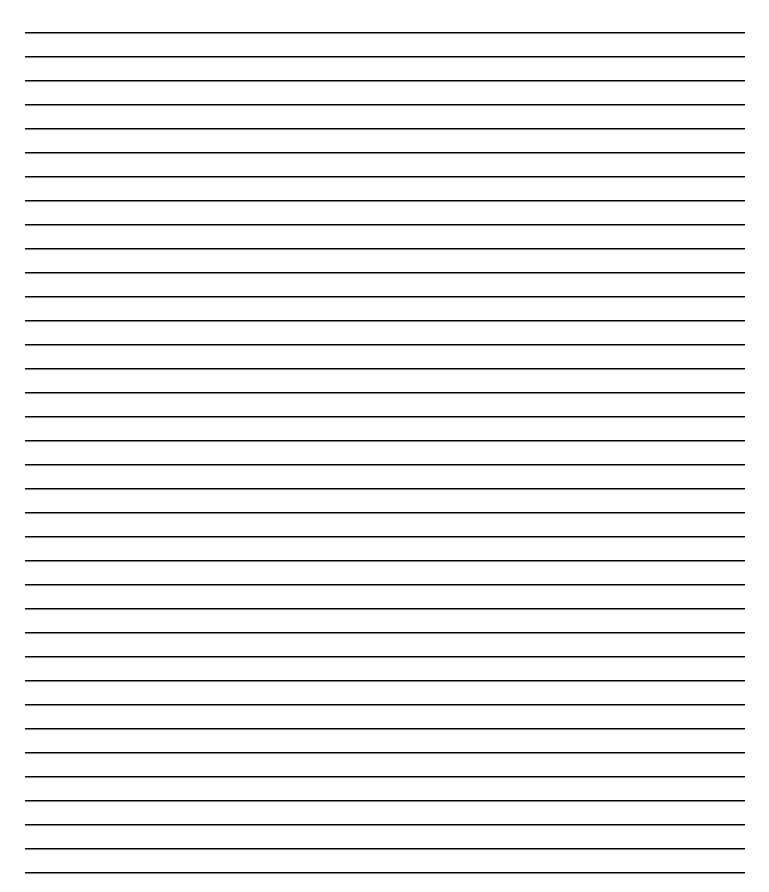


☐ Plate, 4020T-18

SPECIAL TEMPLATE

□ ST- _____

Notes



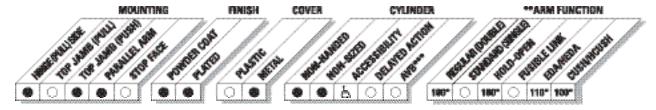


CLOSER MOUNTS
*HINGE (PULL) SIDE
TOP JAMB (PUSH SIDE)
PARALLEL (PUSH SIDE)

*HINGE (pull) side mount shown

The 4031 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.

- Cast Iron
- ► Forged Steel Main Arm
- Heat Treated Steel Pinion
- All Weather Fluid
- ► UL & cUL Listed
- ► Standard 4030 series closer is shipped with forged regular arm, metal cover and wood/self-tapping machine screw pack. See 4030 Series pages 30 & 31 for options.
- Non-sized (1-4) 4031 cylinder for exterior doors to 36" (914 mm) and interior doors to 48" (1219 mm).
- Closer mounts hinge side, top jamb, and parallel arm, on either right or left swinging doors.
- ► Closer meets ADA requirements. See 4030 Series page 32.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► The 4030 Series is UL and cUL listed for Self-closing doors without hold-open.
- ► Tested and certified under ANSI Standard A156.4, grade one.



- Available
- Not available
- Loser 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

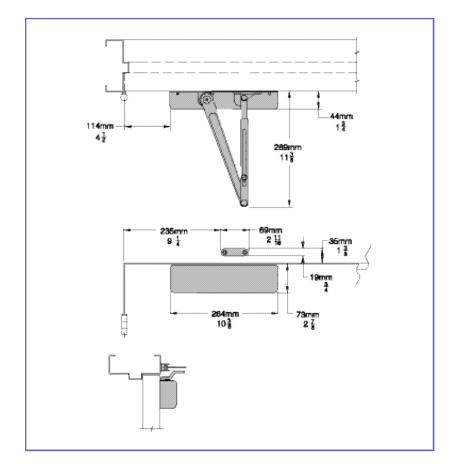


HINGE (PULL) SIDE MOUNTING

MAXIMUM OPENING

Can be templated for 180° .

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



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.
- ► **Reveal** should not exceed 3/16" (5 mm) for regular arm or 3/16" (5 mm) for hold-open arm.
- ► **Top Rail** requires 2 7/8" (73 mm) minimum.
- ► **Clearance** of 1 3/4" (44 mm), behind door required for installation.

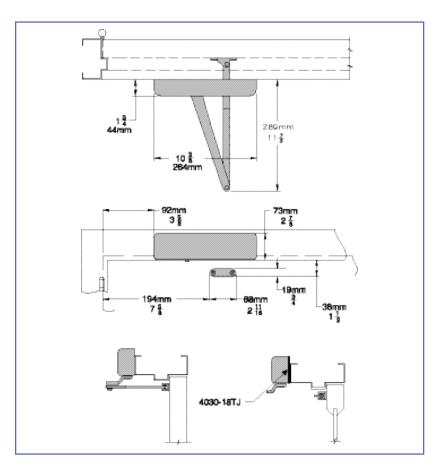
Options

► Hold-open arm.

Special Templates

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





TOP JAMB (PUSH SIDE) MOUNTING

MAXIMUM OPENING

Can be templated for 180°.

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

- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point or where the door cannot swing 180°.
- ► **Reveal** up to 3 1/2" (89 mm) allows 180° opening. Reveal up to 7 1/2" (191 mm) with long arm allows for 140° opening.
- ► **Top Rail** requires 1 1/2" (38 mm) minimum from stop.
- ► **Head Frame** less than 2 1/4" (57 mm) requires PLATE, 4030-18TJ. Plate requires 1 1/2" (38 mm) minimum.

Options

- Hold-open arm.
- ► Long arm.
- ► Long Hold-open arm.

Special Templates

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



PARALLEL ARM (PUSH SIDE) MOUNTING

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.

MAXIMUM OPENING

REGULAR or HOLD-OPEN arms can be templated for 180°.

EDA template allows 110° maximum opening. Hold-open points up to maximum opening with hold-open arm.

- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing maximum opening.
- ► Clearance for 4030-62PA shoe is 4" (102 mm) from door face. EDA arm is 5 1/2" (140 mm) from door face.
- ► **Top Rail** less than 5" (127 mm) measured from the stop requires PLATE, 4030-18PA. Plate requires 1 3/4" (44 mm) minimum.
- ► **Stop Width** minimum 1" (25 mm).
- ► **Head Frame** flush or single rabetted requires PA SHOE ADAPTER, 4030-419.
- ► **BLADE STOP** clearance, requires 1/2" (13 mm) BLADE STOP SPACER. 4030-61.
- Auxiliary Shoe 4030-62A allows installation of regular arm with overhead holder/stop. Special templating required.
- ► **EDA ARM** requires SHOE SUPPORT, 4030-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm).

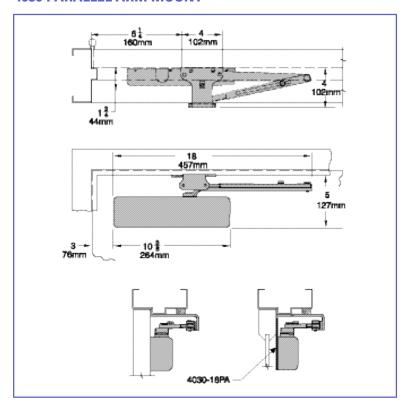
Options

► Hold-open, EDA, HEDA, CUSH or HCUSH arm.

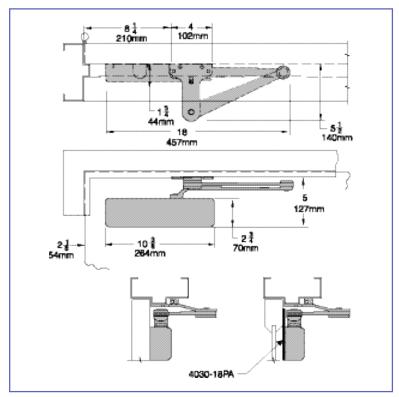
Special Templates

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

4030 PARALLEL ARM MOUNT



4030 EDA MOUNT



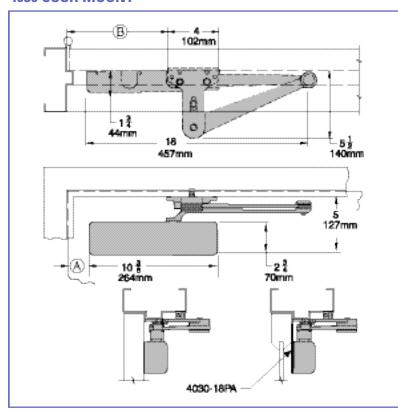
4030 closers ordered with EDA arms include 4030-201 FIFTH HOLE SPACER to support the shoe.



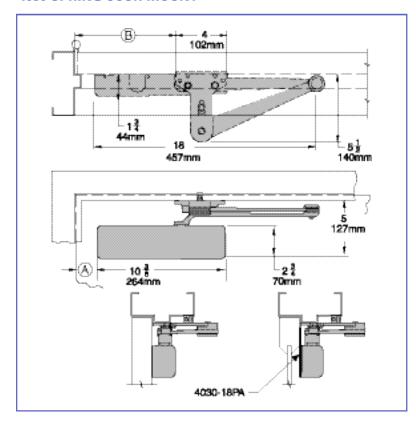
LCN CLOSERS PHOI
121 W. RAILROAD AVE. FAX
P.O. BOX 100 www
PRINCETON, IL, USA 61356-0100 3/10

PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com

4030 CUSH MOUNT



4030 SPRING CUSH MOUNT



CUSH-N-STOP or SPRING CUSH MOUNTING

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

MAXIMUM OPENING

CUSH and SPRING CUSH arms can be templated for maximum opening/hold-open point at 85°,

- (A) = 35/8" (92 mm)
- (B) = 9 3/4" (248 mm)

90°,

- (A) = 3 " (76 mm)
- $(B) = 9 \frac{1}{8}$ " (232 mm)

or 100°*.

- (A) = 17/8" (48 mm)
- (B) = 8 " (203 mm)

Spring Cush hold-open points are approximately 5° less than templated stop point.

Clearance for CUSH or SPRING CUSH shoe is 5 1/2" (140 mm) from door face.

Head Frame flush or rabetted requires CUSH FLUSH PANEL ADAPTER, 4030-419.

CUSH or SPRING CUSH ARM

requires SHOE SUPPORT, 4030-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm).



^{*100°} mounting will not work with swing clear hinges.

CYLINDERS

CYLINDER, 4031-3071

Standard, non-handed cast iron cylinder assembly.

ARMS

REGULAR ARM, 4030-3077

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

LIGHT DUTY ARM, 4030-3077LD

Optional non-handed stamped arm mounts hinge side, top jamb or parallel arm (62PA required).

PA SHOE, 4030-62PA

Required for parallel arm mounting.

LONG ARM, 4030-3077L

Optional non-handed arm includes LONG ROD AND SHOE, 4030-79LR for top jamb mount with deep reveals.

HOLD-OPEN ARM, 4030-3049

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

LONG HOLD-OPEN ARM, 4030-3049L

Optional non-handed arm includes LONG HEAD AND TUBE, 4030-3048L for top jamb mount with deep reveals.

EXTRA DUTY ARM, 4030-3077EDA

Optional, non-handed parallel arm features solid forged steel main and forearm for potentially abusive installations.

HOLD-OPEN EDA ARM, 4030-3049EDA

Optional handed arm, provides hold-open function adjustable at shoe.

CUSH-N-STOP® ARM, 4030-3077CNS

Optional, non-handed parallel arm features solid forged steel main arm and forearm with stop in soffit shoe.

HOLD-OPEN CUSH ARM, 4030-3049CNS

Optional non-handed arm, provides hold-open function with templated stop/hold-open points. Handle controls hold-open function.

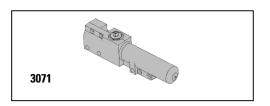
SPRING CUSH ARM,4030-3077SCNS

Optional, non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe.

SPRING HCUSH ARM, 4030-3049SCNS

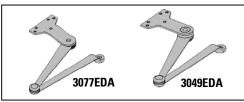
Optional, non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe. Handle controls hold-open function.

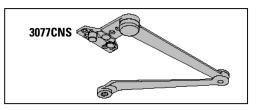


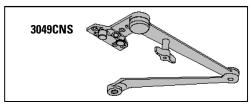


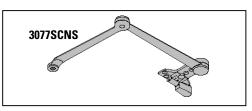


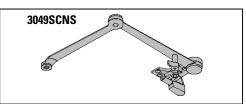












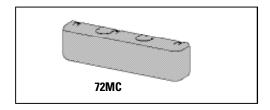
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PRINCETON, IL, USA 61356-0100 3/10

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COVERS

COVER, 4030-72MC

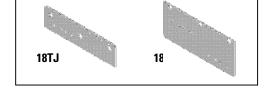
Non-handed metal cover.



INSTALLATION ACCESSORIES

PLATE, 4030-18TJ

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



PLATE, 4030-18PA

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

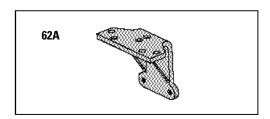


Provide anchorage for fifth screw used with CUSH arms where reveal is less than 3 1/16" (78 mm).



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

AUXILIARY SHOE, 4030-62A requires a top rail of 7" (178 mm). Optional shoe replaces -62PA for parallel arm mounting of regular arm with some overhead holder/stop. Consult factory.



PA FLUSH PANEL ADAPTER, 4030-419

Provides horizontal mounting surface for CUSH shoe on single rabetted or flush frame.

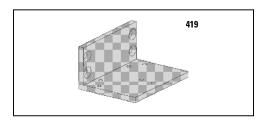
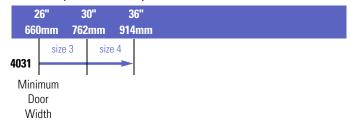




TABLE OF SIZES Non-sized 4031 cylinder is adjustable from sizes 1 to 4 and is shipped set to size 3.

Indicates recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH



INTERIOR DOOR WIDTH

4031 size 2 size 3 size 4		6" mm	34" 864mm	38" 965mm	48' 1219 ₁	
4031	4021	size 2	size	e 3	size 4	
Minimum Door	Mini					

REDUCED OPENING FORCE 4030 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 affecting closing power.

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

^{*} Maximum opening force

HOW-TO-ORDER 4030 SERIES CLOSERS

1. SELECT FINISH

☐ Standard Powder Coat
Aluminum, Dark Bronze, Statuary,
Light Bronze, Black, Brass.

Closer will be shipped with:

- STANDARD CYLINDER,
- STANDARD METAL COVER,
- REGULAR ARM
- Wood and Self-tapping Machine screw pack unless options listed below are indicated.

CLOSER OPTIONS

INISH		
_	_	

LINISH
☐ Custom Powder Coat (RAL)
☐ Plated Finish, US
□ SRI primer
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) ☐ FDA
☐ HEDA (specify right or left hand)
☐ Cush-N-Stop (CUSH)
☐ HCush-N-Stop (HCUSH)
□ Spring Cush (SCUSH)
☐ Spring HCush (SHCUSH)
OPTIONAL SCREW PACKS
☐ TB*, Wood & Machine Screw (TBWMS)
* Specify door thickness if other than 1 3/4".

INSTALLATION ACCESSORIES

☐ Plate	e, 4030-18T	J
☐ Plate	e, 4030-18P	Α
_ 0110		

☐ CUSH Shoe Support, 4030-30

☐ Blade Stop Spacer, 4030-61

☐ Auxiliary Shoe, 4030-62A

☐ PA Flush Panel Adapter, 4030-419

SPECIAL TEMPLATE

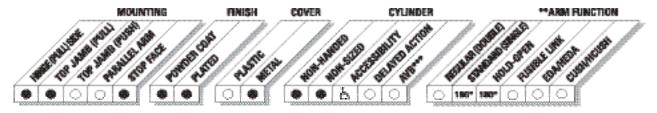
□ ST- ___





The 4031T is a single lever (track)
arm, surface mounted closer
designed for interior use on
narrow head frames and top rails.
The choice of three mountings and
ease of installation offer a
versatile solution to door control in
moderate traffic applications. The
4030T compliments the heavy duty
4000 Series.

- Cast Iron
- ► Heat Treated Steel Pinion
- All Weather Fluid
- UL & cUL Listed
- Standard 4031T series closer is shipped with a standard arm, metal cover, a standard track and wood/self-tapping machine screw pack. See 4030T Series page 37 for options.
- ► Non-sized 4031T cylinder for interior doors to 38" (965 mm).
- Closer mounts pull side on door, pull side on frame and push side on door, on either right or left swinging doors.
- Closer meets ADA requirements. See 4030T Series page 38.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► The 4030 Series is UL and cUL listed for Self-closing doors without hold-open.
- ► Tested and certified under ANSI Standard A156.4, grade one.



- Available
- O Not available
- 占 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



HINGE (PULL) SIDE MOUNTING

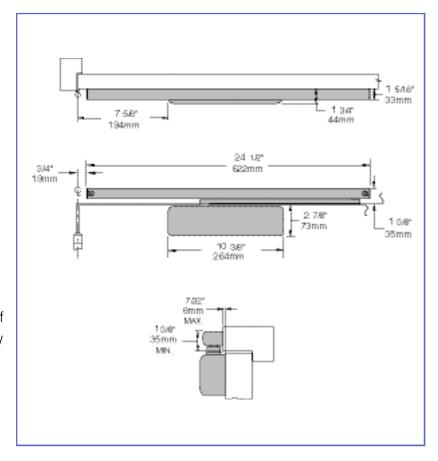
MAXIMUM OPENING

Can be templated for 180° .

Consult factory if door will be held open at 180°

Hold-open points up to maximum opening with hold-open option.

Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.
- ► Reveal should not exceed 7/32" (6 mm).
- ► **Top Rail** requires 2 7/8" (73 mm) minimum.
- ► **Clearance** of 1 3/4" (44 mm) behind door required for installation.

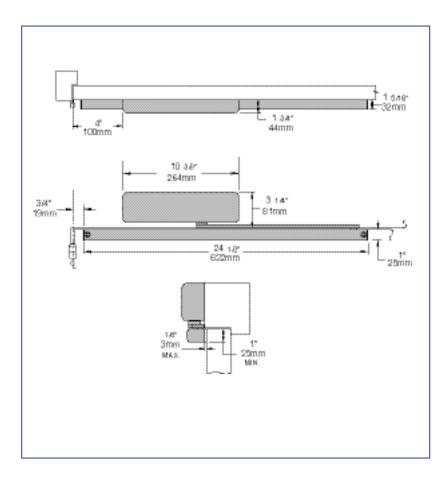
Options

► Hold-open track.

Special Templates

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





- Butt Hinges should not exceed 5" (127 mm) in width.
- Auxiliary Stop is recommended at hold-open point or where the door cannot swing 180°.
- ► **Reveal** should not exceed 1/8" (3 mm).
- ► **Top Rail** requires 1" (25 mm) minimum.
- ► **Head Frame** requires 2 7/8" (73 mm) minimum.

TOP JAMB (PULL SIDE) MOUNTING

MAXIMUM OPENING

Can be templated for 180°.

Consult factory if door will be held open at 180°

Hold-open points up to maximum opening with hold-open option.

Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.

Options

Hold-open track.

Special Templates

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



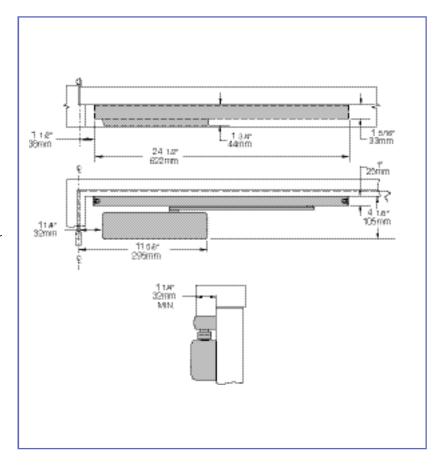
STOP FACE (PUSH SIDE) MOUNTING

MAXIMUM OPENING

Can be templated for 110°.

Hold-open points up to maximum opening with hold-open option.

Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.



- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- Auxiliary Stop is recommended at hold-open point or where a door cannot swing 110°.
- Clearance projects 1 3/4" (44 mm).
- ► **Top Rail** requires 4 1/8" (105mm) minimum measured from the stop.
- ► **Stop Width** minimum 1 1/4" (32 mm).

Options

► Hold-open track.

Special Templates

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



CYLINDERS

CYLINDER, 4031T-3071

Standard, non-handed cast iron cylinder assembly.

COVERS

COVER, 4030T-72MC

Non-handed metal cover.

ARMS

STANDARD ARM, 4030T-3077T

Non-handed single lever arm mounts hinge side, top jamb or stop face. Track roller included with arm.

STANDARD TRACK, 4030T-3038

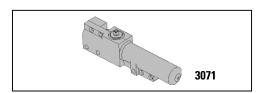
Standard, non hold-open, non-handed track mounts on either side of the door. Will accept hold-open clip.

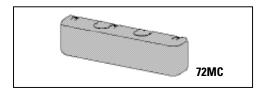
HOLD-OPEN TRACK, 4030T-3038H

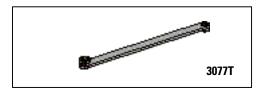
Optional non-handed hold-open track mounts on either side of the door. Comes with 4030T-3054 Hold-open clip.

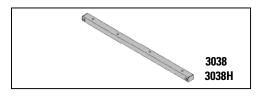
HOLD-OPEN CLIP, 4030T-3054

Mounts in track to provide hold-open function. Hold-open point controlled by clip location.









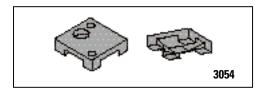




TABLE OF SIZES Non-sized 4031T cylinder is adjustable from sizes 1 to 3 and is shipped set to size 3.

Indicates recommended range of door width for closer size.

INTERIOR DOOR WIDTH



REDUCED OPENING FORCE 4030T 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 affecting closing power.

	DOOR WIDTH	36"	42"	48"
<u>6</u>	8.5* lbs.	N/A	N/A	N/A
_	5.0* lbs.	4031T	4031T	4031T

^{*} Maximum opening force

HOW-TO-ORDER 4030T SERIES CLOSERS

1. SELECT FINISH

☐ Standard Powder Coat
Aluminum, Dark Bronze , Statuary,
Light Bronze, Black, Brass.

Closer will be shipped with:

- STANDARD CYLINDER
- STANDARD METAL COVER,
- STANDARD TRACK
- STANDARD ARM
- TRACK ROLLER
- Wood and Self-tapping Machine screw pack unless options listed below are indicated.

CLOSER OPTIONS

TRACK
☐ Hold-open (H)
FINISH
☐ Custom Powder Coat (RAL)
☐ Plated Finish, US
☐ SRI primer
SCREW PACK
☐ TB*, Wood & Machine Screws (TBWMS)



CLOSER MOUNTS
HINGE (PULL SIDE) (Shown)
TOP JAMB (PUSH SIDE)
PARALLEL ARM (PUSH SIDE)

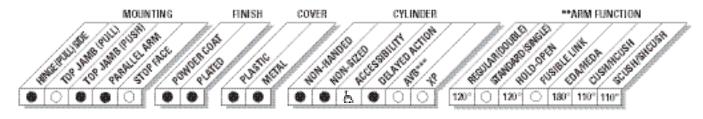
- ► Standard 4040 series closer shipped with regular arm, standard plastic clip-on cover, and self reaming and tapping screws. See 4040 Series pages 45-47 for options.
- ► Non-sized cylinder is adjustable for interior doors to 5′0″ and exterior doors to 4′0″.
- Closer mounts hinge side, top jamb, and parallel arm w/PA Shoe on either right or left swinging doors.
- Closers to meet ADA requirements. See 4040 Series page 48.
- Standard or optional custom powder coat finish.
- Optional plated finish on cover, arm, and fasteners.
- Optional SRI primer for installations in corrosive conditions.
- ► UL and cUL listed for self-closing doors without hold-open.
- ► Tested and certified under ANSI Standard A156.4, grade one.

The 4040 SUPER SMOOTHEE® is LCN's most flexible heavy duty closer designed for institutional and other rugged high traffic applications.

- ► Ten Million Cycles
- Cast Iron
- ► Forged Steel Arm
- ► Double Heat Treated Steel Pinion
- ► All Weather Fluid
- ► Non-Handed
- ► LCN_® Fast[™] Power Adjust
- Fast & Accurate Installation
- ► UL & cUL Listed
- ► For XP See Page 40

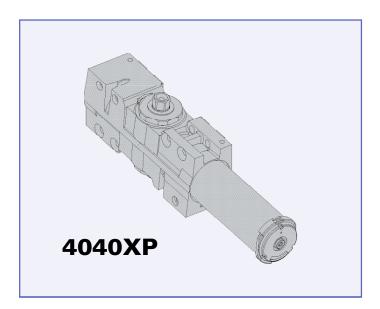


The 4040 Series includes the LCN_o FAST™ Power Adjust, a revolutionary visual indicator for Spring Power Adjustment.



- AvailableNot available
- Loser available with less than 5.0 lbs. opening force on 36" door.

 **Maximum opening/hold-open point with standard template.
- *** Advanced Variable Backcheck



- Non-sized cylinder is adjustable for interior doors to 5'0" and exterior doors to 4'0".
- Closer mounts parallel arm (EDA arm) on either right or left swinging doors.
- Optional hinge side and top jamb mount with optional regular arm.
- Closers to meet ADA requirements. See 4040XP Series page 49.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- ► Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► UL and cUL listed for self-closing doors without hold-open.
- ► 4040XP can be used with all 4041 accessories. See pages 45-47 for options.

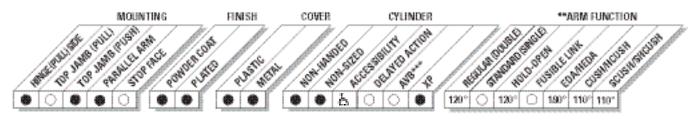
4040XP

The 4040XP is LCN's most durable heavy duty closer designed for the most demanding, high use and abuse applications.

- ► 44% increased bearing load capacity
- ► Strongest pinion ever- at 3/4" journal diameter
- ► Widest bearing ever- at 5/8"
- ► Stronger pinion teeth
- ► New V-shield[™] seal with longer life
- ► XP = eXtra Protection in real world applications
- ► Cast Iron
- ► Forged Steel Arm
- ► Double Heat Treated Steel Pinion
- ► All Weather Fluid
- ► Non-Handed
- ► LCN® Fast™ Power Adjust
- ► Fast & Accurate Installation
- ► UL & cUL Listed
- ► Tested and certified under ANSI Standard A156.4, grade one



The 4040 Series includes the LCN_□ FAST[™] Power Adjust, a revolutionary visual indicator for Spring Power Adjustment.





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

*** Advanced Variable Backcheck

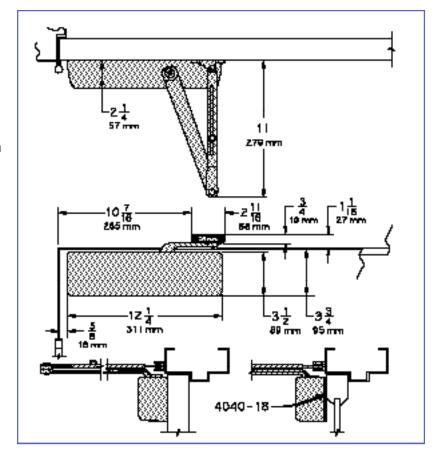
LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PRINCETON, IL, USA 61356-0100

HINGE (PULL) SIDE MOUNTING

MAXIMUM OPENING

Templating allows up to 120°.

Hold-open points 90° up to 120° with hold-open arm.



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- Auxiliary Stop is recommended at hold-open point or where a door cannot swing beyond 120°.
- ▶ **Reveal** should not exceed 3/4" (19 mm) for regular arm or hold-open arm.
- ► **Top Rail** less than 3 3/4" (95 mm) requires PLATE, 4040-18. Plate requires 2" (51 mm) minimum.
- ► **Clearance** of 2 3/8" (60 mm) behind door required for 90° installation.
- ► **Delayed Action** (not available on 4040XP) Add suffix "DEL" to selected cylinder (eg. 4041 DEL). Delays closing from 120° to 70°. Delay time adjustable up to approximately 1 minute.

Options

- ► 4040XP cylinder
- 4041 Delayed action cylinder.
- ► Hold-open arm.
- Metal cover.

Special Templates

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

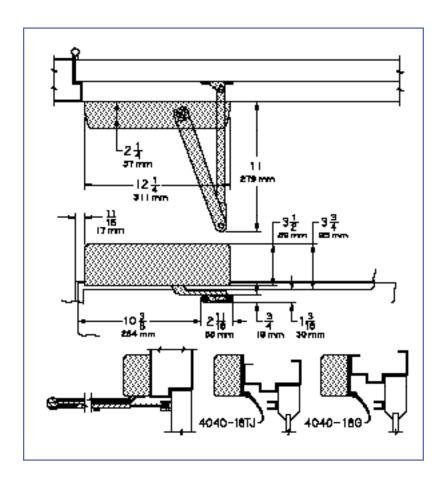


TOP JAMB (PUSH SIDE) MOUNTING

MAXIMUM OPENING

Templating allows up to 120°.

Hold-open points 85° up to 120° with hold-open arm.



- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point or where the door cannot swing 120°.
- ▶ Reveal of 2 9/16" (65 mm) allows 120° opening for REGULAR ARM or standard HOLD-OPEN ARM. 4 13/16" (122 mm) allows up to 120° opening with LONG ARM where standard rod and shoe is replaced with optional LONG ROD AND SHOE 4040-79LR. Use H-LONG ARM with LONG HEAD AND TUBE, 4040-78HL for hold-open. 8" (203 mm) allows up to 120° opening with EXTRA LONG ARM where standard rod and shoe is replaced with optional EXTRA LONG ROD AND SHOE, 4040-79ELR.
- ► **Top Rail** requires 1 1/4" (32 mm) minimum. 2 1/4" (57 mm) minimum with closer on PLATE, 4040-18TJ. 3" (76 mm) minimum with closer on PLATE, 4040-18G.
- ► **Head Frame** less than 3 1/2" (89 mm) requires PLATE, 4040-18TJ. With flush ceiling, use PLATE, 4040-18G. Either plate requires 1 3/4" (44 mm) minimum.
- ► **Delayed Action** (not available on 4040XP) Add suffix "DEL" to selected cylinder (eg. 4041 DEL). Delays closing from 120° to 80°. Delay time adjustable up to approximately 1 minute.

Options

- ► 4040XP cylinder
- ► 4041Delayed action cylinder.
- ► Long arm, extra long arm, holdopen arm, long hold-open arm.
- Metal cover.

Special Templates

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



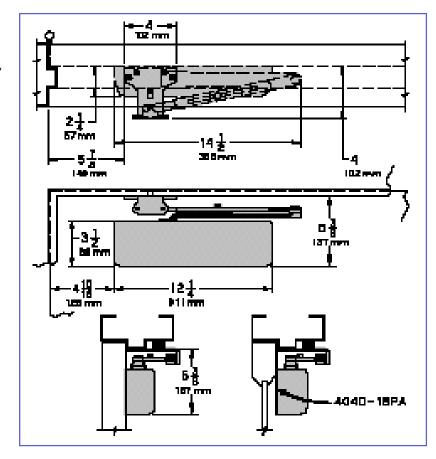
PARALLEL ARM (PUSH SIDE) MOUNTING

Optional mounting requires PA SHOE, 4040-62PA for REGULAR or HOLD-OPEN arms. Add prefix "P" to closer description (eg. P4041). P4041 closer includes 4040-201 FIFTH HOLE SPACER to support PA SHOE.

MAXIMUM OPENING

180° opening/hold-open points with all except CUSH arms.

110° opening/hold-open with CUSH arms.



- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point, where the door cannot swing 180°, or where CUSH-N-STOP arm is not used.
- ► **Clearance** for 4040-62PA shoe is 4" (102 mm) from door face. EDA shoe projects 5 1/2" (140 mm) from door face. CUSH shoe projects 6" (152 mm) from door face.
- ► **Top Rail** less than 5 3/8" (137 mm) measured from the stop requires PLATE, 4040-18PA. Plate requires 2" (51 mm) minimum from the stop.
- ► **Head Frame** flush or rabetted requires PA SHOE ADAPTER, 4040-419.
- ► **Stop Width** minimum 1" (25 mm).
- ► **Blade Stop** clearance requires 1/2" (13mm) BLADE STOP SPACER, 4040-61.
- ➤ **Delayed Action** (not available on 4040XP) Add suffix "DEL" to selected cylinder (eg. P4041 DEL). Delays time adjustable up to approximately 1 minute.

Options

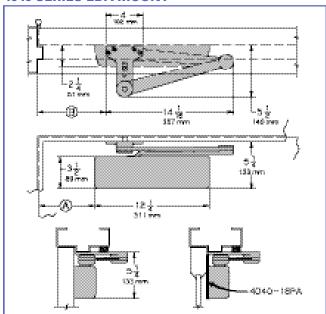
- ► 4040XP cylinder
- ► 4041Delayed action cylinder.
- ► Hold-open, EDA, HEDA, CUSH, HCUSH, SPRING CUSH, or SPRING HCUSH arm.
- Metal cover.

Special Templates

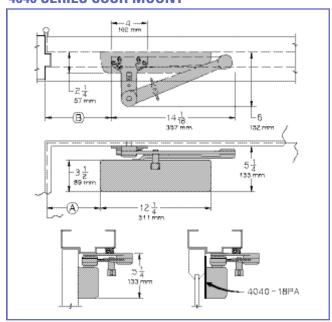
Customized installation templates or products may be available to solve unusual applications. Contact I CN for assistance.



4040 SERIES EDA MOUNT



4040 SERIES CUSH MOUNT



- Clearance for 4040-62EDA is 5 1/2" (140 mm) from door face. 6" (152 mm) for CUSH.
- ► **Head Frame** flush or rabetted requires CUSH FLUSH PANEL ADAPTER, 4040-419.
- CUSH ARM requires SHOE SUPPORT, 4040-30 for fifth screw anchorage for narrow frames.
- ► **Delayed Action** (not available on 4040XP) Add suffix "DEL" to selected cylinder (eg. 4041 DEL). Delays closing from maximum opening to; 115° with 180° template. 95° with 110° template. 85° with 100° template. 75° with 90° template.

Delay time adjustable up to approximately 1 minute.

LCN 4040 SERIES

Mounting details are the same as 4040 Series REGULAR or HOLD-OPEN except as listed below. 4040 Series closers ordered with EDA or CUSH arms include 4040-201 FIFTH HOLE SPACER to support the shoe.

MAXIMUM OPENING

EDA arm can be templated for points at: 110°,

- (A) = 6 3/8" (162 mm)
- (B) = 7 3/4" (197 mm)

or 180°.

- (A) = 27/8" (73 mm)
- $(B) = 4 \frac{1}{4}$ " (108 mm)

Hold-open points up to maximum opening with HEDA arm.

CUSH arms can be templated for opening/hold-open point at: 85°,

- \triangle = 7 15/16" (202 mm)
- (B) = 9 1/8" (232 mm)

90°,

- (A) = 7 3/16" (183 mm)
- (B) = 8 1/2" (216 mm)

100°,

- (A) = 6 1/16" (154 mm)
- $(B) = 7 \frac{1}{4}$ " (184 mm)

or 110°.

- \triangle = 5 1/16" (129 mm)
- (B) = 6.3/8" (162 mm)

Spring Cush dead stop points are approximately 5° more than templated stop point. Hold open at templated stop points.



CYLINDERS

CYLINDER, 4041-3071

Standard, non-handed cast iron cylinder assembly.

CYLINDER, 4040XP-3071

Heavy duty, non-handed cast iron cylinder assembly.

COVERS

COVER, 4040-72

Standard, non-handed plastic clip-on cover.

METAL COVER, 4040-72MC

Optional, handed cover. Required for plated finishes and custom powder coat finishes.

ARMS

REGULAR ARM, 4040-3077

Non-handed arm mounts pull side or top jamb with shallow reveal. P4041 closer includes PA SHOE, 4040-62PA required for parallel arm mounting.

PA SHOE, 4040-62PA

Required for parallel arm mounting.

LONG ARM, 4040-3077L

Optional non-handed arm includes LONG ROD AND SHOE, 4040-79LR for top jamb mount.

EXTRA LONG ARM, 4040-3077ELR

Optional non-handed arm includes EXTRA LONG ROD AND SHOE, 4040-79ELR for top jamb mount with deep reveal.

HOLD-OPEN ARM, 4040-3049

Optional, non-handed arm mounts pull side or top jamb with shallow reveal, hold-open adjustable shoe. P4041 closer includes 4040-62PA shoe required for parallel arm mounting.

LONG HOLD-OPEN ARM, 4040-3049L

Optional non-handed arm includes LONG HEAD AND TUBE, 4040-3048L for top jamb mount.

EXTRA DUTY ARM, 4040-3077EDA

Non-handed parallel arm features forged, solid steel main and forearm for potentially abusive installations.

HOLD-OPEN EXTRA DUTY ARM, 4040-3049EDA

Optional handed arm provides hold-open function, adjustable at the shoe.

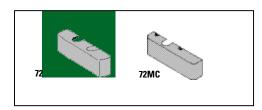
EDA ARM w/THICK HUB SHOE, 4040-3077EDAG

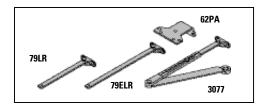
Optional for blade stop clearance, requires special templating.

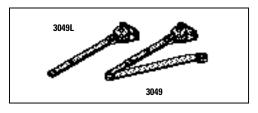
HEDA ARM w/THICK HUB SHOE, 4040-3049EDAG

Optional for blade stop clearance, requires special templating.

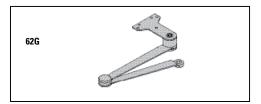














ARMS cont.

CUSH-N-STOP® ARM, 4040-3077CNS

Optional, non-handed parallel arm features solid forged steel main arm and forearm with stop in soffit shoe.

HCUSH ARM, 4040-3049CNS

Provides hold-open function with templated stop/hold-open points. Handle controls hold-open function.

SPRING CUSH ARM, 4040-3077SCNS

Optional, non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe.

SPRING HCUSH ARM, 4040-3049SCNS

Optional, non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe. Handle controls hold-open function.

INSTALLATION ACCESSORIES

PLATE, 4040-18

Required for hinge side mount where top rail is less than 3 3/4" (95 mm). Plate requires minimum 2" (51 mm) minimum top rail.

PLATE, 4040-18G

Locates top jamb mounted closer flush with top of head frame face in flush ceiling condition. Plate requires 1 3/4" (44 mm) minimum head frame.

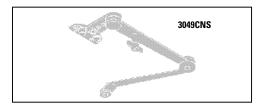
PLATE, 4040-18TJ

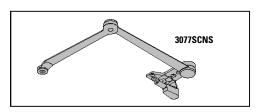
Centers top jamb mounted closer vertically on head frame where face is less than 3 1/2" (89 mm). Plate requires 1 3/4" (44 mm) minimum head frame.

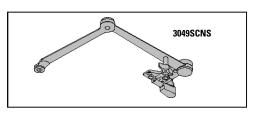
PLATE, 4040-18PA

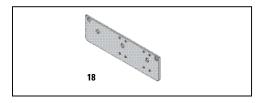
Required for parallel arm mounting where top rail is less than 5 1/2" (140 mm), measured from the stop. Plate requires 2" (51 mm) minimum top rail.

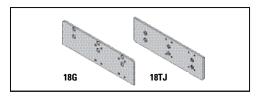
3077CNS

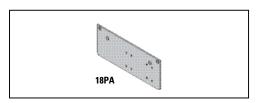














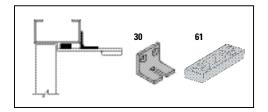
INSTALLATION ACCESSORIES cont.

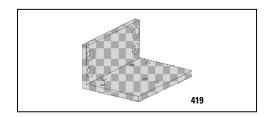
CUSH SHOE SUPPORT, 4040-30 provides anchorage for fifth screw used with CUSH arms, where reveal is less than 3 1/16" (78 mm).

BLADE STOP SPACER, 4040-61 required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop.

PA FLUSH PANEL ADAPTER, 4040-419 provides horizontal mounting surface for PA or CUSH shoe on single rabetted or flush frame.

AUXILIARY SHOE, 4040-62A requires a top rail of 7" (178 mm). Optional shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop.





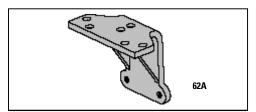




TABLE OF SIZES

4041 cylinders are adjustable from size 1 through size 6 and is shipped set to size 3

Closing power of 4040 series closers may be adjusted 50%.

Indicates recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH



INTERIOR DOOR WIDTH



REDUCED OPENING FORCE 4040 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.	4041	4041	4041
	5.0* lbs.	4041	4041	4041

^{*} Maximum opening force

HOW-TO-ORDER 4041 SERIES CLOSERS

4041 SEMILS GLOSEMS
1. SELECT FINISH.
☐ Standard Powder Coat
Aluminum, Dark Bronze , Statuary,
Light Bronze, Black, Brass.
Light biolize, black, blass.
Closer will be shipped with:
- STANDARD CLIP-ON COVER,
- REGULAR ARM,
- SELF-REAMING and TAPPING SCREWS,
unless options listed below are selected.
CLOSER OPTIONS
CYLINDER
☐ Delayed Action (DEL)
COVER
☐ Metal (specify right or left hand) (MC)
FINISH
☐ Custom Powder Coat (RAL)
(handed metal cover required)
☐ Plated Finish, US
(handed metal cover required)
☐ SRI primer
ARM ☐ Regular w/62PA (Rw/PA)
☐ Regular w/62A (R/62A)
□ Long (LONG)
☐ Extra Long (XLONG)
☐ Hold-Open (H)
☐ Hold-Open w/62PA (Hw/PA)
☐ Long Hold-Open (HLONG)
☐ EDA (optional -62G)
☐ HEDA (specify right or left hand, optional-62G)
☐ Cush-N-Stop (CUSH)
☐ HCush-N-Stop (HCUSH)
□ Spring Cush (SCUSH)□ Spring HCush (SHCUSH)
OPTIONAL SCREW PACKS
☐ TB* w/Self-Reaming and Tapping (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, 4040-18
☐ Plate, 4040-18TJ ☐ Plate, 4040-18G
☐ Plate, 4040-180



□ CUSH Shoe Support, 4040-30□ Blade Stop Spacer, 4040-61□ Auxiliary Shoe, 4040-62A□ PA Flush Panel Adapter, 4040-419

SPECIAL TEMPLATE

□ ST-

TABLE OF SIZES

4040XP cylinders are adjustable from size 1 through size 6 and is shipped set to size 3

Closing power of 4040 series closers may be adjusted 50%.

Indicates recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH



INTERIOR DOOR WIDTH



REDUCED OPENING FORCE 4040 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"
F	8.5* lbs.	4041	4041	4041
	5.0* lbs.	4041	4041	4041

^{*} Maximum opening force

HOW-TO-ORDER 4040XP SERIES CLOSERS

1. SELECT FINISH.	
☐ Standard Powder Coat	
Aluminum, Dark Bronze , Statuary,	
Light Bronze, Black, Brass.	
Closer will be shipped with: - STANDARD CLIP-ON COVER, - SPECIFY ARM WHEN ORDERING, - SELF-REAMING and TAPPING SCREWS,	
unless options listed below are selected.	
CLOSER OPTIONS COVER	
☐ Metal (specify right or left hand) (MC) FINISH	
☐ Custom Powder Coat (RAL)	
(handed metal cover required)	
☐ Plated Finish, US(handed metal cover required)	
□ SRI primer	
ARM	
☐ Regular (Rw)	
☐ Regular w/62PA (Rw/PA) ☐ Regular w/62A (R/62A)	
☐ Long (LONG)	
□ Extra Long (XLONG)	
☐ Hold-Open (H)	
☐ Hold-Open w/62PA (Hw/PA)	
☐ Long Hold-Open (HLONG)	
□ EDA (-62G)	
☐ HEDA (specify right or left hand, optional-62☐ Cush-N-Stop (CUSH)	.ن
☐ HCush-N-Stop (HCUSH)	
□ Spring Cush (SCUSH)	
☐ Spring HCush (SHCUSH)	
OPTIONAL SCREW PACKS	
☐ TB* w/Self-Reaming and Tapping (TBSRT)	
☐ Wood & Machine Screw (WMS)	
☐ TB*, Wood & Machine Screw (TBWMS) ☐ TORX Machine Screw (TORX)	
☐ TB* & TORX Machine Screw (TOTIX)	
* Specify door thickness if other than 1 3/4".	
INSTALLATION ACCESSORIES	
☐ Plate, 4040-18	
☐ Plate, 4040-18TJ	
☐ Plate, 4040-18G ☐ Plate, 4040-18PA	
ו ומנס, 4040⁻ וטו ∧	

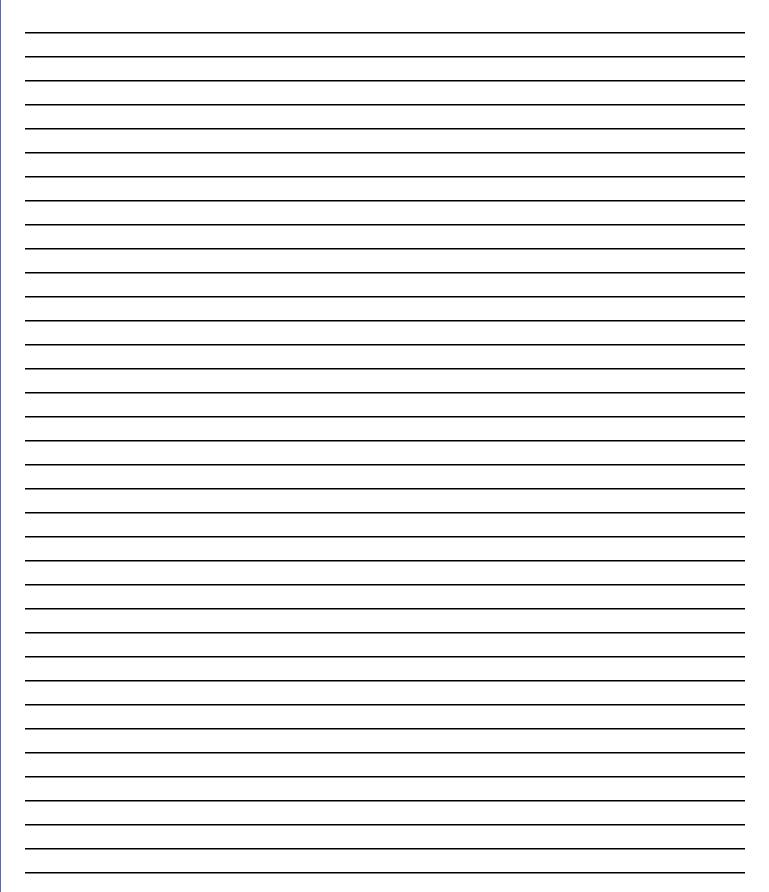


□ CUSH Shoe Support, 4040-30
□ Blade Stop Spacer, 4040-61
□ Auxiliary Shoe, 4040-62A
□ PA Flush Panel Adapter, 4040-419

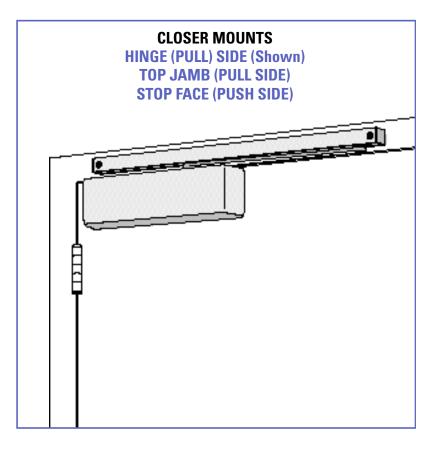
SPECIAL TEMPLATE

□ ST- ___

Notes

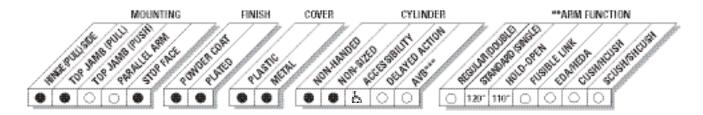






The 4040T SMOOTHEE® is LCN's most flexible heavy duty track closer designed specifically for interior doors in institutional and other rugged high traffic applications.

- Cast Iron
- ► Forged Steel Arm
- Double Heat Treated Steel Pinion
- All Weather Fluid
- ▶ Non-Handed
- ► Fast & Accurate Installation
- UL & cUL Listed
- ► Standard 4040T series closer is shipped with standard arm, standard track, track roller, standard plastic clip-on cover, and self reaming and tapping screws. See 4040T Series pages 55 & 56 for options
- ► Non-sized cylinders for interior doors to 4'0".
- ► Closer mounts pull side on door, pull side top jamb or push side on door.
- ► Closers to meet ADA requirements. See 4040T Series page 57.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► Consult factory for double egress applications.
- ► The 4040T Series is UL and cUL listed with a standard track for self-closing doors.
- ► Tested and certified under ANSI Standard A156.4, grade one.



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



LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PRINCETON, IL, USA 61356-0100

HINGE (PULL) SIDE MOUNTING

MAXIMUM OPENING

Templating allows 120° with standard arm, limited to 110° when optional bumper is installed.

Hold-open points at 85° , 90° , 95° , 100° , 105° , or 110° , depending on the clip location in track.

Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.

2 \frac{1}{4} \frac{1}{16} \fra

- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► Auxiliary Stop is recommended at hold-open point or where a door cannot swing 120°. Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.
- ► **Reveal** should not exceed 1/8" (3 mm) for standard arm.
- ► **Top Rail** less than 3 3/4" (95 mm) requires PLATE, 4040T-18. Plate requires 1 13/16" (44 mm) minimum.
- ► **Head Frame** requires 1 1/4" (32 mm) minimum.
- ► **Clearance** of 2 1/4" (57 mm) behind door required for 90° installation.

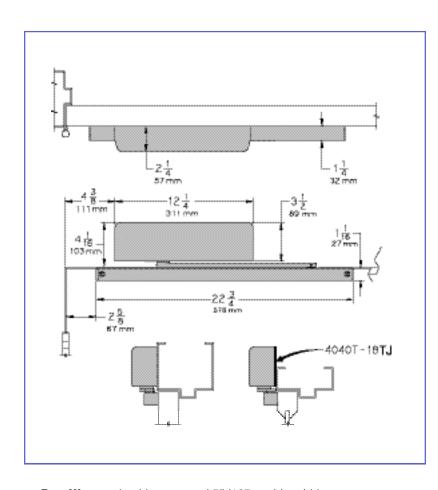
Options

- Standard track with bumper, hold-open track, hold-open track with bumper.
- Metal cover.
- ► ST required for double egress applications. Consult factory

Special Templates

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





- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing 180°. Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.
- ► **Reveal** should not exceed 1/8" (3 mm).
- ► **Head Frame** less than 3 7/8" (98 mm), requires PLATE, 4040T-18TJ. Plate requires 1 3/4" (44 mm) minimum.
- ► **Clearance** of 1 1/4" (32 mm) behind door required for 180° installation.

TOP JAMB (PULL SIDE) MOUNTING

MAXIMUM OPENING

Templating allows 180° with standard track arm, limited to 110° with optional bumper installed.

Consult factory if door will be held open at 180°

Hold-open points at 85°, 90°, 95°, 100°, 105° or 110° with hold-open tracks.

Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.

Options

- Standard track with bumper, hold-open track, hold-open track with bumper.
- ► Metal cover.

Special Templates

Customized installation templates or products may be available to solve unusual applications.

Contact I CN for assistance.



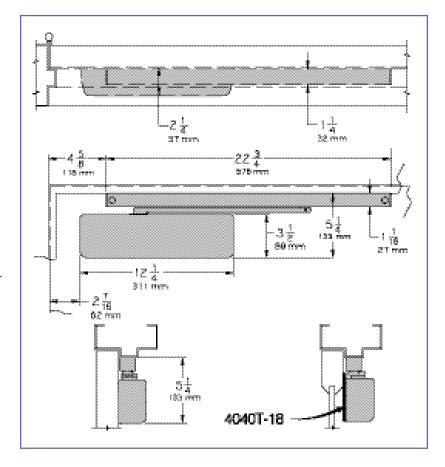
STOP FACE (PUSH SIDE) MOUNTING

MAXIMUM OPENING

Templating allows 120° with standard track arm, limited to 110° with optional bumper tracks.

Hold-open points at 85°, 90°, 95°, 100°, 105° or 110° with hold-open tracks.

Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- ➤ **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing 120°. Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.
- ► **Clearance** projects 2 1/4" (57 mm) from face of door.
- ► **Top Rail** less than 5 1/4" (133 mm) measured from the stop, requires PLATE, 4040T-18. Plate requires 3 1/2" (89 mm) minimum.
- ► **Stop Width** minimum 1 1/4" (32 mm).

Options

- Standard track with bumper, hold-open track, hold-open track with bumper.
- Metal cover.

Special Templates

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



CYLINDERS

CYLINDER, 4041T-3071

Standard, non-handed cast iron cylinder assembly.

COVERS

COVER, 4040T-72

Standard, non-handed plastic clip-on cover.

METAL COVER, 4040T-72MC

Optional, handed cover. Required for plated finishes and custom powder coat finishes.

ARMS

STANDARD ARM, 4040T-3077T

Non-handed arm.

Arm does not include track roller.

DOUBLE EGRESS ARM, 4040T-3077DE

Optional, handed arm for double egress doors and frames. Arm does not include track roller.

Maximum reveal is 2 11/16" (68mm).

TRACKS

STANDARD TRACK, 4040T-3038

Standard, non hold-open, non-handed track.

Will accept hold-open clip and/or bumper assembly.

STANDARD TRACK with BUMPER, 4040T-3038B

Optional non hold-open, non-handed track with bumper assembly installed.

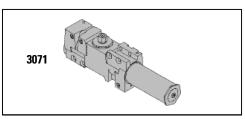
Will accept hold-open clip.

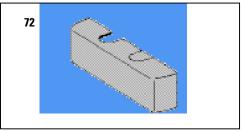
HOLD-OPEN TRACK, 4040T-3038H

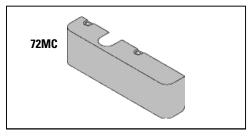
Optional, non-handed track with hold-open clip installed. Will accept bumper assembly.

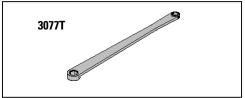
HOLD-OPEN TRACK with BUMPER, 4040T-3038HB

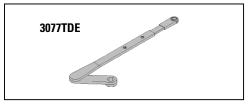
Optional, non-handed track with hold-open clip and bumper assembly installed.

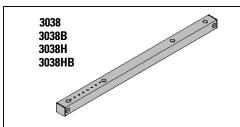














INSTALLATION ACCESSORIES

PLATE, 4040T-18

Required for pull side (door mount) installations where top rail is less than 3 3/4" (95 mm).

Plate requires minimum 1 3/4" (44 mm) top rail.

Required for push side (door mount) installations where top rail is less than 5 1/4" (133 mm) measured from the stop. Plate requires minimum 3 1/2" (89 mm) top rail.

PLATE, 4040T-18TJ

Required for pull side top jamb installations where head frame is less than 3 7/8" (98 mm). Plate requires minimum 1 3/4" (44 mm) head frame.

TRACK BUMPER, 4040T-169

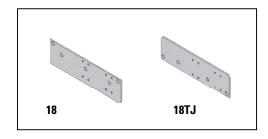
Mounts in track to assist backcheck, does not replace auxiliary stop. Limits maximum opening. Consists of bumper, bumper post, and mounting screw.

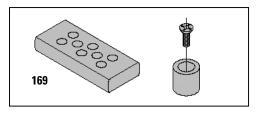
HOLD-OPEN CLIP, 4040T-3054

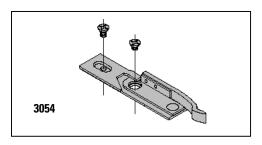
Mounts in track to provide hold-open function. Hold-open point controlled by clip location. Consists of clip and mounting screws.

TRACK ROLLER, 4040T-3034

Quiet, low friction roller assembly. Shoulder dimension "X" = 1/8" (3mm).







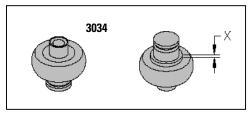




TABLE OF SIZES

Non-Sized 4041T cylinder is adjustable from sizes 1 thru 4 and is shipped set to size 3.

Indicates recommended range of door width for closer size.

INTERIOR DOOR WIDTH



REDUCED OPENING FORCE 4040T 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.

Ł	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	N/A	N/A	N/A
	5.0* lbs.	4041T	4041T	4041T

^{*} Maximum opening force

HOW-TO-ORDER 4040T SERIES CLOSERS

1. SPECIFY FINISH

☐ Standard Powder Coat Aluminum, Dark Bronze, Statuary, Light Bronze, Black, Brass.

Closer will be shipped with:

- STANDARD CLIP-ON COVER,
- STANDARD ARM,
- TRACK ROLLER,
- STANDARD TRACK,
- SELF-REAMING and TAPPING SCREWS, unless options listed below are selected.

CLOSER OPTIONS

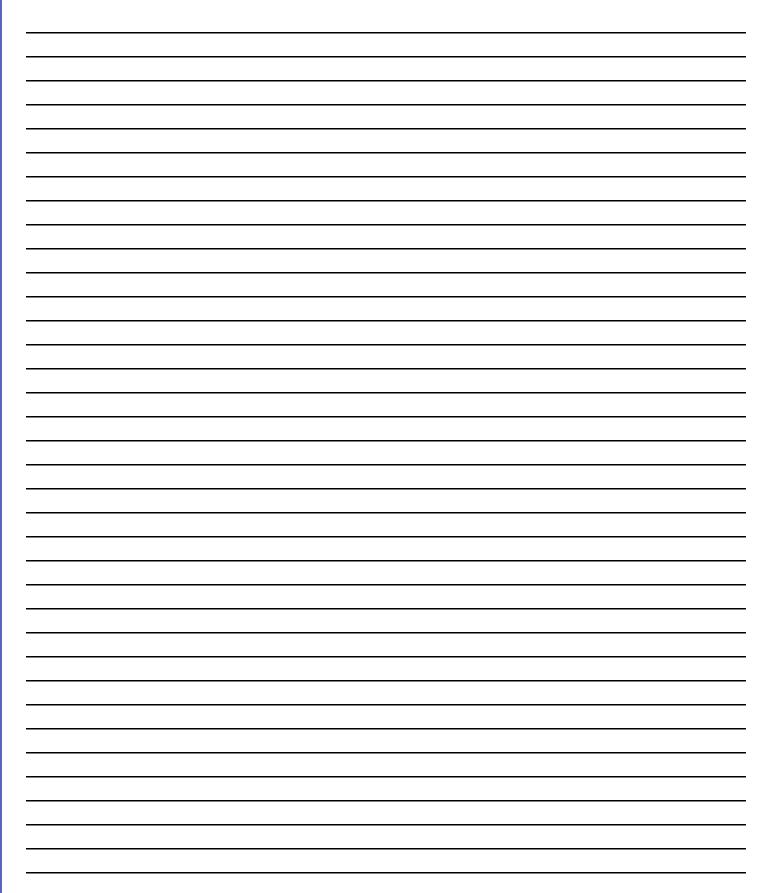
COVER
☐ Metal (specify right or left hand) (MC)
FINISH
□ Custom Powder Coat (RAL)
(handed metal cover required)
☐ Plated Finish, US
(handed metal cover required)
□ SRI primer
TRACK
☐ Regular with Bumper (BUMPER)
□ Hold-Open (HO)
☐ Hold-Open with Bumper (HBUMPER)
SPECIFY SCREW PACK
☐ TB* w/Self-Reaming and Tapping (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 ACCESSORY
□ Plate, 4040T-18
□ Plate, 4040T-18T.I



SPECIAL TEMPLATE

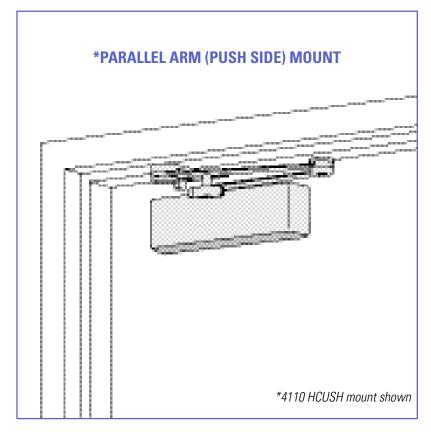
□ ST- _____

Notes





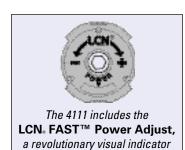
LCN CLOSERS PHON
121 W. RAILROAD AVE. FAX 8
P.O. BOX 100 www
PRINCETON, IL, USA 61356-0100 3/10



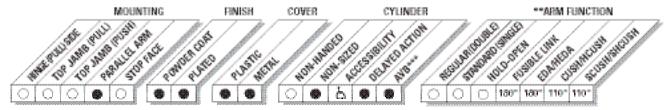
- ► Standard 4110 series closer is shipped with EXTRA DUTY arm, standard plastic cover, 4110-201 FIFTH SCREW SPACER and self reaming and tapping screws. See 4110 Series pages 61 & 62 for options.
- ► Sized 6 cylinder adjustable for interior doors to 5'0" and exterior doors to 4'0".
- ► Non-sized cylinder adjustable for interior doors to 4'6" and exterior doors
- ► Closer mounts parallel arm, specify right or left swinging door.
- ► 4111 cylinder meets ADA requirements. See 4110 Series page 63.
- ► Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- ► Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► The 4110 Series is UL and cUL listed for self-closing doors without hold-
- ► Tested and certified under ANSI Standard A156.4, grade one.

The 4110 SMOOTHEE® is LCN's best performing heavy duty closer designed specifically for institutional and other rugged high traffic applications.

- ► Ten Million Cycles
- Cast Iron
- Extra Duty Forged Steel Arm **Standard**
- ► Double Heat Treated Steel **Pinion**
- All Weather Fluid
- ► LCN_® Fast[™] Power Adjust
- Fast & Accurate Installation
- UL & cUL Listed



for Spring Power Adjustment.



- Available O Not available
- **Maximum opening/hold-open point with standard template. Closer available with less than 5.0 lbs. opening force on 36" door.
- *** Advanced Variable Backcheck



PARALLEL ARM (PUSH SIDE) MOUNTING

MAXIMUM OPENING

EDA or Fusible Link arm can be templated for 100°.

- \triangle = 5 15/16" (151 mm)
- $(B) = 7 \frac{1}{4}$ " (184 mm)

140°

- (A) = 47/16" (113 mm)
- (B) = 5 3/4" (146 mm)

or 180°.

- (A) = 2.15/16" (75 mm)
- $(B) = 4 \frac{1}{4}$ " (108 mm)

Hold-open points up to maximum opening with HEDA or Fusible Link arm.

CUSH arm can be templated for maximum opening at 85°.

- \triangle = 8 5/16" (211 mm)
- B = 9.5/8" (244 mm)

90°.

- (A) = 7 11/16" (195 mm)
- (B) = 9'' (229 mm)

100°.

- \triangle = 6 7/16" (164 mm)
- (B) = 7 3/4" (197 mm)

or 110°.

- \triangle = 5 9/16" (141 mm)
- (B) = 6.7/8" (175 mm)

Hold-open point at maximum opening with HCUSH arm.

Spring Cush hold-open points are approximately 5° less than templated stop point.

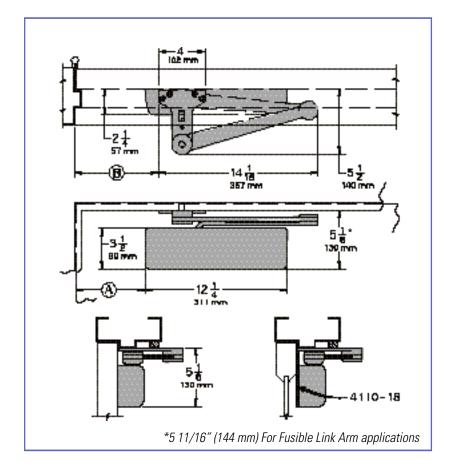
Options

- Size 6 or non-sized cylinder.
- Delayed Action or Advanced Variable Backcheck cylinder.
- ► HEDA, CUSH, HCUSH, SPRING CUSH, SPRING HCUSH or Fusible Link arm.
- Metal cover.

Special Templates

Customized installation templates or products may be available to solve unusual applications.

Contact LCN for assistance.



- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point, where a door cannot swing 180°, or where CUSH-N-STOP arm is not used.
- ► **Clearance** for EDA, or CUSH shoe is 5 1/2" (140 mm) from door face.
- ► **Top Rail** less than 5 1/8" (130 mm) measured from stop requires PLATE, 4110-18. Plate requires 2" (51 mm) minimum measured from the stop.
- ► **Stop Width** minimum 1" (25 mm).
- ► **Head Frame** flush or rabetted requires CUSH FLUSH PANEL ADAPTER, 4110-419.
- ► **Reveal** less than 2 3/4" (70 mm), use CUSH SH0E SUPPORT, 4110-30 with CUSH arms.
- ▶ **Blade Stop Spacer**, 4110-61 required to clear 1/2" (13 mm) blade stop.
- ► **Cush Arm** requires CUSH SH0E SUPPORT, 4110-30 for fifth screw anchorage with CUSH arms.
- ▶ **Delayed Action** Add suffix "DEL" to selected cylinder (eg. 4111 DEL). Not available with 4116 cylinder. Delays closing from maximum opening to approximately 70°. Delay time adjustable up to approximately 1 minute.
- ► Advanced Variable Backcheck cylinder starts backcheck at approximately 45° instead of the normal 75°. Add suffix "AVB" to selected cylinder.



CYLINDERS

CYLINDER, 4110-3071

Standard, handed cast iron cylinder assembly. For various applications see "Table of Sizes" on 4110 Series page 63.

COVERS

COVER, 4110-72

Standard, non-handed plastic cover.

METAL COVER, 4110-72MC

Optional, handed cover. Required for plated finishes and custom powder coat finishes.

ARMS

EXTRA DUTY ARM, 4110-3077EDA, 4110-3077EDAG,

Non-handed parallel arm features forged, solid steel main and forearm for potentially abusive installations.

Optional 4110-62G thick hub shoe for blade stop clearance.

HOLD-OPEN ARM 4110-3049EDA

Optional handed arm provides hold-open function, adjustable at shoe.

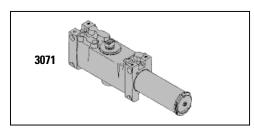
FUSIBLE LINK ARM, 4110-3049FL

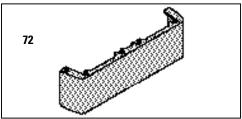
Optional, handed arm releases hold-open function adjustable at shoe when exposed to temperatures above 165° F.

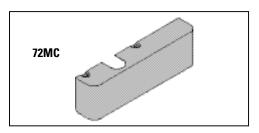
NOTE: Check local codes before specifing FL arms. NOT A LIFE SAFETY PRODUCT!

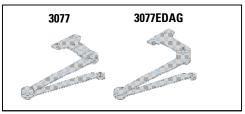
CUSH-N-STOP ARM, 4110-3077CNS

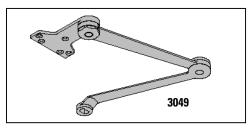
Optional, non-handed parallel arm features solid forged steel main arm and forearm with built-in stop in soffit shoe.

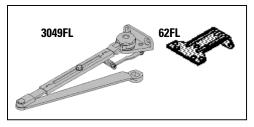


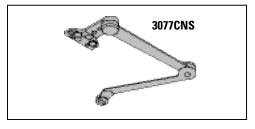












LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PRINCETON, IL, USA 61356-0100 PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com 3/10



H-CUSH ARM 4110-3049CNS

Optional non-handed arm provides hold-open function with templated stop/hold-open points. Handle controls hold-open function.

SPRING CUSH ARM, 4110-3077SCNS

Optional, non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe.

SPRING H-CUSH ARM, 4110-3049SCNS

Optional, non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe. Handle controls hold-open function.

INSTALLATION ACCESSORIES

PLATE, 4110-18

Required for push side mount where top rail is less than 5 1/8" (130 mm), measured from the stop.

Plate requires minimum 2" (51 mm) minimum top rail. Plate also used with CUSH Arm installations.

CUSH SHOE SUPPORT, 4110-30

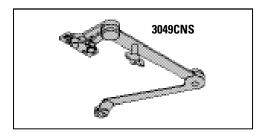
Provides anchorage for fifth screw used with CUSH arm, where reveal is less than 3 1/16" (78 mm).

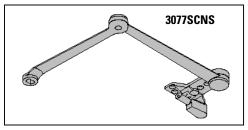
BLADE STOP SPACER, 4110-61

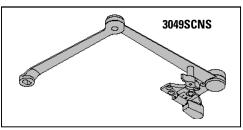
Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop

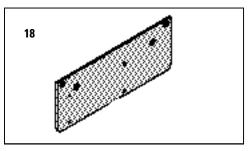
PA FLUSH PANEL ADAPTER, 4110-419

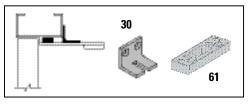
Provides horizontal mounting surface for EDA or CUSH shoe on single rabetted or flush frame.











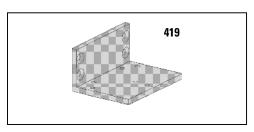




TABLE OF SIZES Select closer based on width of door.

The spring power of non-sized 4111 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3.

Sized 4110 series cylinder 6.

Delayed action not available with 4116 cylinder.

H - CUSH and SPRING H-CUSH arm not available with 4116 cylinder.

Indicates recommended range of door width for closer size

EXTERIOR (and VESTIBULE) DOOR WIDTH



INTERIOR DOOR WIDTH

	8" mm	34" 864m				60" ım 1524mı	n
4111 4116	size 2		size 3	size 4	size 5	size 6	
Minii Do Wid	or	*	Adjusta	ble Size 1 thru 5			

REDUCED OPENING FORCE 4110 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.

F	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	4111	4111	4111
	5.0* lbs.	4111	4111	4111

^{*} Maximum opening force

☐ SRI primer SPECIFY ARM

- ☐ Hold-Open Extra Duty (HEDA)
 ☐ Fusible Link,165° F (FL)
 ☐ Cush-N-Stop (CUSH)
- ☐ H-Cush-N-Stop (n/a with 4116 cylinder) (HCUSH) ☐ Spring Cush (SCUSH)
- ☐ Spring H-Cush (n/a with 4116 cylinder) (SHCUSH) ☐ Extra Duty (EDA)
- ☐ H-Extra Duty (HEDA)

SCREW PACK

- ☐ TB*, Self-Reaming & Tapping (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, 4110-18
☐ CUSH Shoe Support, 4110-30
☐ Blade Stop Spacer, 4110-61
☐ PA Flush Panel Adapter, 4110-419

SPECIAL TEMPLATE

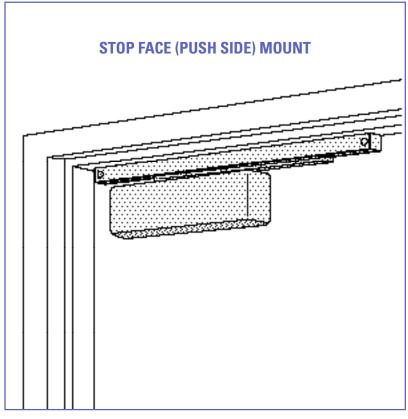
\square S1	
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Notes

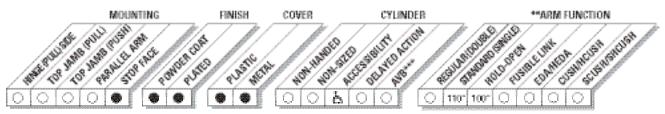






► Standard 4110T series closer is shipped with standard arm, standard track, track roller, standard plastic cover and self reaming and tapping screws. See 4110T Series pages 67 & 68 for options.

- ► Sized cylinders for interior doors to 4'0".
- ► Closer mounts stop face side, specify right or left swinging door.
- ► Closers to meet ADA requirements. See 4110T Series page 69.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► The 4110T Series is UL and cUL listed with a standard track for selfclosing doors.
- ► Tested and certified under ANSI Standard A156.4, grade one.



- AvailableNot available
- 📙 Closer available with less than 5.0 lbs. opening force on 36" door.
- **Maximum opening with standard template.
- *** Advanced Variable Backcheck

The 4110T SMOOTHEE® is LCN's best performing heavy duty track closer designed specifically for interior doors in institutional and other high traffic applications.

- Cast Iron
- ► Forged Steel Main Arm
- ► Double Heat Treated Steel
 Pinion
- ► All Weather Fluid
- ► Fast & Accurate Installation
- UL & cUL Listed

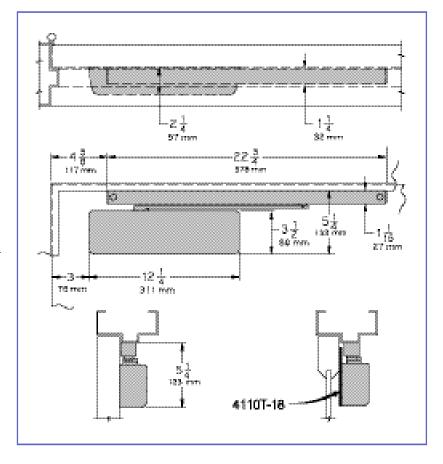
STOP FACE (PUSH SIDE) MOUNTING

MAXIMUM OPENING

Templating allows 110° with standard track arm, limited to 100° with optional bumper tracks.

Hold-open points at 85°, 90°, 95°, or 100° with hold-open tracks.

Please note that many track style door closers are capable of allowing 180° of door swing. Be aware that the majority of track style closers are at their weakest closing force in the 180 – 130° range. Consult factory for applications where exterior or large/heavy door must swing 180°.



- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing 110°.

Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.

- ► **Clearance** projects 2 1/4" (57 mm) from face of door.
- ► **Top Rail** less than 5 1/4" (133 mm) measured from stop, requires PLATE, 4110T-18.

Plate requires 2 1/4" (57 mm) minimum.

Stop Width minimum 1 1/4" (32 mm).

Options

- Standard track with bumper, hold-open track, hold-open track with bumper.
- Metal cover.

Special Templates

Customized installation templates or products may be available to solve unusual applications.

Contact LCN for assistance.



CYLINDERS

CYLINDER, 4110T-3071

Standard, handed cast iron cylinder assembly. For various applications see "Table of Sizes" on 4110T Series page 69.

COVERS

COVER, 4110T-72

Standard, non-handed plastic cover.

METAL COVER, 4110T-72MC

Optional, handed cover. Required for plated finishes and custom powder coat finishes.

ARM

STANDARD ARM, 4110T-3077T

Handed arm.

Roller not included with arm.

TRACKS

STANDARD TRACK, 4110T-3038

Standard, non hold-open, non-handed track.
Will accept hold-open clip and/or bumper assembly.

STANDARD TRACK with BUMPER, 4110T-3038B

Optional non hold-open, non-handed track with bumper assembly installed.

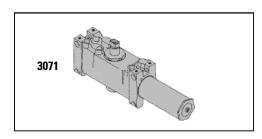
Will accept hold-open clip.

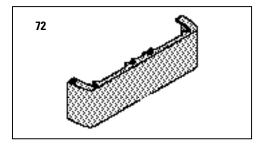
HOLD-OPEN TRACK, 4110T-3038H

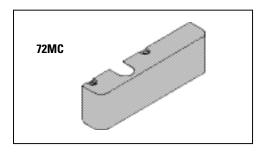
Optional, non-handed track with hold-open clip installed. Will accept bumper assembly.

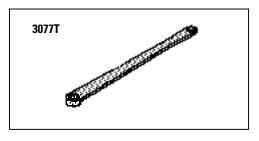
HOLD-OPEN TRACK with BUMPER, 4110T-3038HB

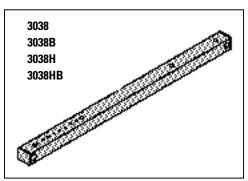
Optional, non-handed track with hold-open clip and bumper assembly installed.











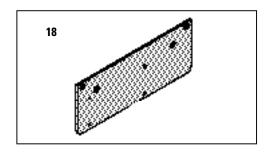


INSTALLATION ACCESSORIES

PLATE, 4110T-18

Required where top rail, when measured from the stop, is less than $5 \frac{1}{4}$ " (133 mm).

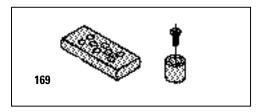
Plate requires minimum 2 1/4" (57 mm) minimum top rail.



TRACK BUMPER, 4110T-169

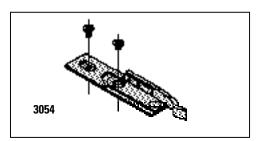
Mounts in track to assist backcheck, not replace auxiliary stop. Limits maximum opening.

Consists of bumper, bumper post, and mounting screw.



HOLD-OPEN CLIP, 4110T-3054

Mounts in track to provide hold-open function. Hold-open point controlled by clip location. Consists of clip and mounting screws.



TRACK ROLLER, 4110T-3034

Quiet, low friction roller assembly. Shoulder dimension "X" = 1/16" (2 mm).

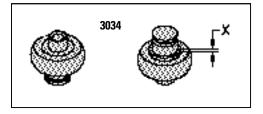
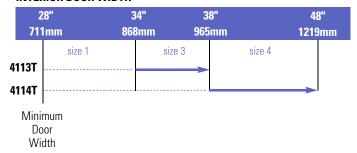




TABLE OF SIZES Select closer based on width of door. Sized 4110T series cylinders available in size 1, 3 or 4. Closing power of all 4110T Series closers may be increased 15%. Specify next higher size closer where strong drafts exist.

Indicates recommended range of door width for closer size.

INTERIOR DOOR WIDTH



REDUCED OPENING FORCE 4110T 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"
Ę-	8.5* lbs.	N/A	N/A	N/A
	5.0* lbs.	4111T	4111T	4111T

^{*} Maximum opening force

HOW-TO-ORDER 4110T SERIES CLOSERS

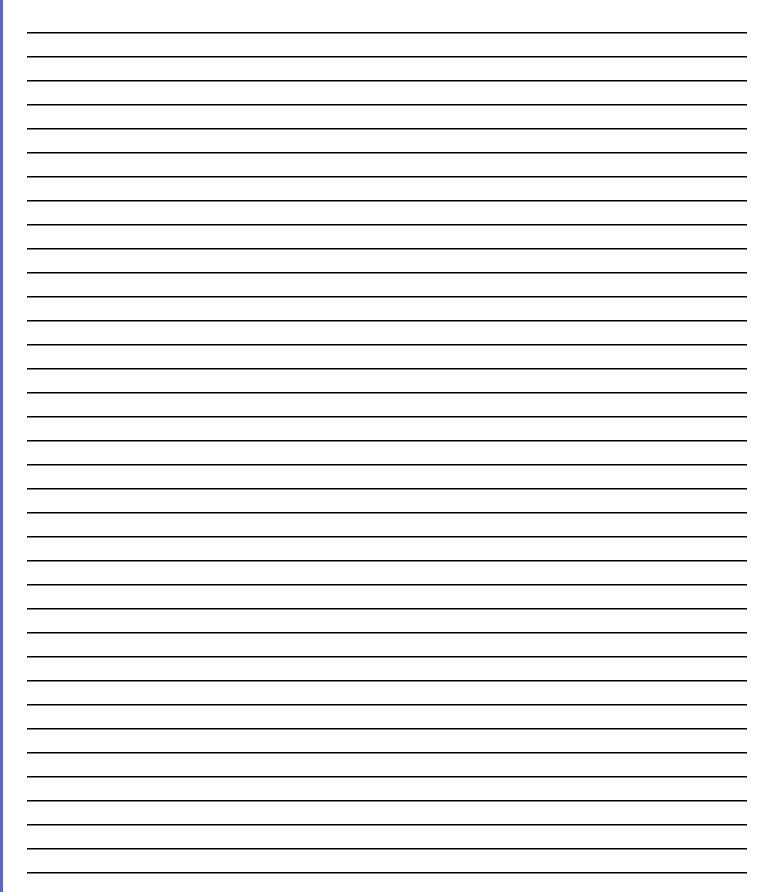
1. SELECT CYLINDER SIZE

☐ 4111T (ADA)

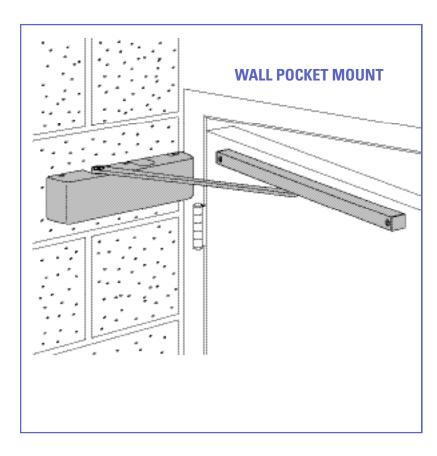
S. SELECT FINISH Standard Powder Coat		
Aluminum, Dark Bronze , Statuary, Light Bronze, Black, Brass. Closer will be shipped with: - STANDARD COVER, - STANDARD ARM, - TRACK ROLLER, - STANDARD TRACK, - SELF-REAMING and TAPPING SCREWS, unless options listed below are selected. CLOSER OPTIONS COVER Metal (MC) FINISH Custom Powder Coat (RAL) (handed metal cover required) Plated Finish, US (handed metal cover required) SRI primer SPECIFY TRACK Standard with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK TB* w/Self-Reaming and Tapping (TBSRT) Wood & Machine Screw (WMS) TB*, Wood & Machine Screw (TBWMS) TORX Machine Screw (TBTRX) * Specify door thickness if other than 1 3/4 INSTALLATION ACCESSORIES		
Closer will be shipped with: - STANDARD COVER, - STANDARD ARM, - TRACK ROLLER, - STANDARD TRACK, - SELF-REAMING and TAPPING SCREWS, unless options listed below are selected CLOSER OPTIONS COVER - Metal (MC) FINISH - Custom Powder Coat (RAL)		
- STANDARD COVER, - STANDARD ARM, - TRACK ROLLER, - STANDARD TRACK, - SELF-REAMING and TAPPING SCREWS, unless options listed below are selected CLOSER OPTIONS COVER Metal (MC) FINISH Custom Powder Coat (RAL)		Light Bronze, Black, Brass.
- STANDARD ARM, - TRACK ROLLER, - STANDARD TRACK, - SELF-REAMING and TAPPING SCREWS, unless options listed below are selected. CLOSER OPTIONS COVER Metal (MC) FINISH Custom Powder Coat (RAL)		• •
- TRACK ROLLER, - STANDARD TRACK, - SELF-REAMING and TAPPING SCREWS, unless options listed below are selected CLOSER OPTIONS COVER Metal (MC) FINISH Custom Powder Coat (RAL)		<i>'</i>
- STANDARD TRACK, - SELF-REAMING and TAPPING SCREWS, unless options listed below are selected. CLOSER OPTIONS COVER Metal (MC) FINISH Custom Powder Coat (RAL)		,
- SELF-REAMING and TAPPING SCREWS, unless options listed below are selected. CLOSER OPTIONS COVER Metal (MC) FINISH Custom Powder Coat (RAL)		
unless options listed below are selected CLOSER OPTIONS COVER Metal (MC) FINISH Custom Powder Coat (RAL) (handed metal cover required) Plated Finish, US (handed metal cover required) SRI primer SPECIFY TRACK Standard with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK TB* w/Self-Reaming and Tapping (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		- · ·
COVER Metal (MC) FINISH Custom Powder Coat (RAL) (handed metal cover required) Plated Finish, US (handed metal cover required) SRI primer SPECIFY TRACK Standard with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK TB* w/Self-Reaming and Tapping (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		·
Metal (MC) FINISH Custom Powder Coat (RAL) (handed metal cover required) Plated Finish, US (handed metal cover required) SRI primer SPECIFY TRACK Standard with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK TB* w/Self-Reaming and Tapping (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	CL	OSER OPTIONS
Custom Powder Coat (RAL)	CO	VER
Custom Powder Coat (RAL)		Metal (MC)
(handed metal cover required) Plated Finish, US		
(handed metal cover required) SRI primer SPECIFY TRACK Standard with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK TB* w/Self-Reaming and Tapping (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	(handed metal cover required)
SPECIFY TRACK Standard with Bumper (BUMPER) Hold-Open (HO) Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK TB* w/Self-Reaming and Tapping (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	(handed metal cover required)
□ Standard with Bumper (BUMPER) □ Hold-Open (HO) □ Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK □ TB* w/Self-Reaming and Tapping (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		
☐ Hold-Open (HO) ☐ Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK ☐ TB* w/Self-Reaming and Tapping (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		
Hold-Open with Bumper (HBUMPER) SPECIFY SCREW PACK TB* w/Self-Reaming and Tapping (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		• •
SPECIFY SCREW PACK TB* w/Self-Reaming and Tapping (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		
☐ TB* w/Self-Reaming and Tapping (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		· · · · · · · · · · · · · · · · · · ·
 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 		
 ☐ TORX Machine Screw (TORX) ☐ TB* & TORX Machine Screw (TBTRX) * Specify door thickness if other than 1 3/4 INSTALLATION ACCESSORIES 		
☐ TB* & TORX Machine Screw (TBTRX) * Specify door thickness if other than 1 3/4 INSTALLATION ACCESSORIES		TB*, Wood & Machine Screw (TBWMS)
* Specify door thickness if other than 1 3/4 INSTALLATION ACCESSORIES		• •
INSTALLATION ACCESSORIES		
		STALLATION ACCESSORIES Plate, 4110T-18



Notes







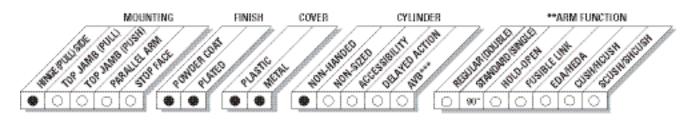
The 4000T is a heavy duty closer to reliably control fire and smoke barrier doors with maximum swing of 90°.

Designed for use with an SEM

- ► Cast Iron
- ► Forged Steel Arm

7850 wall magnet.

- ► Double Heat Treated Steel
 Pinion
- ► All Weather Fluid
- UL & cUL Listed
- 4000T series closer is shipped with standard arm, standard track, track roller, standard plastic clip-on cover, and wood and machine screw pack. See 4000T Series page 73 for options.
- ► Sized cylinders for interior fire/smoke barrier doors to 4'0".
- Closer mounts in a wall pocket, hinge side, on either right or left hand door.
- Standard or optional custom powder coat finish.
- Optional plated finish on metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ► The 4000T Series is UL and cUL listed with a standard arm for self-closing doors.
- ► Tested and certified under ANSI Standard A156.4, grade one.



- AvailableNot available
- **Maximum opening/hold-open point with standard template.
- *** Advanced Variable Backcheck



WALL POCKET MOUNTING

Cylinder mounts on wall.

Track mounts on hinge side of door.

MAXIMUM OPENING

Templating allows 90° only. Hold-open point 90° with magnet.

Dimension 1 is the distance from the centerline of the closer shaft to the centerline of the hinge or pivot. For pocket pivot or total door hinge, 9 1/2" (241 mm).

For butt hinge 8" (203 mm). For center pivot 10" (254 mm).

Dimension 2 is the distance from the centerline of the pivot or hinge to the cylinder mounting surface. For pocket pivot 4 1/2" (114 mm). For total door hinge 3 7/8" (98mm) For butt hinge 2 7/8" (73 mm). For center pivot 4 1/2" (114 mm).

Dimension 3 is the distance from the centerline of the pivot or hinge to end of the track.

For pocket pivot or total door hinge, 3 7/8" (98mm).

For butt hinge 2 3/8" (60mm). For center pivot 4 5/8" (117mm).

12 1/4 -2 1 57 mr 311mm PIVO) POINT (BY OTHERS) 22 3 DEPTH OF POCKET AT MAGNET MOUNTING LOCATION LCN (X) MODE 1 🕆 4 ! 103 mm 27 mm 7830 SEM 2 % 7840 62 mm SEM 3 5 87mm 7850 VIEW OF CLOSER WITH DOOR CLOSED

- ► Butt Hinges, Pocket Pivot, Total Door Hinge or Center Pivot are door mounting options.
- ▶ **Butt Hinges** should not exceed 5" (127 mm).
- ► **Pocket Depth,** See above table for distance required between door and closer mounting location. This dimension is measured from the cylinder mounting surface to the pull side face of the door at 90°.
- ► Wall Magnet SEM 7850 is recommended. Use of other magnets may require special construction to alter the depth of the pocket at the magnet location. See Fire Life Safety Section.

Options

Metal cover.

Special Templates

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



CYLINDERS

CYLINDER, 4000T-3071

Standard, non-handed cast iron cylinder assembly.

COVERS

COVER, 4000T-72

Standard, non-handed plastic clip-on cover.

METAL COVER, 4000T-72MC

Optional, handed cover. Required for plated and custom powder coat finishes.

ARM

STANDARD ARM, 4000T-3077T

Non-handed arm.

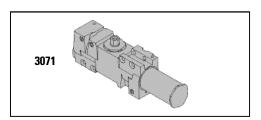
TRACK

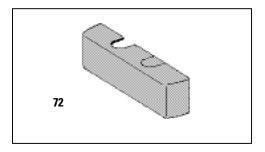
STANDARD TRACK, 4000T-3038

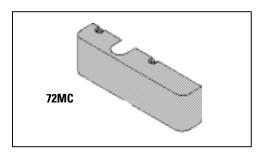
Standard, non hold-open, non-handed track. Will not accept hold-open clip or bumper assembly.

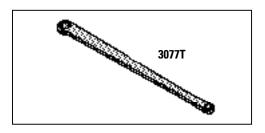
TRACK ROLLER, 4000T-3034

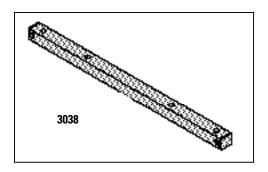
Quiet, low friction roller assembly. Shoulder Dimension "X"= 1/8" (3 mm).

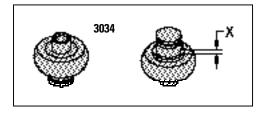












LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PRINCETON, IL, USA 61356-0100 PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com 3/10

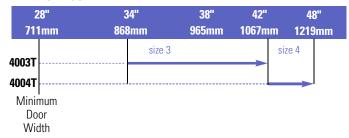


TABLE OF SIZES Select closer based on width of door.

4000T Series cylinders available in size 3 or 4. Closing power of 4000T Series closers is not adjustable.

Indicates recommended range of door width for closer size.

INTERIOR DOOR WIDTH



HOW-TO-ORDER

1000T	SERIES	CLOSERS

1. SELECT CYLINDER SIZE □ 4003T

2. SELECT FINISH

□ 4004T

☐ Standard Powder Coat
Aluminum, Dark Bronze, Statuary,
Light Bronze, Black, Brass.

Closer will be shipped with:

- STANDARD CLIP-ON COVER,
- STANDARD ARM,
- TRACK ROLLER.
- STANDARD TRACK,
- WOOD and MACHINE SCREW PACK, unless options below are selected.

CLOSER OPTIONS

GLUSEN OF HUNS
COVER
☐ Metal (MC)
FINISH
☐ Custom Powder Coat (RAL)
(handed metal cover required)
☐ Plated Finish, US
(handed metal cover required)
☐ SRI primer
SCREW PACK
☐ TB*, Wood & Machine Screw (TBWMS
- TODY M 1: 0 /TODY

☐ TB*, Wood & Machine Screw (TBWMS)
□ TORX Machine Screw (TORX)
□ TB* & TORX Machine Screw (TBTRX)
* Specify door thickness if other than 1 3/4".

SPECIAL TEMPLATE



