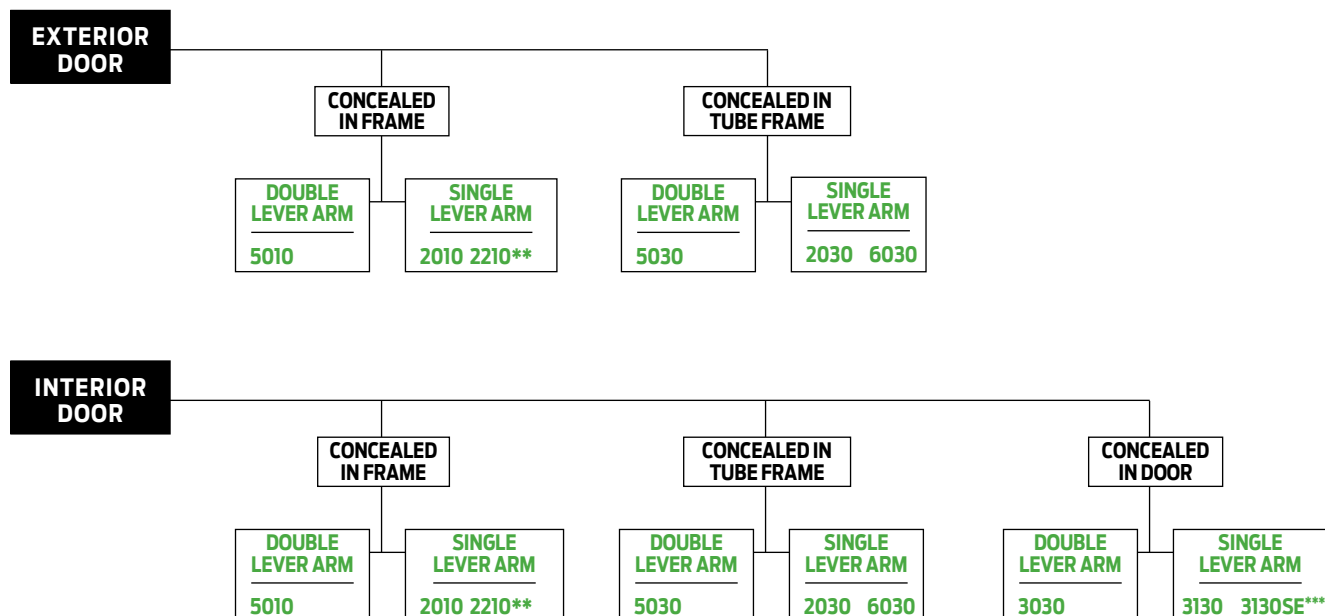


Product selection guide

The concealed LCN closers feature a modern design for concealment in either the head frame or top rail of the door. This guide is based on the desired mounting of the closer.



** INDICATES HIGH SECURITY CLOSER, DOOR POSITION SWITCH OPTIONAL. REFER TO HIGH SECURITY SECTION OF THE CATALOG.

*** INDICATES FIRE LIFE SAFETY CLOSER. REFER TO FIRE LIFE SAFETY SECTION.

Product comparison

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

CLOSER SERIES	CONCEALED MOUNTING			FINISH		CYLINDER		ARM		*ARM FUNCTION				
	IN FRAME	IN 1-3/4" TUBE	IN DOOR	POWDER COAT	PLATED	HANDED	SIZED	ACCESSIBILITY	DELAYED ACTION	CONCEALED	EXPOSED	STANDARD (SINGLE)	REGULAR (DOUBLE)	HOLD-OPEN
2010	●	○	○	●	●	●	●	♿	○	●	○	180°	○	110°
2030	○	●	○	●	●	●	●	♿	○	●	○	180°	○	110°
3030	○	○	●	●	●	●	●	♿	○	○	●	○	180°	140°
3130	○	○	●	●	●	●	●	♿	○	●	○	140°	○	100°
5010	●	○	○	●	●	●	●	♿	●	○	●	○	180°	100°
5030	○	●	○	●	●	●	●	♿	○	○	●	○	180°	100°
6030	○	○	○	●	●	○	●	♿	○	●	○	95°	○	95°

● AVAILABLE
○ NOT AVAILABLE

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

* Maximum opening/hold-open point with standard template. See individual closer series for degrees of opening per installation.

Concealed closer series

APPLICATIONS

- For aluminum, hollow metal, or wood doors and frames.
- Can be used with hinge or pivot mounted door.
- Closers for 4" or minimum 1-3/4" head frame or 4" top rail.
- Mounting clips for wood frames and other installation accessories available for unusual conditions.
- For concealed in door closers consult factory for installations with pivots.

FEATURES COMMON TO CONCEALED CLOSERS

- Mountings for head frame or door top rail.
- Handed for right or left swinging doors. (except 6030)
- Closers to meet ADA reduced opening force requirements.
- Adjustable hydraulic backcheck cushions opening swing prior to 90°.
- Separate regulation of general closing speed and latching speed.
- Joints in arm and shoe adapt to uneven trim. (for double lever arms)

DESIGN ASSISTANCE

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

WARRANTY

15 year limited warranty. See General Information Section for complete warranty details.

SPECIFICATIONS

Refer to "SPECIFICATIONS" section for suggested architectural specifications.

MATERIALS

(Closers concealed in the door or frame)

- High strength **cast iron** cylinder.
- **Forged steel** main arms (except 6030).
- One piece **forged steel** piston.
- **All weather fluid** in overhead concealed models performs to temperature ranges from 120°F (49°C) to -30°F (-35°C) without any seasonal adjustment.
- **High efficiency, full complement**, low friction bearings.
- Tamper resistant regulating screws.
- Full rack and pinion hydraulic action.
- Quiet, low friction track and roller combination for all single lever (standard) arm closers.

FINISHES

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

LISTINGS & APPROVALS

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

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

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

POSITIVE PRESSURE

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

FASTENERS

Standard WOOD and MACHINE SCREW (WMS) pack contains phillips head wood and machine screws to install the closer.

TORX machine screws are available for some closers.

Note 1: Phillips head, metric machine screws are available, please specify.

MAINTENANCE

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

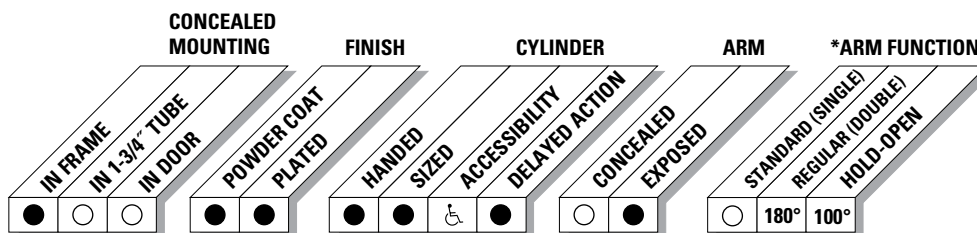


The concealed 5010 Series is a heavy duty closer designed for institutional, high traffic, or other applications exposed to weather or abuse. The double lever arm provides superior door control and a choice of finishes, cylinder functions, and arm functions that meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	Fasteners	Wood Screws and Torx Security Screws (optional)
Body Construction	<ul style="list-style-type: none"> ■ Cast Iron Body ■ Full Complement Bearing ■ 1-1/8" Diameter Piston ■ 11/16" Diameter Double Heat Treated Pinion Journal 	Mounting	Concealed (in frame); aluminum frame requires 4" (102 mm) x 4" tube
Fluid	All Weather Fluid	Arms	Regular Arm
Handing	Handed	Finishes/Colors/ Powder Coat	<ul style="list-style-type: none"> ■ Aluminum (689) ■ Statuary Bronze (690) ■ Light Bronze (691) ■ Black (693) ■ Dark Bronze (695) ■ Brass (696) ■ Custom colors optional
Size	Sized 1-6		<ul style="list-style-type: none"> ■ Optional SRI primer - powder coat only ■ Optional plated finishes
Warranty	15 years		

Special Templates

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



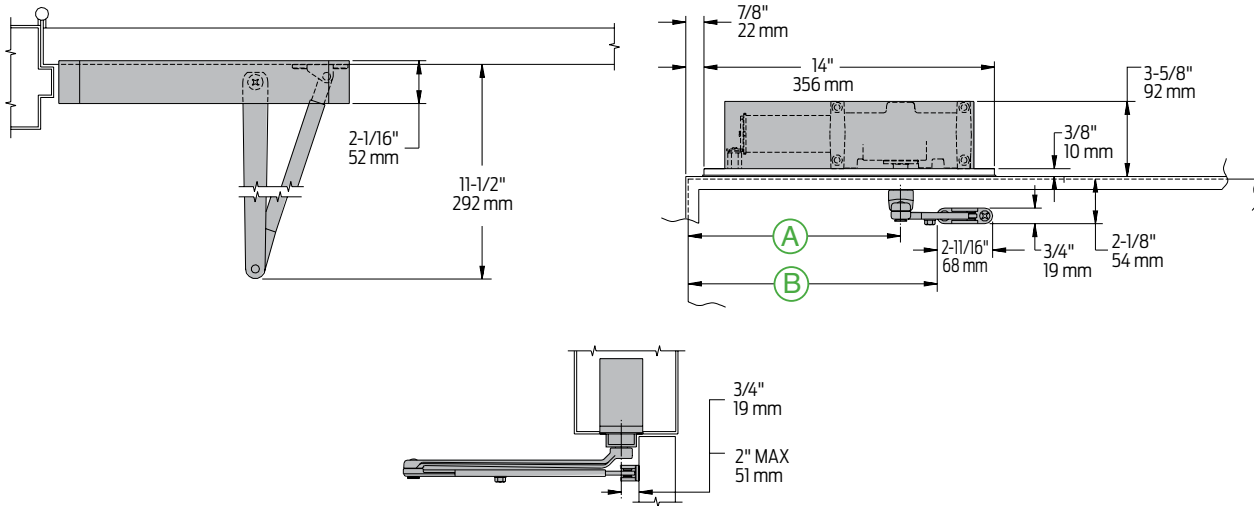
● AVAILABLE
○ NOT AVAILABLE

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

5010 Series

Mounting details

Concealed Mounting



Butt Hinges	Should not exceed 6" (152 mm) in width
Auxiliary Stop	Recommended at hold-open point or where a door cannot swing 180°
Top Rail	Minimum 2-1/8" (54 mm) required
Delay Action	<ul style="list-style-type: none"> ■ Add suffix "DEL" to selected cylinder (eg. 5014 DEL) (not available with 5016 cylinder) ■ Delays closing from maximum opening to approximately 70° ■ Delay time adjustable up to approximately 1 minute
Maximum opening	<p>Butt hung doors can be templated for</p> <p>100°: A = 10-3/16" (259 mm) B = 12" (305 mm)</p> <p>180°: A = 5-1/2" (140 mm) B = 7-5/16" (186 mm) trim permitting</p> <ul style="list-style-type: none"> ■ Hold-open points up to 100° only with hold-open arm ■ Center pivot mounting restricts opening to 140° ■ Offset pivot mounting allows up to 180°, trim permitting

Notes:

- For interior or exterior doors
- Single acting cylinder in head frame
- Exposed arm on hinge side of door

Cylinder



5011(2)(3)(4)(5)(6)-3071
Cast Iron Cylinder Assembly

- Handed
- With mounting plate
- Standard

Arms



5010-3077
Regular Arm

- Non-handed



5010-3049
Hold-Open Arm

- Handed
- Provides hold-open function for 100° Template, adjustment at elbow
- Optional

How-to-order 5010 Series closers

Select cylinder size

- 5011
- 5012
- 5013
- 5014
- 5015
- 5016 (DEL not available)

Select hand

- RH
- LH

Specify finish

- Standard Powder Coat _____
- Aluminum, Dark Bronze, Statuary, Light Bronze, Black, Brass

Closer will be shipped with:

- Standard cylinder with finish plate
- Standard arm
- Regular arm
- Wood and machine screw pack unless options listed below are selected.

Closer options

Cylinder function

- Delayed Action (DEL)

Arm

- Hold-Open (H)

Finishes

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

Screw pack

- TORX Machine Screw (TORX)

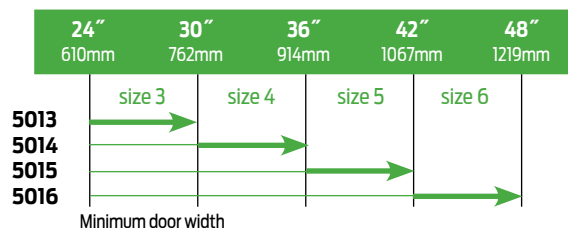
Special template

- ST- _____

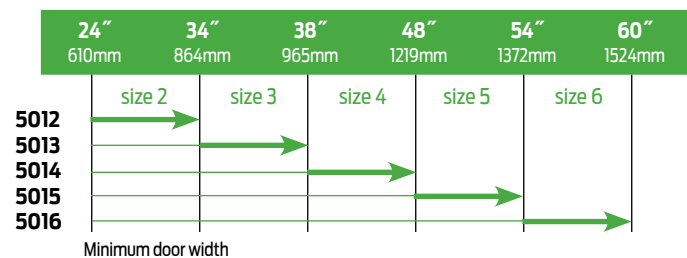
Table of sizes

- Select closer based on width of door
- Series cylinders available in size 1, 2, 3, 4, 5, or 6
- Closing power of all 5010 Series closers may be increased 50%
- Specify next higher size closer where strong drafts exist
- Delayed action not available with 5016 cylinder

Exterior (and Vestibule) door width



Interior door width




→ Indicates recommended range of door width for closer size.

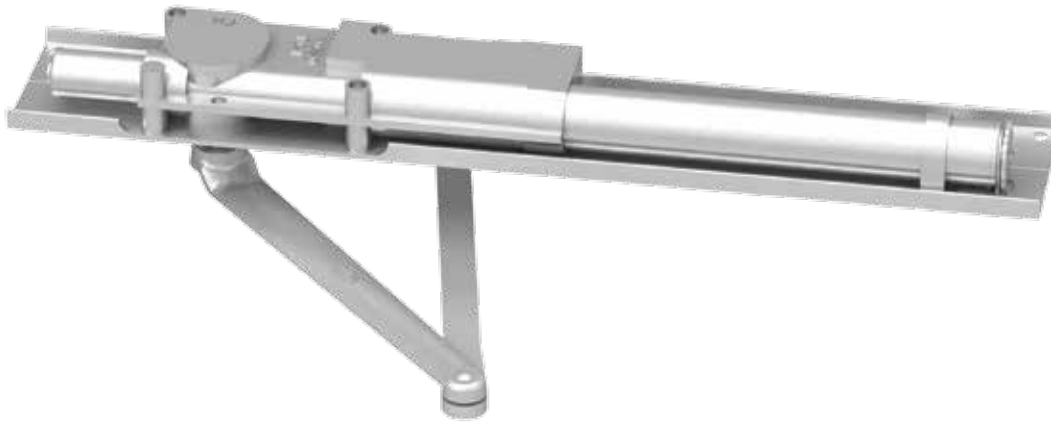
Reduced opening force 5010 Series closers

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 affecting closing power.

* Maximum opening force.

	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	5012	5013	5013
5.0* lbs.	5011	5011	5012	

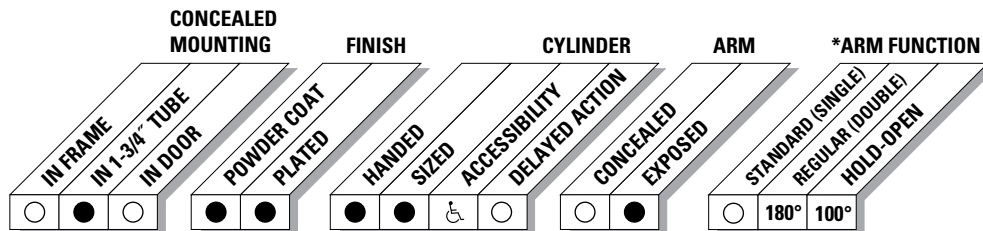


The concealed 5030 Series PACER® is a heavy duty closer designed to fit in a narrow, minimum 1-3/4" aluminum transom. The double lever arm provides superior door control and the choice of finishes and arm functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	Fasteners	Wood Screws and Torx Security Screws (optional)
Body Construction	<ul style="list-style-type: none"> ■ Cast Iron Body ■ Full Complement Bearing ■ 1-1/8" Diameter Piston ■ 11/16" Diameter Double Heat Treated Pinion Journal 	Mounting	Concealed (in tube); aluminum frame requires minimum 1-3/4" (44 mm) x 4-1/2" (114 mm) tube
Fluid	All Weather Fluid	Arms	Regular Arm
Handing	Handed	Finishes/Colors/ Powder Coat	<ul style="list-style-type: none"> ■ Aluminum (689) ■ Statuary Bronze (690) ■ Light Bronze (691) ■ Black (693) ■ Dark Bronze (695) ■ Brass (696) ■ Custom colors optional
Size	Sized 1; 3-6		<ul style="list-style-type: none"> ■ Optional SRI primer - powder coat only ■ Optional plated finishes
Warranty	15 years		

Special Templates

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



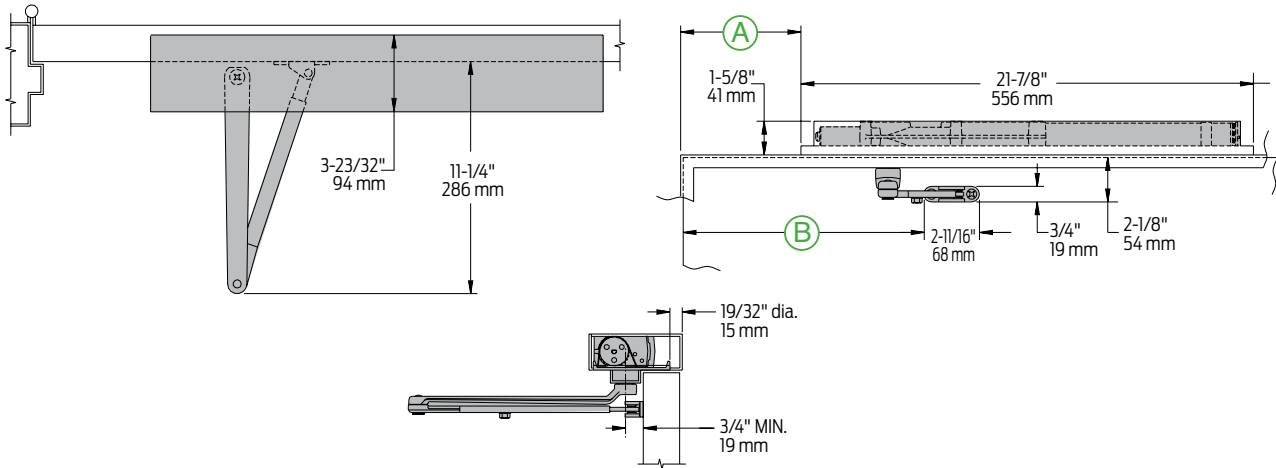
● AVAILABLE
○ NOT AVAILABLE

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

5030 Series

Mounting details

Concealed Mounting



Butt Hinges	Should not exceed 6" (152 mm) in width
Auxiliary Stop	Recommended at hold-open point or where the door cannot swing 180°
Wood Frame	<ul style="list-style-type: none"> Installation simplified by WOOD MOUNTING CLIP SET 5030-416 for center pivoted or 5030-417 for offset pivoted and butt hung installations Consult factory for preparation details
Top Rail	Minimum 2-1/8" (54 mm) required
Door Thickness	Maximum 1-3/4" (44 mm), for doors thicker than 1-3/4" consult factory
Maximum opening	<p>Butt hung doors can be templated for</p> <p>100°: A = 5-13/16" (148 mm) B = 11-13/16" (300 mm)</p> <p>180°: A = 2-1/16" (52 mm) B = 8-1/16" (205 mm) trim permitting</p> <ul style="list-style-type: none"> Hold-open points up to 100° only with hold-open arm Center pivot mounting restricts opening to 120°. Hold-open up to 120° with hold-open arm Offset pivot mounting allows up to 115°, trim permitting. Hold-open up to 115° with hold-open arm

Notes:

- For interior or exterior doors
- Single acting cylinder in head frame
- Exposed arm on push side of door

Cylinder



5031(3)(4)(5)(6)-3071 Cast Iron Cylinder Assembly

- Handed
- With mounting plate
- Standard

Arms



5030-3077 Regular Arm

- Non-handed



5030-3049 Hold-Open Arm

- Handed
- Provides hold-open function for 100° template, adjustable at elbow
- Optional

Installation Accessories



5030-416 Wood Mounting Clip Set

- Simplifies mounting center pivoted 5030 closer in wood frame
- Includes latch stile clip, hinge stile clip, and cover.
- For use with Ives Series center pivots
- Consult factory for special template



5030-417 Wood Mounting Clip Set

- Simplifies mounting offset pivoted or butt hung 5030 closer in wood frame.
- Includes two clips.
- For use with offset pivots.
- Consult factory for special template.

How-to-order 5030 Series closers

Select cylinder size

- 5031
- 5033
- 5034
- 5035
- 5036

Select hand

- RH
- LH

Specify finish

- Standard Powder Coat _____
- Aluminum, Dark Bronze, Statuary, Light Bronze, Black, Brass

Closer will be shipped with:

- Standard cylinder with mounting plate
- Regular arm
- Wood and machine screw pack unless options listed below are selected.

Closer options

Arm

- Hold-Open (H)

Finishes

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

Installation accessories

- Wood Clip Set, 5030-416
- Wood Clip Set, 5030-417

Screw pack

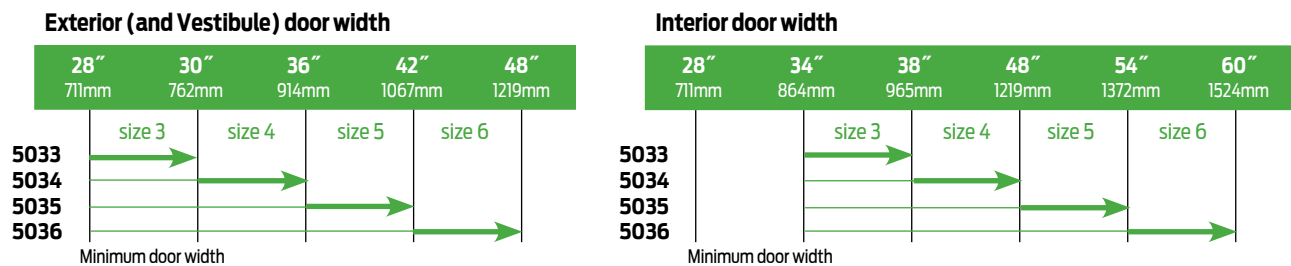
- TORX Machine Screw (TORX)

Special template

- ST- _____

Table of sizes

- Select closer based on width of door
- 5030 Series cylinders available in size 1, 2, 3, 4, 5 or 6
- Closing power of all 5030 Series closers may be increased 50%
- Specify next higher size closer where strong drafts exist




→ Indicates recommended range of door width for closer size.
 Note: Minimum door width 28" (711 mm).

Reduced opening force 5030 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 affecting closing power.

* Maximum opening force.

	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	5033	5033	5033
5.0* lbs.	5031	5031	5033	