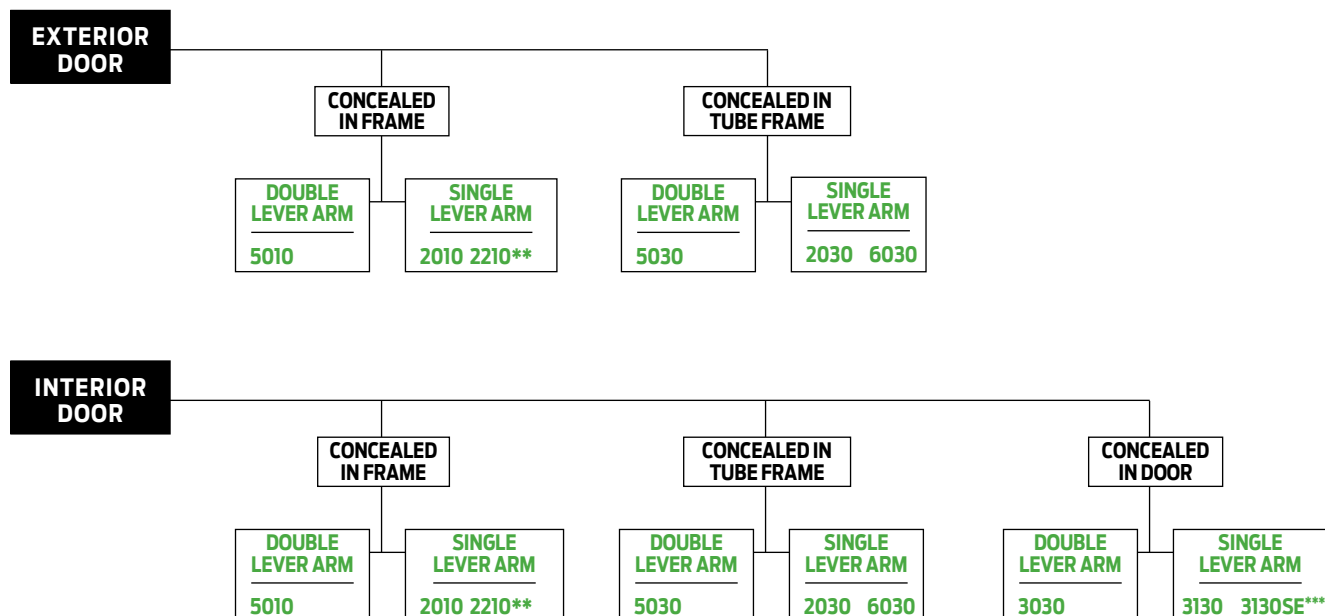


Product selection guide

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

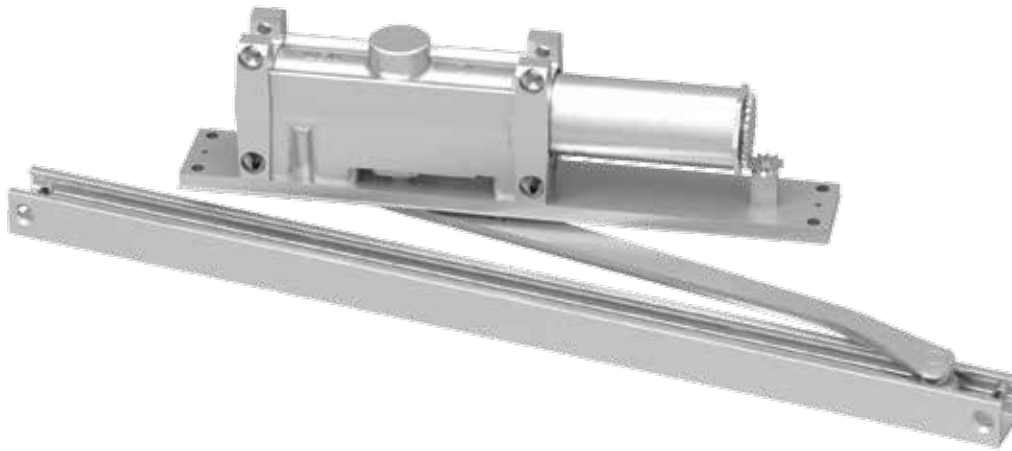
Standard WOOD and MACHINE SCREW (WMS) pack contains phillips head wood and machine screws to install the closer.

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.

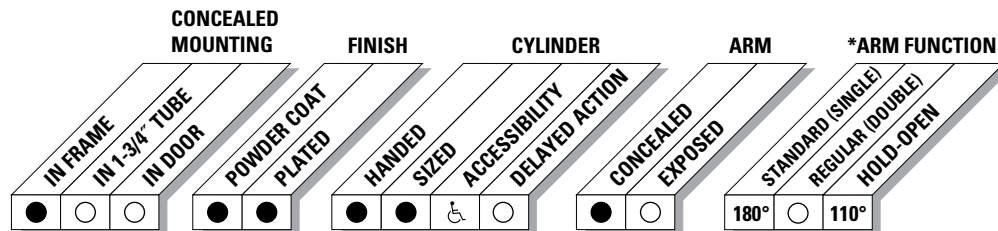


The concealed 2010 Series is a heavy duty closer designed to provide complete concealment. The single lever arm and roller assembly provide smooth, quiet door control and the choice of finishes and track functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	Fasteners	Wood and Machine Screw Pack
Body Construction	<ul style="list-style-type: none"> ■ Cast Iron Body ■ Full Complement Bearing ■ 1-1/2" Diameter Piston ■ 11/16" Diameter Double Heat Treated Pinion Journal 	Mounting	Concealed (in frame); aluminum frame requires minimum 4" x 4" (102 mm) tube
Fluid	All Weather Fluid	Arms	Standard arm and track
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

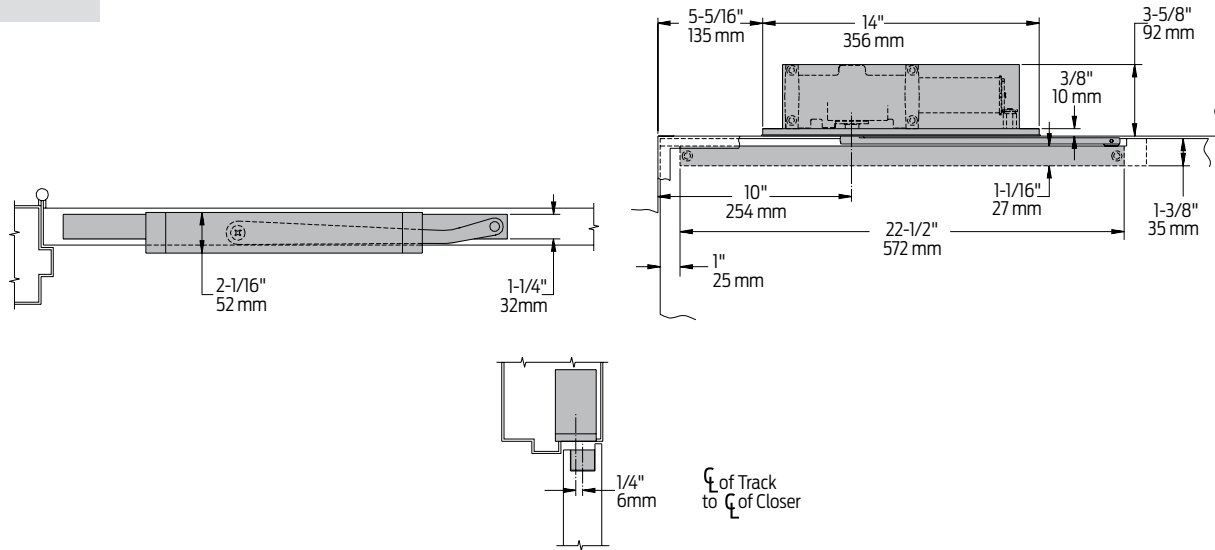
Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



● 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.



Butt Hinges	Should not exceed 5" (127 mm) in width
Auxiliary Stop	<ul style="list-style-type: none"> Recommended where a door cannot swing 180° Optional track bumper assembly assists backcheck in cushioning the opening swing of the door (not intended to replace an auxiliary stop).
Top Rail	<ul style="list-style-type: none"> 1-3/8" (35 mm) mortise required With Fire Shield, 1-13/32" (36 mm) mortise required 5/16" (8 mm) cutout required at top of the door, stop face only
Door Thickness	1-3/4" (44 mm) minimum
Hollow Metal Frame	Consult factory for installation instructions
Maximum opening	<ul style="list-style-type: none"> Butt hinge template allows 180°, trim permitting Limited to 110° when optional bumper is installed Adjustable hold-open points from 85° to 110°, with hold-open track Offset pivot template allows 110°, trim permitting Limited to 95° when optional bumper is installed Adjustable hold-open points from 75° to 95°, with hold-open track Center pivot template allows 120°, trim permitting Limited to 95° when optional bumper is installed Adjustable hold-open points from 75° to 95°, with hold-open track

Notes:

- For interior or exterior doors
- Single acting cylinder in head frame
- Concealed arm and track in door top rail

Cylinder



2011(3)(4)(5)(6)-3071
Cast Iron Cylinder Assembly

- Handed
- With mounting plate
- Standard

Arm



2010-3077T
Standard Arm

- Handed
- Track roller not included with arm

Installation Accessories



2010-420
Fire Shield

- 22 gauge steel liner mounts in the track mortise of the door's top rail for 20 minute labeled wood doors



2010-169
Track Bumper

- Mounts in track to assist backcheck
- Limits maximum opening
- Consists of bumper, bumper post, and mounting screw

NOTE: Track bumper does not replace auxiliary stop.

Tracks



2010-3038
Standard Track

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



2010-3038B
Standard Track with Bumper

- Non-handed
- Non hold-open
- Will accept hold-open clip
- Optional



2010-3038H
Hold-Open Track

- Non-handed
- Will accept bumper assembly
- Optional



2010-3038HB
Hold-Open Track with Bumper

- Non-handed
- Optional



2010-3054
Hold-Open Clip

- Mounts in track to provide hold-open function
- Hold-open point controlled by clip location
- Requires 2010-3034H



2010-3034
Track Roller

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



2010-3034H
Hold-Open Track Roller

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

How-to-order 2010 Series closers

Table of sizes

- Select closer based on width of door.
- 2010 Series cylinders available in size 1, 3, 4, 5, or 6.
- Closing power of all 2010 Series closers may be increased 15%.
- Specify next higher size closer where strong drafts exist.

Select cylinder size

- 2011
- 2013
- 2014
- 2015
- 2016

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
- Standard track
- Wood and machine screw pack
unless options listed below are selected.

Closer options

Tracks

- Standard with Bumper (BUMPER)
- Hold-open (H)
- Hold-open with Bumper (HBUMPER)

Finishes

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

Installation accessories

- Fire Shield, 2010-420

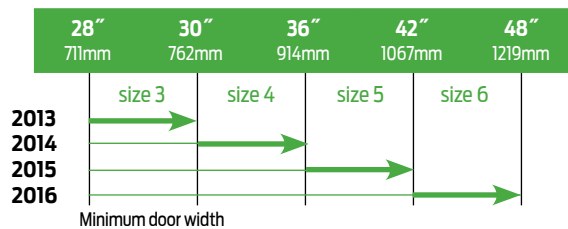
Screw pack

- TORX Machine Screw (TORX)

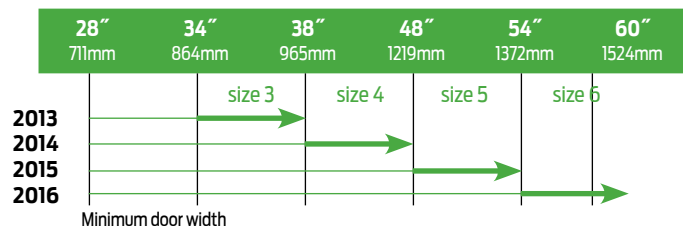
Special template

- ST- _____

Exterior (and Vestibule) door width



Interior door width




→ Indicates recommended range of door width for closer size.

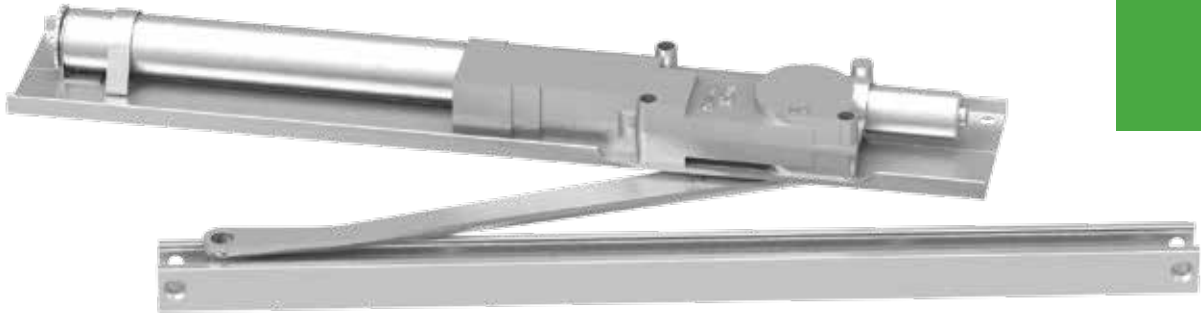
Reduced opening force 2010 Series closers

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.	2014	2014	2015
	5.0* lbs.	2011	2011	2013

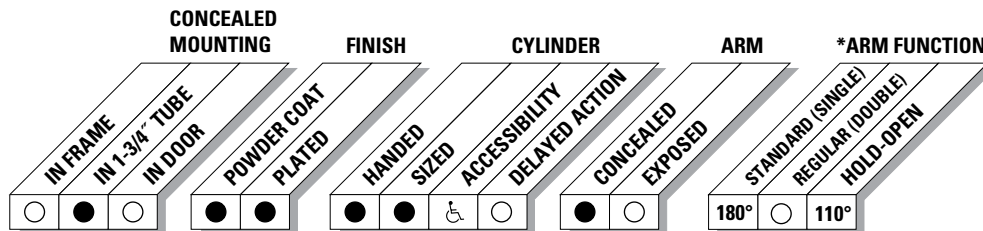


The concealed 2030 Series PACER® is a heavy duty closer designed to fit in a narrow, minimum 1-3/4" aluminum transom. The single lever arm and roller assembly provide smooth, quiet door control and the choice of finishes and track functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	Fasteners	Wood and Machine Screw Pack
Body Construction	<ul style="list-style-type: none"> ■ Cast Iron Body ■ Full Complement Bearing ■ 1 1/8" Diameter Piston ■ 1 1/16" Diameter Double Heat Treated Pinion Journal 	Mounting	Concealed (in tube); aluminum frame requires minimum 1-3/4" (44 mm) x 4" (102 mm) tube
Fluid	All Weather Fluid	Arms	Standard arm and track
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 1-5		<ul style="list-style-type: none"> ■ Optional SRI primer - powder coat only ■ Optional plated finishes
Warranty	15 years		

Special Templates

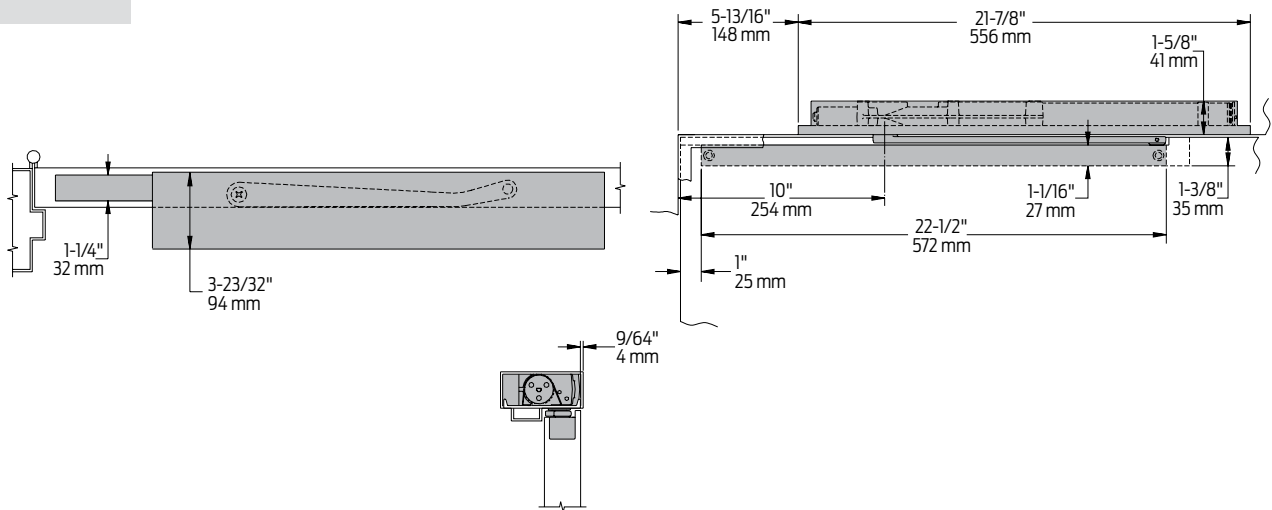
Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



● 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.



Butt Hinges	Should not exceed 5" (127 mm) in width
Auxiliary Stop	<ul style="list-style-type: none"> ■ Recommended where a door cannot swing 180° ■ Optional track bumper assembly assists backcheck in cushioning the opening swing of the door (not intended to replace an auxiliary stop).
Top Rail	<ul style="list-style-type: none"> ■ 1-3/8" (35 mm) mortise required ■ With Fire Shield, 1-13/32" (36 mm) mortise required ■ 5/16" (8 mm) cutout required at top of the door, stop face only
Door Thickness	1-3/4" (44 mm) minimum
Hollow Metal Frame	Consult factory for installation instructions
Wood Frame	Installation simplified by WOOD MOUNTING CLIP SET 2030-416 for center pivoted or 2030-417 for offset pivoted and butt hung installations. Consult factory for preparation details.
Maximum opening	<ul style="list-style-type: none"> ■ Butt hinge template allows 180°, trim permitting ■ Limited to 110° when optional bumper is installed ■ Adjustable hold-open points from 85° to 110°, with hold-open track ■ Consult factory if door will be held open at 180° ■ Offset pivot template allows 115°, trim permitting. Limited to 95° when optional bumper is installed ■ Hold-open point from 85°, with hold-open track ■ Center pivot template allows 120°, trim permitting ■ Limited to 100° when optional bumper is installed ■ Adjustable hold-open points from 85° to 100°, with hold-open track

Notes:

- For interior or exterior doors
- Single acting cylinder in head frame
- Concealed arm and track in door top rail

Cylinder



2031(2)(3)(4)(5)-3071
Cast Iron Cylinder Assembly

- Handed
- With mounting plate
- Standard

Arm



2030-3077T
Standard Arm

- Handed
- Track roller not included with arm

Tracks



2030-3038
Standard Track

- Non-handed
- Non hold-open
- Will accept hold-open clip and/or bumper assembly
- Standard



2030-3038B
Standard Track with Bumper

- Non-handed
- Non hold-open
- Will accept hold-open clip
- Optional



2030-3038H
Hold-Open Track

- Non-handed
- Will accept bumper assembly
- Optional



2030-3038HB
Hold-Open Track with Bumper

- Non-handed
- Optional

Installation Accessories



2030-420
Fire Shield

- 22 gauge steel liner mounts in the track mortise of the door's top rail for 20 minute labeled wood doors



2030-416
Wood Mounting Clip Set

- Simplifies mounting center pivoted 2030 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



2030-417
Wood Mounting Clip Set

- Simplifies mounting offset pivoted or butt hung 2030 closer in wood frame
- Includes two clips
- For use with offset pivots
- Consult factory for special template



2030-169
Track Bumper

- Mounts in track to assist backcheck. Limits maximum opening.
- Consists of bumper, bumper post, and mounting screw

NOTE: Track bumper does not replace auxiliary stop



2030-3054
Hold-Open Clip

- Mounts in track to provide hold-open function
- Hold-open point controlled by clip location
- Requires 2030-3034H Hold-Open Track Roller



2030-3034
Track Roller

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



2030-3034H
Hold-Open Track Roller

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

How-to-order 2030 Series closers

Select cylinder size

- 2031
- 2032
- 2033
- 2034
- 2035

Specify finish

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

Closer will be shipped with:

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

Select hand

- RH
- LH

Closer options

Tracks

- Standard with Bumper (BUMPER)
- Hold-open (H)
- Hold-open with Bumper (HBUMPER)

Finishes

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

Installation accessories

- Fire Shield, 2030-420
- Wood Clip Set, 2030-416
- Wood Clip Set, 2030-417

Screw pack

- TORX Machine Screw (TORX)

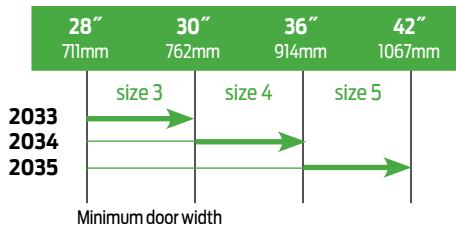
Special template

- ST- _____

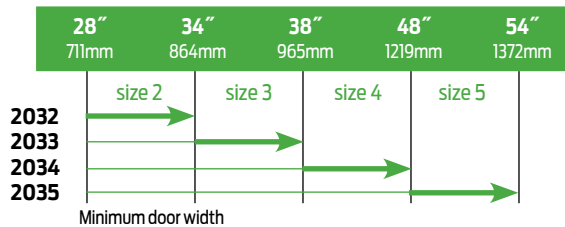
Table of sizes

- Select closer based on width of door.
- 2030 Series cylinders available in size 1, 2, 3, 4, or 5.
- Closing power of all 2030 Series closers may be increased 35%.
- Specify next higher size closer where strong drafts exist

Exterior (and Vestibule) door width



Interior door width




→ Indicates recommended range of door width for closer size.

Reduced opening force 2030 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.	2033	2033	2034
5.0* lbs.	2031	2032	2032	