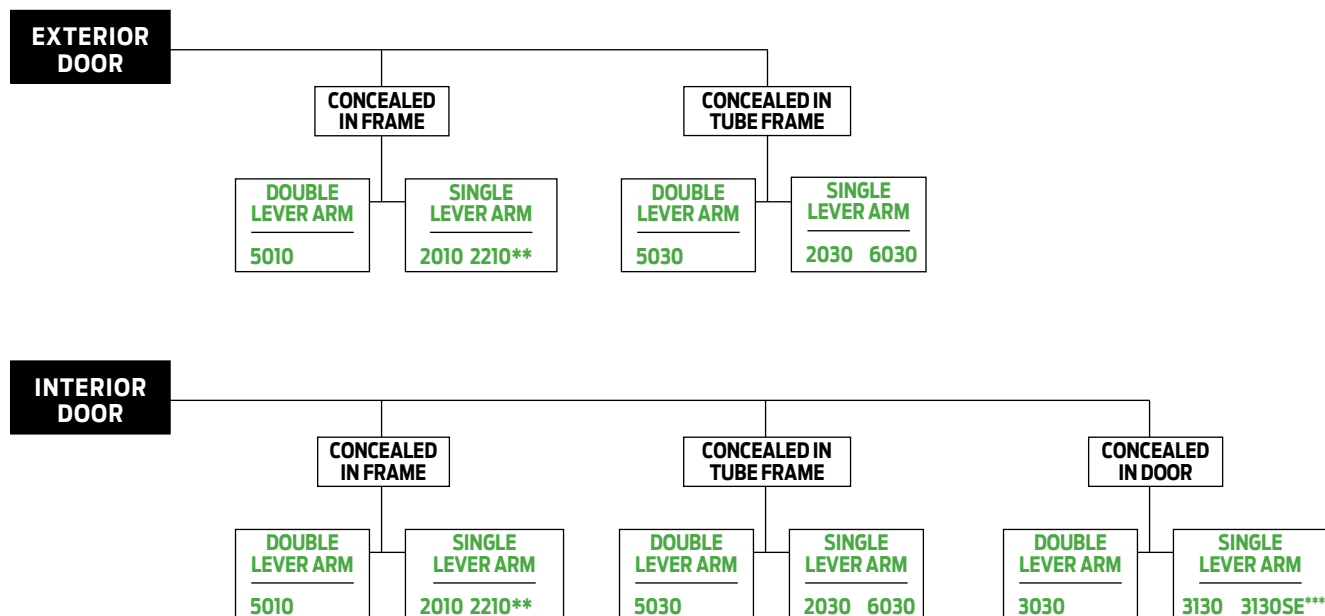


Product selection guide

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.

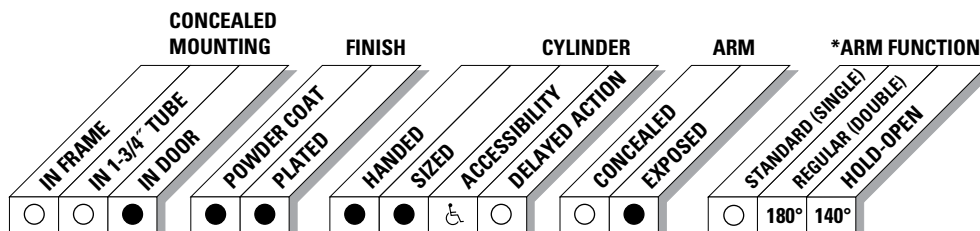


The concealed 3030 Series is designed to mount in a 1-3/4" interior door. The double lever arm provides superior door control and the choice of finishes and arm functions meet virtually all architectural requirements.

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 ■ 1/2" Diameter Double Heat Treated Pinion Journal 	Mounting	Concealed (in door); consult factory for installations with pivots
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 1-4		<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.



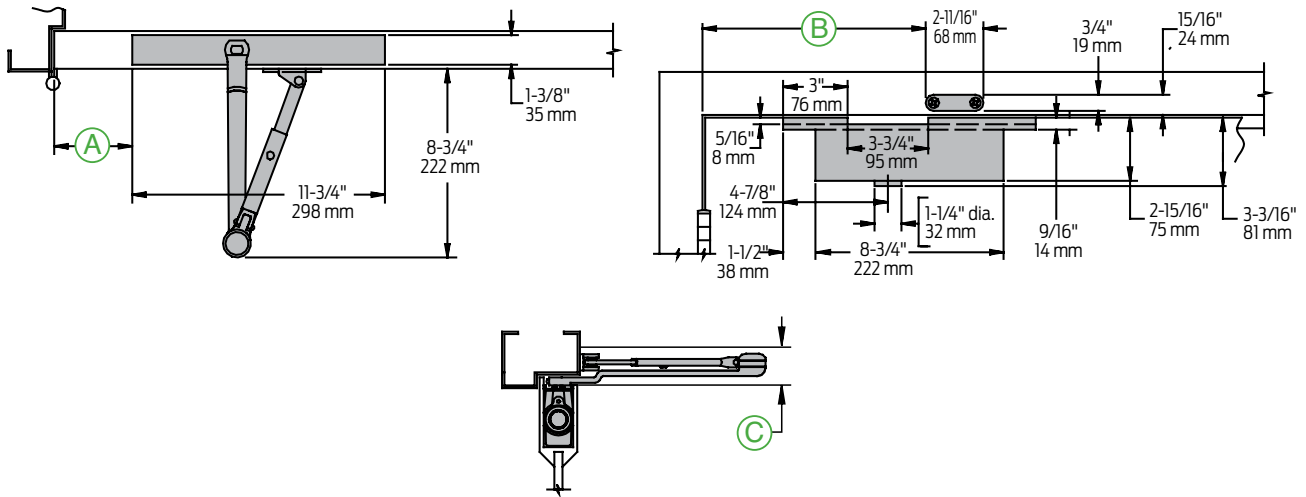
● AVAILABLE
○ NOT AVAILABLE

♿ 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.

3030 Series

Mounting details

Concealed Mounting



Butt Hinges	Should not exceed 5" (127 mm) in width
Auxiliary Stop	Recommended at hold-open point or where a door cannot swing 180°
Top Rail	Minimum 4" (102 mm) required
Door Thickness	<ul style="list-style-type: none"> ■ 1-3/4" (44 mm) minimum ■ Please consult the door manufacturer to assure that the door integrity and warranty is maintained after installing the 3030 Series door closer in a 1-3/4" thick wood door
Maximum opening	<p>Can be templated for</p> <p>100°: A = 3-5/8" (92 mm) B = 10-1/4" (260 mm)</p> <p>130°: A = 2-5/8" (67 mm) B = 9-1/4" (235 mm)</p> <p>180°: A = 1-5/8" (41 mm) B = 8-1/4" (210 mm)</p> <ul style="list-style-type: none"> ■ Hold-open points up to maximum opening or 140°, whichever is less, with hold-open arm. <p>Arm clearance above door C = 1-1/4" (32 mm) minimum</p>

Notes:

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

Cylinder



3031(2)(3)(4)-3071
Cast Iron Cylinder Assembly

- Handed
- With mounting plate
- Standard

Arms



3030-3077
Regular arm

- Non-handed



3030-3049
Hold-open arm

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

How-to-order 3030 Series closers

Select cylinder size

- 3031
- 3032
- 3033
- 3034

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 bracket
- 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)

Screw pack

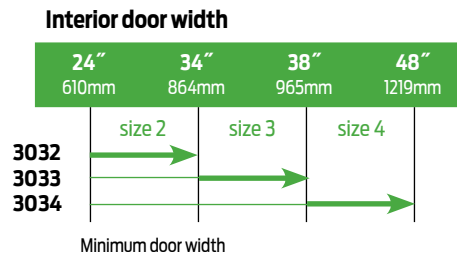
- TORX Machine Screw (TORX)

Special template

- ST- _____

Table of sizes

- Select closer based on width of door
- 3030 Series cylinders available in size 1, 2, 3, or 4
- Closing power of all 3030 Series closers may be increased 15%



Indicates recommended range of door width for closer size.

Reduced opening force 3030 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.	N/A	N/A	N/A
	5.0* lbs.	3031	3031	3032

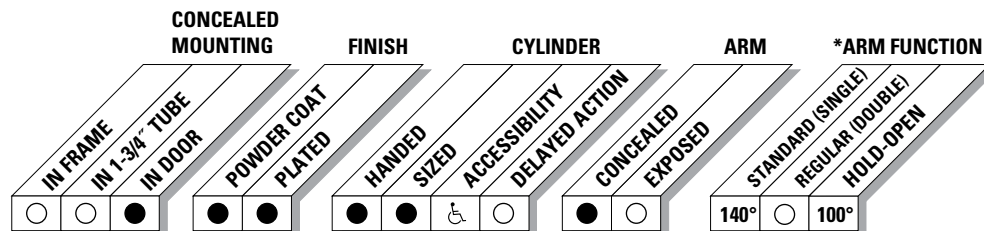


The concealed 3130 Series is designed to mount in a 1-3/4" interior door. The single lever arm and roller assembly provides complete concealment and the choice of finishes and track functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	Fasteners	Wood 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 ■ 1/2" Diameter Double Heat Treated Pinion Journal 	Mounting	Concealed (in door); consult factory for installation with pivots
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 1-3		<ul style="list-style-type: none"> ■ Optional SRI primer - powder coat only ■ Optional plated finishes
Warranty	15 years		

Special Templates

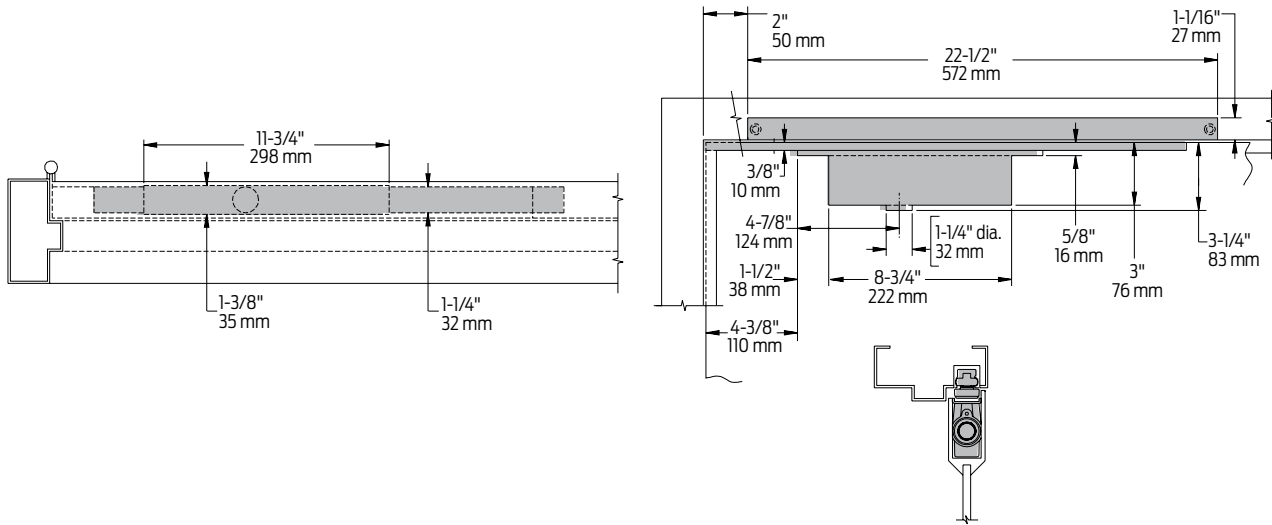
Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



● 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 at hold-open point or where a door cannot swing 140° Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop
Top Rail	Minimum 4" (102 mm) required
Door Thickness	<ul style="list-style-type: none"> 1-3/4" (44 mm) minimum. Please consult the door manufacturer to assure that the door integrity and warranty is maintained after installing the 3130 Series door closer in a 1-3/4" thick wood door
Door Width	2'2" (660 mm) minimum
Maximum opening	<ul style="list-style-type: none"> Templating allows 140°, trim permitting. 100° with optional bumper installed Adjustable hold-open points from 85° to 100°, with hold-open track

Notes:

- For interior doors
- Single acting cylinder and standard arm in top rail of door
- Concealed track in head frame
- Consult factory for installations with pivots.

Cylinder



3131(2)(3)-3071
Cast Iron Cylinder Assembly

- Handed
- With mounting plate
- Standard

Arm



3130-3077T
Standard Arm

- Handed
- Track roller not included with arm
- Standard

Tracks



3130-3038
Track

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



3130-3038B
Standard Track with Bumper

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



3130-3038H
Hold-Open track

- Non-handed
- Will accept bumper assembly
- Optional



3130-3038HB
Hold-Open Track with Bumper

- Non-handed
- Optional

Installation Accessories



3130-169
Track Bumper

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



3130-3054
Hold-Open Clip

- Mounts in track to provide hold-open function
- Hold-open point controlled by clip location
- Requires 3130-3034H Hold-Open Track Roller



3130-3034
Track Roller

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



3130-3034H
Hold-Open Track Roller

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

How-to-order 3130 Series closers

Select cylinder size

- 3131
- 3132
- 3133

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

Closer options

Track

- 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)

Screw pack

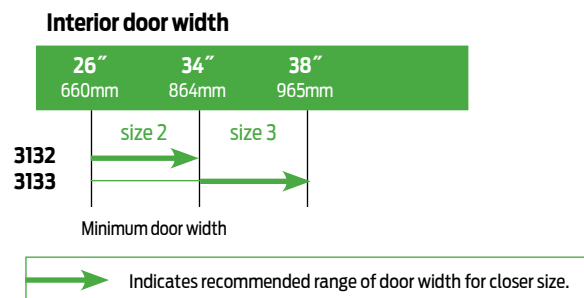
- TORX Machine Screw (TORX)

Special template

- ST- _____

Table of sizes

- Select closer based on width of door.
- 3130 Series cylinders available in size 1, 2, or 3.
- Closing power of 3130 Series closers is not adjustable



Reduced opening force 3130 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.	N/A	N/A	N/A
	5.0* lbs.	3131	3131	3132