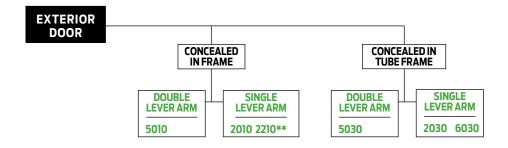
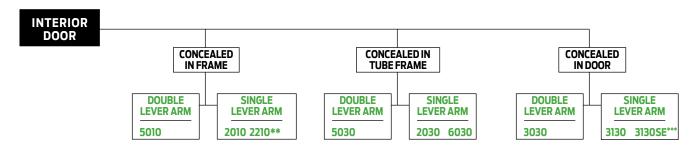
## Product selection guide

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.

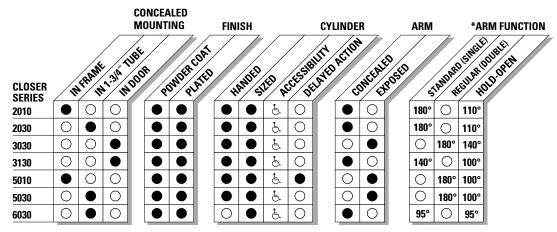




<sup>\*\*</sup> INDICATES HIGH SECURITY CLOSER, DOOR POSITION SWITCH OPTIONAL. REFER TO HIGH SECURITY SECTION OF THE CATALOG.

## Product comparison

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



AVAILABLE
 NOT AVAILABLE

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



<sup>\*\*\*</sup> INDICATES FIRE LIFE SAFETY CLOSER. REFER TO FIRE LIFE SAFETY SECTION.

<sup>&</sup>amp; Closer available with less than 5.0 lbs. opening force on 36 "door.

# 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. Contact LCN for assistance or technical information at 877-671-7011 or FAX 800-248-1460 (Order Entry), Fax 815-879-1495 for Product Support.

### **WARRANTY**

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) 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 R 1943.

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.

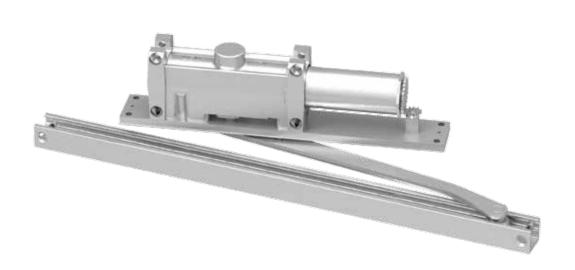
TORX machine screws are available for some closers.

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.





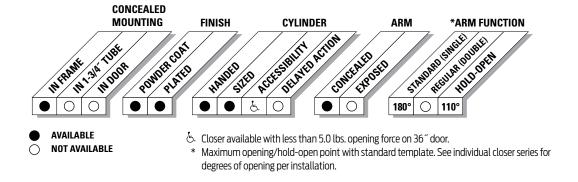
The concealed 2010 Series is a heavy duty closer designed to provide complete concealment. The single lever arm and roller assembly provide smooth, quiet door control and the choice of finishes and track functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body Construction	<ul> <li>Cast Iron Body</li> <li>Full Complement Bearing</li> <li>1-1/2" Diameter Piston</li> <li>11/16" Diameter Double Heat Treated Pinion Journal</li> </ul>
Fluid	All Weather Fluid
Handing	Handed
Size	Sized 1-6
Warranty	15 years

Fasteners	Wood and Machine Screw Pack		
Mounting	Concealed (in frame); aluminum frame requires minimum 4″ x 4″ (102 mm) tube		
Arms	Standard arm and track		
Finishes/Colors/ Powder Coat	<ul> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> </ul>		
	<ul><li>Optional SRI primer - powder coat only</li><li>Optional plated finishes</li></ul>		

Special Templates

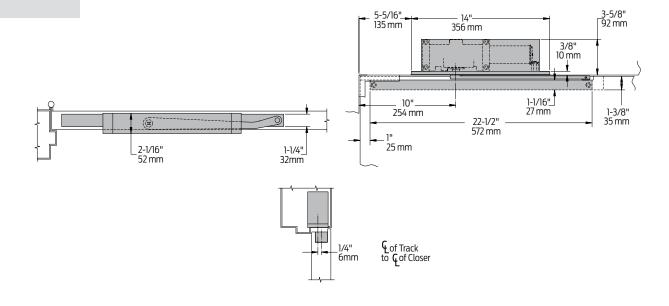
Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



**D3** 

## Mounting details

Concealed Mounting



Butt Hinges	Should not exceed 5" (127 mm) in width
Auxiliary Stop	<ul> <li>Recommended where a door cannot swing 180°</li> <li>Optional track bumper assembly assists backcheck in cushioning the opening swing of the door (not intended to replace an auxiliary stop).</li> </ul>
Top Rail	<ul> <li>1-3/8" (35 mm) mortise required</li> <li>With Fire Shield, 1-13/32" (36 mm) mortise required</li> <li>5/16" (8 mm) cutout required at top of the door, stop face only</li> </ul>
Door Thickness	1-3/4" (44 mm) minimum
Hollow Metal Frame	Consult factory for installation instructions
Maximum opening	<ul> <li>Butt hinge template allows 180°, trim permitting</li> <li>Limited to 110° when optional bumper is installed</li> <li>Adjustable hold-open points from 85° to 110°, with hold-open track</li> </ul>
	<ul> <li>Offset pivot template allows 110°, trim permitting</li> <li>Limited to 95° when optional bumper is installed</li> <li>Adjustable hold-open points from 75° to 95°, with hold-open track</li> </ul>
	<ul> <li>Center pivot template allows 120°, trim permitting</li> <li>Limited to 95° when optional bumper is installed</li> <li>Adjustable hold-open points from 75° to 95°, with hold-open track</li> </ul>

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





### 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



### 2010-3054 Hold-Open Clip

- Mounts in track to provide holdopen 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)



## 2010-3038H Hold-Open Track

- Non-handed
- Will accept bumper assembly
- Optional



2010-3038HB

## Hold-Open Track with Bumper

- Non-handed
- Optional

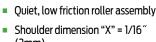




## 2010-3034H

## Hold-Open Track Roller

- (2mm)





## **Ordering Information**

## **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.

### 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.

Select cylinder size	Select hand
□ 2011	□ RH
□ 2013	□LH
□ 2014	
<b>□ 2015</b>	Specify finish

Specify finish ☐ Standard Powder Coat

Aluminum, Dark Bronze, Statuary, Light Bronze, Black, Brass.

## **Closer options**

#### **Tracks**

☐ Standard with Bumper (BUMPER)

□ 2016

- ☐ 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)

### **Installation accessories**

☐ Fire Shield, 2010-420

### 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

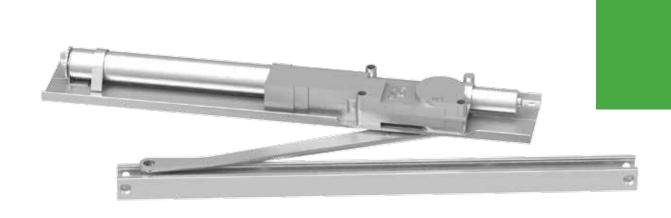
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to POWER OPERATORS section for information on systems that meet reduced opening force requirements without affecting closing power.

* Maximum opening †	force.
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	DOOR WIDTH	36″	42″	48″
Ė	8.5* lbs.	2014	2014	2015
	5.0* lbs.	2011	2011	2013





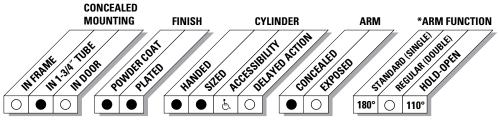
The concealed 2030 Series PACER® is a heavy duty closer designed to fit in a narrow, minimum 1-3/4" aluminum transom. The single lever arm and roller assembly provide smooth, quiet door control and the choice of finishes and track functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act		
Body Construction	<ul> <li>Cast Iron Body</li> <li>Full Complement Bearing</li> <li>11/8" Diameter Piston</li> <li>11/16" Diameter Double Heat Treated Pinion Journal</li> </ul>		
Fluid	All Weather Fluid		
Handing	Handed		
Size	Sized 1-5		
Warranty	15 years		

Fasteners	Wood and Machine Screw Pack		
Mounting	Concealed (in tube); aluminum frame requires minimum 1-3/4" (44 mm) x 4" (102) mm) tube		
Arms	Standard arm and track		
Finishes/Colors/ Powder Coat	<ul> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> </ul>		
	<ul><li>Optional SRI primer - powder coat only</li><li>Optional plated finishes</li></ul>		

**Special Templates** 

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

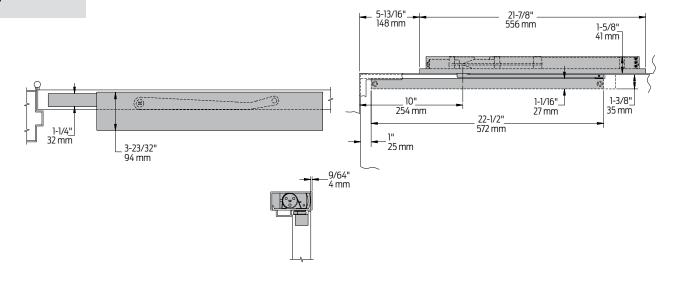


- AVAILABLE
- O NOT AVAILABLE
- Closer available with less than 5.0 lbs. opening force on 36 "door.
- Maximum opening/hold-open point with standard template. See individual closer series for degrees of opening per installation.

**D7** 

## Mounting details

Concealed Mounting



Butt Hinges	Should not exceed 5" (127 mm) in width				
Auxiliary Stop	<ul> <li>Recommended where a door cannot swing 180°</li> <li>Optional track bumper assembly assists backcheck in cushioning the opening swing of the door (not intended to replace an auxiliary stop).</li> </ul>				
Top Rail	<ul> <li>1-3/8" (35 mm) mortise required</li> <li>With Fire Shield, 1-13/32" (36 mm) mortise required</li> <li>5/16" (8 mm) cutout required at top of the door, stop face only</li> </ul>				
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> <li>Butt hinge template allows 180°, trim permitting</li> <li>Limited to 110° when optional bumper is installed</li> <li>Adjustable hold-open points from 85° to 110°, with hold-open track</li> </ul>				
	<ul> <li>Consult factory if door will be held open at 180°</li> </ul>				
	<ul> <li>Offset pivot template allows 115°, trim permitting. Limited to 95° when optional bumper is installed</li> <li>Hold-open point from 85°, with hold-open track</li> </ul>				
	<ul> <li>Center pivot template allows 120°, trim permitting</li> <li>Limited to 100° when optional bumper is installed</li> <li>Adjustable hold-open points from 85° to 100°, with hold-open track</li> </ul>				

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





## 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 holdopen 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)

Ordering Information

### 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.

## $\square$ LH

Select hand  $\square RH$ 

## **Closer options**

Track	S	

☐ 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.

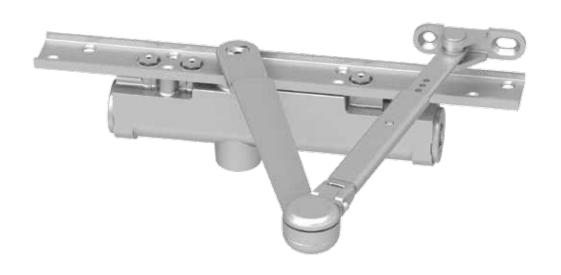
* M	laxi	mu	m	ор	eni	ng	force.
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	DOOR WIDTH	36″	42″	48"
	8.5* lbs.	2033	2033	2034
	5.0* lbs.	2031	2032	2032









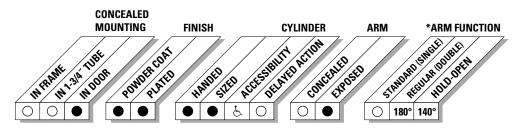
The concealed 3030 Series is designed to mount in a 1-3/4" interior door. The double lever arm provides superior door control and the choice of finishes and arm functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	
Body Construction	<ul> <li>Cast Iron Body</li> <li>Full Complement Bearing</li> <li>1-1/8" Diameter Piston</li> <li>1/2" Diameter Double Heat Treated Pinion Journal</li> </ul>	
Fluid	All Weather Fluid	
Handing	Handed	
Size	Sized 1-4	
Warranty	15 years	

Fasteners	Wood Screws and Torx Security Screws (optional)
Mounting	Concealed (in door); consult factory for installations with pivots
Arms	Regular arm
Finishes/Colors/ Powder Coat	<ul> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> </ul>
	<ul><li>Optional SRI primer - powder coat only</li><li>Optional plated finishes</li></ul>

Special Templates

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

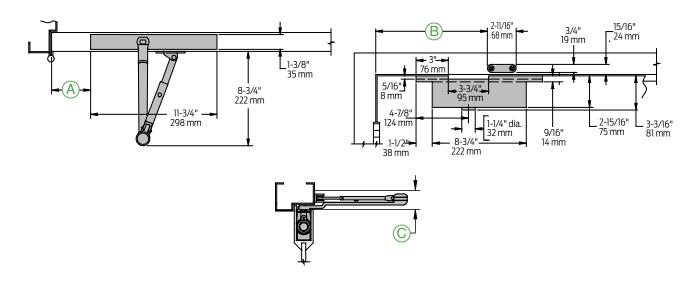


- AVAILABLE
- O NOT AVAILABLE
- & Closer available with less than 5.0 lbs. opening force on 36" door.
- \* Maximum opening/hold-open point with standard template. See individual closer series for degrees of opening per installation.



## 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		
<b>Door Thickness</b>	<ul> <li>1-3/4" (44 mm) minimum</li> <li>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</li> </ul>		
Maximum opening	Can be templated for 100°: A = 3-5/8″ (92 mm) B = 10-1/4″ (260 mm)		
	130°: A = 2-5/8″ (67 mm) B = 9-1/4″ (235 mm)		
	180°: A = 1-5/8″ (41 mm) B = 8-1/4″ (210 mm)		
	<ul> <li>Hold-open points up to maximum opening or 140°, whichever is less, with hold-open arm.</li> </ul>		
	Arm clearance above door C = 1-1/4" (32 mm) minimum		

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





## 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



## Ordering Information

Н	low-	-to-ore	lei	r 30	130	) Seri	ies c	losers

## Select cylinder size

- □3031
- □3032
- □3033
- □3034

### Select hand

- $\square RH$
- □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)

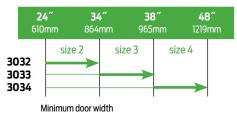
### Special template

□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%

#### Interior door width



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.

			-
* Maxi	mum d	onening	torce.

	DOOR WIDTH	36″	42″	48″
Ė	8.5* lbs.	N/A	N/A	N/A
	5.0* lbs.	3031	3031	3032





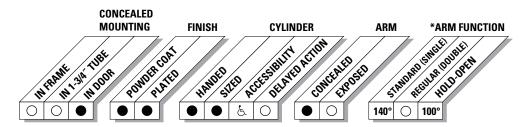
The concealed 3130 Series is designed to mount in a 1-3/4" interior door. The single lever arm and roller assembly provides complete concealment and the choice of finishes and track functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	
Body Construction	<ul> <li>Cast Iron Body</li> <li>Full Complement Bearing</li> <li>1-1/8" Diameter Piston</li> <li>1/2" Diameter Double Heat Treated Pinion Journal</li> </ul>	
Fluid	All Weather Fluid	
Handing	Handed	
Size	Sized 1-3	
Warranty	15 years	

Fasteners	Wood Screws and Torx Security Screws (optional)
Mounting	Concealed (in door); consult factory for installation with pivots
Arms	Standard arm and track
Finishes/Colors/ Powder Coat	<ul> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> </ul>
	<ul><li>Optional SRI primer - powder coat only</li><li>Optional plated finishes</li></ul>

Special Templates

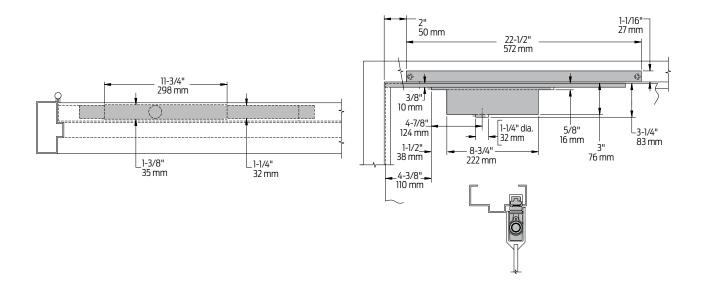
Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



- AVAILABLENOT AVAILABLE
- $\mbox{\&}$  Closer available with less than 5.0 lbs. opening force on 36  $\mbox{''}$  door.
- Maximum opening/hold-open point with standard template. See individual closer series for degrees of opening per installation.

## Mounting details

Concealed Mounting



Butt Hinges	Should not exceed 5" (127 mm) in width	
Auxiliary Stop	<ul> <li>Recommended at hold-open point or where a door cannot swing 140°</li> <li>Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop</li> </ul>	
Top Rail	Minimum 4" (102 mm) required	
<b>Door Thickness</b>	<ul> <li>1-3/4" (44 mm) minimum.</li> <li>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</li> </ul>	
Door Width	2´2″ (660 mm) minimum	
Maximum opening	<ul> <li>Templating allows 140°, trim permitting. 100° with optional bumper installed</li> <li>Adjustable hold-open points from 85° to 100°, with hold-open track</li> </ul>	

- For interior doors
- · Single acting cylinder and standard arm in top rail of door
- · Concealed track in head frame
- $\cdot \textit{Consult factory for installations with pivots.}$





### 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 holdopen 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)



## Ordering Information

## How-to-order 3130 Series closers

## Select cylinder size

- □3131
- □3132
- □3133

#### Select hand

- $\square$  RH
- $\square$  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 wtih 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

## Interior door width



## Reduced opening force 3130 Series closers

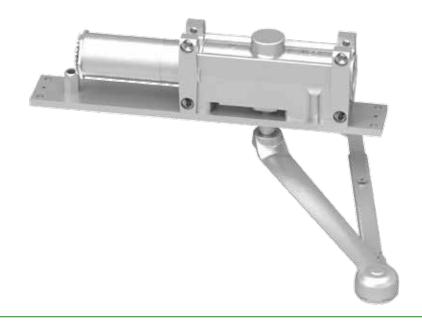
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to POWER OPERATORS section for information on systems that meet reduced opening force requirements without affecting closing power.

*	Maximum	ononing	force

	DOOR WIDTH	36″	42″	48″
Ė	8.5* lbs.	N/A	N/A	N/A
	5.0* lbs.	3131	3131	3132





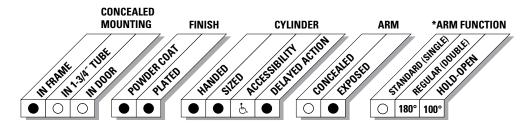
The concealed 5010 Series is a heavy duty closer designed for institutional, high traffic, or other applications exposed to weather or abuse. The double lever arm provides superior door control and a choice of finishes, cylinder functions, and arm functions that meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	
Body Construction	<ul> <li>Cast Iron Body</li> <li>Full Complement Bearing</li> <li>1-1/8 Diameter Piston</li> <li>11/16 Diameter Double Heat Treated Pinion Journal</li> </ul>	
Fluid	All Weather Fluid	
Handing	Handed	
Size	Sized 1-6	
Warranty	15 years	

Fasteners	Wood Screws and Torx Security Screws (optional)
Mounting	Concealed (in frame); aluminum frame requires 4" (102 mm) x 4" tube
Arms	Regular Arm
Finishes/Colors/ Powder Coat	<ul> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> </ul>
	<ul><li>Optional SRI primer - powder coat only</li><li>Optional plated finishes</li></ul>

Special Templates

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



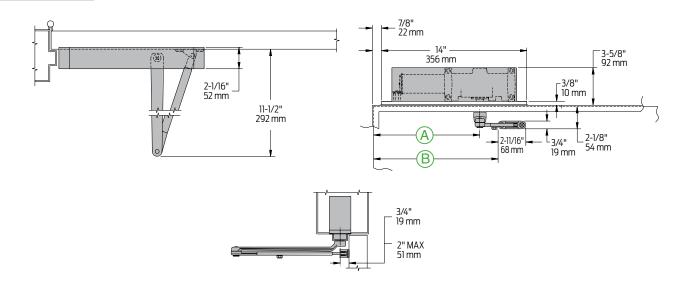
- AVAILABLENOT AVAILABLE
- $\mbox{\&}$  Closer available with less than 5.0 lbs. opening force on 36  $^{\prime\prime}$  door.
- \* Maximum opening/hold-open point with standard template. See individual closer series for degrees of opening per installation.



**D21** 

## Mounting details

Concealed Mounting



Butt Hinges	Should no	t exceed 6" (152 mm) in width	
Doccininges			
Auxiliary Stop	Recomme	Recommended at hold-open point or where a door cannot swing 180°	
Top Rail	Minimum 2	Minimum 2-1/8" (54 mm) required	
Delay Action	<ul><li>Delays</li></ul>	<ul> <li>Add suffix "DEL" to selected cylinder (eg. 5014 DEL) (not available with 5016 cylinder)</li> <li>Delays closing from maximum opening to approximately 70°</li> <li>Delay time adjustable up to approximately 1 minute</li> </ul>	
Maximum opening	ng Butt hung doors can be templated for		
. •	100°:	$A = 10-3/16^{x} (259 \text{ mm})$	
		B = 12" (305 mm)	
	180°:	A = 5-1/2" (140 mm)	
		B = $7-5/16^{\circ}$ (186 mm) trim permitting	
<ul> <li>Hold-open points up to 100° only with hold-open arm</li> </ul>		pen points up to 100° only with hold-open arm	
	<ul> <li>Center pivot mounting restricts opening to 140°</li> </ul>		
	<ul><li>Offset p</li></ul>	pivot mounting allows up to 180°, trim permitting	

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





## 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



## Ordering information

## How-to-order 5010 Series closers

## Select cylinder size

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

## 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.

## 

Select hand  $\square$  RH

## **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

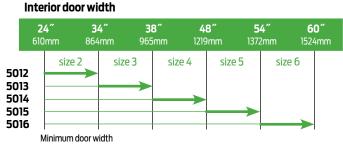
□ST-

## 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





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.

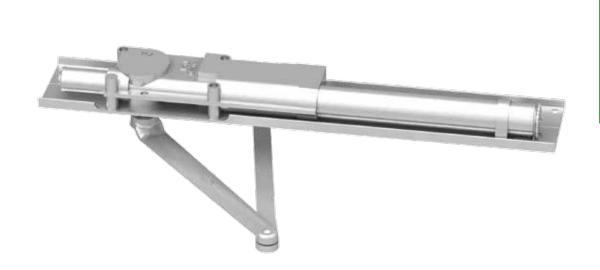
Refer to POWER OPERATORS section for information on systems that meet reduced opening force requirements without affecting closing power.

* Maximum opening force.
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	DOOR WIDTH	36″	42″	48"
Ė	8.5* lbs.	5012	5013	5013
	5.0* lbs.	5011	5011	5012



**D24** 



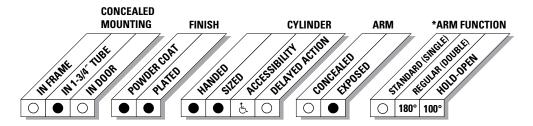
The concealed 5030 Series PACER® is a heavy duty closer designed to fit in a narrow, minimum 1-3/4" aluminum transom. The double lever arm provides superior door control and the choice of finishes and arm functions meet virtually all architectural requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body Construction	<ul> <li>Cast Iron Body</li> <li>Full Complement Bearing</li> <li>1-1/8" Diameter Piston</li> <li>11/16" Diameter Double Heat Treated Pinion Journal</li> </ul>
Fluid	All Weather Fluid
Handing	Handed
Size	Sized 1; 3-6
Warranty	15 years

Fasteners	Wood Screws and Torx Security Screws (optional)
Mounting	Concealed (in tube); aluminum frame requires minimum 1-3/4" (44 mm) x 4-1/2" (114 mm) tube
Arms	Regular Arm
Finishes/Colors/ Powder Coat	<ul> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> </ul>
	<ul><li>Optional SRI primer - powder coat only</li><li>Optional plated finishes</li></ul>

Special Templates

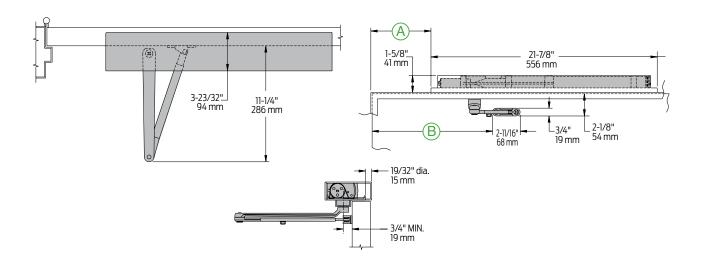
Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



- AVAILABLENOT 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.

## 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> <li>Installation simplified by WOOD MOUNTING CLIP SET 5030-416 for center pivoted or 5030-417 for offset pivoted and butt hung installations</li> <li>Consult factory for preparation details</li> </ul>		
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	Butt hung doors can be templated for 100°: A = 5-13/16" (148 mm) B = 11-13/16" (300 mm)		
	180°: A = 2-1/16" (52 mm) B = 8-1/16" (205 mm) trim permitting		
	<ul> <li>Hold-open points up to 100° only with hold-open arm</li> <li>Center pivot mounting restricts opening to 120°. Hold-open up to 120° with hold-open arm</li> <li>Offset pivot mounting allows up to 115°, trim permitting. Hold-open up to 115° with hold-open arm</li> </ul>		

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





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

- Handed
- With mounting plate
- Standard

### **Arms**





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.

**D27** 

## Ordering information

## How-to-order 5030 Series closers

## Select cylinder size

- □ 5031
- □ 5033
- □ 5034 □ 5035
- □ 5036

### Select hand

 $\square$  RH  $\Box$  LH

Specify finish ☐ Standard Powder Coat

Aluminum, Dark Bronze, Statuary, Light Bronze, Black, Brass

Special template □ST-\_\_

## **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)

## **Installation accessories**

☐ Wood Clip Set, 5030-416

Closer will be shipped with:

- Wood and machine screw pack

unless options listed below are selected.

- Regular arm

- Standard cylinder with mounting plate

☐ Wood Clip Set, 5030-417

## 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

## Exterior (and Vestibule) door width



## Interior door width



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 openi	ng j	orce.
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	DOOR WIDTH	36″	42″	48"
Ė	8.5* lbs.	5033	5033	5033
	5.0* lbs.	5031	5031	5033





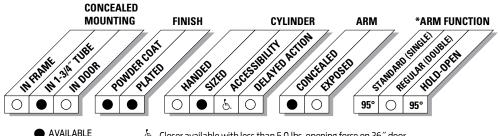
The concealed 6030 Series PACER® is a heavy duty, double acting closer designed to fit in a narrow, minimum 1-3/4" header. The single lever arm and roller assembly provides smooth, guiet door control and the choice of finishes and track functions meet virtually all architectural requirements. Installation at left illustrated with center pivot set (not included).

Certifications	Grade 1 - ANSI A156.4, UL 10 C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	Fasten
		Mounti
Body Construction	Cast Iron Body	Arms
	<ul> <li>Full Complement Bearing</li> <li>1-1/8" Diameter Piston</li> <li>11/16" Diameter Double Heat Treated Pinion Journal</li> </ul>	Finishe Powder
Fluid	All Weather Fluid	
Handing	Non-Handed	
Size	Sized 1-5	
Warranty	15 years	

Fasteners	Wood Screws and Torx Security Screws (optional)
Mounting	Concealed (in tube); double acting
Arms	Standard arm with track
Finishes/Colors/ Powder Coat	<ul> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> </ul>
	<ul><li>Optional SRI primer - powder coat only</li><li>Optional plated finishes</li></ul>

**Special Templates** 

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

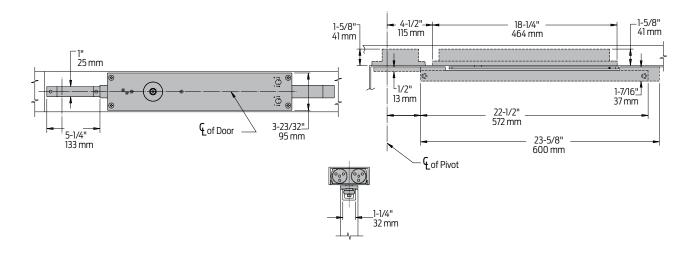


- AVAILABLE O NOT AVAILABLE
- & Closer available with less than 5.0 lbs. opening force on 36 " door.
- Maximum opening/hold-open point with standard template. See individual closer series for degrees of opening per installation.



## Mounting details

Concealed Mounting



Recommended where a door cannot swing 95°	
Must be used but ordered separately	
30" (762 mm) minimum with 1-3/4" (44 mm) pivot centers	
<ul> <li>1-7/16" (36 mm) mortise required</li> <li>3/8" (10 mm) cutout required at top of the door, both sides.</li> </ul>	
1-3/4" (44 mm) minimum	
Centering is provided by rotating the track roller to center the door in the opening.	
<ul> <li>Installation simplified by WOOD MOUNTING CLIP SET, 6030-416</li> <li>Consult product support for special template</li> </ul>	
<ul> <li>Center pivot template allows 95°</li> <li>Adjustable hold-open points from 85° to 95°, with hold-open track</li> </ul>	

- For interior or exterior doors
- · Double acting cylinder in cased frame
- $\cdot$  Concealed arm and track in door top rail
- · Center pivots only





### 6031(2)(3)(4)(5)-3071 Cast Iron Cylinder Assembly

- Non-handed
- With mounting plate
- Standard

### Arm



#### 6030-3077T Standard Arm

- Non-handed
- 5/16" (8 mm) thick arm
- Track roller not included with arm

## **Tracks**



### 6030-3038B Standard Track with Bumper

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



## 6030-3038HB

## Hold-Open Track with Bumper

- Non-handed
- Optional

#### **Installation Accessories**



#### 6030-416

### Wood Mounting Clip Set

- Simplifies mounting 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





## 6030-169 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.



#### 6030-3054 Hold-Open Clip

- Mounts in track to provide holdopen function
- Hold-open point controlled by clip location
- Requires 6030-3034H Hold-Open Track Roller





#### 6030-3034 Track Roller

Quiet, low friction roller assembly includes eccentric with  $3/4^{''}$  (19 mm) adjustment to center 36" (914 mm) door





## Hold-Open Track Roller

- Hold-open roller
- Quiet, low friction roller assembly





## Ordering information

## How-to-order 6030 Series closers

## Select cylinder size

- □ 6031
- □ 6032
- □ 6033 □ 6034
- □ 6035

## Specify finish

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

## **Closer options**

### Track

☐ Hold-open with Bumper (HBUMPER)

#### **Finishes**

- □ Custom Powder Coat (RAL)\_
- ☐ Plated Finish, US\_
- ☐ SRI primer (use with powder coat finishes only)

## **Installation accessories** ☐ Wood Clip Set, 6030-416

Closer will be shipped with:

- Standard track with bumper

- Wood and machine screw pack

unless options listed below are selected.

- Standard arm

- Standard cylinder with mounting plate

## Screw pack

□ TORX Machine Screw (TORX)

#### Special template □ST-

# Table of sizes

- Select closer based on width of door
- 6030 Series cylinders available in size 1, 2, 3, 4, or 5
- Closing power of all 6030 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. Note: Minimum door width 28" (711 mm).

## Reduced opening force 6030 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.

*/	Иах	mum	oper	ning (	orce.
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	DOOR WIDTH	36″	42″	48″
Ė	8.5* lbs.	6033	6034	6035
	5.0* lbs.	6031	6032	6032

