

# 4110 Series



The 4110 is LCN's best performing heavy duty closer with an adjustable spring and possible hold open point beyond 140 degrees, meeting ADA requirements. Backed by a 30 year warranty, the cast iron body and all weather fluid offer versatility in high traffic applications.

## Features

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act	<b>Cover</b>	<ul style="list-style-type: none"> <li>Plastic Cover (PC), standard</li> <li>Metal Cover (MC), optional</li> </ul>
<b>Body construction</b>	<ul style="list-style-type: none"> <li>Cast iron body</li> <li>Full complement bearing</li> <li>1 1/2" diameter piston</li> <li>1/16" diameter double heat treated pinion journal</li> </ul>	<b>Fasteners</b>	Self Reaming and Tapping Screws (SRT)
<b>Fluid</b>	All weather fluid	<b>Mounting</b>	Parallel arm (push side)
<b>Handing</b>	Handed	<b>Arms</b>	Extra-duty arm
<b>Templating</b>	Peel-n-Stick templates - 2 1/2" x 6" mounting hole pattern	<b>Finishes/colors/ powder coat</b>	<ul style="list-style-type: none"> <li>622 Matte black</li> <li>689 Aluminum</li> <li>690 Statuary bronze</li> <li>691 Light bronze</li> <li>693 Black</li> <li>695 Dark bronze</li> <li>696 Brass</li> <li>Custom colors optional</li> </ul>
<b>Size</b>	Adjustable spring size 1-5, or sized 6, includes LCN Green Dial		<ul style="list-style-type: none"> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes</li> </ul>
<b>Warranty</b>	30 years		

### Special templates

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

Mounting	Finish	Cover	Cylinder	Arm function*
Hinge (pull) side	Plastic	Non-handed	Regular (double)	180°
Top jamb (pull)	Metal	Non-sized	Standard (single)	180°
Top jamb (push)	Powder coat	Accessibility	Hold Open	110°
Parallel arm	Plated	Delay Action**	Fusible Link	110°
Stop face		CYLAVB**	EDM/HEDA	
			CUSH/HCUSH	
			SCUSH/SHCUSH	
			Double Egress	

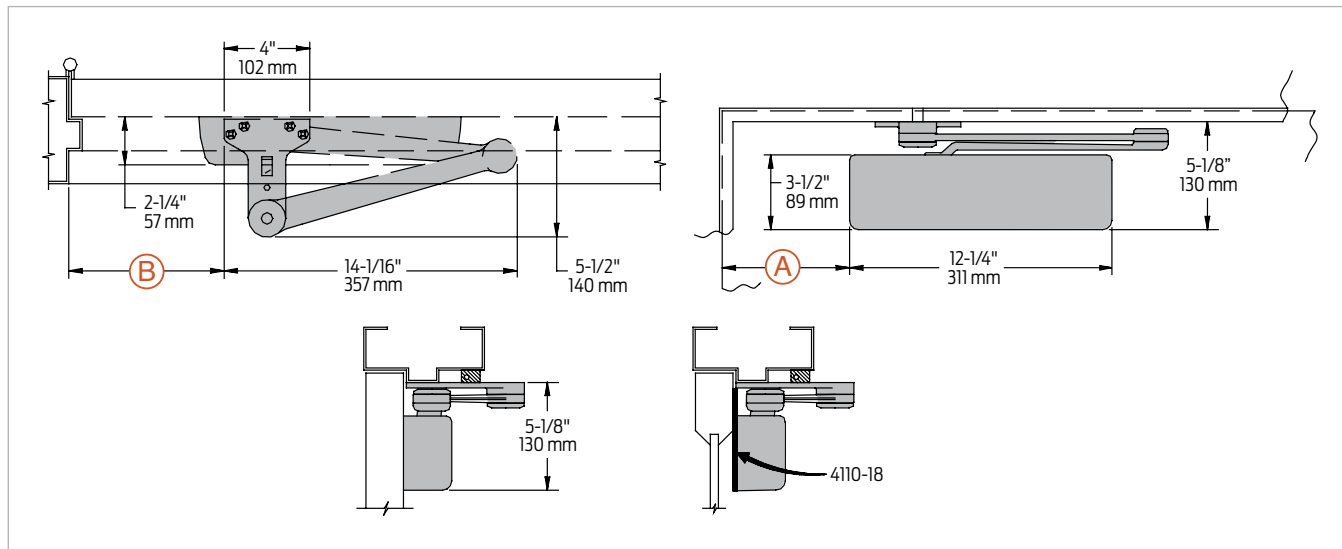
- Available
- Not available

Closer available with less than 5.0 lbs. opening force on 36" door.  
 \* Maximum opening/hold open point with standard template.  
 \*\* Advanced Variable Back Check.  
 \*\*\* Delay feature incorporates standard 4040 cylinder (not XP).

Introduction  
 Product selection guide  
 4010/4010T Series  
 4020/4020T Series  
 4030/4030T Series  
 4040XP/4040XPT Series  
 4050A/4050AT Series  
 4110/4110T Series  
 4000T Series

## Mounting details

### Parallel arm (push) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width																								
Auxiliary stop	Recommended at hold open point, where a door cannot swing 180°, or where Cush-n-Stop Arm is not used																								
Clearance	EDA, or CUSH shoe is 5 1/2" (140 mm) from door face																								
Top rail	<ul style="list-style-type: none"> <li>Less than 5 1/8" (130 mm) measured from stop requires plate, 4110-18</li> <li>Plate requires 2" (51 mm) minimum measured from the stop</li> </ul>																								
Stop width	Minimum 1" (25 mm)																								
Head frame	Flush or rabbeted requires CUSH flush panel adapter, 4110-419																								
Reveal	Less than 2 3/4" (70 mm), use CUSH shoe support, 4110-30 with CUSH arms																								
Blade stop spacer	4110-61 required to clear 1/2" (13 mm) blade stop																								
Cush arm	Requires CUSH shoe support, 4110-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)																								
Delay action	<ul style="list-style-type: none"> <li>Add suffix "CYLDEL" to selected cylinder</li> <li>Not available with 4116 cylinder; delays closing from maximum opening to approximately 70°</li> <li>Delay time adjustable up to approximately 1 minute</li> </ul>																								
Advanced Variable Back Check	<ul style="list-style-type: none"> <li>Cylinder starts back check at approximately 45° instead of the normal 75°</li> <li>Add suffix "CYLAVB" to selected cylinder</li> </ul>																								
Maximum opening	EDA or Fusible Link Arm can be templated for:	CUSH Arm can be templated for maximum opening at:																							
	<table border="0"> <tr> <td>100°</td> <td>A = 5 15/16" (151 mm)</td> <td>85°</td> <td>A = 8 5/16" (211 mm)</td> </tr> <tr> <td></td> <td>B = 7 1/4" (184 mm)</td> <td></td> <td>B = 9 5/8" (244 mm)</td> </tr> <tr> <td>140°</td> <td>A = 4 7/16" (113 mm)</td> <td>90°</td> <td>A = 7 11/16" (195 mm)</td> </tr> <tr> <td></td> <td>B = 5 3/4" (146 mm)</td> <td></td> <td>B = 9" (229 mm)</td> </tr> <tr> <td>or 180°</td> <td>A = 2 15/16" (75 mm)</td> <td>or 110°</td> <td>A = 5 9/16" (141 mm)</td> </tr> <tr> <td></td> <td>B = 2 15/16" (75 mm)</td> <td></td> <td>B = 6 7/8" (175 mm)</td> </tr> </table>	100°	A = 5 15/16" (151 mm)	85°	A = 8 5/16" (211 mm)		B = 7 1/4" (184 mm)		B = 9 5/8" (244 mm)	140°	A = 4 7/16" (113 mm)	90°	A = 7 11/16" (195 mm)		B = 5 3/4" (146 mm)		B = 9" (229 mm)	or 180°	A = 2 15/16" (75 mm)	or 110°	A = 5 9/16" (141 mm)		B = 2 15/16" (75 mm)		B = 6 7/8" (175 mm)
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	<ul style="list-style-type: none"> <li>Hold open points up to maximum opening with HEDA or Fusible Link Arm</li> </ul>	<ul style="list-style-type: none"> <li>Hold open point at maximum opening with HCUSH Arm</li> <li>SCUSH hold open points are approximately 5° less than templated stop point</li> </ul>																							

## Accessories

### Cylinders



- 4111(6)-3071**  
**Cast iron cylinder assembly (CYL)**
- Handed
  - Standard

### Covers



- 4110-72**  
**Plastic Cover (PC)**
- Non-handed
  - Standard



- 4110-72MC**  
**Metal Cover (MC)**
- Handed
  - Required for plated finishes and custom powder coat finishes
  - Optional

### Arms



- 4110-3049EDA**  
**Hold Open Arm (H)**
- Handed
  - Optional
  - Provides hold open function, adjustable at shoe



- 4110-3049FL**  
**Fusible Link Arm (FL)**
- Handed
  - Releases hold-open function adjustable at shoe when exposed to temperatures above 165° F
  - Optional

Note: Check local codes before specifying FL arms.  
 NOT A life safety product!



- 4110-3077CNS**  
**Cush-n-Stop Arm (CUSH)**
- Non-handed
  - Features solid forged steel main arm and forearm with built-in stop in soffit shoe



- 4110-3077EDA**  
**Extra Duty Arm (EDA)**
- Non-handed
  - Features forged, solid steel main and forearm for potentially abusive installations



- 4110-3077EDA/62G**  
**Extra Duty Arm (EDA)**
- Non-handed
  - Features forged, solid steel main and forearm for potentially abusive installations
  - Optional 4110-62G thick hub shoe for blade stop clearance



- 4110-3049CNS**  
**Hold Open Cush-n-Stop Arm (HCUSH)**
- Non-handed
  - Provides hold open function with templated stop/hold open points
  - Handle controls hold open function



- 4110-3077SCNS**  
**Spring Cush-n-Stop Arm (SCUSH)**
- Non-handed
  - For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
  - Optional



- 4110-3049SCNS**  
**Spring Hold open Cush-n-Stop Arm (SHCUSH)**
- Non-handed
  - For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
  - Handle controls hold open function
  - Optional

### Installation accessories



- 4110-18**  
**Plate**
- Required for push side mount where top rail is less than 5 1/8" (130 mm), measured from the stop
  - Requires minimum 2" (51 mm) minimum top rail



- 4110-30**  
**CUSH shoe support**
- Provides anchorage for fifth screw used with CUSH arm, where reveal is less than 3 1/16" (78 mm)



- 4110-61**  
**Blade stop spacer**
- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop



- 4110-419**  
**PA flush panel adapter**
- Provides horizontal mounting surface for CUSH shoe on single rabbeted or flush frame

## Ordering information

### How-to-order 4110 Series closers

#### 1. Select cylinder size

- 4111 (adjustable from size 1 to 5)
- 4116 (CYLDEL, SHCUSH or HCUSH arm not available)

#### 2. Specify hand

- Right Hand (RH)
- Left Hand (LH)

#### 3. Select finish

- Standard powder coat \_\_\_\_\_
- Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

#### Closer will be shipped with:

- Standard cylinder
- Standard cover
- Extra duty arm
- Self reaming and tapping screws (unless options listed below are selected)

### Closer options

#### Cylinder

- Delay Action Cylinder (CYLDEL) (not available with 4116)
- Advanced Variable Back Check (CYLAVB)

#### Cover

- Metal Cover (MC)

#### Finish

- Custom powder coat (RAL) \_\_\_\_\_ (handed metal cover required)
- Plated finish, US \_\_\_\_\_ (handed metal cover required)
- SRI primer (use with powder coat finishes only)

#### Arm

- Extra Duty Arm (EDA)

- Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
- Hold Open Extra Duty Arm (HEDA)
- Fusible Link Arm (FL)
- Cush-n-Stop Arm (CUSH)
- Hold Open Cush-n-Stop Arm (HCUSH)(N/A with 4116 cylinder)
- Spring Cush-n-Stop Arm (SCUSH)
- Spring Hold Open Cush-n-Stop Arm (SHCUSH) (N/A with 4116 cylinder)

#### Optional screw packs

- Through Bolt<sup>1</sup> Self Reaming and Tapping Screws (TBSRT)

- Wood and machine screws (WMS)
- Through Bolt<sup>1</sup> Wood and Machine Screws (TBWMS)
- Torx Machine Screws (TORX)
- Through Bolt<sup>1</sup> and Torx Machine Screws (TBTRX)

#### Installation accessories

- Plate, 4110-18
- CUSH shoe support, 4110-30
- Blade stop spacer, 4110-61
- PA flush panel adapter, 4110-419

#### Special template

- ST- \_\_\_\_\_

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

### Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4111 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4116 series cylinders 6
- Delay action not available with 4116 cylinder
- HCUSH and SHCUSH arm not available with 4116 cylinder

#### Exterior (and vestibule) door width



#### Interior door width




→ Indicates recommended range of door width for closer size.  
\* Adjustable Size 1 thru 5.

### Reduced opening force 4110 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 Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

	Door width	36"	42"	48"
	8.5* lbs.	4111	4111	4111
	5.0* lbs.	4111	4111	4111

\* Maximum opening force.