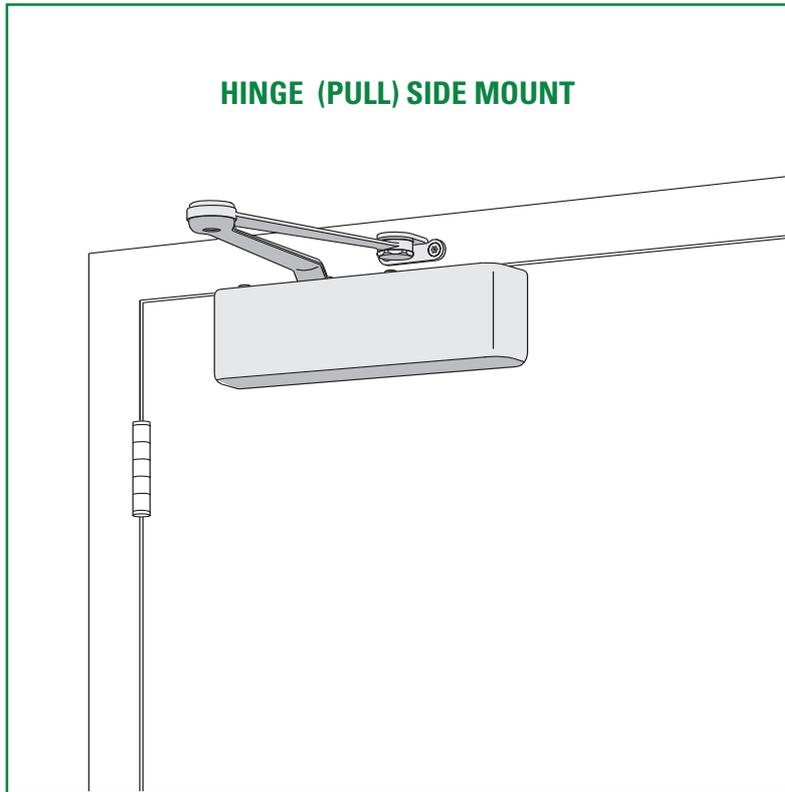


# LCN 4510 SERIES



*The 4510 SMOOTHIE® Series is a heavy duty, high security closer with special components to minimize tampering and vandalism. Forged steel double lever arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic applications. The closer has passed 10,000,000 cycles in independent testing. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.*

- ▶ Standard 4510 series closer shipped with EXTRA DUTY arm (non hold-open), metal security cover, and TORX Machine Screw pack. See 4510 Series page 17 for options.
- ▶ Sized cylinders for interior doors to 5'0" and exterior doors to 4'0".
- ▶ Non-sized cylinder adjustable for interior doors to 4'6" and exterior doors to 3'6".
- ▶ Closer mounts hinge side, specify right or left swinging door.
- ▶ 4511 cylinder meets ADA requirements. See 4510 Series page 18.
- ▶ Standard or optional custom powder coat finish.
- ▶ Optional SRI primer for installations in corrosive conditions.
- ▶ The 4510 Series is UL listed for self-closing doors.
- ▶ Tested and certified under ANSI Standard A156.4, grade one.



MOUNTING				FINISH		COVER		CYLINDER				*ARM FUNCTION					
●	○	○	○	●	○	●	○	●	○	○	○	○	○	○	○	○	
HINGE (PULL) SIDE	PARALLEL ARM (PUSH)	STOP FACE	CONCEALED (FRAME)	POWDER COAT	PLATED	PLASTIC	METAL	HANDED	NON-SIZED	SIZED	ACCESSIBILITY	DELAYED ACTION	AVB**	DPS SWITCH	STANDARD (SINGLE)	EDA	CUSH/H/CUSH

● Available  
○ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.  
\*Maximum opening with standard template.  
\*\* Advanced Variable Backcheck

# LCN 4510 SERIES

## MOUNTING DETAILS

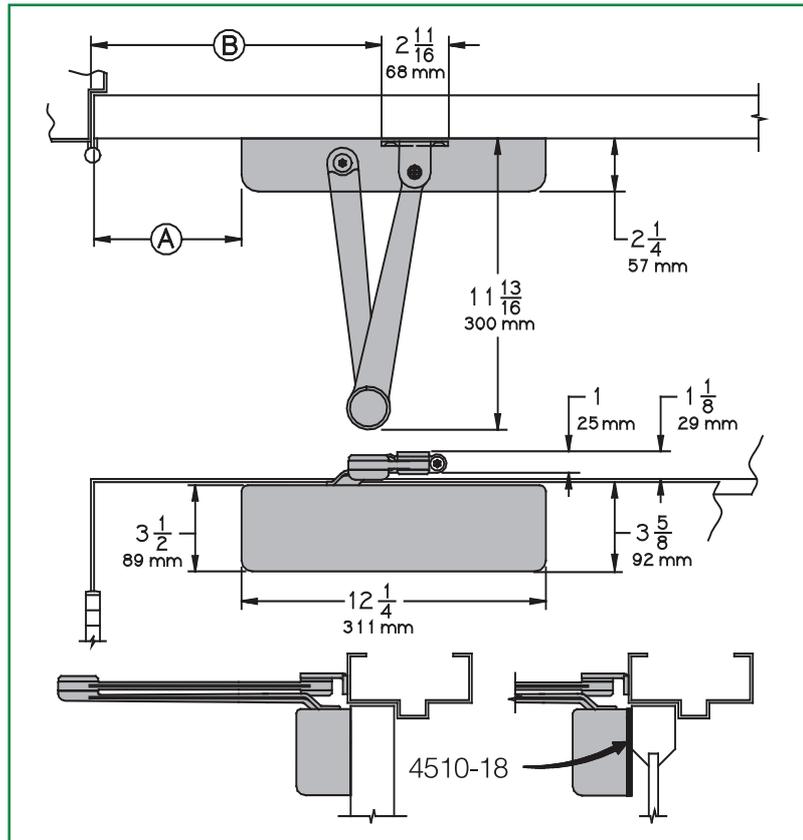
### HINGE (PULL) SIDE MOUNTING

#### MAXIMUM OPENING

Can be templated for 140°.

Ⓐ = 4 3/16" (106 mm)

Ⓑ = 9 7/8" (251 mm)



- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ▶ **Auxiliary Stop** is recommended where a door cannot swing 140°.
- ▶ **Reveal** should not exceed 1/8" (3 mm).
- ▶ **Top Rail** less than 3 1/2" (89 mm), requires PLATE 4510-18. Plate requires 2" (51mm) minimum top rail.
- ▶ **Head frame** less than 1" (25 mm), consult factory.
- ▶ **Clearance** of 2 1/4" (57 mm) behind door required for installation.
- ▶ **Arm Clearance** above door 1 1/8" (29 mm) required.
- ▶ **Delay Action** Add suffix "DEL" to selected cylinder. Not available with 4516 cylinder. Delays closing from maximum opening to approximately 70°. Delay time adjustable up to approximately 1 minute.
- ▶ **Advanced Variable Backcheck** cylinder starts backcheck at approximately 45° instead of the normal 75°. Add suffix "AVB" to selected cylinder.

#### Options

- ▶ Sized or non-sized cylinder.
- ▶ Delayed action or Advanced Variable Backcheck cylinder.

#### Special Templates

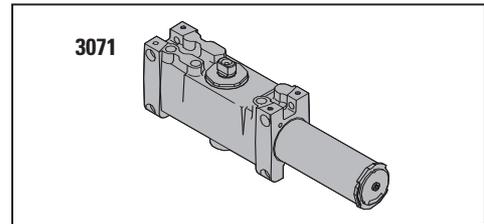
Customized installation templates or products may be available to solve unusual applications. Contact LCN for assistance.

# LCN 4510 SERIES

## CYLINDERS

### CYLINDER, 4510-3071

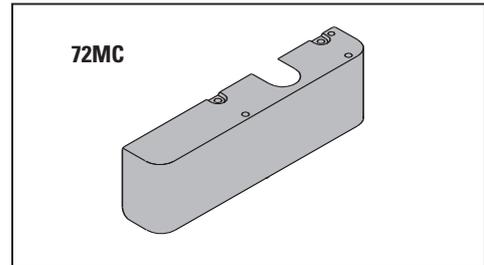
Standard, handed cast iron cylinder assembly.  
For various applications see "Table of Sizes" on 4510 Series page 18.



## COVER

### SECURITY COVER, 4510-72MC

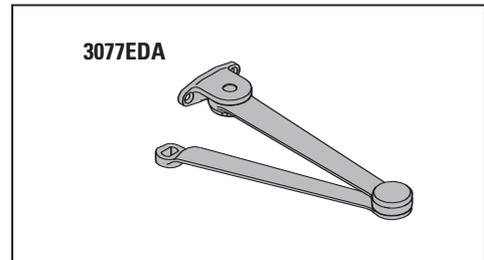
Standard, handed, heavy gauge metal security cover.  
Four point mounting for extra security.  
Closer adjustments not accessible with cover installed.



## ARM

### EXTRA DUTY ARM, 4510-3077EDA

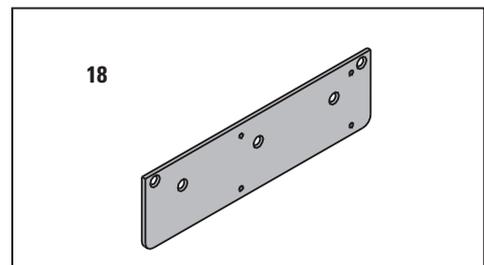
Non-handed arm, features solid forged steel main arm and forearm for potentially abusive installations.  
Double slab arm/pinion attachment for maximum strength.



## INSTALLATION ACCESSORIES

### PLATE, 4510-18

Required where top rail is less than 3 1/2" (89 mm).  
Plate requires minimum 2" (51 mm) top rail.



# LCN 4510 SERIES

**TABLE OF SIZES** Select closer based on width of door.  
 The spring power of non-sized 4511 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3.  
 Sized 4510 series cylinder available in size 6.  
 Delayed action not available with 4516 cylinder.

→ Indicates recommended range of door width for closer size.

## EXTERIOR (and VESTIBULE) DOOR WIDTH

	24" 610mm	30" 762mm	36" 914mm	42" 1067mm	48" 1219mm
*4511	size 3	size 4	size 5	size 6	
4516					

Minimum Door Width \* Adjustable Size 1 thru 5

## INTERIOR DOOR WIDTH

	24" 610mm	34" 864mm	38" 965mm	48" 1219mm	54" 1372mm	60" 1524mm
*4511	size 2	size 3	size 4	size 5	size 6	
4516						

Minimum Door Width \* Adjustable Size 1 thru 5

## REDUCED OPENING FORCE 4510 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 effecting closing power.

	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	4511	4511	4511
	5.0* lbs.	4511	4511	4511

\* Maximum opening force

## HOW-TO-ORDER 4510 SERIES CLOSERS

### 1. SELECT CYLINDER SIZE

- 4511 (adjustable from size 1 to 5)
- 4516 (DEL not available)

### 2. SPECIFY HAND

- RH
- LH

### 3. SELECT FINISH

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

**Closer will be shipped with:**

- SECURITY COVER,
  - EXTRA DUTY ARM,
  - TORX MACHINE SCREW PACK,
- unless options listed below are selected.

## CLOSER OPTIONS

### CYLINDER

- Delayed Action ( DEL)
- Advanced Variable Backcheck (AVB)

### FINISH

- Custom Powder Coat (RAL) \_\_\_\_\_
- Plated Finish, US \_\_\_\_\_
- SRI primer

### SCREW PACK

- TB\* and TORX Machine Screw (TBTRX)
- \* Specify door thickness if other than 1 3/4".

### INSTALLATION ACCESSORIES

- PLATE, 4510-18

### SPECIAL TEMPLATE

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

**NOTE:** Installation of this closer requires T-27 and T-25 driver bits for TORX machine screws with a security pin. Sold separately.

