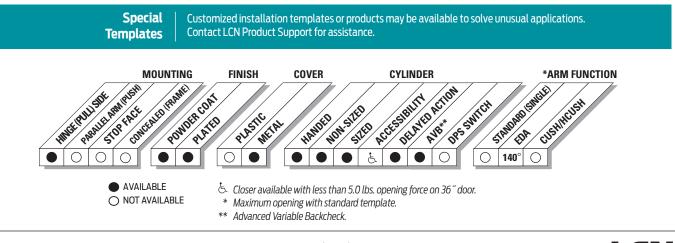


Features

The 4510 SMOOTHEE® 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 million cycles in independent testing. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA*, 100 Hour Salt Spray, Meets BAA - Buy American Act *4511 cylinder meets ADA requirements	
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	Exterior and Vestibule, Adjustable Size 1-5 Interior, Adjustable Size 1-5	
Warranty	15 years	

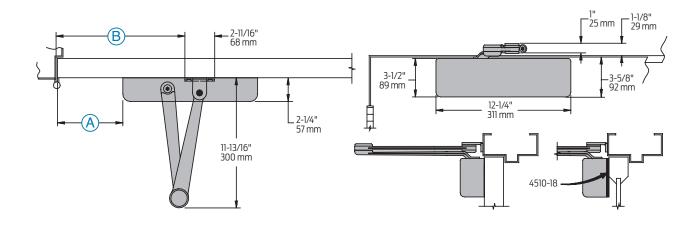
Cover Fasteners	Metal Security TORX machine screw pack		
Mounting	Hinge (Pull Side)		
Arms	Extra heavy duty, non-hold open		
Finishes/Colors/ Powder Coat	<ul> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes</li> </ul>		





# Mounting details

Hinge (Pull Side) Mounting



Butt Hinges	Should not exceed 5" (127 mm) in width		
Auxiliary Stop	Recommended where a door cannot swing 140°		
Reveal	Should not exceed 1/8″ (3 mm)		
Top Rail	<ul> <li>Less than 3-1/2" (89 mm), requires PLATE 4510-18</li> <li>Plate requires 2" (51mm) minimum top rail</li> </ul>		
Head Frame	Less than 1″ (25 mm), consult factory		
Clearance	2-1/4″ (57 mm) behind door required for installation		
Arm Clearance	Above door 1-1/8" (29 mm) required		
Delay Action	<ul> <li>Add suffix "DEL" to selected cylinder.</li> <li>Not available with 4516 cylinder.</li> <li>Delays closing from maximum opening to approximately 70°.</li> <li>Delay time adjustable up to approximately 1 minute.</li> </ul>		
Advanced Variable Backcheck	<ul> <li>Cylinder starts backcheck at approximately 45° instead of the normal 75°</li> <li>Add suffix "AVB" to selected cylinder</li> </ul>		
Maximum opening	Can be templated for		
	140°: A = 4-3/16″ (106 mm) B = 9-7/8″ (251 mm)		
Options	Delayed action or Advanced Variable Backcheck cylinder		

16

# 4510 Series

# Accessories



## **Installation Accessories**



#### **4510-18** Plate

- riate
- Required where top rail is less than 3-1/2" (89 mm)
- Requires minimum 2"(51 mm) top rail



# Ordering Information

# How-to-order 4510 Series

#### Select cylinder size

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

## Select hand

□ RH □ LH

#### **Specify finish**

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

# **Closer options**

#### Cylinder

Delayed Action (DEL)
 Advanced Variable Backcheck (AVB)

#### Finishes

□ Custom Powder Coat (RAL)

 $\Box$  Plated Finish, US \_

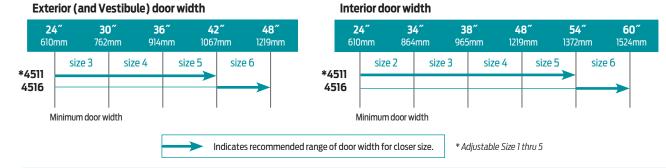
□ SRI primer (use with powder coat finishes only)

#### Screw pack

□ TB\* and TORX Machine Screw (TBTRX) \* 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 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



# **Reduced opening force 4510 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″
Ŀ.	8.5* lbs.	4511	4511	4511
	5.0* lbs.	4511	4511	4511

\* Maximum opening force.

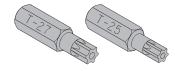
# LCN®

18

## Closer will be shipped with:

- Standard cylinder
- Security cover
- Extra duty arm
- TORX machine screw pack, unless options listed below are selected.

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



Installation accessories □ PLATE, 4510-18

Special template