

LCN®

# High Security Series

Vandal resistant closers





## Designed with durable materials and meticulous engineering

From the very beginning, our dedication has distinguished LCN from other brands. From those who design the product to those who make it to those who sell it, we have a passion for providing door closers that keep people safe and secure. We want a quality product that stands in its own class. And our heritage for high quality has led the company for multiple decades.

LCN's rich history started in 1877 when our founder was hired to solve the problem of slamming church doors at a Boston church. It led to the world's first door check and launched the beginning of the door closer industry. His innovation continued, leading to the formation of the LCN brand in 1926. LCN is always raising the bar another notch—just like when we began implementing environmental and high use/abuse testing to better gauge performance in real-world applications.

Manufactured with pride in Princeton, Ill., U.S.A., by our highly skilled and tenured craftsmen. Our solutions are specifically designed for enhanced durability, consistency and longevity. From meticulous engineering to strict quality control, LCN accepts no less than the best.

Through investment in state-of-the-art equipment, processes and people, we believe LCN will continue to provide the best solutions for our customers. Reliability means control over door speed, latch engagement and, ultimately, how well a door with an LCN closer operates in the field. Our processes include additional measures, such as honing and centerless grinding, that enable us to achieve tolerances within one ten-thousandth of an inch. The durable and reliable solutions our Princeton manufacturing plant delivers have been proven in the field to withstand abuse.

LCN has dedicated its time and resources to doing one thing—producing the finest line of door control devices possible. Our success is found in the millions of door closers installed in facilities across the world that bear the LCN trademark.

### High Security closer features

- A vandal resistant design engineered for each application, easy installation and superior performance
- Hinge side, parallel arm, stop face or concealed mounting
- Handed for right or left swinging doors

### Information and customer care



[us.allegion.com](https://us.allegion.com)



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[support@allegion.com](mailto:support@allegion.com)  
[Closers\\_TechProdSupport@allegion.com](mailto:Closers_TechProdSupport@allegion.com)



[www.youtube.com/LCNHardware](https://www.youtube.com/LCNHardware)

### Ordering



[Allegion\\_Orders@allegion.com](mailto:Allegion_Orders@allegion.com)

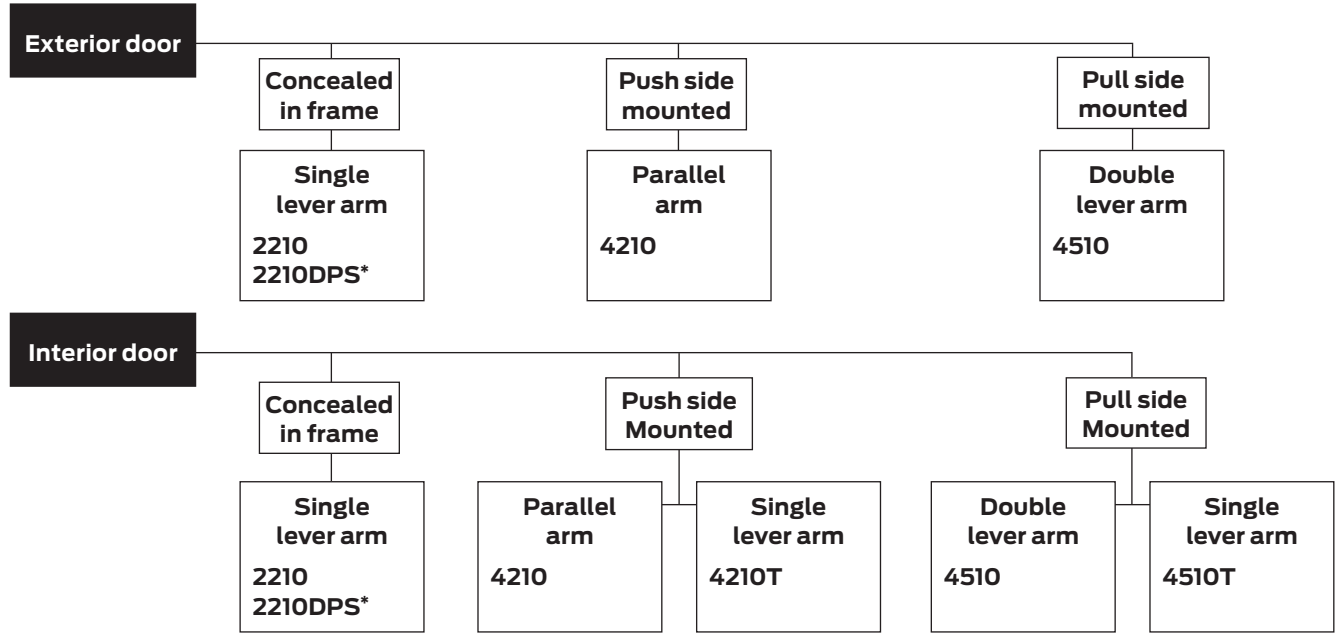


eFax: 1.800.248.1460

# High Security Series vandal resistant closers

## Product selection guide

High Security LCN closers feature a vandal resistant design engineered for each application, easy installation, and superior performance. This guide is based on the desired mounting of the closer.



\*Door position switch.

## Product comparison

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

	Hinge (pull) side	Parallel arm (push)	Stop face	Concealed (frame)	Powder coat	Plated	Plastic	Metal	Handed	Non-sized	Sized	Accessibility	Delay action	CYLAVB**	DPS	Cylinder	Standard (single)	EDA	CUSH/HCUSH	Arm function*
2210	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	180°	■	■	■	■
2210DPS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	180°	■	■	■	■
4210	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	180°	110°	■	■	■
4210T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	110°	■	■	■	■
4510	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	140°	■	■	■	■
4510T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	180°	■	■	■	■

■ Available  
■ Not available  
 Closer available with less than 5.0 lbs. opening force on 36" door.  
 \* Maximum opening with standard template. See individual closer series for degrees of opening per installation.  
 \*\* Advanced Variable Backcheck.

## Product selection guide

### Applications

- For any concealed or surface mounted installation subject to potential abuse or vandalism
- For correctional, aluminum, hollow metal, or wood doors and frames
- Can be used with hinge or pivot mounted door
- Adapter plates and other installation accessories available for non-standard conditions

### Features common to High Security closers

- Each closer is a vandal resistant design for a specific mounting; hinge side, parallel arm, stop face or concealed
- Handed for right or left swinging doors
- Closers to meet ADA reduced opening force requirements
- All closers furnished with torx tamper resistant machine screws
- All surface mount closers include a heavy gauge steel cover with four attachment points
- All closer adjustments are protected when installation is complete
- All track closers use a jam resistant track and tamper resistant arm/roller assembly
- Adjustable hydraulic back check cushions opening swing prior to 90°
- Advanced Variable Back Check (CYLAVB) is available on all high security closers
- Separate regulation of general closing speed and latching speed

### 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

High Security Series closers carry a 15 year limited warranty, except for the 2210DPS Series closer that carries a 2 year limited warranty. See LCN General Information catalog for complete warranty details.

### Specifications

Refer to specifications section for suggested architectural specifications.

### Materials

- High strength cast iron cylinder
- Forged steel main arms and forearms
- One piece forged steel piston
- LCN's all weather "Liquid X" fluid 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
- Double heat treated pinions
- Tamper resistant regulating screws
- Full rack and pinion hydraulic action
- Quiet, low friction track and roller combination for all single lever 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

### Listings and approvals

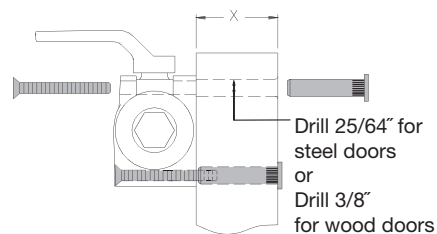
- UL listed for self-closing doors without hold open under "swinging door closers" (GVEV) file R 1943.
- Tested and certified under ANSI Standard A 156.4 (consult factory for details)
- Consult factory for other listings such as; ULC, California State Fire Marshal, Bureau of Standards and Appeals

### 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

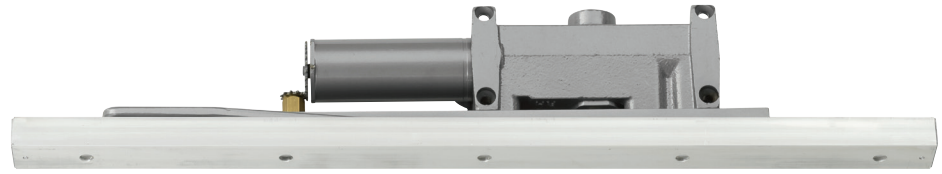
Torx Machine Screw (TORX) pack contains tamper resistant machine screws to install the closer. Through Bolts for Torx Machine Screws are available for all high security closers, except 2210 Series. LCN Through Bolts (TB) can be installed on 1 3/4" thick doors with the 1/4"-20 torx screws supplied with the closer. Optional sizes are available for 1 5/8" or 1 3/8" door thicknesses, but this must be specified when ordering.



Note: For Through Bolts, specify door thickness if other than 1 3/4" (44mm), represented in diagram as dimension "X".

Special driver bits are required for installation or removal of Torx Machine Screws with a security pin as supplied with LCN High Security closers. All bits fit a 1/4" hex drive socket. For 1/4"-20 screws use T-27, for #12 machine screws use T-25, for #10 machine screws use T20, for #8 (and undercut #10) machine screws use T15, and for #6 machine screws use T10. The specific bits required for installation are listed on the "how to order" page for each closer. Sold separately.

# 2210 Series



The concealed 2210 Series, heavy duty, high security track closer features complete concealment with special components to minimize tampering and vandalism. Forged steel, single lever arm and heavy steel mounting plate are designed for correctional, vandal prone, institutional, and other high traffic applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

## Features

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act	<b>Fasteners</b>	Torx Machine Screws (TORX)
<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>1/8" diameter double heat treated pinion journal</li> </ul>	<b>Mounting</b>	<ul style="list-style-type: none"> <li>Concealed, single acting cylinder in head frame</li> <li>Concealed, arm and track in top rail of door</li> </ul>
<b>Fluid</b>	All weather fluid	<b>Arms</b>	Standard security arm and security track
<b>Handing</b>	Handed	<b>Finishes/colors/ powder coat</b>	<ul style="list-style-type: none"> <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> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes</li> </ul>
<b>Size</b>	Sized 3-5 (refer to chart); interior, exterior and vestibule		
<b>Warranty</b>	15 years (2210); 2 years (2210DPS)		
<b>Cover</b>	Two piece metal finish plates		

### Special templates

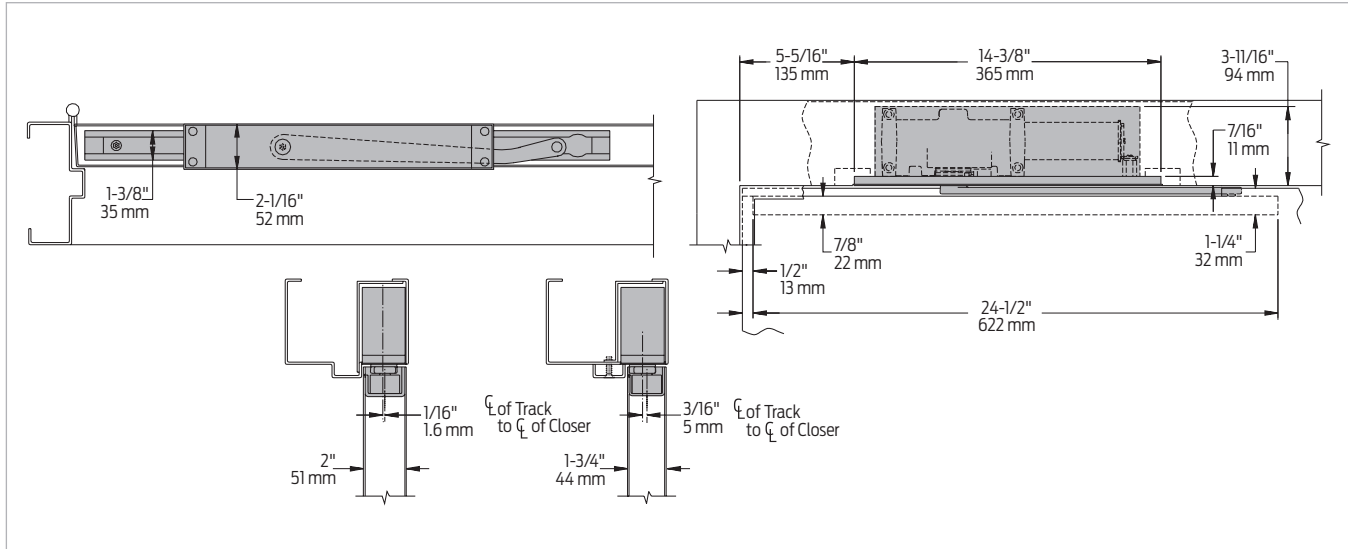
Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

	Hinge (pull) side	Parallel arm (push)	Stop face	Concealed (frame)	Powder coat	Plated	Finish	Cover	Cylinder	Arm function*
2210	■	■	■	■	■	■	Plastic	Handed	180°	Standard (single)
2210DPS	■	■	■	■	■	■	Metal	Non-sized	180°	EDA

■ Available      ■ Not available  
 \* Maximum opening with standard template.  
 \*\* Advanced Variable Backcheck.

# Mounting details

## Concealed mounting

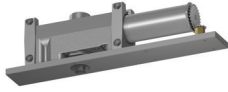


<b>Butt hinges</b>	Should not exceed 4 1/2" (114 mm) in width
<b>Auxiliary stop</b>	Recommended where a door cannot swing 180°
<b>Top rail</b>	1 1/4" (32 mm) mortise required; 3/8" (10 mm) cutout required at top of door, stop face only
<b>Door thickness</b>	1 3/4" (44 mm) minimum
<b>Door width</b>	28" (711 mm) minimum
<b>Head frame</b>	<ul style="list-style-type: none"> <li>5 3/4" (146 mm) wide and 4" (102 mm) high with 2 3/16" (56 mm) rabbet required</li> <li>Consult factory if any dimension is less</li> </ul>
<b>Steel mounting plate</b>	Thickness 3/8" (10 mm)
<b>Door position switch</b>	<ul style="list-style-type: none"> <li>Optional, field adjustable switch can interface with security and monitoring systems</li> <li>Add suffix "DPS" to selected cylinder</li> <li>Provides normally open (N.O.) and normally closed (N.C.) circuit</li> <li>A three wire connector harness with 84" (2134 mm), 16 AWG leads is furnished to simplify connection to field wiring</li> <li>Single pole double throw (SPDT) contacts rated at 125/250 VAC at 10.1 amps maximum resistive load are standard</li> </ul>
<b>Advanced Variable Back Check</b>	<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>
<b>Maximum opening</b>	<ul style="list-style-type: none"> <li>Templating allows 180°</li> <li>Consult factory if door will be held open at 180°</li> <li>Pivot mounting door limits opening to 110° and increases minimum door width to 32" (813 mm)</li> <li>Please note that many track style door closers are capable of allowing 180° of door swing</li> </ul>
<b>Options</b>	<ul style="list-style-type: none"> <li>Advanced Variable Back Check Cylinder (CYLAVB)</li> <li>Door Position Switch (DPS)</li> </ul>

Note: Track style closers are at their weakest closing force at 180°.

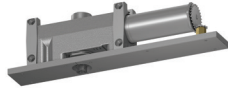
## Accessories

### Cylinders



**2213(4)(5)-3071**  
**Cast iron cylinder assembly (CYL)**

- Handed
- Cast iron
- Standard



**2213(4)(5)DPS-3071**  
**Cast iron cylinder assembly (CYL)**

- Handed
- Cast iron
- Assembly includes DPS wire harness and gear

### Arms



**2210-3077T**  
**2210DPS-3077T**  
**Standard Security Arm (STDTRKSECARM)**

- Handed
- Solid forged steel and large cross section for potentially abusive installations
- Special threaded attachment of track roller for extra security
- Double slab arm/pinion attachment for maximum strength
- Can only be used with high security track roller, 2210-3034 or 2210DPS-3034
- Roller is included with arm when either the 2210-3077T or 2210DPS-3077T are ordered separately

### Tracks



**2210-3038**  
**2210DPS-3038**  
**Standard Security Track (STDSECTRK)**

- Non-handed
- Hold open function not available
- Designed to eject foreign objects placed in track during either opening or closing motion
- Requires track roller, 2210-3034

### Installation accessories



**2210-11**  
**Long Plate**

- Heavy gauge metal plate
- Required for complete enclosure
- Six point Torx Mounting Screws for extra security
- Closer adjustments not accessible with finish plates installed



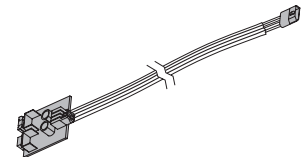
**2210-12**  
**Short Plate**

- Heavy gauge metal plate
- Required for complete enclosure
- Four point Torx Mounting Screws for extra security
- Closer adjustments not accessible with finish plates installed



**2210-3034**  
**Security Track Roller**

- Low friction track roller threads into 2210-3077T arm for extra strength and security
- Can not be removed without disconnecting arm from closer



**2210-493**  
**Test Kit**

- Battery operated designed to verify switch signal response point
- Can be used directly at door location (used for 2210DPS only)



## Ordering information

### How-to-order 2210 Series closers

**1. Select cylinder size**

- 2213
- 2213DPS
- 2214
- 2214DPS
- 2215
- 2215DPS

**2. Specify hand**

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

**3. Select finish**

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

### Closer will be shipped with:

- Standard cylinder
- Finish plate
- Standard security arm
- Security track roller
- Security track
- Torx machine screws,  
(unless options listed below are selected)

### Closer options

**Cylinder**

- Advanced Variable Back Check (CYLAVB)

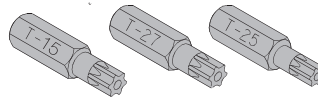
**Finish**

- Custom Powder Coat (RAL) \_\_\_\_\_
- Plated finish \_\_\_\_\_ (cover plate and arm only)
- SRI primer (excludes DPS)  
(for use with powder coat finishes only)

**Special template**

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

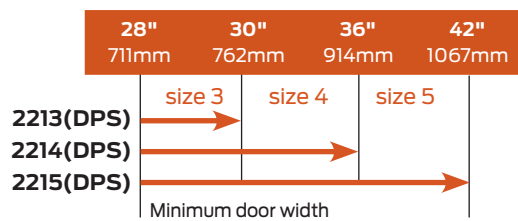
Note: Installation of this closer requires T-27, T-25 and T-15 driver bits for torx machine screws with a security pin. Sold separately.



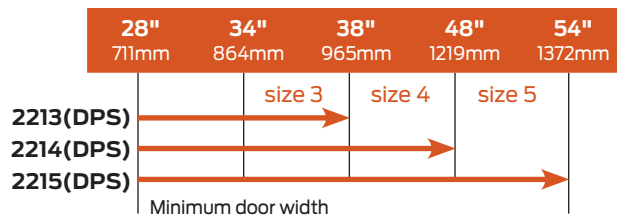
### Table of sizes

- Select closer based on width of door
- 2210 Series cylinders available in size 3, 4, or 5
- Spring power is set at the factory for size 3, 4, or 5, but is field adjustable (may be increased 50%)

#### Exterior (and vestibule) door width

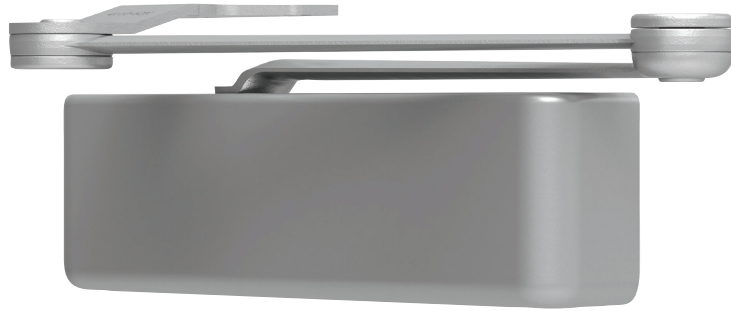


#### Interior door width



➔ Indicates recommended range of door width for closer size.  
Note: Minimum door width 28" (711mm).

# 4210 Series



The 4210 Smoothee® Series is a heavy duty, high security closer with special components to minimize tampering and vandalism. Forged steel parallel arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

## Features

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act <small>Note: 4211 cylinder meets ADA.</small>	<b>Cover</b>	Metal Cover (MC)
<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>	Torx Machine Screws (TORX)
<b>Fluid</b>	All weather fluid	<b>Mounting</b>	Parallel (push side)
<b>Handing</b>	Handed	<b>Arms</b>	Extra duty, non hold open
<b>Size</b>	Sized 1-5 or size 6; adjustable exterior, interior and vestibule	<b>Finishes/colors/ powder coat</b>	<ul style="list-style-type: none"> <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> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes (cover only)</li> </ul>
<b>Warranty</b>	15 years		

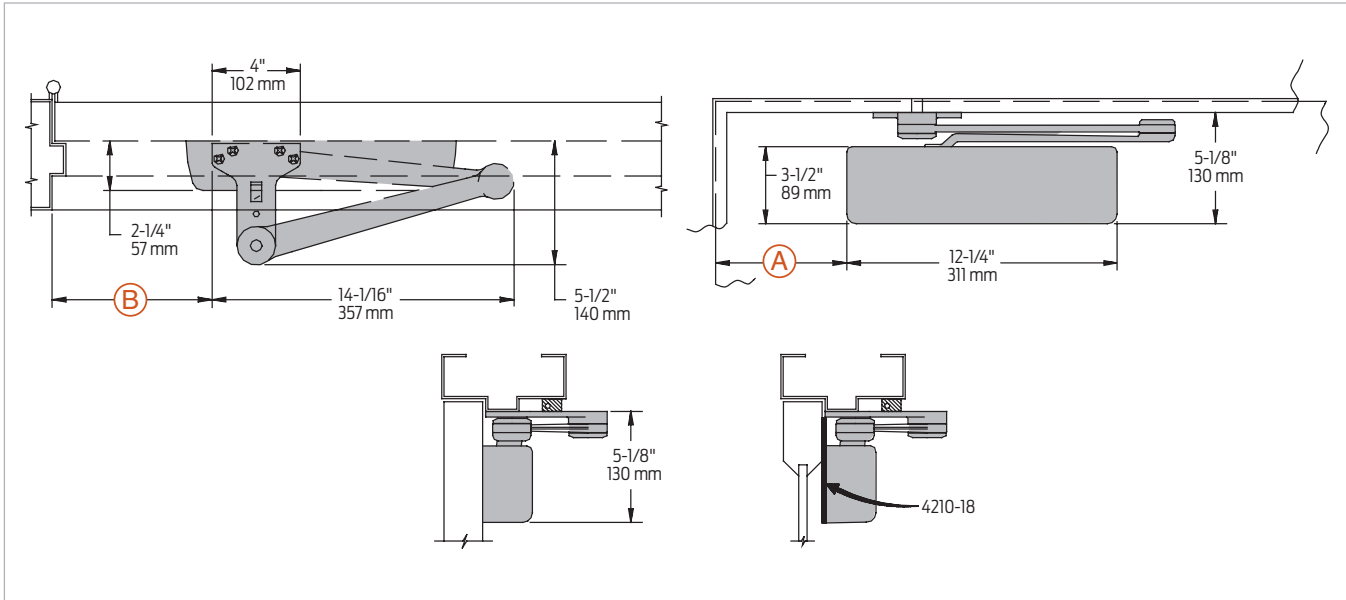
**Special templates** | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting		Finish		Cover		Cylinder		Arm function*								
Hinge (pull) side	Parallel arm (push)	Concealed (frame)	Powder coat	Plated	Plastic	Metal	Handed	Non-sized	Sized	Accessibility	Delay action	CYLAVB**	DPS	Standard (single)	EDA	CUSH/HCUSH
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ Available      ■ Not available  
♿ Closer available with less than 5.0 lbs. opening force on 36" door.  
 \* Maximum opening with standard template.  
 \*\* Advanced Variable Backcheck.

## Mounting details

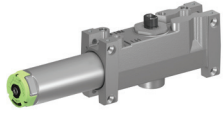
### Parallel arm (push side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width	
Auxiliary stop	Recommended where a door cannot swing 180° or where CUSH arms not used	
Clearance	For EDA or CUSH is 5 1/2" (140 mm) from push side of door	
Top rail	Less than 5 1/8" (130 mm) measured from stop, requires plate 4210-18. Plate requires 2" (51 mm) minimum top rail	
Stop width	2 3/4" (70 mm) recommended. Less than 1" (25mm), consult factory	
Delay action	<ul style="list-style-type: none"> <li>▪ Add suffix "CYLDEL" to selected cylinder</li> <li>▪ Not available with 4215 or 4216 cylinder</li> <li>▪ Delays closing from maximum opening to approximately 70°</li> <li>▪ Delays 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 arm can be templated for	CUSH arm can be templated for maximum opening at
	100°: A = 5 15/16" (151 mm) B = 7 1/4" (184 mm)	85°: A = 8 5/16" (211 mm) B = 9 5/8" (244 mm)
	140°: A = 4 7/16" (113 mm) B = 5 3/4" (146 mm)	90°: A = 7 11/16" (195 mm) B = 9" (229 mm)
	180°: A = 2 15/16" (75 mm) B = 4 1/4" (108 mm)	100°: A = 6 7/16" (164 mm) B = 7 3/4" (197 mm)
		110°: A = 5 9/16" (141 mm) B = 6 7/8" (175 mm)
	Hold open point at maximum opening with HCUSH arm	
Options	Delay Action cylinder (CYDEL) or Advanced Variable Back Check cylinder (CYLAVB)	

## Accessories

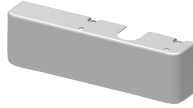
### Cylinders



**4211(6)-3071  
Cast iron cylinder  
assembly (CYL)**

- Handed
- Cast iron
- Standard

### Covers



**4210-72MC  
Metal Cover (MC)**

- Handed
- Four point mounting for extra security
- Closer adjustments not accessible with cover installed
- Standard

### Arms



**4210-3077EDA  
Extra Duty Arm (EDA)**

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



**4210-3077CNS  
Cush-n-Stop Arm (CUSH)**

- Non-handed
- Parallel arm features solid forged steel main arm and forearm with built-in stop in soffit shoe
- Double slab arm/pinion attachment for maximum strength



**4210-3049CNS  
Hold Open Cush-n-Stop Arm  
(HCUSH)**

- Non-handed
- Parallel arm provides hold open function with templated stop/hold open points
- Handle controls hold open function with thumb turn
- HCUSH arm not available with 4216 cylinder
- Double slab arm/pinion attachment for maximum strength

### Installation accessories



**4210-18, 4210-18CUSH  
Plate**

- Required for push side mount where top rail is less than 5 1/8" (130 mm), measured from the stop
- Requires 2" (51 mm) minimum top rail measured from the stop
- Also used with CUSH arm installations



**4210-30  
CUSH Shoe Support**

- Provides anchorage for fifth screw used with CUSH arms where reveal is less than 3 1/16" (78mm)



**4210-61  
Blade Stop Spacer**

- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop



**4210-419  
PA Flush Panel Adapter**

- Provides horizontal mounting surface for EDA or CUSH shoe on single rabbeted or flush frame

## Ordering information

### How-to-order 4210 Series closers

**1. Select cylinder size**

- 4211 (adjustable from size 1 to 5)
- 4216 (CYLDEL or HCUSH arm not available)

**2. Specify hand**

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

**3. Select finish**

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

**Closer will be shipped with:**

- Standard cylinder
- Metal cover
- Standard security arm
- Torx machine screws

(unless options listed below are selected)

### Closer options

**Cylinder**

- Delay Action Cylinder (CYLDEL)
- Advanced Variable Back Check Cylinder (CYLAVB)

**Finish**

- Custom Powder Coat (RAL) \_\_\_\_\_
- Plated finish \_\_\_\_\_ (cover only)
- SRI primer (excludes DPS)
- (for use with powder coat finishes only)

**Arm**

- Cush-n-Stop Arm (CUSH)
- Hold Open Cush-n-Stop Arm (HCUSH)

**Screw packs**

- Through Bolt<sup>1</sup> and Torx Machine Screw (TBTRX)

**Installation accessories**

- Plate, 4210-18
- Plate, 4210-18CUSH

**Special template**

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

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

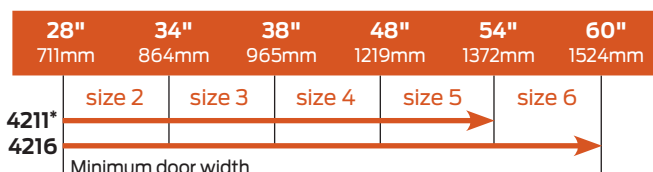
### Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4211 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4210 Series cylinder available in size 6
- Delay action not available with 4216 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 4210 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.	4211	4211	4211
5.0* lbs.	4211	4211	4211

\* Maximum opening force.

# 4210T Series



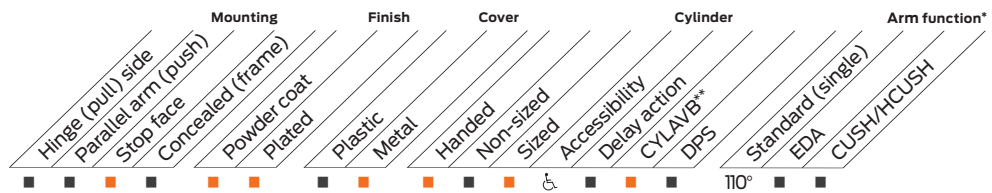
The 4210T Smoothee Series is a heavy duty, high security track closer with special components to minimize tampering and vandalism. Forged steel arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic interior applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

## Features

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act <small>Note: 4211 cylinder meets ADA.</small>	<b>Cover</b>	Metal Cover (MC)
<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>	Torx Machine Screws (TORX)
<b>Fluid</b>	All weather fluid	<b>Mounting</b>	Stop face (push side)
<b>Handing</b>	Handed	<b>Arms</b>	Security arm, security track with roller
<b>Size</b>	Sized 1, 3 or 4; Interior	<b>Finishes/colors/powder coat</b>	<ul style="list-style-type: none"> <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> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes</li> </ul>
<b>Warranty</b>	15 years		

### Special templates

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

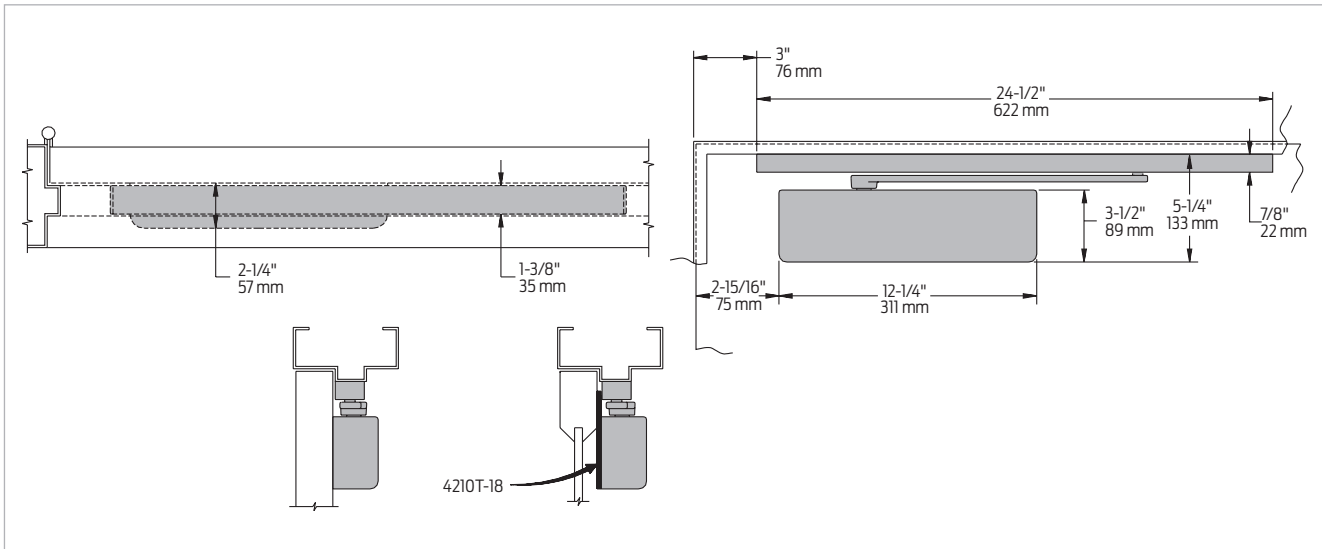


■ Available  
■ Not available

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

## Mounting details

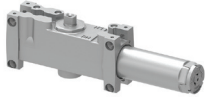
### Stop face (push side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended where a door cannot swing 180°
Clearance	2 1/4" (57 mm) from door
Top rail	<ul style="list-style-type: none"> <li>Less than 5 1/4" (133 mm) measured from stop, requires plate 4210T-18</li> <li>Plate requires 2 1/4" (57mm) minimum measured from the stop</li> </ul>
Stop width	Minimum 1 3/8" (35 mm)
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	Templating allows 110°
Options	Advanced Variable Back Check Cylinder (CYLAVB)

## Accessories

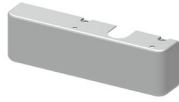
### Cylinders



**4211(3)(4)T-3071  
Cast iron cylinder  
assembly (CYL)**

- Handed
- Cast iron
- Standard

### Covers



**4210T-72MC  
Metal Cover (MC)**

- Handed
- Four point torx mounting for extra security
- Closer adjustments not accessible with cover installed

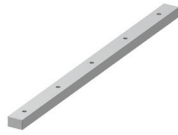
### Arms



**4210T-3077T  
Standard Security Arm  
(STDTRKSECARM)**

- Handed
- Solid forged steel, large cross section arm
- Special threaded attachment of track roller for extra security
- Double slab arm/ pinion attachment for maximum strength
- Can only be used with high security track roller, 4210T-3034

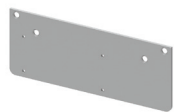
### Tracks



**4210T-3038  
Standard Security Track  
(STDSECTRK)**

- Non-handed
- Designed to eject foreign objects placed in track during either opening or closing motion
- Requires track roller, 4210T-3034

### Installation accessories



**4210T-18  
Plate**

- Required where top rail, when measured from the stop, is less than 5 1/4" (133 mm)
- Requires 2 1/4" (57 mm) minimum top rail measured from the stop



**4210T-3034  
Security Track Roller**

- Low friction track roller threads into 4210T-3077 arm for extra strength and security
- Can not be removed without disconnecting arm from closer



## Ordering information

### How-to-order 4210T Series closers

**1. Select cylinder size**

- 4211T (ADA)
- 4213T
- 4214T

**2. Specify hand**

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

**3. Select finish**

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

**Closer will be shipped with:**

- Standard cylinder
- Metal cover
- Standard security arm
- Security track roller
- Security track
- Torx machine screws,  
(unless options listed below are selected)

### Closer options

**Cylinder**

- Advanced Variable Back Check Cylinder (CYLAVB)

**Finish**

- Custom Powder Coat (RAL) \_\_\_\_\_
- Plated finish \_\_\_\_\_
- SRI primer (excludes DPS)  
(for use with powder coat finishes only)

**Screw packs**

- Through Bolt<sup>1</sup> and Torx Machine Screw (TBTRX)

**Installation accessories**

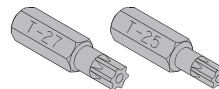
- Plate, 4210T-18

**Special template**

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

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

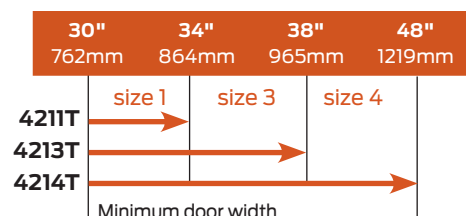
Note: Installation of this closer requires T-27 and T-25 driver bits for Torx Machine Screws with a security pin. Sold separately.



### Table of sizes

- Select closer based on width of door
- 4210T series cylinders available in size 1, 3 or 4
- Closing power of all 4210T Series closers may be increased 15%

**Interior door width**



→ Indicates recommended range of door width for closer size.  
Note: Minimum door width 30" (762mm).

**Reduced opening force 4210T Series closers**

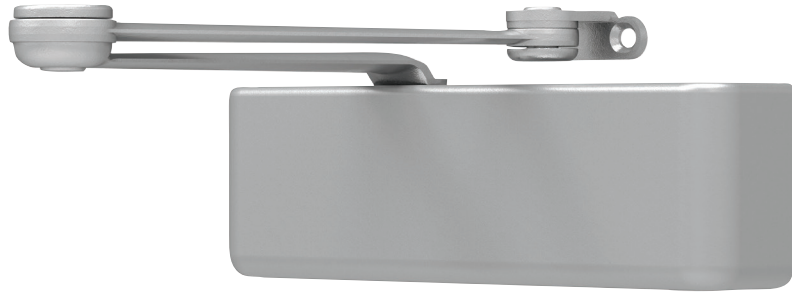
**CAUTION!** Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

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.	4213T	4213T
	5.0* lbs.	4211T	4211T

\* Maximum opening force.

# 4510 Series



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. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

## Features

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act <small>Note: 4511 cylinder meets ADA.</small>	<b>Cover</b>	Metal Cover (MC)
<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>	Torx Machine Screws (TORX)
<b>Fluid</b>	All weather fluid	<b>Mounting</b>	Hinge (pull side)
<b>Handing</b>	Handed	<b>Arms</b>	Extra heavy duty, non-hold open
<b>Size</b>	Sized 1-5; Adjustable, exterior, interior and vestibule	<b>Finishes/colors/powder coat</b>	<ul style="list-style-type: none"> <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> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes</li> </ul>
<b>Warranty</b>	15 years		

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

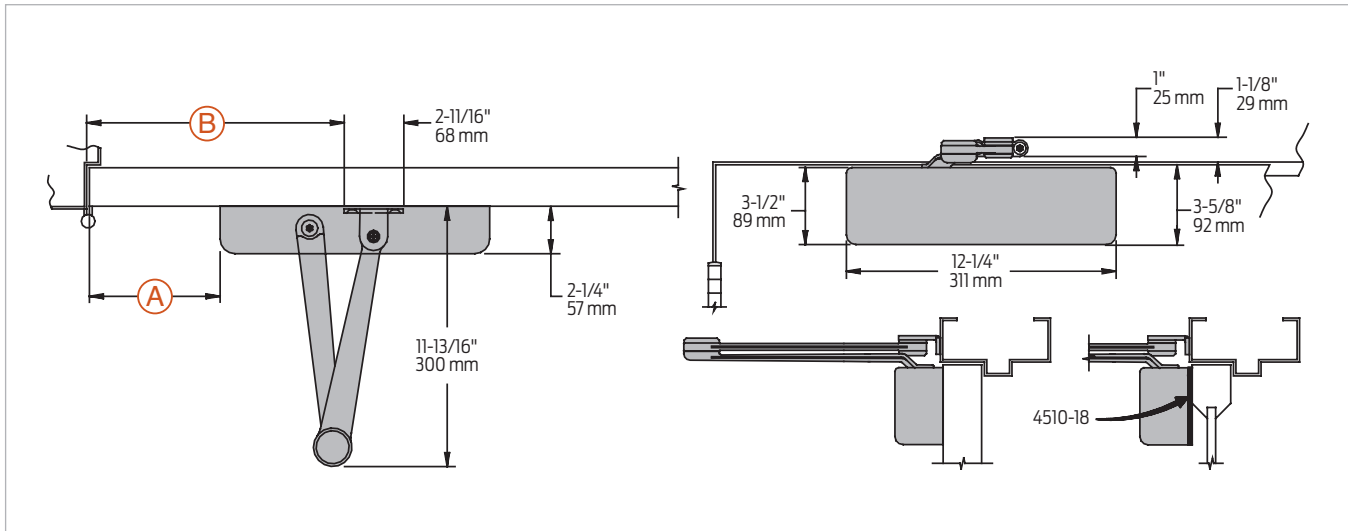
Mounting	Finish	Cover	Cylinder	Arm function*
<ul style="list-style-type: none"> <li>Hinge (pull) side</li> <li>Parallel arm (push)</li> <li>Stop face</li> <li>Concealed (frame)</li> <li>Powder coat</li> <li>Plated</li> </ul>	<ul style="list-style-type: none"> <li>Plastic</li> <li>Metal</li> </ul>	<ul style="list-style-type: none"> <li>Handed</li> <li>Non-sized</li> <li>Sized</li> </ul>	<ul style="list-style-type: none"> <li>Accessibility</li> <li>Delay action</li> <li>CYLAVB**</li> <li>DPS</li> </ul>	<ul style="list-style-type: none"> <li>Standard (single)</li> <li>EDA</li> <li>CUSH/HCU5H</li> </ul>

■ Available  
■ Not available

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

## 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	Reveal should not exceed 1/8" (3 mm)
Clearance	2 1/4" (57 mm) behind door required for installation
Top rail	<ul style="list-style-type: none"> <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
Arm clearance	Above door 1 1/8" (29 mm) required
Delay action	<ul style="list-style-type: none"> <li>Add suffix "CYLDEL" to selected cylinder</li> <li>Not available with 4516 cylinder</li> <li>Delays closing from maximum opening to approximately 70°</li> <li>Delays 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	Can be templated for 140°: A = 4 3/16" (106 mm) B = 9 7/8" (251 mm)
Options	Delay Action cylinder (CYDEL) or Advanced Variable Back Check cylinder (CYLAVB)

## Accessories

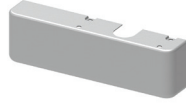
### Cylinders



**4511(6)-3071  
Cast iron cylinder  
assembly (CYL)**

- Handed
- Cast iron
- Standard

### Covers



**4510-72MC  
Metal Cover (MC)**

- Handed
- Four point mounting for extra security
- Closer adjustments not accessible with cover installed
- Standard

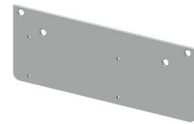
### Arms



**4510-3077EDA  
Extra Duty Arm (EDA)**

- Non-handed
- Solid forged steel main arm and forearm for potentially abusive installations
- Double slab arm/pinion attachment for maximum strength
- Standard

### Installation accessories



**4510-18  
Plate**

- 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 closers

**1. Select cylinder size**

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

**2. Specify hand**

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

**3. Select finish**

- Standard powder coat \_\_\_\_\_

Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696).

**Closer will be shipped with:**

- Standard cylinder
- Metal cover
- Extra duty arm
- Torx machine screws  
(unless options listed below are selected)

### Closer options

**Cylinder**

- Delay Action Cylinder (CYLDEL)
- Advanced Variable Back Check Cylinder (CYLAVB)

**Finish**

- Custom Powder Coat (RAL) \_\_\_\_\_
- Plated finish \_\_\_\_\_
- SRI primer (for use with powder coat finishes only)

**Screw packs**

- Through Bolt<sup>1</sup> and Torx Machine Screw (TBTRX)

**Installation accessories**

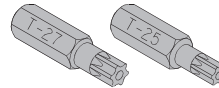
- Plate, 4510-18

**Special template**

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

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

Note: Installation of this closer requires T-27 and T-25 driver bits for Torx Machine Screws with a security pin. Sold separately.



### 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
- Delay action not available with 4516 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 4210 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.	4511	4511
	5.0* lbs.	4511	4511

\* Maximum opening force.

# 4510T Series



The 4510T Smoothee Series is a heavy duty, high security track closer with special components to minimize tampering and vandalism. Forged steel single lever arm and heavy gauge metal security cover are designed for correctional, vandal prone, institutional and other high traffic interior applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

## Features

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act Note: 4511T cylinder meets ADA.	<b>Cover</b>	Metal Cover (MC)
<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>	Torx Machine Screws (TORX)
<b>Fluid</b>	All weather fluid	<b>Mounting</b>	Hinge (pull side)
<b>Handing</b>	Handed	<b>Arms</b>	Standard security arm, security track (non hold open) and track roller
<b>Size</b>	Sized 1, 3 or 4	<b>Finishes/colors/ powder coat</b>	<ul style="list-style-type: none"> <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> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes</li> </ul>
<b>Warranty</b>	15 years		

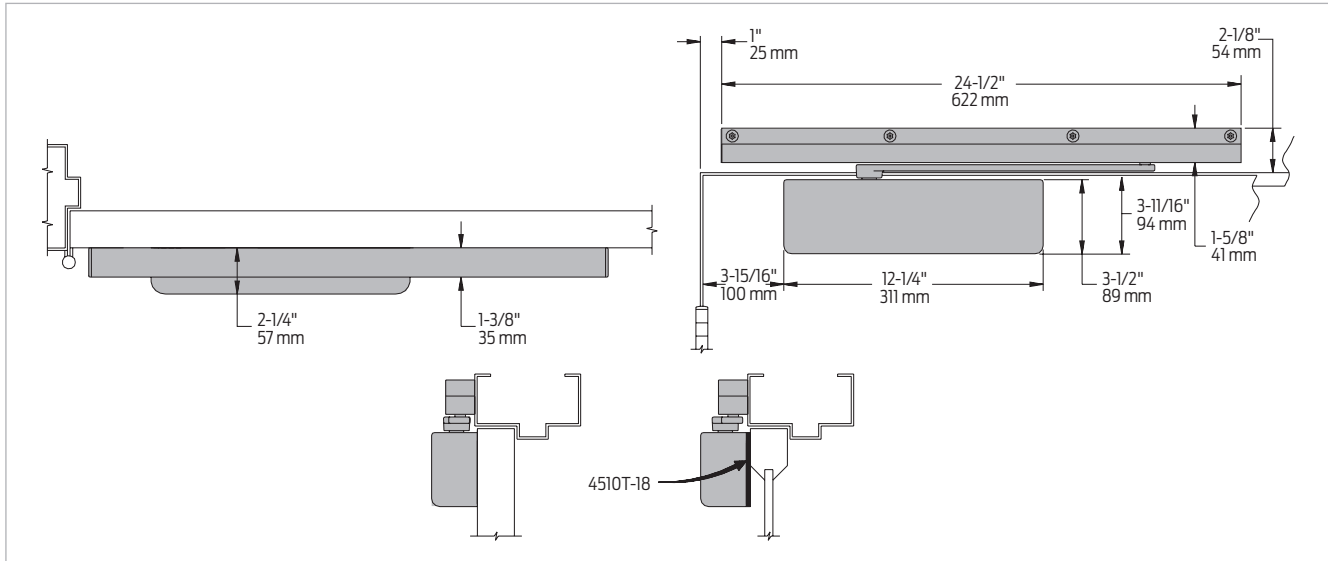
**Special templates** | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting	Finish	Cover	Cylinder	Arm function*
Hinge (pull) side	Plastic	Handed	Accessibility	Standard (single)
Parallel arm (push)	Metal	Non-sized	Delay action	EDA
Stop face		Sized	CYLAV/B**	CUSH/HCUSH
Concealed (frame)			DPS	
Powder coat				
Plated				

■ Available     ■ Not available     Closer available with less than 5.0 lbs. opening force on 36" door.  
 \* Maximum opening with standard template.  
 \*\* Advanced Variable Backcheck.

## Mounting details

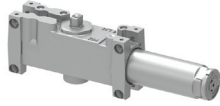
### Hinge (pull side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended where a door cannot swing 180°
Reveal	Reveal should not exceed 1/8" (3 mm)
Clearance	2 1/4" (57 mm) behind door required for installation
Top rail	<ul style="list-style-type: none"> <li>▪ Less than 3 3/4" (95 mm), requires plate 4510T-18</li> <li>▪ Plate requires 2" (51mm) minimum top rail</li> </ul>
Head frame	Minimum 2 1/8" (54 mm)
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	<ul style="list-style-type: none"> <li>▪ Templating allows 180°</li> <li>▪ Consult factory if door will be held open at 180°</li> </ul>
Options	Advanced Variable Back Check cylinder (CYLAVB)

## Accessories

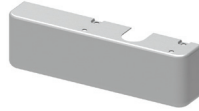
### Cylinders



**4511T(3)(4)-3071  
Cast iron cylinder  
assembly (CYL)**

- Handed
- Cast iron
- Standard

### Covers



**4510T-72MC  
Metal Cover (MC)**

- Handed
- Four point torx mounting for extra security
- Closer adjustments not accessible with cover installed

### Arm



**4510T-3077T  
Standard Security Arm  
(STDTRKSECARM)**

- Handed
- Solid forged steel, large cross section arm
- Special threaded attachment of track roller for potentially abusive installations
- Double slab arm/pinion attachment for maximum strength
- Can only be used with high security track roller, 4510T-3034

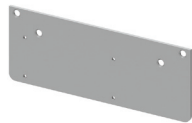
### Tracks



**4510T-3038  
Standard Security Track (STDSECTRK)**

- Non-handed
- Designed to eject foreign objects placed in track during either opening or closing motion
- Requires track roller, 4510T-3034

### Installation accessories



**4510T-18  
Plate**

- Required where top rail is less than 3 3/4" (95 mm)
- Requires minimum 2" (51 mm) top rail



**4510T-3034  
Security Track Roller**

- Low friction track roller threads into 4510T-3077T arm for extra strength and security
- Can not be removed without disconnecting arm from closer



## Ordering information

### How-to-order 4510T Series closers

**1. Select cylinder size**

- 4511T (ADA)
- 4513T
- 4514T

**2. Specify hand**

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

**3. Select finish**

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

**Closer will be shipped with:**

- Standard cylinder
- Metal cover
- Standard security arm
- Security track roller
- Security track
- Torx machine screws,  
(unless options listed below are selected)

### Closer options

**Cylinder**

- Advanced Variable Back Check Cylinder (CYLAVB)

**Finish**

- Custom Powder Coat (RAL) \_\_\_\_\_
- Plated finish \_\_\_\_\_
- SRI primer (excludes DPS)  
(for use with powder coat finishes only)

**Screw packs**

- Through Bolt<sup>1</sup> and Torx Machine Screw (TBTRX)

**Installation accessories**

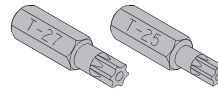
- Plate, 4510T-18

**Special template**

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

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

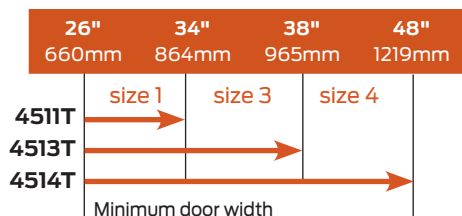
Note: Installation of this closer requires T-27 and T-25 driver bits for Torx Machine Screws with a security pin. Sold separately.



### Table of sizes

- Select closer based on width of door
- Sized 4510T Series cylinders available in size 1, 3 or 4
- Closing power of all 4510T Series closers may be increased 15%

**Interior door width**



→ Indicates recommended range of door width for closer size.  
Note: Minimum door width 30" (762mm).

**Reduced opening force 4510T 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.	4513T	4513T
	5.0* lbs.	4511T	4511T

\* Maximum opening force.

4510T Series

Introduction

Product selection guide

2210 Series

4210 Series

4210T Series

4510 Series

4510T Series



## About Allegion

Allegion (NYSE: ALLE) is a global pioneer in seamless access, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion secures people and assets with a range of solutions for homes, businesses, schools and institutions. Allegion had \$2.7 billion in revenue in 2018, and sells products in almost 130 countries.

For more, visit [www.allegion.com](http://www.allegion.com).

KRYPTONITE ■ LCN ■  ■ STEELCRAFT ■ VON DUPRIN