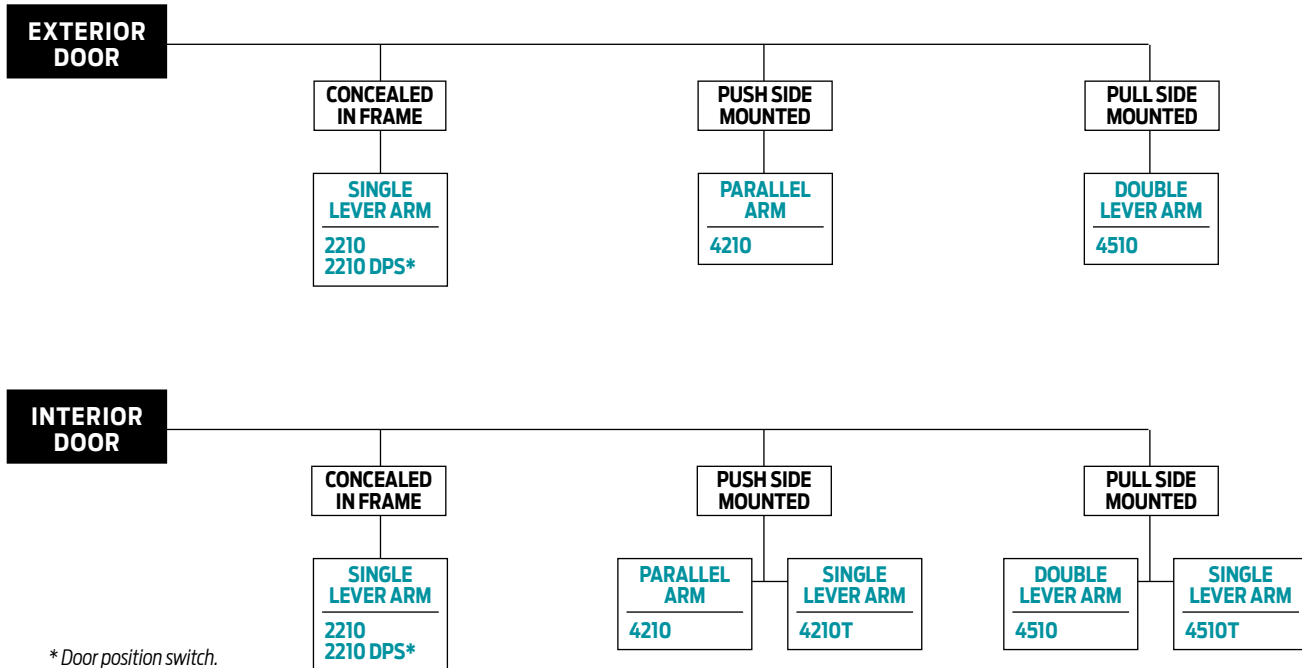


## Product selection guide

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.



## Product comparison

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

CLOSER SERIES	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/HCUSH		
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.

# High Security Closers Series

## 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 unusual 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.
- All high security closers are based on a cylinder certified to exceed 10,000,000 cycles in independent testing.
- 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 backcheck cushions opening swing prior to 90°.
- Advanced variable backcheck (AVB) 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.

## 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 General Information Section for complete warranty details.

## 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 & 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.

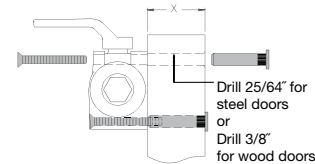
## POSITIVE PRESSURE

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

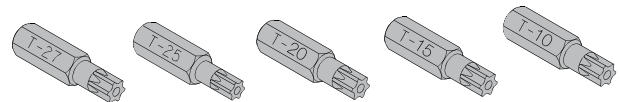
TORX MACHINE SCREW (TORX) pack contains tamper resistant machine screws to install the closer. Thru Bolts for TORX machine screws are available for all high security closers, except 2210 series.

LCN thru 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 1: For Thru Bolts, specify door thickness if other than 1-3/4" (44mm).*

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 T-20, 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.



## FASTENERS

TORX MACHINE SCREW (TORX) pack contains tamper resistant machine screws to install the closer. Thru Bolts for TORX machine screws are available for all high security closers, except 2210 series.

## SPECIFICATIONS

Refer to "SPECIFICATIONS" section for suggested architectural specifications.



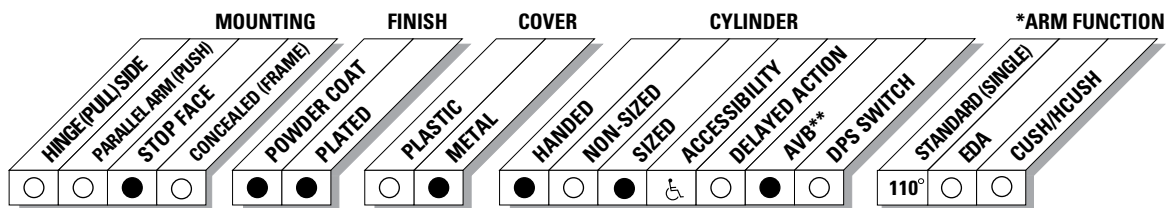
The 4210T SMOOTHIE® Series is a heavy duty, high security track closer with special components to minimize tampering and vandalism. Forged steel arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic interior applications. The closer has passed 10 million cycles in independent testing. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA*, 100 Hour Salt Spray, Meets BAA - Buy American Act  <i>*4211 meeting ADA requirements</i>
<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>■ 11/16" Diameter Double Heat Treated Pinion Journal</li> </ul>
<b>Fluid</b>	All Weather Fluid
<b>Handing</b>	Handed
<b>Size</b>	Interior, Sized 1, 3 or 4
<b>Warranty</b>	15 years

<b>Cover</b>	Metal Security
<b>Fasteners</b>	TORX machine screw pack
<b>Mounting</b>	Stop Face (Push Side)
<b>Arms</b>	Security arm, security track with roller
<b>Finishes/Colors/ Powder Coat</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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.



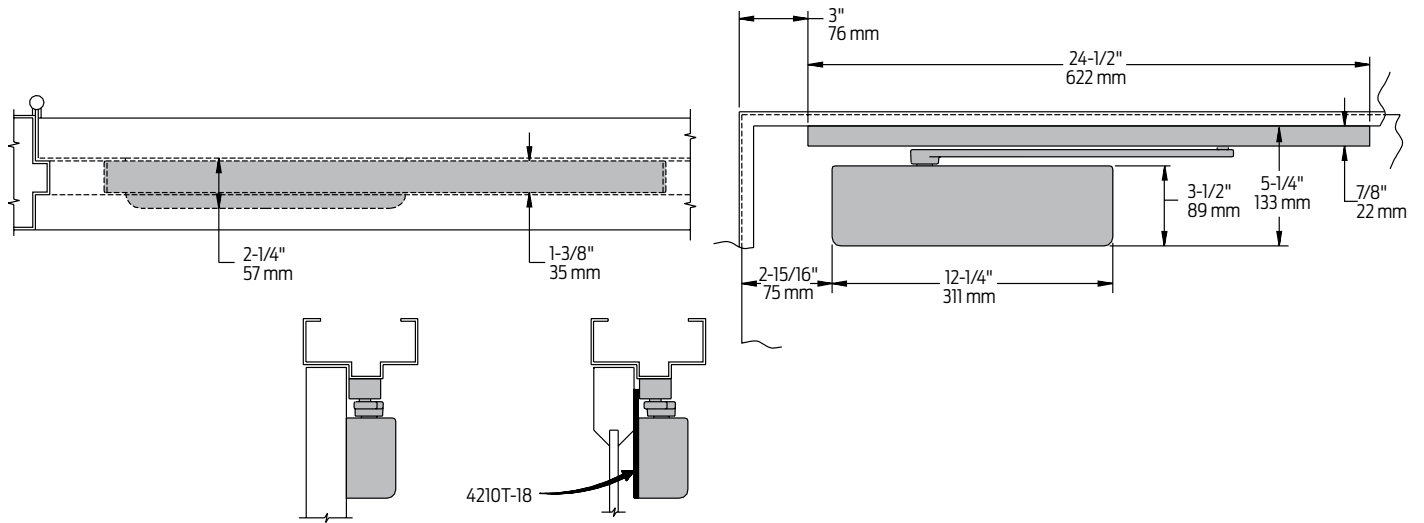
● AVAILABLE  
○ NOT AVAILABLE

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

# 4210T Series

## Mounting details

### Stop Face (Push Side) Mounting



<b>Butt Hinges</b>	Should not exceed 5" (127 mm) in width
<b>Auxiliary Stop</b>	Recommended where the door cannot swing 110°
<b>Clearance</b>	2-1/4" (57 mm) from door
<b>Top Rail</b>	<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>
<b>Stop Width</b>	Minimum 1-3/8" (35 mm)
<b>Advanced Variable Backcheck</b>	<ul style="list-style-type: none"> <li>Cylinder starts backcheck at approximately 45° instead of the normal 75°</li> <li>Add suffix "AVB" to selected cylinder (eg. 4213T AVB)</li> </ul>
<b>Maximum opening</b>	Templating allows 110°
<b>Options</b>	Advanced Variable Backcheck cylinder

### Cylinder



**4211(3)(4)T-3071**  
Cylinder Assembly

- Handed
- Cast iron
- For various applications see "Table of Sizes" on 4210T Series page 14
- Standard

### Cover



**4210T-72MC**  
Metal Security Cover

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

### Arms



**4210T-3077T**  
Standard Security Arm

- 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

### Track



**4210T-3038**  
Security Track

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



**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

### 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

### How-to-order 4210T Series

#### Select cylinder size

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

#### Select hand

- RH
- LH

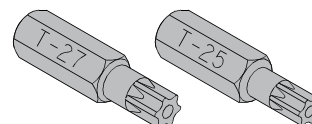
#### Specify finish

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

#### Closer will be shipped with:

- Standard cylinder
- Security cover
- Standard security arm
- Security track roller
- Security track
- 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.



### Closer options

#### Cylinder

- Advanced Variable Backcheck (AVB)

#### Finishes

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

#### Screw pack

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

#### Installation accessories

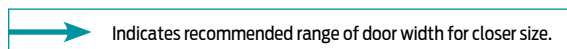
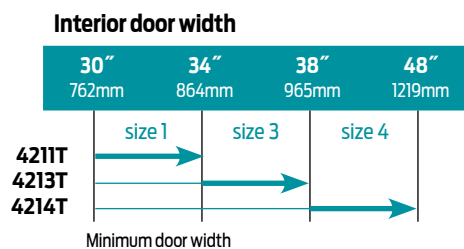
- PLATE, 4210T-18

#### Special template

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

### 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%



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 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"
	8.5* lbs.	4213T	4213T	4213T
	5.0* lbs.	4211T	4211T	4211T

\* Maximum opening force.