

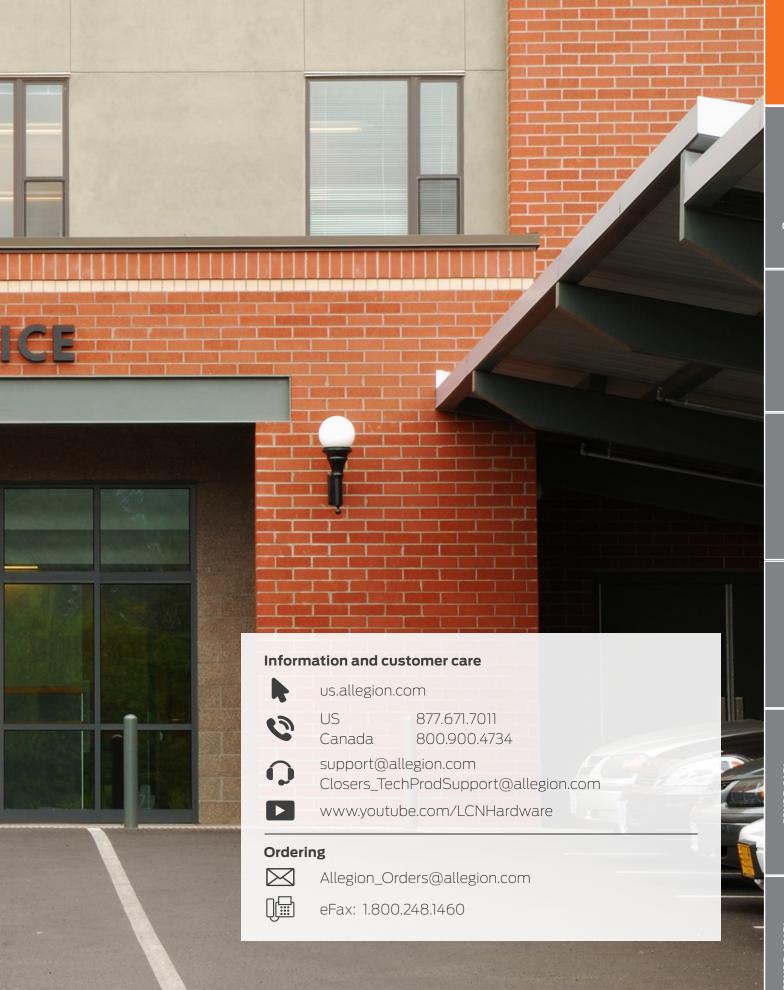
Through investment in state-of-the-art equipment, processes and people, we believe LCN will continue to provide the best solutions for our customers. Reliability means control over door speed, latch engagement and, ultimately, how well a door with an LCN closer operates in the field. Our processes include 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

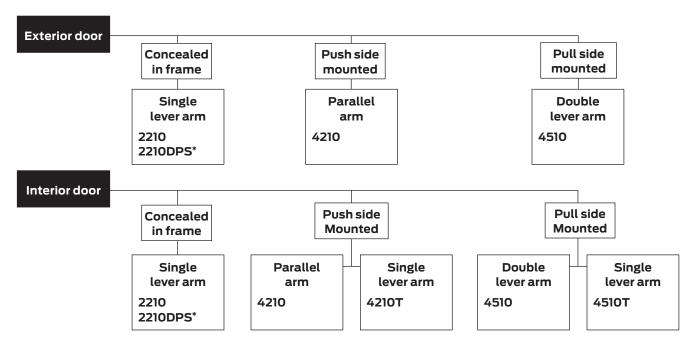




High Security Series vandal resistant closers

Product selection guide

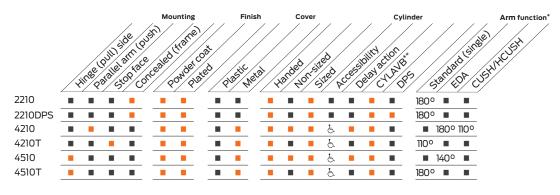
High Security LCN closers feature a vandal resistant design engineered for each application, easy installation, and superior performance. This guide is based on the desired mounting of the closer.



^{*}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.



- Available
- Not available
- Closer available with less than 5.0 lbs. opening force on 36" door.
- & 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.

Introduction

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
- 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

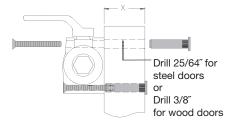
Positive pressure //



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 13/4" 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 $\frac{1}{4}$ " hex drive socket. For $\frac{1}{4}$ "-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.

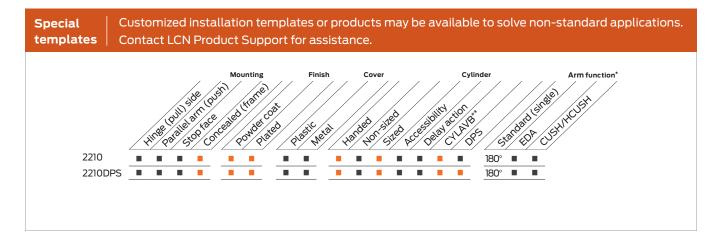
2210 Series



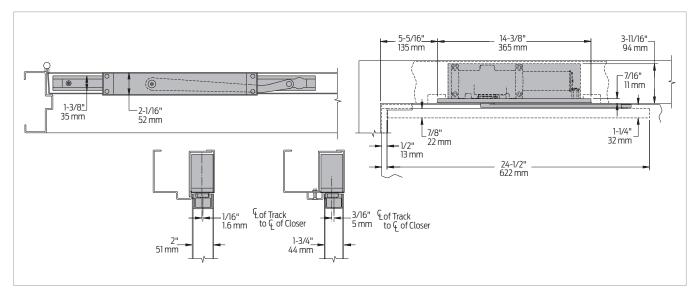
The concealed 2210 Series, heavy duty, high security track closer features complete concealment with special components to minimize tampering and vandalism. Forged steel, single lever arm and heavy steel mounting plate are designed for correctional, vandal prone, institutional, and other high traffic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

Certifications	Grade 1 - ANSI A156.4, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act	
Body construction	 Cast iron body Full complement bearing 1½" diameter piston ¾16" diameter double heat treated pinion journal 	
Fluid	All weather fluid	
Handing	Handed	
Size	Sized 3-5 (refer to chart); interior, exterior and vestibule	
Warranty	15 years (2210); 2 years (2210DPS)	
Cover	Two piece metal finish plates	

Fasteners	Torx Machine Screws (TORX)	
Mounting	 Concealed, single acting cylinder in head frame Concealed, arm and track in top rail of door 	
Arms	Standard security arm and security track	
Finishes/colors/ powder coat	 622 Matte Black 689 Aluminum 690 Statuary Bronze 691 Light Bronze 693 Gloss Black 695 Dark Bronze 696 Brass Custom colors optional 	
	Optional SRI primer - powder coat onlyOptional plated finishes	



Concealed mounting



Butt hinges	Should not exceed 4 1/2" (114 mm) in width		
Auxiliary stop	Recommended where a door cannot swing 180°		
Top rail	11/4" (32 mm) mortise required; 3/8" (10 mm) cutout required at top of door, stop face only		
Door thickness	1 ³ / ₄ " (44 mm) minimum		
Door width	28" (711 mm) minimum		
Head frame	 5 ³/4" (146 mm) wide and 4" (102 mm) high with 2 ³/16" (56 mm) rabbet required Consult factory if any dimension is less 		
Steel mounting plate	Thickness ³ / ₈ " (10 mm)		
Door position switch	 Optional, field adjustable switch can interface with security and monitoring systems Add suffix "DPS" to selected cylinder Provides normally open (N.O.) and normally closed (N.C.) circuit A three wire connector harness with 84" (2134 mm), 16 AWG leads is furnished to simplify connection to field wiring Single pole double throw (SPDT) contacts rated at 125/250 VAC at 10.1 amps maximum resistive load are standard 		
Advanced Variable Back Check	 Cylinder starts back check at approximately 45° instead of the normal 75° Add suffix "CYLAVB" to selected cylinder 		
Maximum opening	 Templating allows 180° Consult factory if door will be held open at 180° Pivot mounting door limits opening to 110° and increases minimum door width to 32" (813 mm) Please note that many track style door closers are capable of allowing 180° of door swing 		
Options	Advanced Variable Back Check Cylinder (CYLAVB)Door Position Switch (DPS)		

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

2210 Series

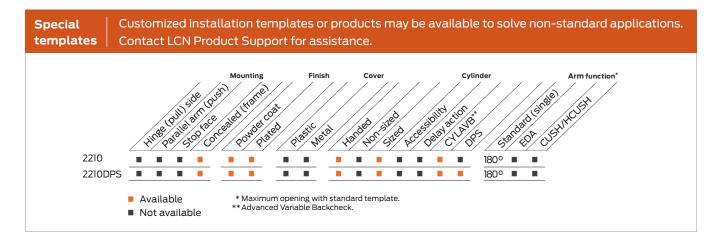
2210 Series



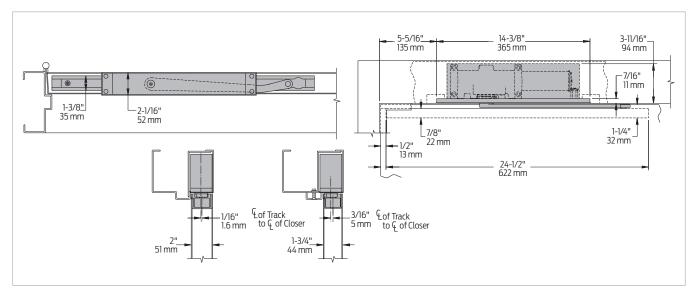
The concealed 2210 Series, heavy duty, high security track closer features complete concealment with special components to minimize tampering and vandalism. Forged steel, single lever arm and heavy steel mounting plate are designed for correctional, vandal prone, institutional, and other high traffic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

Certifications	Grade 1 - ANSI A156.4, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act	
Body construction	 Cast iron body Full complement bearing 1½" diameter piston 1½" diameter double heat treated pinion journal 	
Fluid	All weather fluid	
Handing	Handed	
Size	Sized 3-5 (refer to chart); interior, exterior and vestibule	
Warranty	15 years (2210); 2 years (2210DPS)	
Cover	Two piece metal finish plates	

Fasteners	Torx Machine Screws (TORX)	
Mounting	 Concealed, single acting cylinder in head frame Concealed, arm and track in top rail of door 	
Arms	Standard security arm and security track	
Finishes/colors/ powder coat	 622 Matte Black 689 Aluminum 690 Statuary Bronze 691 Light Bronze 693 Gloss Black 695 Dark Bronze 696 Brass Custom colors optional 	
	Optional SRI primer - powder coat onlyOptional plated finishes	



Concealed mounting



Butt hinges	Should not exceed 4 1/2" (114 mm) in width		
Auxiliary stop	Recommended where a door cannot swing 180°		
Top rail	1 1/4" (32 mm) mortise required; 3/8" (10 mm) cutout required at top of door, stop face only		
Door thickness	1 ³ / ₄ " (44 mm) minimum		
Door width	28" (711 mm) minimum		
Head frame	 5 ³/₄" (146 mm) wide and 4" (102 mm) high with 2 ³/₁₆" (56 mm) rabbet required Consult factory if any dimension is less 		
Steel mounting plate	Thickness ³ / ₈ " (10 mm)		
Door position switch	 Optional, field adjustable switch can interface with security and monitoring systems Add suffix "DPS" to selected cylinder Provides normally open (N.O.) and normally closed (N.C.) circuit A three wire connector harness with 84" (2134 mm), 16 AWG leads is furnished to simplify connection to field wiring Single pole double throw (SPDT) contacts rated at 125/250 VAC at 10.1 amps maximum resistive load are standard 		
Advanced Variable Back Check	 Cylinder starts back check at approximately 45° instead of the normal 75° Add suffix "CYLAVB" to selected cylinder 		
Maximum opening	 Templating allows 180° Consult factory if door will be held open at 180° Pivot mounting door limits opening to 110° and increases minimum door width to 32" (813 mm) Please note that many track style door closers are capable of allowing 180° of door swing 		
Options	Advanced Variable Back Check Cylinder (CYLAVB)Door Position Switch (DPS)		

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

Accessories Cylinders

2210 Series



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 3. Select finish

☐ Right Hand (RH)

☐ Left Hand (LH)

□ Standard powder coat _____ Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss 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.

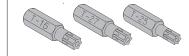


Table of sizes

- 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



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

4210 Series

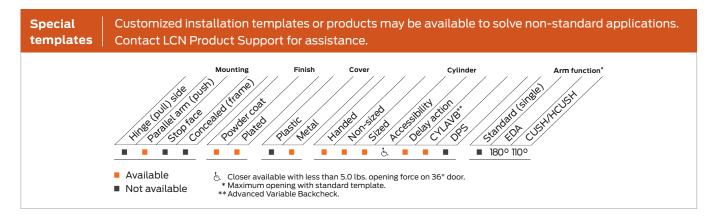
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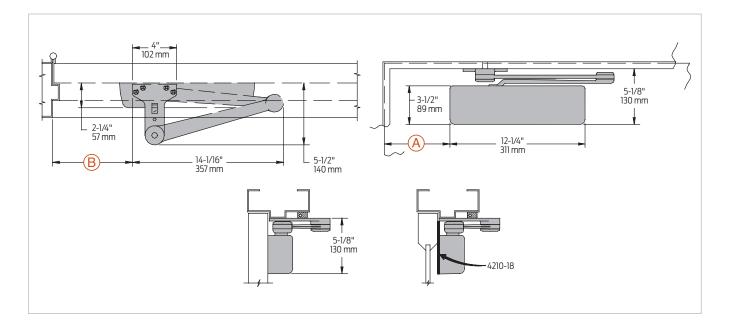
The 4210 Smoothee® Series is a heavy duty, high security closer with special components to minimize tampering and vandalism. Forged steel parallel arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic applications. A choice of finishes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

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	
	Note: 4211 cylinder meets ADA.	
Body construction	 Cast iron body Full complement bearing 1½" Diameter piston 1½" diameter double heat treated pinion journal 	
Fluid	All weather fluid	
Handing	Handed	
Size	Sized 1-5 or size 6; adjustable exterior, interior and vestibule	
Warranty	15 years	

Cover	Metal Cover (MC)		
Fasteners	Torx Machine Screws (TORX)		
Mounting	Parallel (push side)		
Arms	Extra duty, non hold open		
Finishes/colors/ powder coat	 622 Matte Black 689 Aluminum 690 Statuary Bronze 691 Light Bronze 693 Gloss Black 695 Dark Bronze 696 Brass Custom colors optional Optional SRI primer - powder coat only Optional plated finishes (cover only) 		



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 ½" (140 mm) from push side of door		
Top rail	Less than 5 1/8" (130 mm) measured fro	om stop, requires plate 4210-18. Plate requires 2" (51 mm) minimum top rai	
Stop width	2 ³/₄" (70 mm) recommended. Less tha	an 1" (25mm), consult factory	
Delay action	 Add suffix "CYLDEL" to selected cylinder Not available with 4215 or 4216 cylinder Delays closing from maximum opening to approximately 70° Delays time adjustable up to approximately 1 minute 		
Advanced Variable Back Check	 Cylinder starts back check at approximately 45° instead of the normal 75° Add suffix "CYLAVB" to selected cylinder 		
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 "/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°: $A = 5 \frac{9}{16}$ " (141 mm) $B = 6 \frac{7}{6}$ " (175 mm)	
		Hold open point at maximum opening with HCUSH arm	
Options	Delay Action cylinder (CYDEL) or Advanced Variable Back Check cylinder (CYLAVB)		

10T Series

Accessories

Cylinders

4210 Series



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 ½" (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 ½/16" (78mm)



4210-61 Blade Stop Spacer

 Lowers parallel arm shoe to clear ½" (13 mm) blade stop



4210-419

 PA Flush Panel Adapter
 Provides horizontal mounting surface for EDA or CUSH shoe on single rabetted or flush frame

Introduction

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

 \square Standard powder coat

Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss 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 Bolt¹ 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.

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Door width	36"	42"	48"	
8.5* lbs.	4211	4211	4211	
5.0* lbs.	4211	4211	4211	

* Maximum opening force.

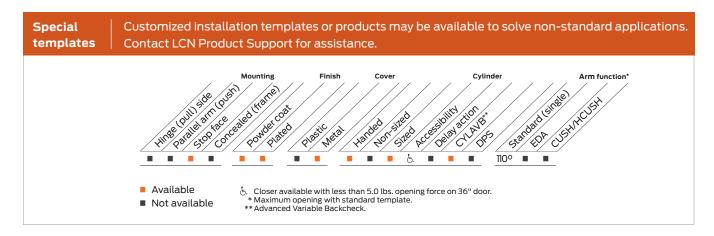
4210T Series



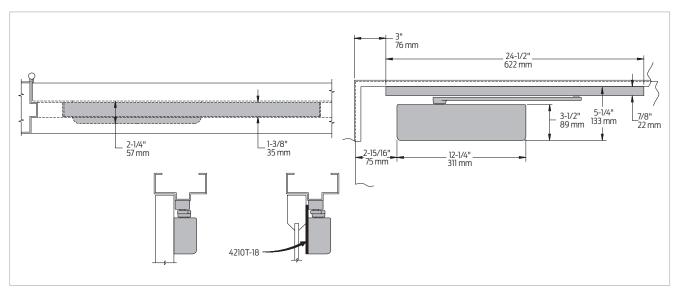
The 4210T Smoothee Series is a heavy duty, high security track closer with special components to minimize tampering and vandalism. Forged steel arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic interior applications. A choice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

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	
	Note: 4211 cylinder meets ADA.	
Body construction	 Cast iron body Full complement bearing 1½" Diameter piston ½" diameter double heat treated pinion journal 	
Fluid	All weather fluid	
Handing	Handed	
Size	Sized 1, 3 or 4; Interior	
Warranty	15 years	

Cover	Metal Cover (MC)		
Fasteners	Torx Machine Screws (TORX)		
Mounting	Stop face (push side)		
Arms	Security arm, security track with roller		
Finishes/colors/ powder coat	 622 Matte Black 689 Aluminum 690 Statuary Bronze 691 Light Bronze 693 Gloss Black 695 Dark Bronze 696 Brass Custom colors optional 		
	Optional SRI primer - powder coat onlyOptional plated finishes		



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	 Less than 5 ½" (133 mm) measured from stop, requires plate 4210T-18 Plate requires 2 ½" (57mm) minimum measured from the stop
Stop width	Minimum 1 ³ / ₈ " (35 mm)
Advanced Variable Back Check	 Cylinder starts back check at approximately 45° instead of the normal 75° Add suffix "CYLAVB" to selected cylinder
Maximum opening	Templating allows 110°
Options	Advanced Variable Back Check Cylinder (CYLAVB)

Cylinders

Accessories



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 _____ Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss 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 Bolt¹ 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.

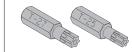


Table of sizes

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

* Maximum opening force.

4510 Series

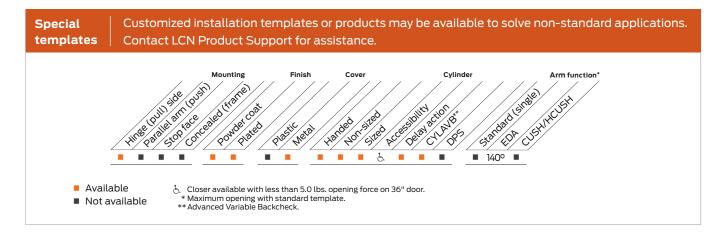
4510 Series



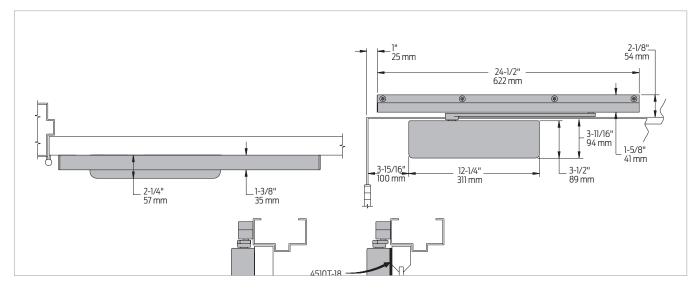
The 4510 Smoothee Series is a heavy duty, high security closer with special components to minimize tampering and vandalism. Forged steel double lever arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic applications. A choice of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

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act		
	Note: 4511 cylinder meets ADA.		
Body	Cast iron body		
construction	Full complement bearing		
	 1½" Diameter piston 		
	■ ¹¹ / ₁₆ " diameter double heat		
	treated pinion journal		
Fluid	All weather fluid		
Handing	Handed Sized 1-5; Adjustable, exterior, interior and vestibule		
Size			
Warranty	15 years		

Cover	Metal Cover (MC)		
Fasteners	Torx Machine Screws (TORX)		
Mounting	Hinge (pull side)		
Arms	Extra heavy duty, non-hold open		
Finishes/colors/ powder coat	 622 Matte Black 689 Aluminum 690 Statuary Bronze 691 Light Bronze 693 Gloss Black 695 Dark Bronze 696 Brass Custom colors optional 		
	Optional SRI primer - powder coat onlyOptional plated finishes		



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 ½" (57 mm) behind door required for installation
Top rail	 Less than 3 ½" (89 mm), requires plate 4510-18 Plate requires 2" (51mm) minimum top rail
Head frame	Less than 1" (25 mm), consult factory
Arm clearance	Above door 1 1/8" (29 mm) required
Delay action	 Add suffix "CYLDEL" to selected cylinder Not available with 4516 cylinder Delays closing from maximum opening to approximately 70° Delays time adjustable up to approximately 1 minute
Advanced Variable Back Check	 Cylinder starts back check at approximately 45° instead of the normal 75° Add suffix "CYLAVB" to selected cylinder
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

4510 Series



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

Introduction

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

Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss 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 Bolt¹ and Torx Machine Screw (TBTRX)

Installation accessories

☐ Plate, 4510-18

Special template

□ ST-____

1. Specify door thickness if other than 1 $^3/_4{}^{\prime\prime}$.

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

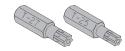
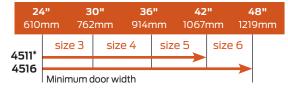


Table of sizes

- 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	4511	
5.0* lbs.	4511	4511	4511	_

* Maximum opening force.

4510T Series

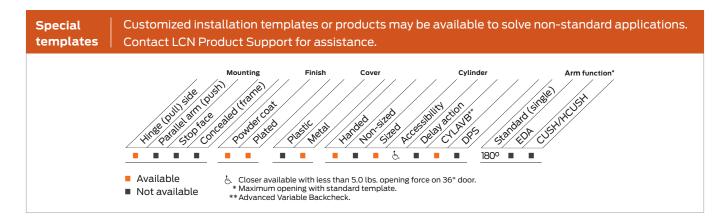
4510T Series



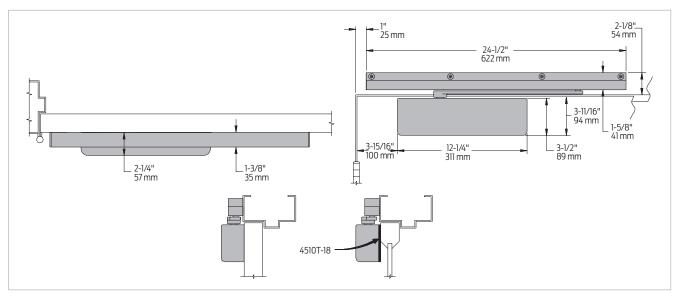
The 4510T Smoothee Series is a heavy duty, high security track closer with special components to minimize tampering and vandalism. Forged steel single lever arm and heavy gauge metal security cover are designed for correctional, vandal prone, institutional and other high traffic interior applications.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

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act Note: 4511T cylinder meets ADA.	
Body construction	 Cast iron body Full complement bearing 1½" Diameter piston ½" diameter double heat treated pinion journal 	
Fluid	All weather fluid	
Handing	Handed Sized 1, 3 or 4	
Size		
Warranty	15 years	

Cover	Metal Cover (MC)
Fasteners	Torx Machine Screws (TORX)
Mounting	Hinge (pull side)
Arms	Standard security arm, security track (non hold open) and track roller
Finishes/colors/ powder coat	 622 Matte Black 689 Aluminum 690 Statuary Bronze 691 Light Bronze 693 Gloss Black 695 Dark Bronze 696 Brass Custom colors optional Optional SRI primer - powder coat only Optional plated finishes



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	 Less than 3 ³/₄" (95 mm), requires plate 4510T-18 Plate requires 2" (51mm) minimum top rail
Head frame	Minimum 2 1/8" (54 mm)
Advanced Variable Back Check	 Cylinder starts back check at approximately 45° instead of the normal 75° Add suffix "CYLAVB" to selected cylinder
Maximum opening	 Templating allows 180° Consult factory if door will be held open at 180°
Options	Advanced Variable Back Check cylinder (CYLAVB)

Accessories

4510T Series

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 _____ Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss 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 Bolt¹ 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.

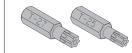


Table of sizes

- 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	4513T	
5.0* lbs.	4511T	4511T	4511T	

^{*} Maximum opening force.

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.

For more, visit www.allegion.com

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