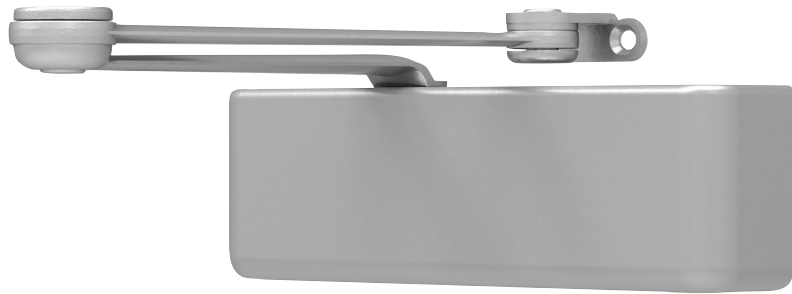


4510 Series



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

| | | | |
|--------------------------|--|------------------------------------|--|
| Certifications | Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act <small>Note: 4511 cylinder meets ADA.</small> | Cover | Metal Cover (MC) |
| Body construction | <ul style="list-style-type: none"> Cast iron body Full complement bearing 1 1/2" Diameter piston 1/16" diameter double heat treated pinion journal | Fasteners | Torx Machine Screws (TORX) |
| Fluid | All weather fluid | Mounting | Hinge (pull side) |
| Handing | Handed | Arms | Extra heavy duty, non-hold open |
| Size | Sized 1-5; Adjustable, exterior, interior and vestibule | Finishes/colors/powder coat | <ul style="list-style-type: none"> 689 Aluminum 690 Statuary Bronze 691 Light Bronze 693 Black 695 Dark Bronze 696 Brass Custom colors optional |
| Warranty | 15 years | | <ul style="list-style-type: none"> Optional SRI primer - powder coat only Optional plated finishes |

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

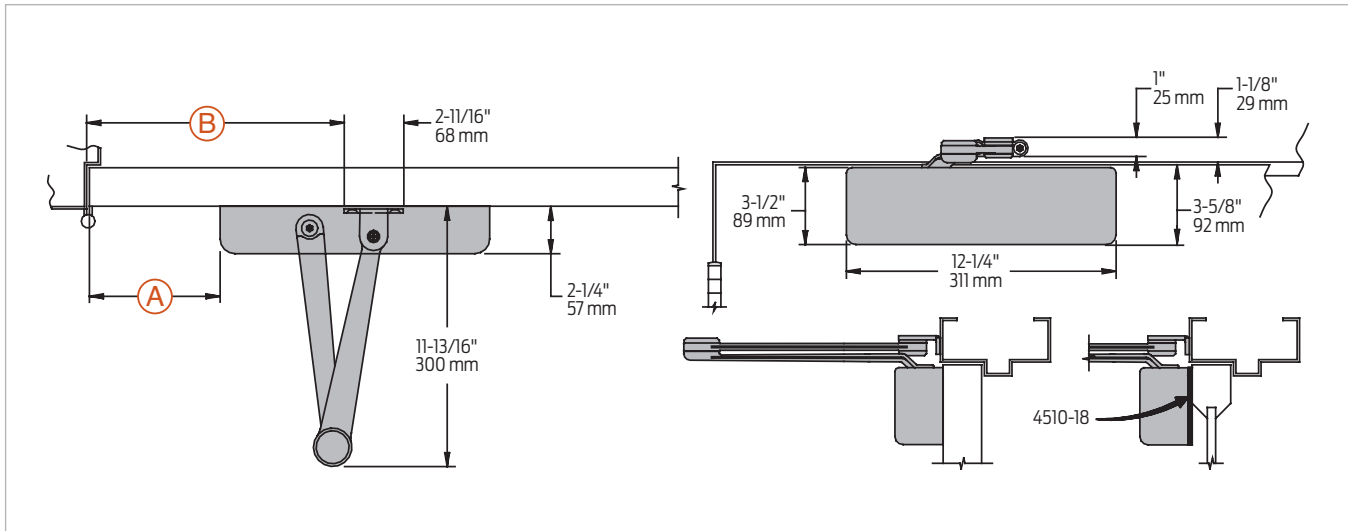
| Mounting | Finish | Cover | Cylinder | Arm function* |
|---|--|--|--|--|
| <ul style="list-style-type: none"> Hinge (pull) side Parallel arm (push) Stop face Concealed (frame) Powder coat Plated | <ul style="list-style-type: none"> Plastic Metal | <ul style="list-style-type: none"> Handed Non-sized Sized | <ul style="list-style-type: none"> Accessibility Delay action CYLAVB** DPS | <ul style="list-style-type: none"> Standard (single) EDA CUSH/HCUSH |
| <ul style="list-style-type: none"> 140° | | | | |

■ 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"> Less than 3 1/2" (89 mm), requires plate 4510-18 Plate requires 2" (51mm) minimum top rail |
| Head frame | Less than 1" (25 mm), consult factory |
| Arm clearance | Above door 1 1/8" (29 mm) required |
| Delay action | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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



**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

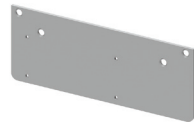
Arms



**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