

LCN®

# 1000 Series

Surface mounted closers



# 1450 Series

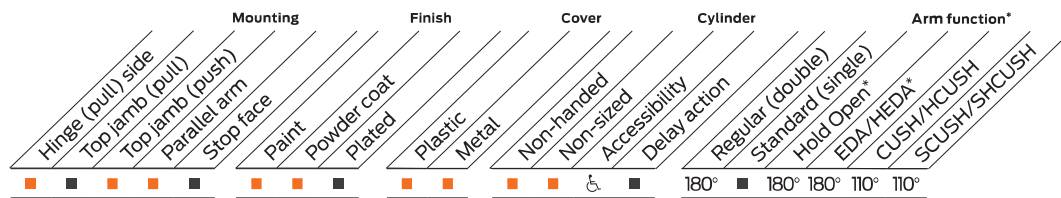


The 1450 Series cast aluminum closer was specially designed to deliver consistent, dependable, long-term performance in frequently-used, low-abusive traffic areas. With industry's most common hole pattern it can fit a range of applications like aftermarket replacement, aluminum storefronts and new construction projects.

## Features

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act	<b>Cover</b>	<ul style="list-style-type: none"> <li>▪ Slim line plastic, standard</li> <li>▪ Full plastic and metal, optional</li> </ul>
<b>Body construction</b>	<ul style="list-style-type: none"> <li>▪ Cast aluminum body</li> <li>▪ Full complement bearing</li> <li>▪ 1 1/4" diameter piston</li> <li>▪ 5/8" diameter single heat treated pinion journal</li> </ul>	<b>Fasteners</b>	Universal screw pack (UNIV)
<b>Fluid</b>	All weather fluid	<b>Mounting</b>	Hinge (pull side), top jamb (push side), parallel arm (push side)
<b>Handing</b>	Non-handed	<b>Arms</b>	Standard regular pull side and top jamb
<b>Templating</b>	Peel-n-Stick templates - 3/4" x 12" mounting hole pattern	<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> </ul>
<b>Size</b>	Adjustable spring size 1-6		<ul style="list-style-type: none"> <li>▪ Optional SRI primer - powder coat only</li> </ul>
<b>Warranty</b>	25 years		

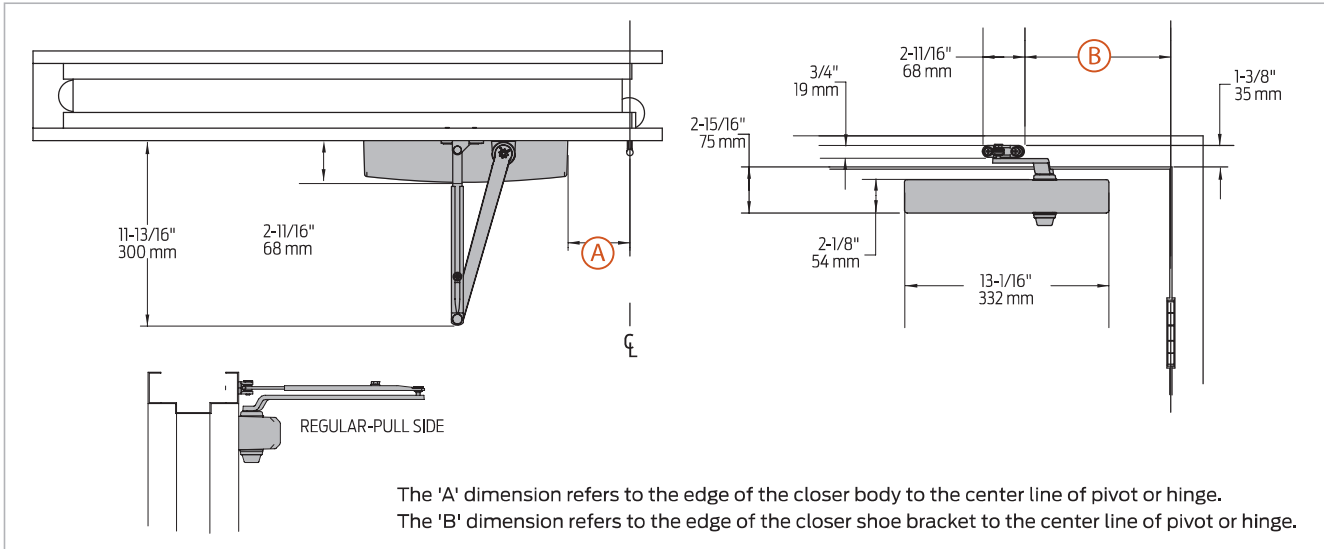
**Special templates** | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.



■ Available      ♿ Closer available with less than 5.0 lbs. opening force on 36" door.  
■ Not available      \* Maximum opening/hold open point with standard template.  
 D For designer series only

## Mounting details

### Hinge (pull side) mounting

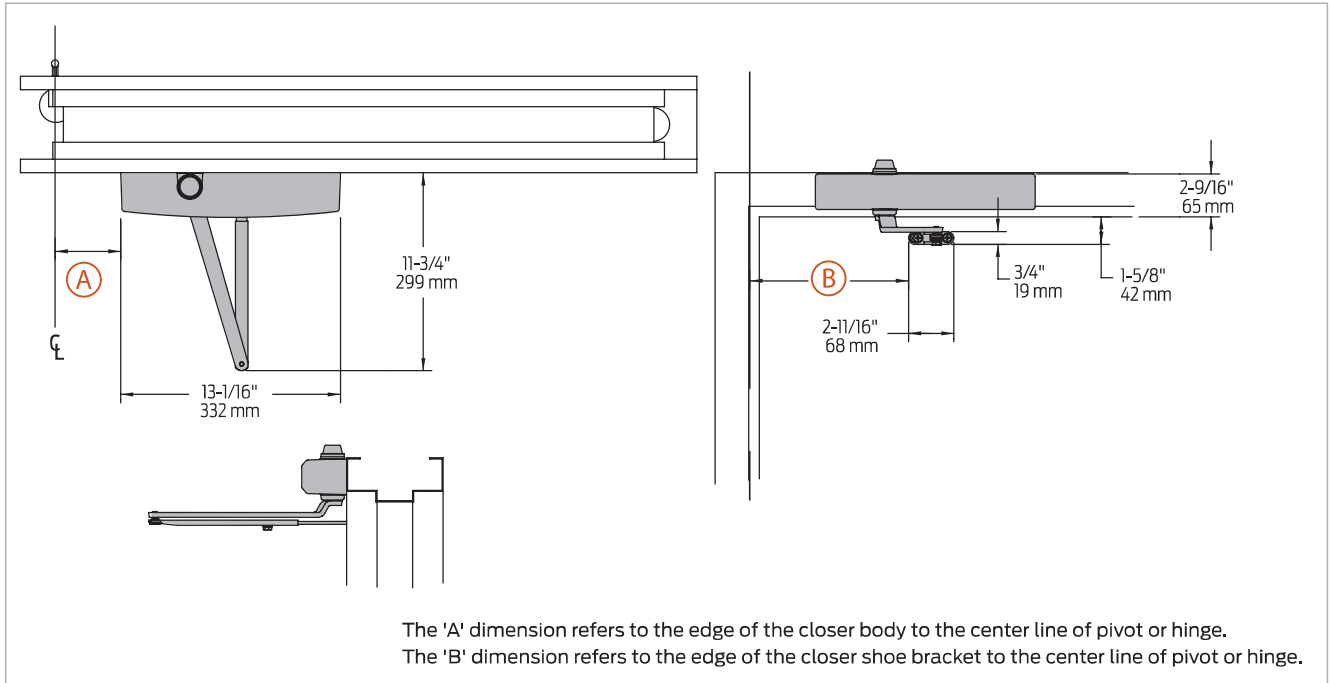


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°
Reveal	Should not exceed 3/4" (19 mm) for regular arm or 1/2" (13 mm) for Hold Open Arm
Top rail	<ul style="list-style-type: none"> <li>Less than 2 1/2" (64 mm) requires plate, 1450-18</li> <li>With full cover, use plate, 1450-18FC. Plate requires 1 1/2" (38 mm) minimum</li> </ul>
Clearance	2 3/8" (60 mm) behind door required for installation
Maximum opening	100°: A = 7" (102 mm) B = 12 3/8" (314 mm)
	101° to 130°: A = 5 1/2" (140 mm) B = 10 7/8" (276 mm)
	131° to 180°: A = 4" (140 mm) B = 9 3/8" (238 mm)

Note: Hold open points up to maximum opening with Hold Open Arm.  
\* Frame and trim permitting

## Mounting details

### Top jamb (push side) mounting

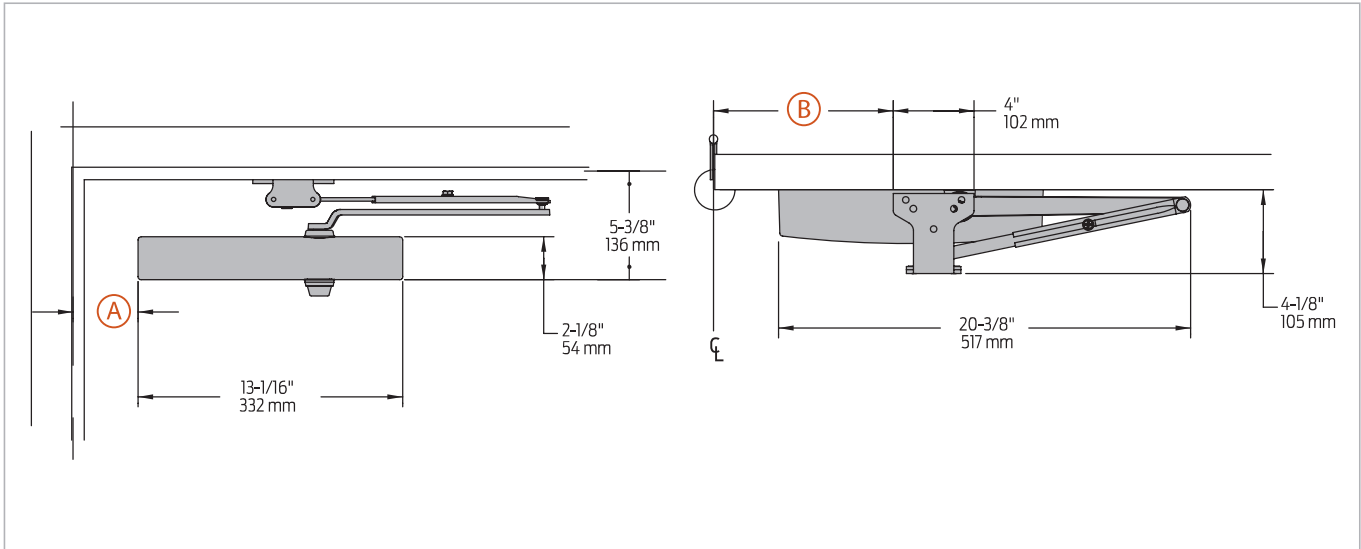


<b>Butt hinges</b>	Should not exceed 5" (127 mm) in width		
<b>Auxiliary stop</b>	Recommended at hold open point or where a door cannot swing 180°		
<b>Reveal</b>	Arm type	Reveal	Max opening
	Regular Arm	5"	Up to 170°
	Regular Arm	3 3/4"	Up to 180°
	Long Arm	8"	Up to 155°
	Hold Open Arm	2 3/4"	Up to 180°
	Hold Open Long Arm	4 7/8"	Up to 140°
<b>Top rail</b>	Requires 2 1/8" (54 mm) minimum. 3 3/8" (86 mm) minimum with closer on plate, 1450-18.		
<b>Head frame</b>	Less than 1 3/4" (44 mm) requires plate, 1450-18. For flush ceiling condition with 1 3/4" (45 mm) head frame, use plate, 1450-18		
<b>Maximum opening</b>	100°:	A=7" (102 mm) B = 12 3/8" (314 mm)	
	101° to 130°:	A = 5 1/2" (140 mm) B = 10 7/8" (276 mm)	
	131° to 180°:	A = 4" (102 mm) B = 9 3/8" (238 mm)	

Note: Hold open points up to maximum opening with Hold Open Arm.  
 \* Frame and trim permitting

## Mounting details

### Parallel arm (push side) mounting

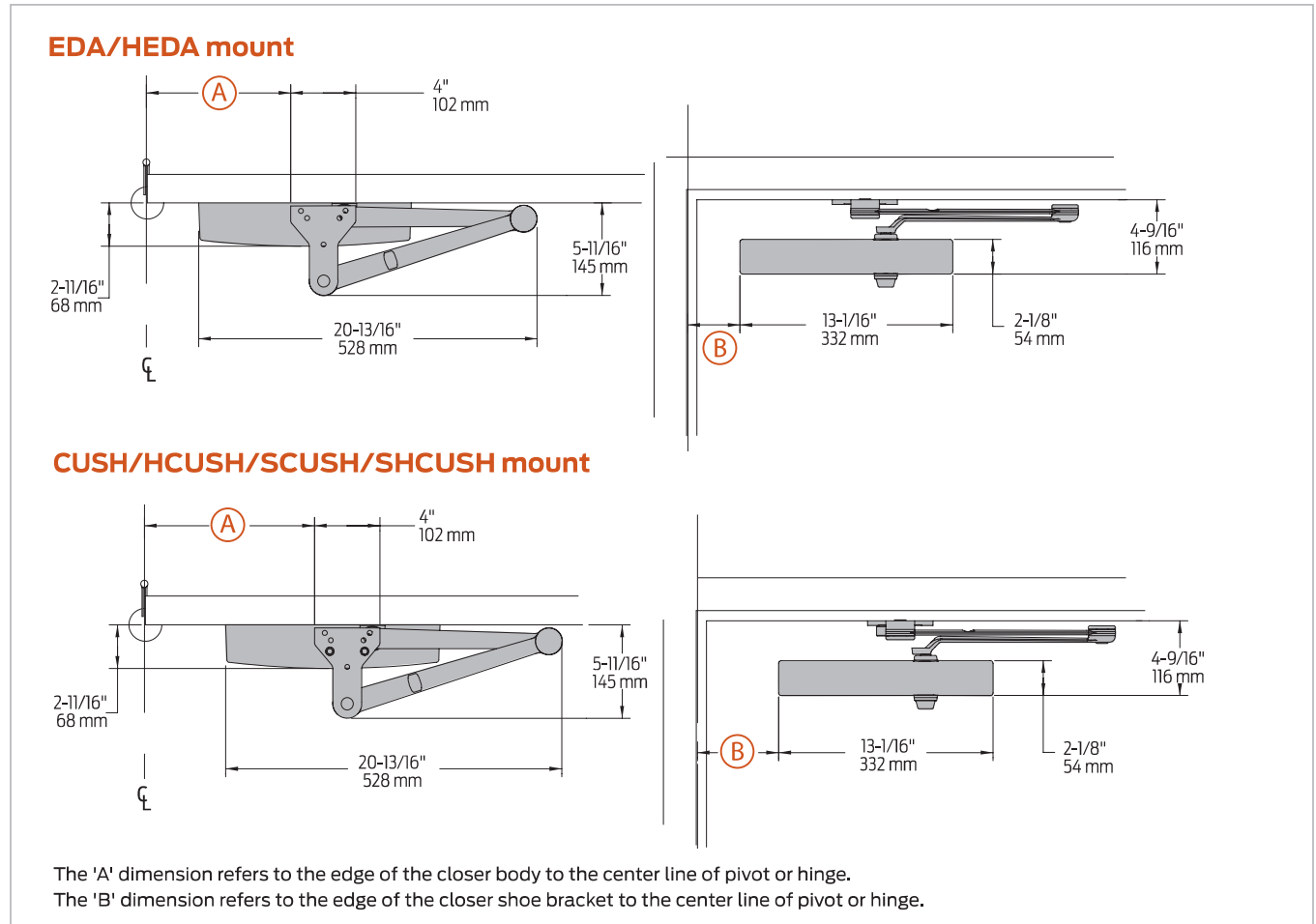


Butt hinges	Should not exceed 5" (127 mm) in width													
Auxiliary stop	Recommended at hold open point, where a door cannot swing 180°, or where Cush-n-Stop Arm is not used													
Top rail	<ul style="list-style-type: none"> <li>Less than 5 1/4" (133 mm) measured from the soffit requires</li> <li>Plate requires 1 1/4" (32 mm) minimum.</li> </ul>													
	<table border="1"> <thead> <tr> <th>Cover</th> <th>Minimum top rail (measured from soffit)</th> <th>Plate required</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Plastic</td> <td>3 1/2" (89 mm)</td> <td>1450-18</td> </tr> <tr> <td>2 1/4" (57 mm)</td> <td>1450-18PA</td> </tr> <tr> <td rowspan="2">Metal</td> <td>3 1/2" (89 mm)</td> <td>1450-18FC</td> </tr> <tr> <td>2 1/4" (57 mm)</td> <td>1450-18PAFC</td> </tr> </tbody> </table>	Cover	Minimum top rail (measured from soffit)	Plate required	Plastic	3 1/2" (89 mm)	1450-18	2 1/4" (57 mm)	1450-18PA	Metal	3 1/2" (89 mm)	1450-18FC	2 1/4" (57 mm)	1450-18PAFC
Cover	Minimum top rail (measured from soffit)	Plate required												
Plastic	3 1/2" (89 mm)	1450-18												
	2 1/4" (57 mm)	1450-18PA												
Metal	3 1/2" (89 mm)	1450-18FC												
	2 1/4" (57 mm)	1450-18PAFC												
Clearance	1450-62PA shoe projects 4 1/8" (105 mm) from door face													
Head frame	Flush or single rabbeted requires PA shoe adapter, 1450-418													
Stop width	Minimum 1" (25 mm)													
Blade stop	Clearance, requires 1/2" (13 mm) blade stop spacer, 1450-61													
Auxiliary shoe	1450-62A allows installation of regular arm with overhead holder/stop													
Maximum opening	Regular or Hold Open Arm can be templated to 120°: A = 3 3/16" (81 mm) B = 8 7/8" (225 mm) 121° to 180°: A = 11/16" (17 mm) B = 6 3/8" (162 mm)													

Note: Note: Hold open points up to maximum opening with Hold Open Arm, PA shoe is included with RWPA Arm, 1450 closer includes 1450-201 fifth hole spacer to support PA shoe.

# Mounting details

## EDA and Cush-n-Stop mounting



<b>Clearance</b>	1450-62EDA or CUSH shoe projects 5 11/16" (144mm) from door face	
<b>Head frame</b>	Flush or rabbeted requires CUSH flush panel adapter, 1450-419	
<b>EDA or CUSH ARM</b>	Requires soffit shoe support, 1450-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)	
<b>SCUSH</b>	Dead stop points are approximately 5° more than templated stop points	
<b>Maximum opening</b>	EDA template allows 110°. Hold open point up to maximum opening	CUSH arms can be templated for maximum opening/ hold open point at 85°
	120°: A = 8 7/8" (225 mm) B = 3 3/16" (81 mm)	85°: A = 10 3/8" (279 mm) B = 4 15/16" (140 mm)
	over 120°: A = 6 3/8" (162 mm) B = 1 1/16" (17 mm)	90°: A = 9 5/8" (244 mm) B = 4 3/16" (106 mm)
		95°: A = 8 7/8" (225 mm) B = 3 7/16" (87 mm)
		100°: A = 8 1/4" (210 mm) B = 2 13/16" (71 mm)
		105°: A = 7 5/8" (194 mm) B = 2 3/16" (56 mm)
		110°: A = 7" (178 mm) B = 1 9/16" (40 mm)

Note: 1450 closers ordered with EDA, CUSH or SCUSH Arms include 1450-201 fifth hole spacer to support the shoe.



## 1450 Series

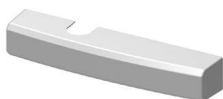
## Accessories

## Cylinders


**1450-3071**  
**Cast aluminum cylinder (CYL)**

- Non-handed
- Standard

## Covers


**1450-72**  
**Slim line plastic cover (SLIMPC)**

- Non-handed
- Standard



Left hand shown

**1450-72MC**  
**Metal Cover (MC)**

- Handed
- Optional


**1450-72FC**  
**Full Plastic Cover (FPC)**

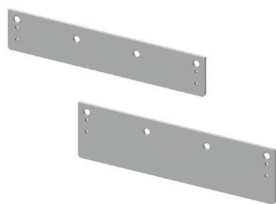
- Non-handed
- Optional

## Alternate cover

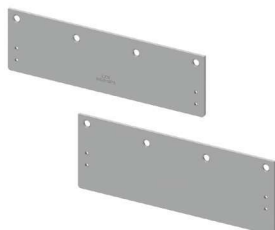

**1450-72ALT**  
**Alternate cover**

- Non-handed
- Optional, sold separately (not packed with closer)

## Installation accessories


**1450-18 / 1450-18FC**  
**Plate**

- Required for hinge side mount where top rail is less than 2 1/2" (64 mm)
- Required for top jamb mounting where head frame is less than 1 3/4" (44 mm) or flush ceiling condition exists
- Requires minimum 1 1/2" (38 mm) minimum top rail or 1 1/4" (32 mm) head frame
- With full cover, use plate 1450-18FC


**1450-18PA / 1450-18PAFC**  
**Plate**

- Required for parallel arm mounting where top rail is less than 4 3/8" (111mm), measured from the stop
- Requires 1 3/4" (44 mm) minimum top rail
- With full cover, use plate 1450-18PAFC


**1450-30**  
**CUSH shoe support**

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


**1450-61**  
**Blade stop spacer**

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


**1450-62PA**  
**PA shoe**

- Required for parallel arm mounting


**1450-62A**  
**Auxiliary shoe**

- Requires a top rail of 7" (178mm). Optional shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop


**1450-419**  
**PA flush panel adapter**

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

## Accessories



**1450-3077**  
Regular Arm with Parallel Arm Bracket (RWPA)

- Non-handed
- Mounts hinge side or top jamb
- Includes PA shoe, 1450-62PA required for parallel arm mounting



**1450-3077L**  
Long Arm (LONG)

- Non-handed
- Includes long rod and shoe, 1450-79LR for top jamb mount with deep reveals
- Optional



**1450-3049**  
Hold Open Arm with Parallel Arm Bracket (HWPB)

- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Hold open adjustable at shoe
- Optional



**1450-3049L**  
Hold Open Long Arm (HLONG)

- Non-handed
- Includes long head and tube, 1450-3048L for top jamb mount with deep reveals
- Optional



**1450-3077EDA**  
Extra Duty Arm (EDA)

- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations
- Optional 1450-3077EDA/G for blade stop clearance



**1450-3077EDA/62G**  
Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)

- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations
- Optional 1450-3077EDA/G for blade stop clearance



**1450-3049EDA**  
Hold Open Extra Duty Arm (HEDA)

- Handed
- Provides hold open function adjustable at shoe
- Optional



**1450-3077CNS**  
Cush-n-Stop Arm (CUSH)

- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe
- Optional



**1450-3049CNS**  
Hold Open Cush-n-Stop Arm (HCUSH)

- Non-handed
- Provides hold-open function with templated stop/hold open points
- Handle controls hold open function
- Optional



**1450-3077SCNS**  
Spring Cush-n-Stop Arm (SCUSH)

- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional



**1450-3049SCNS**  
Spring Hold Open Cush-n-Stop Arm (SHCUSH)

- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional



## Ordering information

### How-to-order 1450 Series closers

#### 1. 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
- Standard cover
- Tripack arm (RWPA)
- Universal screw pack  
(unless options listed below are selected)

### Closer options

#### Cover

- Full Plastic Cover (FPC)
- Metal Cover (MC)
- Alternate Cover (ALT) (sold separately from product)

#### Finish

- Custom powder coat (RAL) \_\_\_\_\_  
(metal cover required)
- SRI primer  
(use with powder coat finishes only)

#### Arm

- Regular Arm with Parallel Arm Bracket (RWPA)
- Long Arm (LONG)
- Regular Arm with 62A Auxiliary Shoe (RW62A)
- Hold Open with Parallel Arm Bracket (HWP)

- Hold Open Long Arm (HLONG)
- Extra Duty Arm (EDA) (optional -62G)
- Hold Open Extra Duty Arm (HEDA) - specify handing
- Cush-n-Stop Arm (CUSH)
- Hold Open Cush-n-Stop Arm (HCUSH)
- Spring Cush-n-Stop Arm (SCUSH)
- Spring Hold Open Cush-n-Stop Arm (SHCUSH)

#### Optional screw packs

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

#### Installation accessories

- Plate, 1450-18
- Plate, 1450-18FC
- Plate, 1450-18PA
- Plate, 1450-18PAFC
- CUSH Shoe Support, 1450-30
- Blade Stop Spacer, 1450-61
- Auxiliary Shoe, 1450-62A
- PA Flush Panel Adapter, 1450-419

#### Special template

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

#### Meets Buy American Act

- BAA

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

### Table of sizes

- Select closer based on width of door
- The spring power of a 1450 cylinder is field adjustable from size 1 through size 6 and is shipped adjusted to size 3

#### Exterior (and vestibule) door width



#### Interior door width



Indicates recommended range of door width for closer size.  
\* Adjustable Size 1 thru 6.

### Reduced opening force 1450 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.	1450	1450	1450
5.0* lbs.	1450	1450	1450	

\* Maximum opening force.