



Multi-sized cast iron closer  
for high use applications

**Norton®**

**ASSA ABLOY**

Experience a safer  
and more open world

**9500**  
**S E R I E S**

DOOR CLOSER

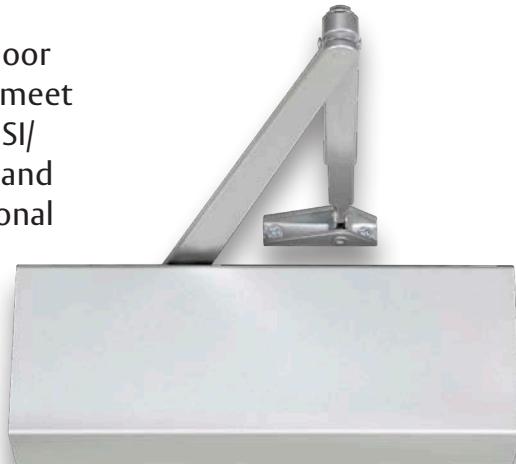
**CATALOG**

## INTRODUCTION

Ideal for high use openings, the Norton 9500 Series Cast Iron door closer offers the durability, flexibility and strength required to meet the needs of your facility. For interior or exterior doors, this ANSI/BHMA Grade 1 closer features a clean, modern cover aesthetic and durable cast iron body that can be used in a variety of institutional environments requiring ADA compliance.

## FEATURES

- » Cast iron closer body
- » Non-handed
- » Rack-and-pinion design
- » Standard, separate and independent, latch, sweep and backcheck intensity valves
- » Pressure relief valves for both opening and closing cycles protect the door and frame from damage and reduces maintenance costs
- » Staked valves
- » 2-1/4" (57mm) projection
- » 1-1/2" (38mm) diameter piston
- » 5/8" (16mm) diameter pinion journals
- » Closer mounting plate for easy installation
- » Tri-style® packaging: packed for regular, top jamb or parallel arm mounting
- » Adjustable spring sizes 1-6
- » Molded ABS plastic cover



- » All standard arm applications allow doors to swing 180°, conditions permitting
- » Heavy-duty arms: Regular Rigid, Parallel Rigid, CloserPlus®, Parallel Rigid Offset and Unitrol®
- » Slide Tracks: push or pull side mounting
- » 30-year limited warranty
- » Exceeds 25 million cycles

## OPTIONAL FEATURES

- » Metal cover
- » Delayed action

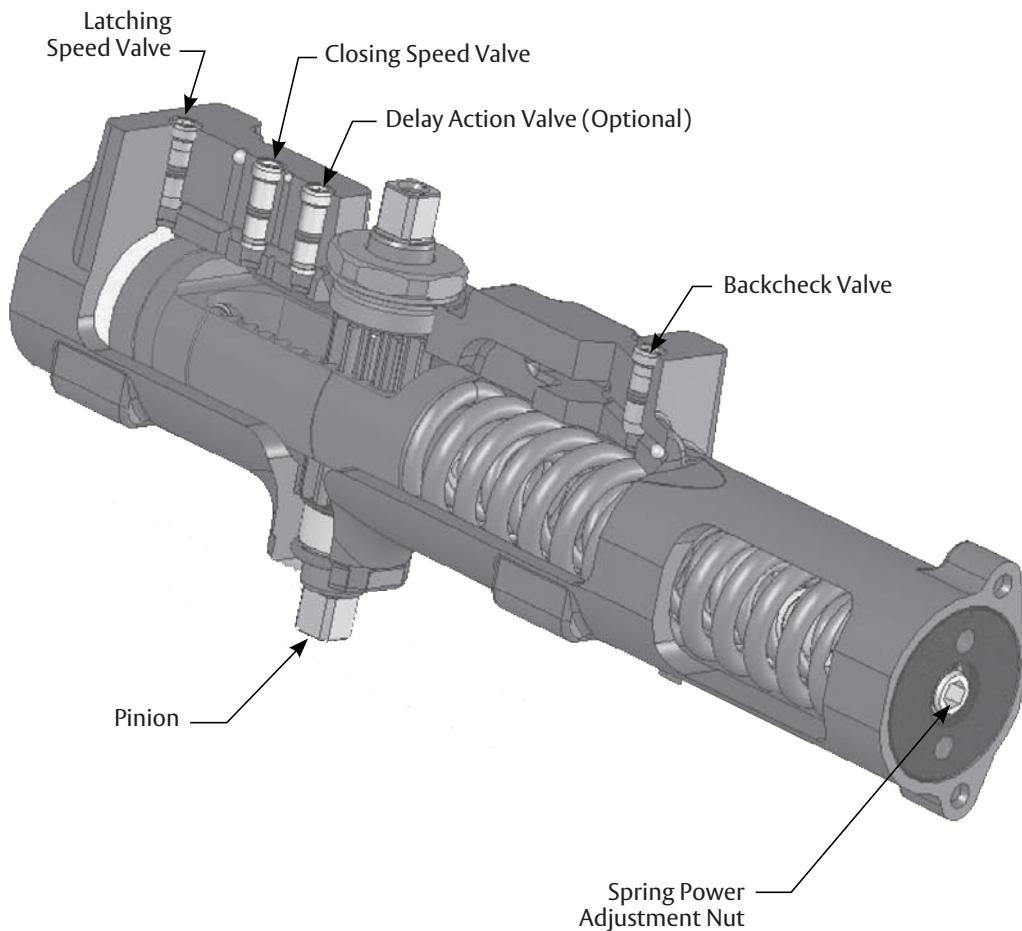
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## 9500 SERIES

### CAST IRON DOOR CLOSER

#### OVERVIEW



#### CERTIFICATIONS

- » ANSI/BHMA A156.4, Grade 1 certified 
- » UL / cUL listed for use on fire rated doors 
- » UL10C listed for positive pressure fire test
- » Comply with requirements for the Americans with Disabilities Act (A.D.A) and ANSI standard A117.1 
- » This product is manufactured in an ISO 9001, ISO 14001 facility
- » UL certified environmental produced declaration
- » GreenCircle certified environmental facts 

#### CAUTION: Door Closers for Low Opening Force Applications:

Door closers installed in openings required to meet the requirements of the Americans With Disabilities Act or ANSI/BHMA Standard A117.1, when adjusted to meet those requirements, may not provide adequate closing power to dependably close and latch the door based on opening or site conditions.

## SPECIFICATIONS

Door closers shall be of full rack and pinion construction with a cold headed heat-treated steel spindle and a forged steel piston precision machined and heat treated. The case shall be of cast iron. All closers for both interior and exterior doors shall be the product of one manufacturer.

Surface closers shall be adjustable to provide sizes 1 through 6 and comply with ADA. All sizes shall be accommodated in one closer body.

Closing shall be controlled by two valves — one to control closing speed and one to control latching speed. Valves shall be concealed against unauthorized adjustment and be non-critical with "O" ring seals. Delayed action shall be available and shall be accomplished with a separate valve.

All arms shall be finely finished with heavy duty forged steel main arm. All closers shall be suitable for regular arm, top jamb, and parallel arm mounting and track type applications when provided with proper brackets and arms. Hold open and heavy duty arms are available. Closers mounted regular arm, top jamb and parallel arm shall allow for full 180° door opening, trim permitting.

Closers shall be available with an adjustable backcheck intensity valve with a safety feature that automatically relieves internal pressure when backcheck has reached the desired adjustment level. Valves shall be accessible without removing the closer from the door.

Closers shall be available with a backcheck intensity valve. Backcheck begins at approximately 70° of door opening for all applications. This valve shall be operative on regular, top jamb, parallel arm, and track type mountings.

Closer covers shall be non-handed to meet a variety of door conditions and design requirements. Closer covers shall be of high impact plastic material of flame retardant grade, secured by machine screws. Projection of the closer body from the door shall not exceed 2-1/4". Closers shall be capable of mounting on 1-3/4" top rail or inverted mounting on 1-3/4" top jamb. Metal covers shall be available. All closers with metal covers shall be available in architectural finishes to match corresponding door hardware.

Closers without hold open shall be regularly furnished with power adjustment arm bracket capable of providing a 15% power adjustment.

A mounting bracket to attach the closer shall be regularly furnished.

Hydraulic fluid shall be of a type requiring no seasonal valve readjustment due to extreme temperature variations.

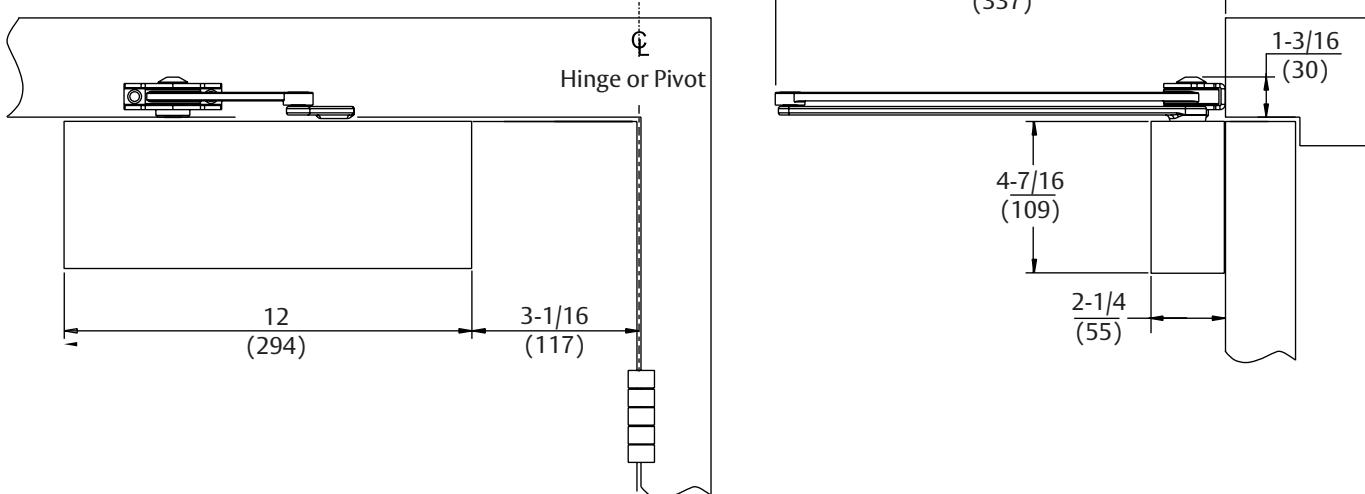
Closer shall have a 30-year limited warranty.

Closers with non-hold open arms shall be listed by Underwriters Laboratories.

## 9500 SERIES

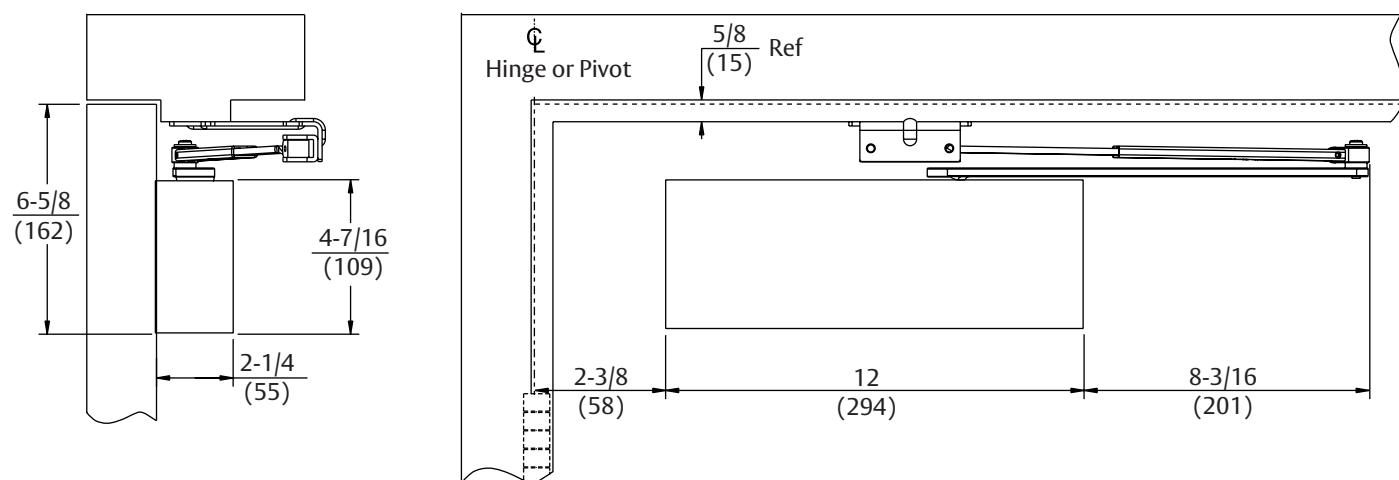
### CAST IRON DOOR CLOSER

#### TECHNICAL DETAILS – REGULAR ARM



Arm Function	Minimum Header	Minimum Top Rail	Maximum Door Swing
Non-Hold Open	1-1/2" (38)	3" (76)	180° (trim permitting)
Hold Open	1-11/16 (43)		90°-180°

#### TECHNICAL DETAILS – PARALLEL ARM

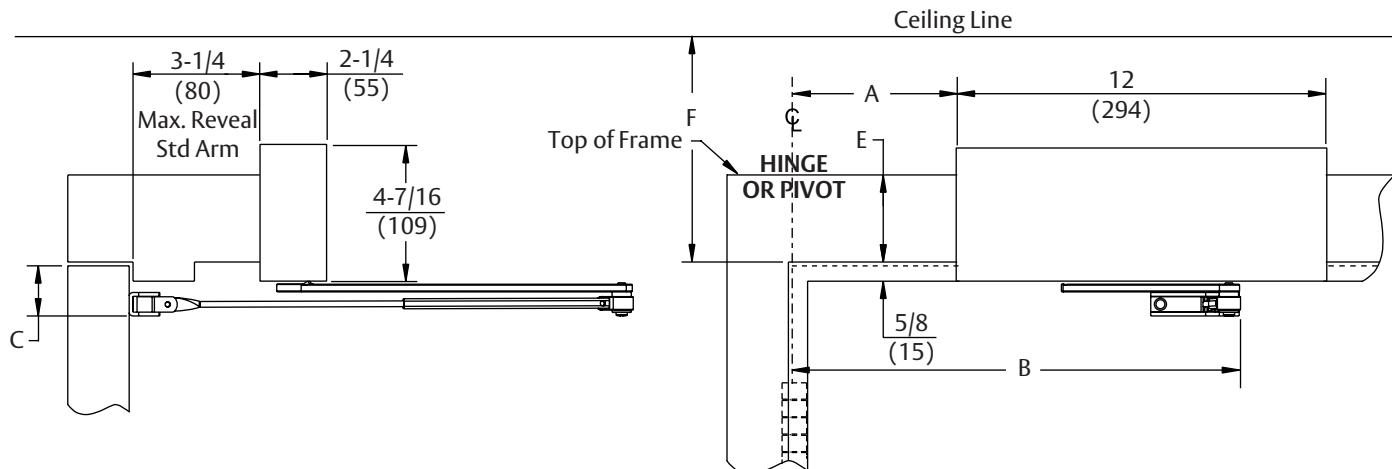


Arm Function	Minimum Top Rail
Non-Hold Open	5-1/4" (133)
Hold Open	

#### NOTES:

- » Mounting holes for mounting bracket are spaced 1" (25mm) x 10" (254mm).
- » Closers are tri-packed for regular arm, parallel arm and top jamb mounting. Parallel arm bracket is included.

#### TECHNICAL DETAILS – TOP JAMB



Maximum Opening	A	B	Hinge Condition
110°	7" (172)	16-1/16" (394)	
140°	5-1/2" (135)	14-5/16" (351)	Butts, Offset Pivots, and Swing Clear Hinges
180°	4" (98)	13-1/16" (320)	
140°	5-1/2" (135)	14-7/16" (354)	^Center Hung

Header Width	C Minimum Top Rail	E Header	F Ceiling Clearance
Standard	1-7/8" (48)	2-1/8" (54)	4" (102)
Narrow	2-1/4" (57)	2" (49)	3-5/8" (92)

Dimensions "A" and "B" are taken from centerline of hinge as shown and apply to pivot point of swing clear hinges. Offset and center hung pivots.

^Must be single-acting door.

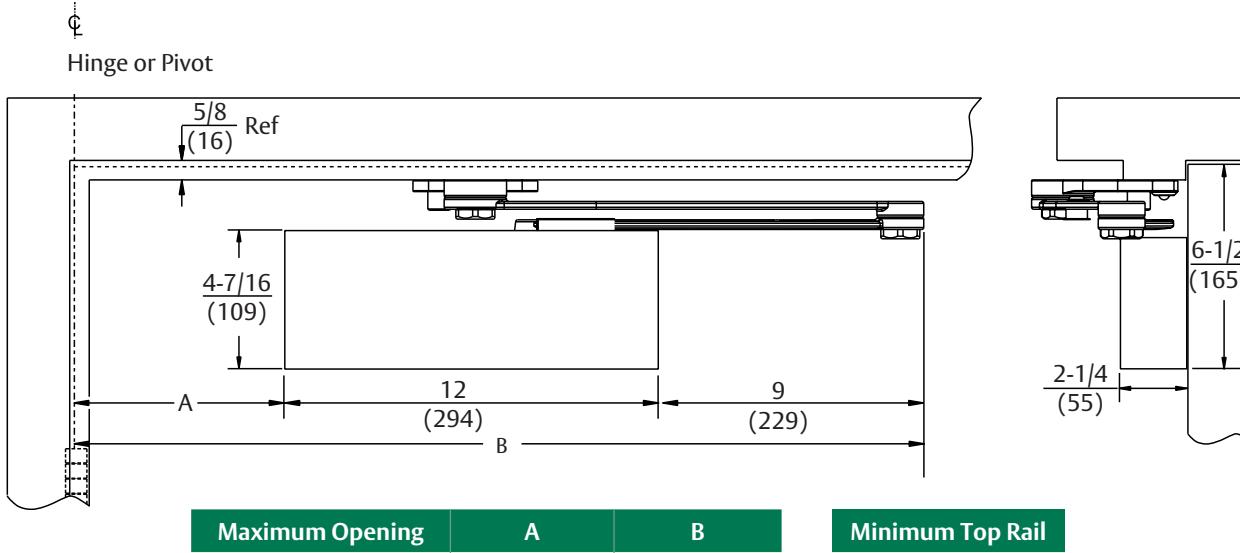
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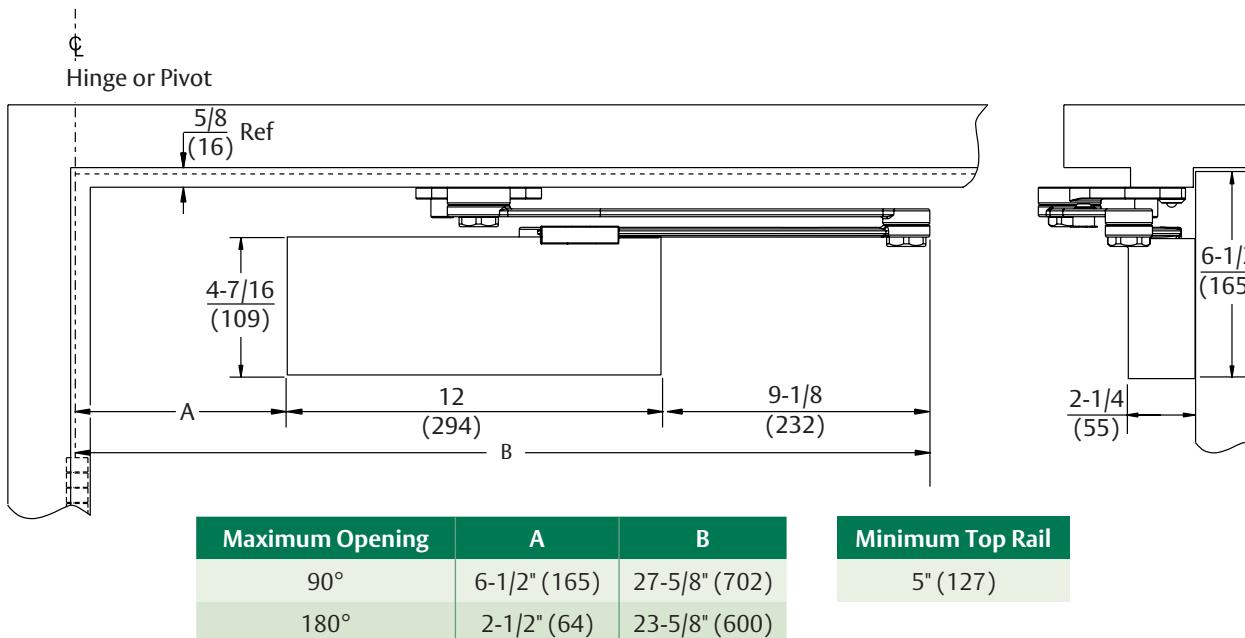
## 9500 SERIES

### CAST IRON DOOR CLOSER

#### TECHNICAL DETAILS – PARALLEL RIGID ARM



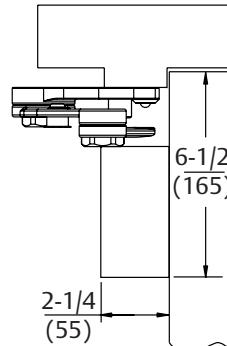
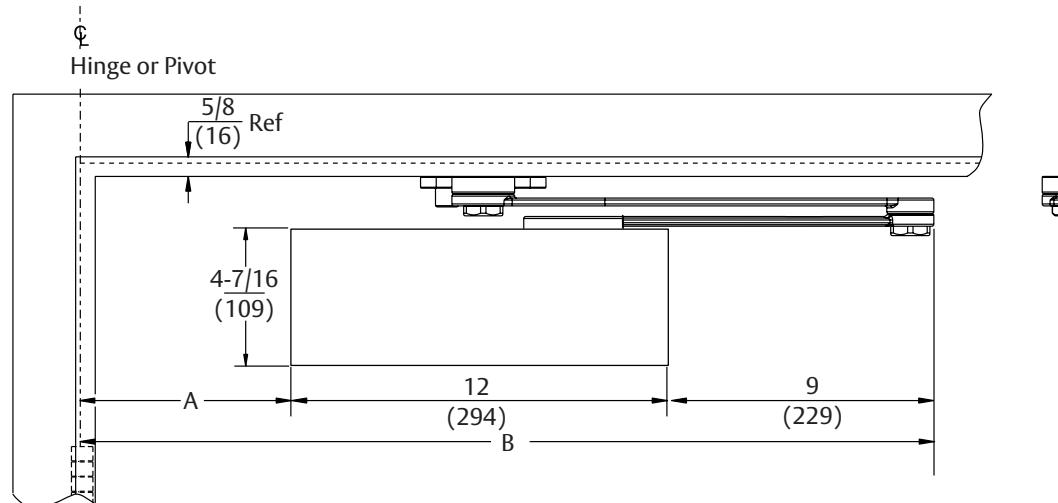
#### TECHNICAL DETAILS – PARALLEL RIGID, FRICTION HOLD OPEN ARM



#### NOTE:

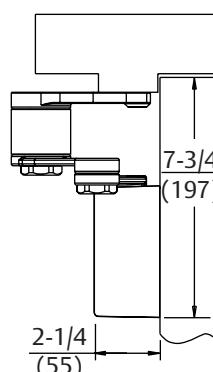
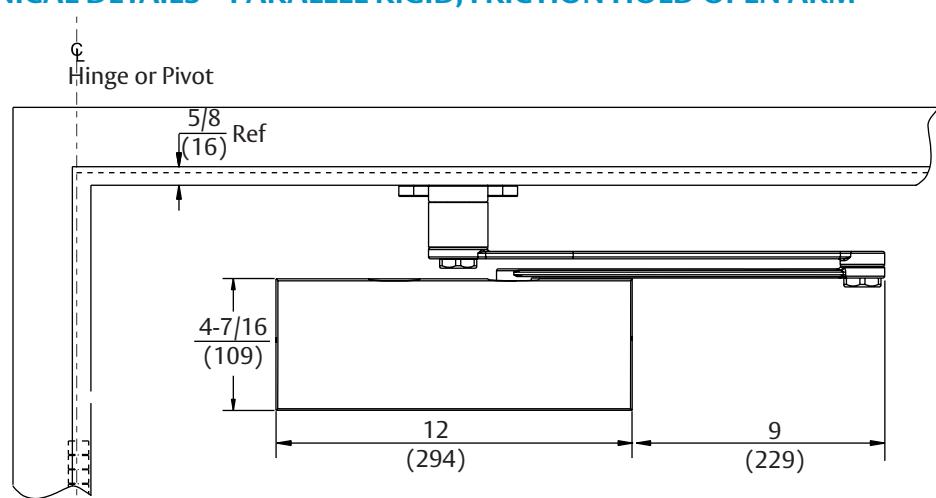
- » Mounting holes for mounting bracket are spaced 1" (25mm) x 10" (254mm).

#### TECHNICAL DETAILS – CLOSER PLUS® ARM



Maximum Opening	A	B	Minimum Top Rail
85°	7-3/4" (197)	28-3/4" (730)	5" (127)
90°	6-3/4" (171)	27-3/4" (708)	
100°	5-1/4" (133)	26-1/4" (667)	
110°	3-7/8" (98)	24-7/8" (631)	

#### TECHNICAL DETAILS – PARALLEL RIGID, FRICTION HOLD OPEN ARM



#### NOTE:

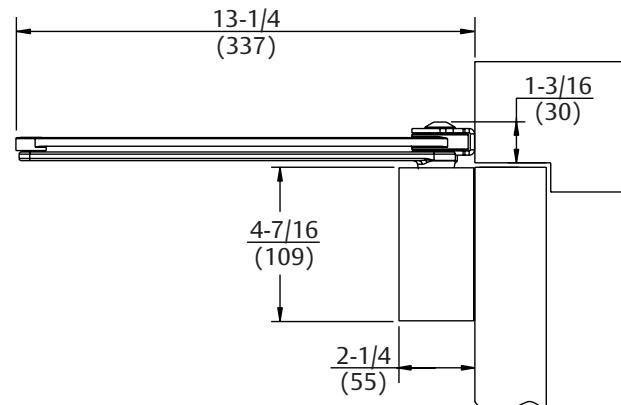
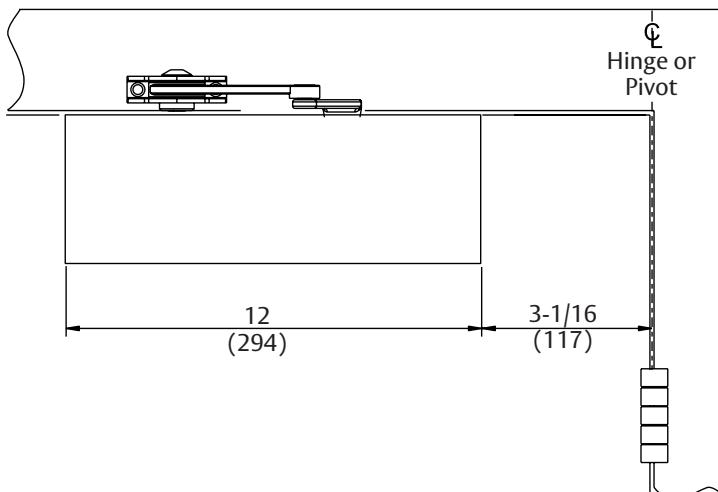
» Mounting holes for mounting bracket are spaced 1" (25mm) x 10" (254mm).

Minimum Top Rail of Door with 5/8" (16mm) Frame Stop	
Without 9500-1/2SP Spacer	With 9500-1/2SP Spacer
6-7/8" (175)	7-3/8" (187)

## 9500 SERIES

### CAST IRON DOOR CLOSER

#### TECHNICAL DETAILS – REGULAR RIGID ARM

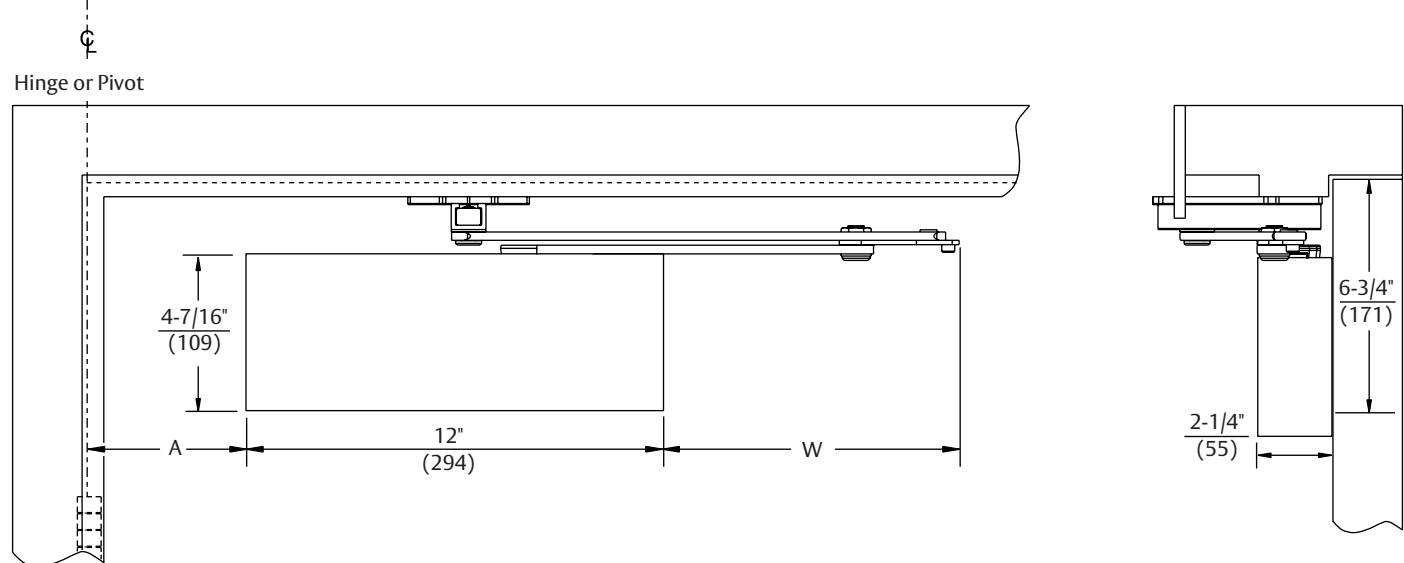


Minimum Header	Minimum Top Rail
1-5/8" (41)	3" (76)

#### NOTE:

- » Mounting holes for mounting bracket are spaced 1" (25mm) x 10" (254mm).

#### TECHNICAL DETAILS – UNITROL® PARALLEL ARM



Opening		Doors 28" - 32"		Doors 33" - 41"		Doors 42" - 48"	
Hold Open	Dead Stop	A	W	A	W	A	W
85°	90°	4-3/4" (121)		5-3/8" (137)		5-7/8" (149)	
90°	95°	4-1/4" (108)		4-7/8" (124)		5-3/8" (137)	
95°	100°	3-3/4" (95)		4-3/8" (111)		4-7/8" (124)	
100°	105°	3-3/8" (86)	8-1/2" (216)	3-7/8" (98)	10" (254)	4-3/8" (111)	11-3/8" (289)
105°	110°	3" (76)		3-1/2" (89)		4" (102)	
110°	115°	2-3/4" (70)		3-1/4" (82)		3-5/8" (92)	

#### Minimum Top Rail

5" (127)

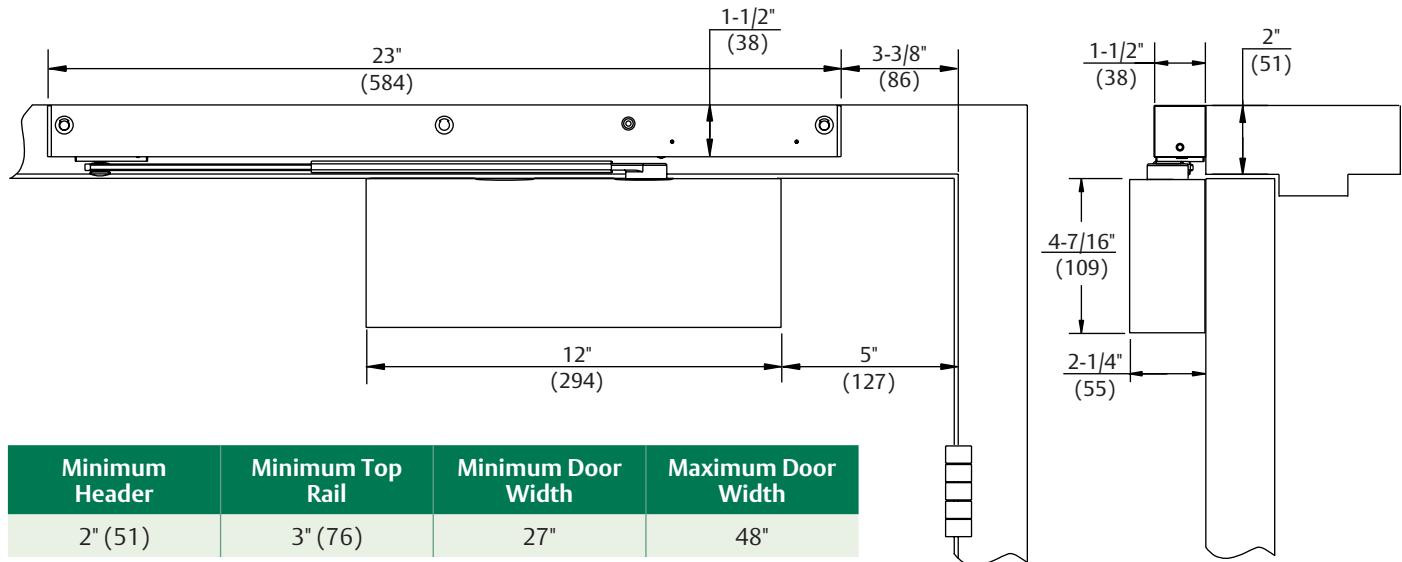
#### NOTE:

- » Mounting holes for mounting bracket are spaced 1" (25mm) x 10" (254mm).

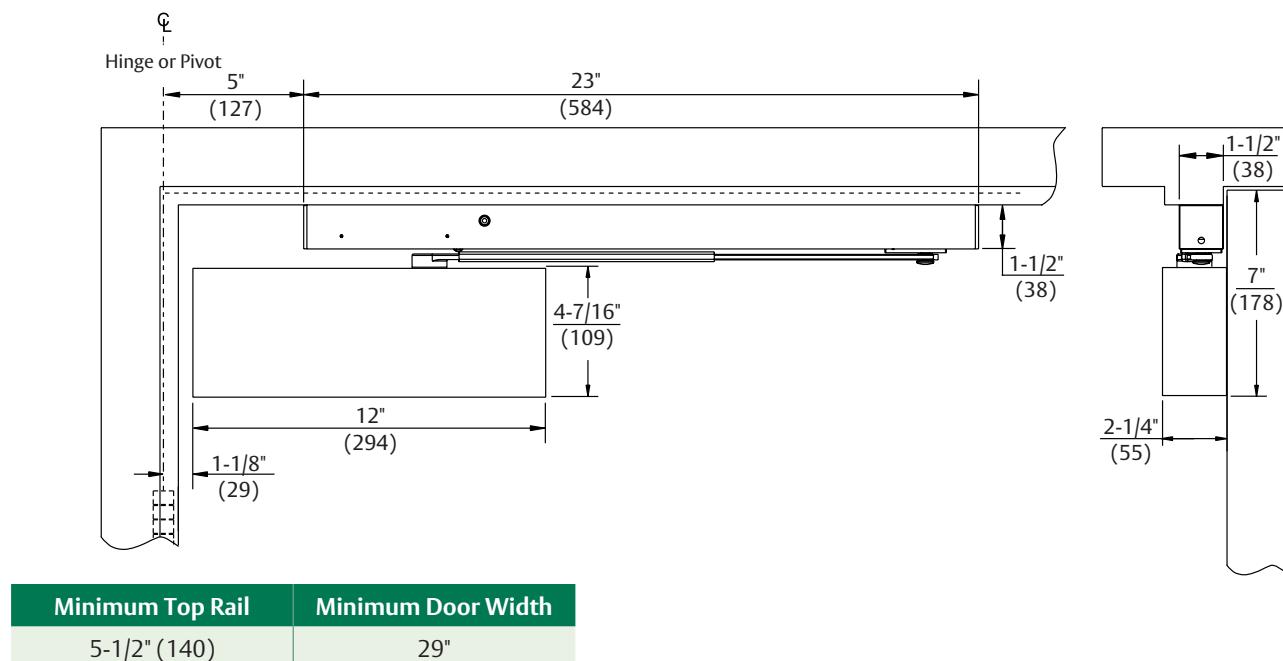
## 9500 SERIES

### CAST IRON DOOR CLOSER

#### TECHNICAL DETAILS – PULL SIDE MOUNTING



#### TECHNICAL DETAILS – PUSH SIDE MOUNTING



#### NOTE:

- » Mounting holes for mounting bracket are spaced 1" (25mm) x 10" (254mm).

#### ARM OPTIONS

##### Regular Arm

**9501-1**

(Non-Hold Open)



**9501-3**

(Hold Open\*)



- » Used with Regular Arm mounting (pull side) and Top Jamb mounting (push side)
- » Available in painted or plated finishes

	Part Number	Description
Non-Hold Open	9501-1W	Main arm & tube assembly
	9501-11	Rod & shoe assembly
	9500-HS	Hex screw package
Hold Open	9501-3W	Main arm & rod assembly
	9501-13	Hold open bracket assembly

##### Parallel Arm

**9501-5**

(Non-Hold Open)



**9501-8**

(Hold Open\*)



- » Mounted on push side
- » Non-hold open arm – combines regular arm with parallel arm mounting bracket
- » Hold open arm – combines regular hold open arm with parallel arm mounting bracket
- » Available in painted or plated finishes

##### Top Jamb (Deep Reveal)



- » Accommodates top jamb mounting for reveals from 3-3/8" (86mm) up to 7-1/4" (184mm), depending on door and frame conditions
- » Mounted on push side
- » Available in painted or plated finishes

	Part Number	Description
Non-Hold Open	9501-1B	<b>Arm Assembly</b>
	9501-2W	Main arm & arm tube assy
	9501-11B	Rod & shoe assembly
Hold Open	9501-3B	<b>Arm Assembly</b>
	9501-3WB	Main arm & rod assy
	9501-13	Hold open bracket assy

Specify finish when ordering arms.  
\*Not allowed by code on fire doors.

## 9500 SERIES

### CAST IRON DOOR CLOSER

#### ARM OPTIONS

##### Parallel Rigid Arm

**PR9501-5**

(Non-Hold Open)



- » Recommended for high-use, high-abuse environments
- » Tamper-resistant, solid forged steel riveted arm
- » Mounted on push side
- » Not available in plated finishes

##### Parallel Rigid - Friction Hold Open Arm\*



- » Recommended for high-use, high-abuse environment
- » Requires auxiliary stop
- » Allows door to swing 180°, conditions permitting
- » Handed
- » Mounted on push side
- » Not available in plated finishes

Arm Assemblies	Handing
PR9501-8R	Right Hand
PR9501-8L	Left Hand

##### CloserPlus® Arm

**9770-5**

(Non-Hold Open)



- » Recommended for high-use, high-abuse environments
- » Tamper-resistant, solid forged steel riveted arm (mounted on push side)
- » Field-reversible steel lug restricts degree of opening to protect door, wall and hardware
- » Requires both backcheck valves on closer
- » Shipped standard as left hand. Handing can be reversed in the field
- » Not available in plated finishes

**9870T-8**

(Hold Open)\*



Specify finish when ordering arms.  
\*Not allowed by code on fire doors.

#### ARM OPTIONS

##### Parallel Rigid Offset Arm



- » Recommended for high-use, high-abuse environments
- » Provides additional vertical clearance
- » Mounted on push side
- » Not available in plated finishes

Arm Assemblies	Arm Function
PRO9501-5	Non-Hold Open

Standard Clearance	Blade Spacer Part Number	Total Clearance
1-3/4"	9500-1/2SP	2-1/4"
	9500-5/8SP	2-3/8"

##### Regular Rigid Arm

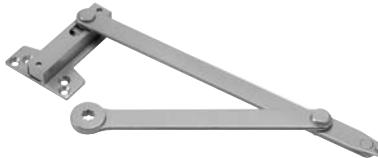
R9501-1  
(Non-Hold Open)



- » Recommended for high-use, high-abuse environments
- » Tamper-resistant, solid forged steel riveted arm
- » Mounted on pull side
- » Not available in plated finishes

##### Unitrol® Parallel Arm

(Non-Hold Open)



(Hold Open)\*



- » Recommended for high-use, high-abuse environments
- » Integrates a door closer, shock absorber and auxiliary heavyduty overhead stop
- » Requires both backcheck valves on the closer
- » Hold open\*
  - » Holder mechanism tension adjustable
  - » Hold open can be engaged/disengaged with a 1/4 turn of the mechanism with a standard blade type screwdriver
- » Not available in plated finishes

Door Width	Arm Assemblies	
	Non-Hold Open	Hold Open*
28" - 32" (71cm - 81cm)	9100-11	9100-1
33" - 41" (84cm - 104cm)	9100-13	9100-3
42" - 48" (107cm - 122cm)	9100-14	9100-4

Specify finish when ordering arms.  
\*Not allowed by code on fire doors.

## 9500 SERIES

### CAST IRON DOOR CLOSER

#### TRACK OPTIONS

##### Pull Side Track



- » Provides a clean aesthetic look with maximum 100° door swing and a minimum door width of 28" (71cm)
- » Mounted on pull side
- » Hold open can be set for 85°, 90°, 95°, or 100°
- » Not available in plated finishes

Part Number		
Arm/Track Function	Track Only	Arm Only
Non-Hold Open	9501ST-1T	9501ST-1A
Hold Open	9501ST-3T	

##### Push Side Track



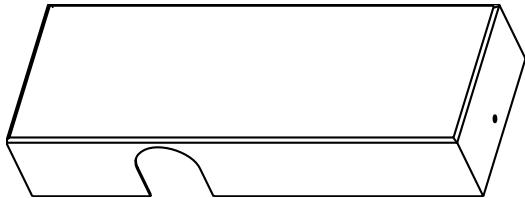
- » Clean aesthetic look for doors opening a maximum of 100° and a minimum door width of 32" (81cm)
- » Backcheck option recommended
- » Mounted on push side
- » Hold open\*
  - » From 85° to 100°
  - » Turn knob offers the use the option of turning hold open on or off
- » Not available in plated finishes

Part Number		
Arm/Track Function	Track Only	Arm Only
Non-Hold Open	9501ST-5T	9501ST-1A
Hold Open	9501ST-8T	

Specify finish when ordering arms.  
\*Not allowed by code on fire doors.

## COVERS AND PLATES

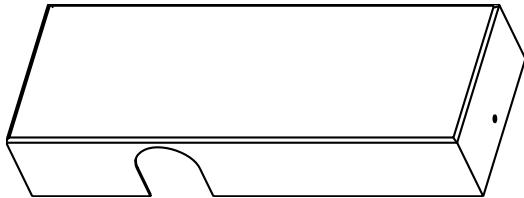
### Full Plastic Cover



#### 9500P

- » Completely covers closer body
- » Non-handed
- » Dimensions: 12" (294) x 4-7/16" (109) x 2-1/4" (55)
- » Available in painted finishes only

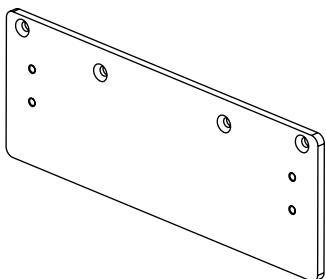
### Full Metal Cover



- » For use in high-abuse applications
- » Specify hand; not field reversible
- » Dimensions: 12" (294) x 4-7/16" (109) x 2-1/4" (55)
- » Available in painted and plated finishes

Part Numbers	Handing
9500M-R	Right Hand
9500M-L	Left Hand

### Drop Plate



- » Permits parallel arm or top jamb mounting on door when top rail is too narrow to install closer in the regular manner
- » Minimum 2" (51mm) top rail required
- » To order separately, specify Part No. x Finish

Drop Plate	Used with:
9586	Regular Arm or Pull Side Track
9587	Top Jamb
9588	Parallel Arm or Push Side Track

## 9500 SERIES CAST IRON DOOR CLOSER

### BRACKETS

#### Mounting Bracket



#### 9500-CMB

- » Standard on all closers
- » Reduces installation time
- » Ensures correct mounting
- » Bracket is first mounted to door or frame, then closer is attached
- » Bracket size: 3-5/8" (92mm) x 11-1/2" (292mm)
- » Hole spacing: 1" (25mm) x 10" (254mm)

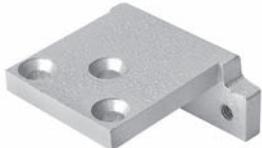
#### Parallel Arm Hold Open Bracket



#### 9528H

- » Converts regular arm hold open to parallel arm hold open closer
- » Standard with parallel arm hold open mounting

#### Mortise Arm Bracket for Regular Arm Mounting



#### 9500-MAB

- » For regular arm mounting where frame requires reinforcement, i.e., on frames with bull nose trim
- » Not available in plated finishes

#### Parallel Arm Offset Bracket



#### 9500-OB

- » Required when parallel arm is used in conjunction with an overhead door holder

#### Parallel Arm Non-Hold Open Bracket



#### 9518

- » Converts regular arm to parallel arm closer
- » Standard with parallel arm mounting

#### Parallel Arm Flush Transom Bracket



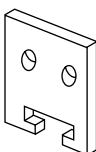
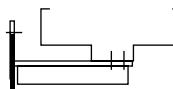
#### 9500-PFTB

- » Required when parallel arm mounting is used on a flush transom application
- » Not available in plated finishes

Specify finish when ordering parts.

#### BRACKETS

##### Reinforcing Bracket



##### 9500-RB

- » Supplied as standard for use with Unitrol® arms
- » Provides additional support to the soffit plate on installations with door frame reveals from 1-7/8" to 4-5/8" (48 to 117mm)
- » Not available in plated finishes

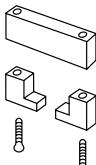
##### Flush Transom Bracket



##### 9500-FTB

- » Available separately for mounting Parallel Rigid and CloserPlus® arms rabbeted or flush transom conditions
- » Not available in plated finishes

##### Deep Reveal Reinforcement Kit



##### 9500-DRK

- » For use with Unitrol® arms
- » Used to support the soffit plate on installations with wide frames.
- » Clamps may be used with or without the spacer block, depending on frame conditions
- » Not available in plated finishes
- » For frames deeper than 4-5/8" (117mm), specify closer x 9500-DRK

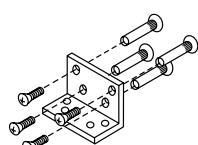
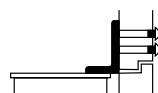
##### Blade Stop Spacer\*



Spacer Size	Part Number
1/2"	9500-1/2SP
5/8"	9500-5/8SP

\*Not for use with Unitrol arms

##### Flush Partition Bracket



##### 9500-FPB

- » For use with Unitrol® arms where rabbeted or flush transom conditions prevent installation of the soffit plate assembly
- » Bracket fastens to the overhead transom to provide a mounting surface for the soffit plate assembly
- » Specify closer x 9500-FP

##### Power Adjustment Arm Bracket

Maximum Power

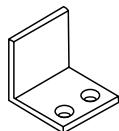


Normal Power



- » Standard on all closers without hold open, except heavy-duty and track type
- » In regular arm or top jamb mounting, bracket may be reversed to increase closing power 15%

##### Angle Support Bracket



##### 9500-AB

- » Available separately for mounting Parallel Rigid and CloserPlus® arms heavy-duty arms on narrow frame or soffit conditions
- » Specify closer x 9500-AB

Specify finish when ordering parts.

## 9500 SERIES

### CAST IRON DOOR CLOSER

#### PARTS LIST

##### DOOR CLOSER BODY ASSEMBLIES

Part Number	Description
9500LAP	Multi-Size Closer Body

#### FASTENERS

Self drilling screws (for properly reinforced wood and metal doors) are supplied standard.

Sleeve nuts and bolts (SNB) are supplied standard with Parallel Rigid, CloserPlus® and Unitrol® arms and Slide Track (push and pull) closers. SNB's are optional for Tri-Style® packed closers (Regular, Top Jamb and Parallel arms). Torx® machine screws are optional for all 9500 series.

#### SCREW PACKS

SP9500	Standard screw package
SP9500SN	Standard screw pack (includes sex nuts)
SP9500SNB	Sex Nuts and Bolts (SNB) for 1-3/4" door
95ASW	Main arm screw & washer
SP9500COV	Cover screw pack

#### TORX® SCREW PACKS

Arm Type	Part Number
Regular, Top Jamb & Parallel	TX95
Parallel Rigid, CloserPlus®	PRTX95
Regular Rigid Heavy-Duty	RTX95
Unitrol® Arm	UNITX95
Slide Track	TXTK95
70TK	Torx® tool kit

#### FINISHES

Norton offers waterborne acrylic, polyester powder coat and plated finishes. Custom finishes are available on special order. A sample and approval is required.

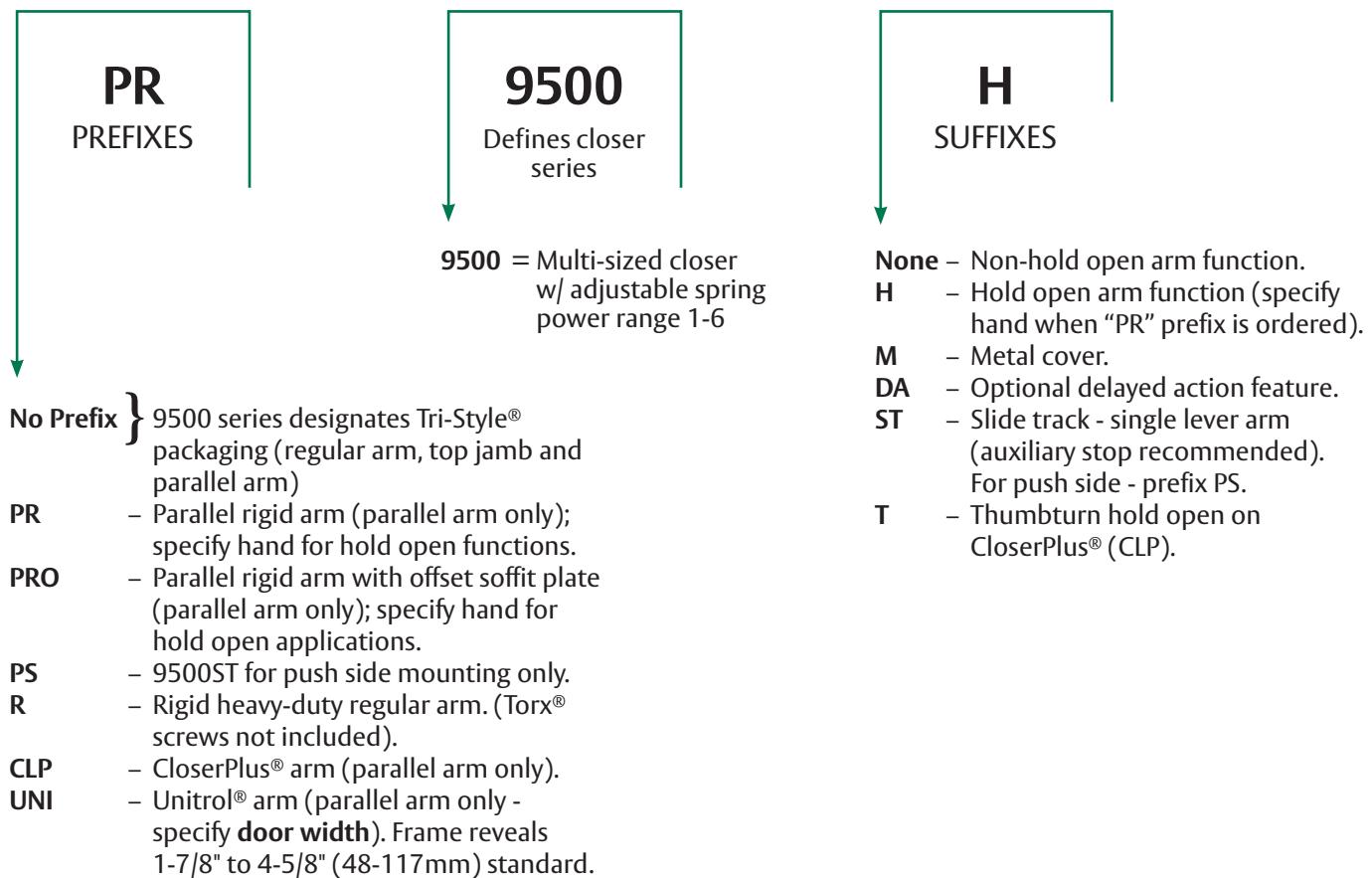
Waterborne acrylic and polyester powder coat will withstand 100 hours of salt spray (ANSI requires 25 hours).

ANSI/BHMA	Description
600*	Prime Coat
605^	Bright Brass
606^	Satin Brass
611^	Bright Bronze
612^	Satin Bronze
613E	Dark Oxidized Satin Bronze – Equivalent
619^	Satin Nickel
625^	Bright Chrome
626^	Satin Chrome
689	Aluminum
690	Statuary Bronze
691	Dull Bronze
693	Black
694	Medium Amber
696	Gold
BSP	Black Suede Powder
WSP	White Suede Powder

<sup>\*</sup>Plated finishes are available on metal covers and standard arms; heavy duty arms are not available plated

## HOW TO ORDER

NOTE: For optimum protection of door and frame assemblies, always use auxiliary wall, floor, or overhead door stop.



### NOTE:

- » Door closer warranty becomes void if the closer is installed on the exterior side of a door in the exterior wall of a building.
- » It is strongly recommended, and may be required on fire door assemblies, that doors having a door closer be hung on ball-bearing or anti-friction hinges or pivots. Consult local authority having jurisdiction.
- » Failure to use fasteners supplied with closer may void factory warranty.
- » Fasteners for fire/smoke door assemblies must conform to NFPA 80. In some applications additional fasteners may be mandated by NFPA 80 that are not shipped with standard Norton product, such as sleeve-nuts/sex-nuts or thru bolts and grommet nuts.
- » Information provided is based on 1-3/4" (44mm) x 7' (2.13m) standard weight doors swinging to 110°. Other conditions (such as door height or weight; or wind/draft conditions) may require adjustment of spring setting, selection of a larger size closer or different closer.

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