



# 9300BC SERIES LIGHT COMMERCIAL DOOR CLOSER

## GENERAL INFORMATION

The 9300BC is a durable, economically priced door closer designed for commercial exterior and interior doors such as storefront and industrial applications.

#### **FEATURES**

- Spring size 2, 3, 4, 5
- Separate and independent valve for sweep speed and latch speed
- Adjustable backcheck standard
- Regular and top jamb mounting

## **Optional Features**

- Parallel mount (prefix P to model number)
- Friction hold open arm

#### Certifications

- UL listed
- UL10C compliant
- ANSI/BHMA A156.4, Grade 3

Note: See the Norton® Series 1600 catalog for ADA compliance of heavy-duty applications.

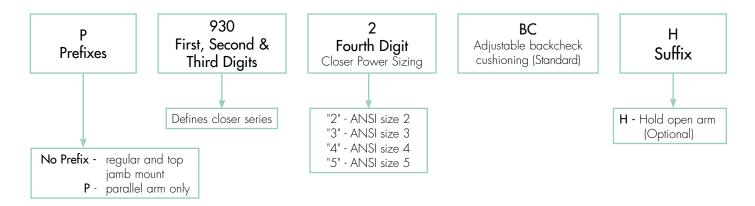
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## HOW TO ORDER



Note: Contact factory if door weight exceeds 250 lbs.

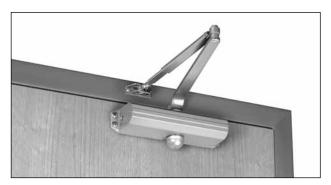
#### COMPLIANCE STANDARDS

All series 9300BC closers comply with ANSI/BHMA A156.4 Grade 3 Specifications. All Norton® series 9300BC closers with non-hold open arms are listed by Underwriters' Laboratories (L) for labeled fire doors. This includes compliance to UL10C for 3-hour assemblies. The product is manufactured in an ISO 9001 facility.

# 9300BC SERIES

# LIGHT COMMERCIAL DOOR CLOSER

#### **APPLICATIONS**



# Regular Arm

This is the only pull-side application for the 9300BC series door closer. It is the most power-efficient application for a door closer. Sufficient frame, door and/or ceiling clearance must be considered.

Since the arm assembly projects directly out from the frame, this application may present an aesthetics issue or be prone to vandalism.



## Parallel Arm

This application provides the most appealing design appearance for the 9300BC series door closer. It is on the push side of the door and the arm assembly extends almost parallel to the door. In the closed position, there is very little or no hardware projecting beyond the frame face in most situations.

Due to the geometry of the arm it is approximately 25% less power efficient than a regular arm application.

The entire closer and arm assembly are mounted below the frame stop, requiring a top rail clearance on the door of 5" (127mm), without using a drop plate. A 9388 drop plate requires a top rail clearance of just 2-5/8" (67mm).



# Top Jamb

For efficiency reasons this application provides the best alternative to the regular arm application. There must be sufficient frame face and/or ceiling clearance for this application. It requires a top rail on the door of just 1-7/8" (48mm). This application provides the best door control for doors in exterior walls that swing out of a building. It will accommodate frame reveals to a maximum of

2-7/8" (73mm). The entire door closer and arm assembly project from the frame, similar to the regular arm application, where matters of appearance can be of concern.

# LIGHT COMMERCIAL DOOR CLOSER



#### FEATURES & FINISHES

#### Aluminum Alloy Housing

Closer bodies are constructed of a special aluminum alloy, carefully selected to accommodate interactive steel components and operating conditions.

#### Rack & Pinion Operation

Provides a smooth constant control of the door through its full opening and closing cycle. 180° door swing can be achieved when door, frame, hardware and arm function do not interfere.

#### Non-Handed

Pinion shaft extends vertically through the closer body in both directions. This permits the closer to be positioned on either right or lefthand doors for most applications.

#### Non-Critical Control Valves

All control valves for sweep speed, latch speed and backcheck cushioning are non-critical and are adjusted by a standard 1/8" (3mm) hex wrench.

#### Adjustable Backcheck Cushion Valve

Provides control of the door in the opening cycle, beginning at approximately 75° of door opening. It slows/cushions the door opening, when the door is forcibly opened beyond its pre-adjusted speed limitation.

#### Finishes

All door closers are painted in waterborne acrylics. All steel parts, mounting plates and brackets are powder coated. The closers will withstand 120 hours of salt spray. ANSI requires 25 hours.

#### Adjust Power Shoe

Supplied as standard for a 15% (±7-1/2%) power adjustment by relocating the forearm at the shoe, for regular arm and top jamb non-hold open installations.

#### Sprayed Finishes

Description	BHMA Designation	Complements the Following Finishes	Old Designation
Aluminum	689	628, 625, 629, 630, 651, 652	AL
Statuary Bronze	690	640, 613	STAT
Dull Bronze	691	612, 63 <i>7</i> , 639	DB
Black	693	315	315
Medium Amber	694	312	312
Gold	696	605, 606, 632, 633	GB
Prime Coat	600*	_	SRI

<sup>\*600</sup> is a special rust inhibiting prime coat. Closers can be ordered prime coat only (specify closer  $\times$  600). An additional charge applies if finish coat is required over prime coat (ex: 9303BC  $\times$  600  $\times$  690).

#### **OPTIONAL FEATURES**

#### Hold Open Arm

Closer arm has adjustable hold open feature (90° to 180°). This arm is non-handed. Order by suffixing "H" to the catalog number.

#### **Fasteners**

т	D intin	Applications			
Туре	Description	RA	PA	TJ	
	DOOR				
SDST	Self-Drilling Self-Tapping Screws	S	S	S	
MS	Machine Screws	S	S	S	
SN	Sleeve Nuts	0	0	0	
TBGN	Through-Bolts & Grommet Nuts	0	0	0	
	FRAME				
SDST	Self-Drilling Self-Tapping Screws	S	S	S	
MS	Machine Screws	S	S	S	

#### S = standard; O = optional

**SN** are for use on unreinforced hollow metal doors or to prevent any hollow metal door from collapse/dimpling. They can also be used for thru bolting on wood doors. SN are supplied for 1-3/4" (44mm) thick doors unless specified for 2-1/4" (57mm) thick doors.

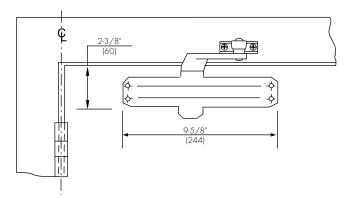
**TBGN** are an alternative to SN for wood doors. TBGN are supplied standard for 1-3/4" (44mm) thick doors. They can be specified for 1-3/8" (35mm) thick doors.

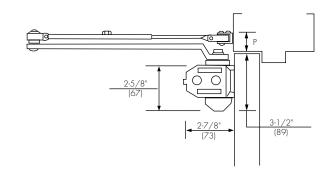






## REGULAR ARM



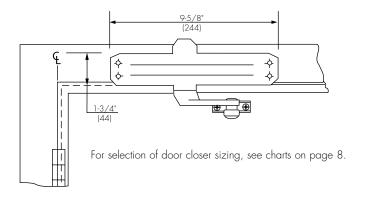


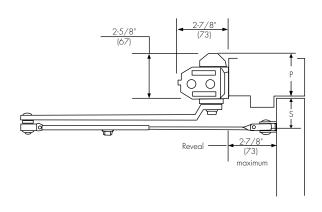
Door openings to 180° can be obtained if conditions permit. For selection of door closer sizing, see charts on page 8.

P Minimum Ceiling Clearance Inches (mm)	
Non-Hold Open	Hold Open
1-1/2" (38)	1-5/8" (41)

Mounting holes on body are spaced centerline to centerline: 9-1/16" (230mm) horizontally x 3/4" (19mm) vertically.

### TOP JAMB





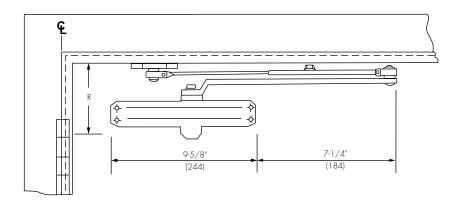
	P S Minimum Ceiling Clearance Inches (mm) S Minimum Top Rail Cle		
Without Drop Plate	With 9388 Drop Plate	Without Drop Plate	With 9388 Drop Plate
2-5/8" (67)	1-3/4" (44)	1-7/8" (48)	3-3/8" (86)

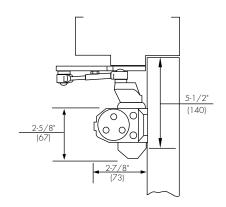
Mounting holes on body are spaced centerline to centerline: 9-1/16" (230mm) horizontally x 3/4" (19mm) vertically.

# LIGHT COMMERCIAL DOOR CLOSER



## PARALLEL ARM





R Minimum Top Rail 5/8" (16mm) Frame Stop Inches (mm)	
Without Drop Plate	With 9388 Drop Plate
5" (127)	2-5/8" (67)

Mounting holes on body are spaced centerline to centerline: 9-1/16" (230mm) horizontally x 3/4" (19mm) vertically.

#### DOOR CLOSER SIZE

Note: Door closing force is not adjustable. Correct size must be selected.

#### Interior Doors

Door Closer	Recomm	Recommended Max. Door Width Inches (cm)		
Size	Regular Arm	Top Jamb	Parallel Arm	
9302BC	34" (86)	34" (86)	32" (81)	
9303BC	40" (102)	40" (117)	38" (97)	
9304BC	48" (122)	48" (122)	46" (11 <i>7</i> )	
9305BC	_	_	52 (132)	

#### **Exterior Doors**

Door Closer	Recommended Max. Door Width Inches (cm)			
Size	Regular Arm	Top Jamb	Parallel Arm	
9302BC	30" (76)	30" (76)	28" (71)	
9303BC	34" (86)	34" (86)	32" (81)	
9304BC	40" (102)	40" (102)	36" (91)	
9305BC	48" (122)	48" (122)	42" (107)	

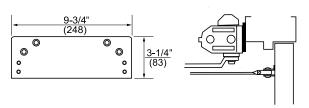
All dimensions are for reference only and are in inches (mm) unless otherwise noted. Door sizing information is based on installation on standard weight doors, 7'0" (213cm) high x 1-3/4" (44mm) thick; hung on anti-friction hinges and operating under normal conditions. Doors in excess of 7'8" (234cm) high or 1-3/4" (44mm) thick, templated openings beyond 150° or doors subject to wind or draft conditions will generally require the next larger size closer.



# LIGHT COMMERCIAL DOOR CLOSER

## TOP JAMB

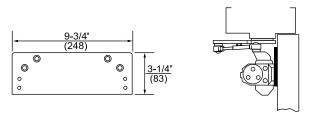
#### Closer Mounting Plate



**Top Jamb - #9388 Drop Plate:** For use when the door closer interferes with the ceiling or the frame face is too narrow to mount a closer body. This drop plate can be used to mount a closer on a frame face as narrow as 1-1/2" (38mm).

#### PARALLEL ARM

#### Closer Mounting Plate



**Parallel Arm - #9388 Drop Plate:** For use where a narrow top rail prevents the closer from being mounted directly to the door surface. This drop plate can be used to mount a closer on a top rail as narrow as 2-5/8" (57mm).

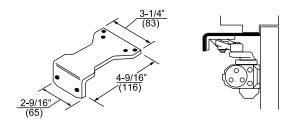
#### **BRACKETS**

#### Non-Hold Open Arms

# 3-1/2" (89) (38) 4-7/8" (124)

**#9318A Soffit Plate:** This soffit plate is supplied to permit parallel arm mounting. It can be mounted where the frame soffit is as narrow as 1" (25mm).

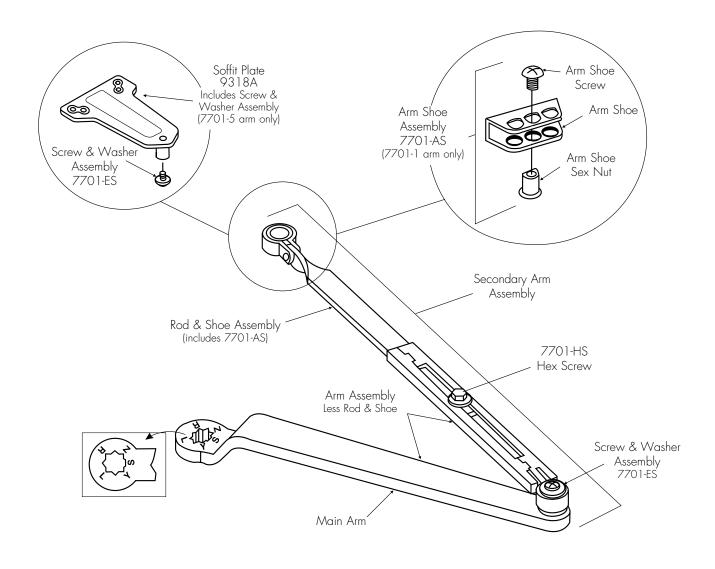
#### Hold Open Arms



#9328H Adapter Plate: This adapter plate is supplied standard with parallel arm hold open closer. It can also be used to convert hold open arms for parallel arm installation. It can be mounted where the frame soffit is as narrow as 1" (25mm).



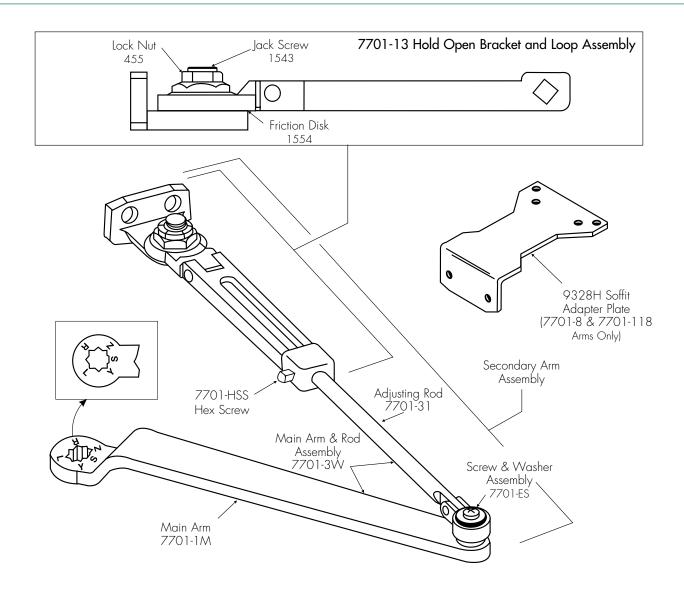
## NON-HOLD OPEN ARM ASSEMBLIES



Closer Series	Complete Arm	Main Arm	Arm Assembly Less Rod and Shoe	Secondary Arm Assembly	Rod & Shoe Assembly
9300BC	7701-1	7701.144	7701-1W	7701-111	<i>77</i> 01-11
P9300BC	7701-5	7701-1M		<i>77</i> 01-115	7701-15



## HOLD OPEN ARM ASSEMBLIES



Closer Series	Complete Arm	Secondary Arm Assembly
9300BCH	7701-3	7701-113
P9300BCH	7701-8	<i>77</i> 01-118

# 9300BC SERIES LIGHT COMMERCIAL DOOR CLOSER



## CLOSER BODY

Model Number	
9302BCLAP	
9303BCLAP	
9304BCLAP	
9305BCLAP	



#### CONTACT US AT:

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For a complete listing of products and applications please visit our web site. www.nortondoorcontrols.com www.assaabloy.ca

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