





INTRODUCTION

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



FEATURES

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

CERTIFICATIONS

- » ANSI/BHMA A156.4, Grade 3
- » UL / cUL listed for use on fire rated doors (h)
- » UL10C listed for positive pressure fire test
- » This product is manufactured in an ISO 9001, ISO 14001 facility
- » UL certified environmental product declaration

TABLE OF CONTENTS

Introduction, Features, Certifications	2
Explanation of Features, Optional Features	3
Applications	4-5
Technical Details	6-7
Door Closer Size	7
Mounting Plates, Brackets	8-9
Closer Bodies	9
Arm Assemblies	10-11
How to Order	12



EXPLANATION OF FEATURES

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 left-hand doors for most applications.

Non-Critical Control Valves

All control valves for sweep speed, latch speed and backcheck cushioning are noncritical 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 preadjusted 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% (\pm 7-1/2%) power adjustment by relocating the forearm at the shoe, for regular arm and top jamb non-hold open installations.

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.

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

Fasteners

Tuno	Description	Applications			
Туре		RA	PA	ТЈ	
		DOOR			
SDST	Self-Drilling Self-Tapping Screws	S	S	S	
MS	Machine Screws	S	S	S	
SN	Sex 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. **When selected as an add-on option, 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. **When selected as an add-on option,** TBGN are supplied standard for 1-3/4" (44mm) thick doors. They can be specified for 1-3/8" (35mm) thick doors.



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).



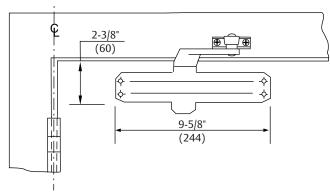


TOP JAMB

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.

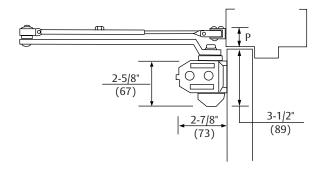


REGULAR ARM



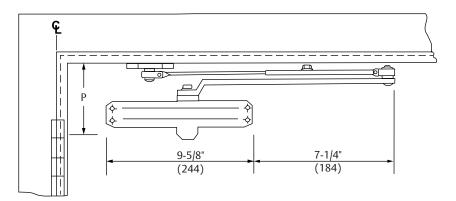
Door openings to 180° can be obtained if conditions permit. For selection of door closer sizing, see charts on page 7.

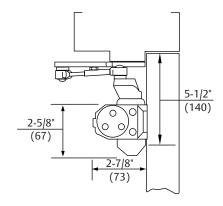
Mounting holes on body are spaced centerline to centerline: 9-1/16" (230mm) horizontally x 3/4" (19mm) vertically.



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

PARALLEL ARM



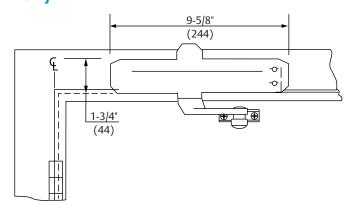


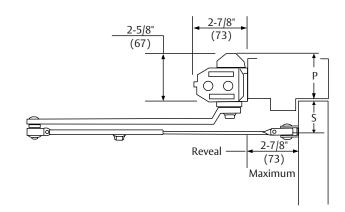
Mounting holes on body are spaced centerline to centerline: 9-1/16" (230mm) horizontally x 3/4" (19mm) vertically.

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



TOP JAMB





For selection of door closer sizing, see charts below.

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

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

DOOR CLOSER SIZE

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

Interior Doors

Door Closer	Recommended Max. Door Width Inches (mm)			
Size	Regular Arm	Top Jamb	Parallel Arm	
9303BC	40" (102)	40" (117)	38" (97)	
9304BC	48" (122)	48" (122)	46" (117)	

Exterior Doors

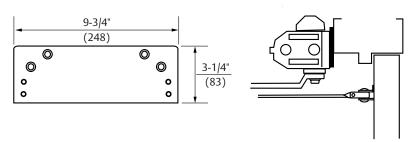
Door Closer			
Size	Regular Arm	Top Jamb	Parallel Arm
9303BC	34" (86)	34" (86)	32" (81)
9304BC	40" (102)	40" (102)	36" (91)

All dimensions are for reference only and are in inches (mm) unless otherwise noted.



TOP JAMB

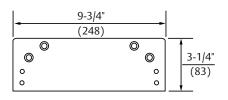
Closer Mounting Plate

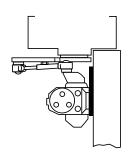


Top Jamb - 9388 Drop Plate: For use when the door closer interferes with the ceiling or the frame face is too narrow to mount a closer body. This drop plate can be used to mount a closer on a frame face as narrow as 1-1/2" (38mm).

PARALLEL ARM

Closer Mounting Plate



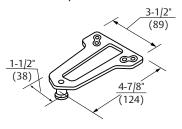


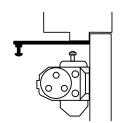
Parallel Arm - 9388 Drop Plate: For use where a narrow top rail prevents the closer from being mounted directly to the door surface. This drop plate can be used to mount a closer on a top rail as narrow as 2-5/8" (57mm).



BRACKETS

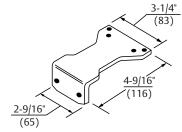
Non-Hold Open Arms

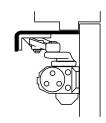




9318A Soffit Plate: This soffit plate is supplied to permit parallel arm mounting. It can be mounted where the frame soffit is as narrow as 1" (25mm).

Hold Open Arms





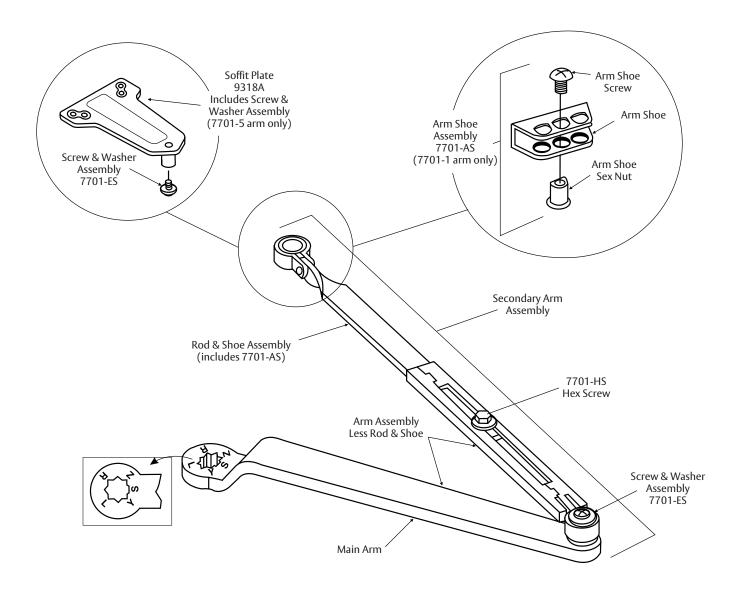
9328H Adapter Plate: This adapter plate is supplied standard with parallel arm hold open closer. It can also be used to convert hold open arms for parallel arm installation. It can be mounted where the frame soffit is as narrow as 1" (25mm).

CLOSER BODIES

Model Number
9303BCLAP
9304BCLAP



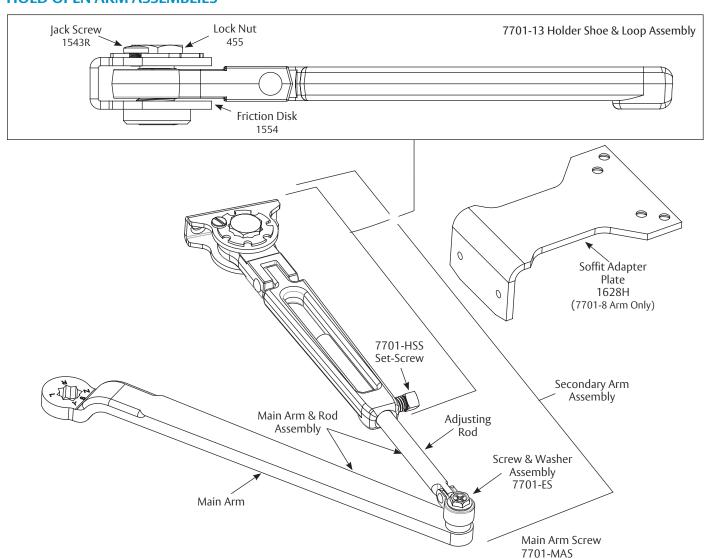
NON-HOLD OPEN ARM ASSEMBLIES



Closer Series	Complete Arm	Main Arm	Arm Assembly Less Rod and Shoe	Secondary Arm Assembly	Rod & Shoe Assembly
9300BC	7701-1	7701-1M	7701-1W	7701-111	7701-11
P9300BC	7701-5		1101-1VV	7701-115	7701-15

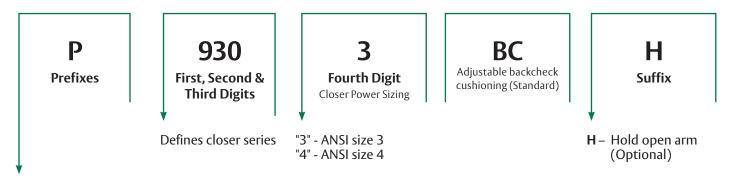


HOLD OPEN ARM ASSEMBLIES



Closer Series	Complete Arm	Secondary Arm Assembly
9300BCH	7701-3	7701-113
P9300BCH	7701-8	7701-118

HOW TO ORDER



No Prefix – Regular and top jamb mount P – Parallel arm only

SPRAYED FINISHES

Description	ANSI/BHMA	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, 637, 639	DB
Black	693	315	315
Medium Amber	694	312	312
Gold	696	605, 606, 632, 633	GB
Prime Coat	600*	_	SRI
Dark Oxidized Satin Bronze Equivalent	613E	_	_
Black Suede Powder	BSP	_	_
White Suede Powder	WSP	_	_

^{*600} is a special rust inhibiting prime coat. Closers can be ordered prime coat only (specify closer x 600). An additional charge applies if finish coat is required over prime coat (ex: 9303BC x 600 x 690).

NOTES:

- » 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 selection of a larger size closer or different closer.

The ASSA ABLOY Group is the global leader in access solutions. Every day, we help billions of people experience a more open world.

ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, frames, door and window hardware, locks, perimeter fencing, access control and service. Since 1880, Norton door controls have been an integral part of schools, hospitals and businesses around the globe. When you need products and people that perform at the highest level, rely on Norton – From Open to Close.

Norton Door Controls | www.nortondoorcontrols.com 3000 Highway 74 East | Monroe, NC 28112 | 1.877.974.2255

ASSA ABLOY Opening Solutions
Door Security Solutions Canada Lwww

Door Security Solutions Canada | www.assaabloy.ca 160 Four Valley Drive | Vaughan, ON L4K 4T9 | 800.461.3007