Combines the function of a single-point electromechanical door holder and door closer

7700PT SERIES

DOOR CLOSER

CATALOG

Norton®

ASSA ABLOY

Experience a safer and more open world

INTRODUCTION

The Norton Power Track® Closer-Holders combine the functions of a single point electromechanical door holder with the proven reliability of a 7700 Series Door Closer. The track assembly contains an arm slide and solenoid operated hold open mechanism and is available with or without an integral smoke detector.

FEATURES

Primary Unit

- Unit comprised of integral smoke detector and solenoid hold open mechanism in the slide track, a hook-up box and door closer.
- Can be used to control a single door or a pair of doors in conjunction with a 24VDC Support Unit.
- **Suffix "PTDO" to model number.**

Support Unit

- Unit is comprised of a solenoid hold open mechanism in the slide track, hook-up box and a door closer.
- Units can be installed on a single door or a pair of doors when controlled by compatible UL listed detection equipment such as area ceiling detectors, pull stations, and remote alarm panels.
- A 24VDC Unit can also serve as a Support unit when used on the inactive leaf of a pair of doors. The active leaf of the pair of doors must be controlled by a Primary Unit.
- **Suffix "PTO" to model number.**

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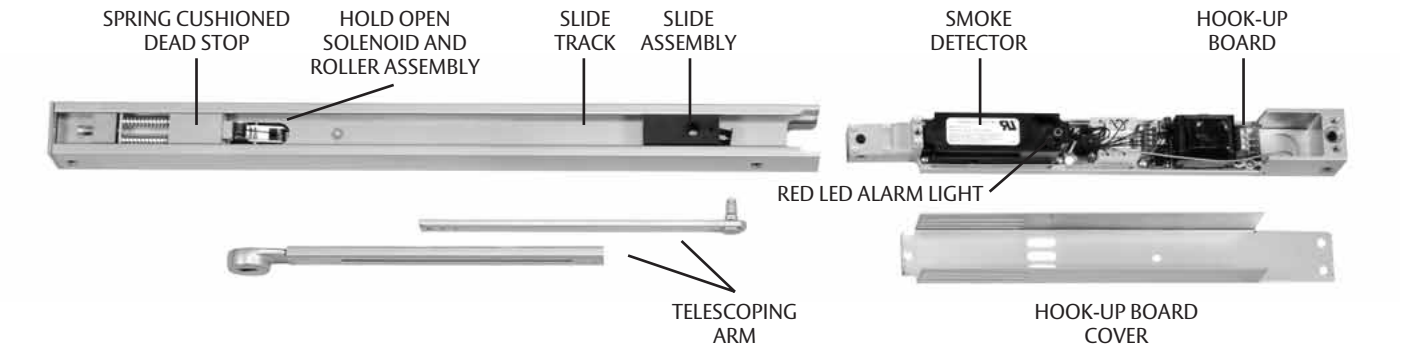
OVERVIEW



CERTIFICATIONS

- ANSI/BHMA A156.15 certified
- UL / cUL listed for use on fire rated doors
- UL10C listed for positive pressure fire test
- This product is manufactured in an ISO 9001 facility

California State Fire Marshal Listings: 03550-0944:101, 03550-0944:102

STANDARD FEATURES

Selective Single-Point Hold Open:

The Power Track® has one template position. The single-point hold open position is selected by adjusting the telescoping arm with a hex drive set screw. Hold open range is 85° thru 110° in approximately 3° increments.

Non-Handed:

Units are non-handed except when ordered with "DE" Double Egress arms. Choice of Push or Pull Side Installation: No prefix indicates pull side application. Prefix “P” for push side installation.

Choice of Supply Voltage:

Available in 24VAC/DC or 120VAC, 60Hz. voltages. Power to these devices must be within a range of (+) 10% (-) 15% of the stated voltage.

Fail Safe:

In the event of a power outage, the Power Track solenoid will be de-energized and the closer/holder will then operate as a normal door closer.

Wiring Option:

Both pull and push side applications will accommodate either concealed or surface wiring. The hook-up box will accept 3/4" (19mm) conduit. Each Power Track is supplied with a thin-walled conduit nut to attach the conduit clamp. The hook-up box base is prepared for surface wiring. State and local building codes will dictate the type of wiring.

Spring Cushioned Dead Stop:

A spring-loaded buffer block at the point of hold open prevents over travel of the arm slide and provides a cushioned dead stop. Use of an additional wall or floor stop is always recommended.

FEATURES – SMOKE DETECTOR

Photoelectric Sensing

Detector employs a photoelectric chamber to substantially reduce the probability of false alarms.

Fire/Smoke Control Circuit

Interprets the alarm signal from the detector and provides switching contacts to interrupt power to the hold open solenoid and divert it to activate optional audio/visual alarms.

Alarm (Relay) Contacts

Normally open in standby condition (energized, non-alarm state). These contacts close during an alarm condition (smoke detected) and switch power from the solenoid to an optional local alarm.

Trouble (Relay) Contacts

Normally closed in standby condition, these supervisory contacts monitor the continuity of power within the detector circuit. Any power interruption within the detector circuit will open these contacts. They can then be used to simultaneously indicate a trouble condition to the alarm panel on a separate trouble circuit.

Quick Disconnect Modules

Each component, solenoid coil, detector and control feature quick disconnect wiring for easy servicing and replacement.

Locked-In Alarm

When a unit alarms, it must be manually reset. This can be accomplished by remote control from the alarm console or by the reset button in the smoke detector. Reset button is accessible through the center louver in the underside of the track. Reset by rotating LED chamber using small flat blade screwdriver.

Indicator Lights

Normal Mode: A red LED flashes once every eight (8) seconds.
Clean Mode: A red LED flashes once every second.
Alarm Mode: A red LED illuminates continuously.

ORDERING VOLTAGES

Type of Unit Model	Model	# of Power Input Lines	Choices of Voltage Input	Can be used with
Primary	PTDO-24	1	24 VAC/DC	24V Support Model PTO
	PTDO-120		120 VAC, 60 Hz	
Support	PTO-24	1	24 VAC/DC	Area Smoke Detection System
	PTO-120		120 VAC, 60Hz	

Operating voltage for the control of fire/smoke doors are specified by the architect, electrical engineer and alarm system engineer and/or contractor. Consulting with these sources will verify which operating voltage should be ordered.

"PTDO" Primary Units

- Two components require electrical power:
  - Integral smoke detector requires 24VDC input power.
  - Hold open solenoid requires 24VDC input.
- Hook-up box receives primary voltage input and distributes it to the smoke detector and hold open solenoid(s).
- Available with two voltage options:
  - **PTDO-24** suffix –
    - Accepts 24VAC or 24VDC power input.
    - A rectifier in the hook-up box will rectify alternating current to direct current for operation of both the smoke detector and hold open solenoid(s).
  - **PTDO-120** suffix –
    - Accepts 120VAC power input.
    - A 120VAC to 24VAC transformer in the hook-up box steps the input voltage down to 24VAC. It is then rectified to 24VDC for operation of both the smoke detector and the 24VDC hold open solenoid(s).

"PTO" Support Units

- Hold open solenoid requires electrical power.
- Solenoid controlled by smoke detection equipment (ceiling detectors) or remote alarm panels.
- Available for operation on 24VAC/DC or 120VAC, 60Hz.
- Hold open solenoid operates on direct current.
- Contains built-in rectifier that converts alternating current to direct current.

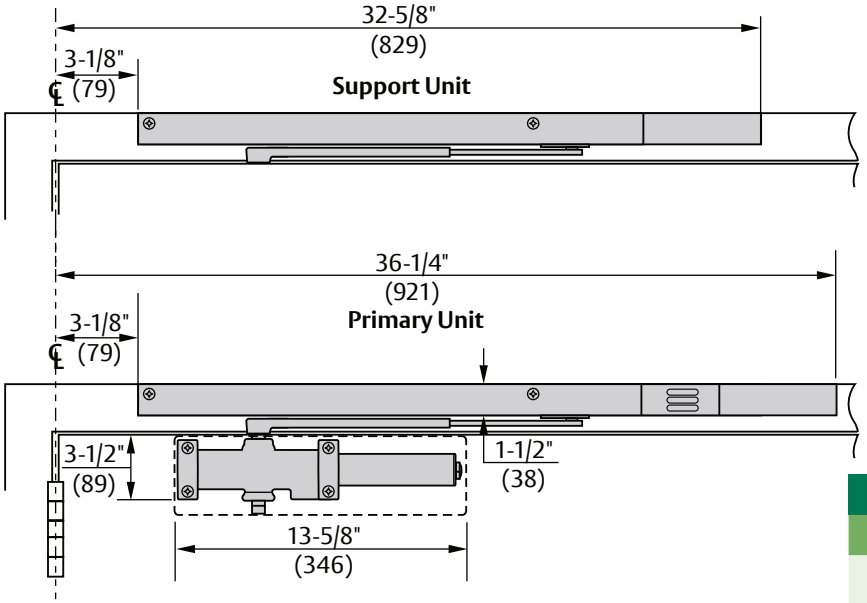
7705 POWER TRACK®

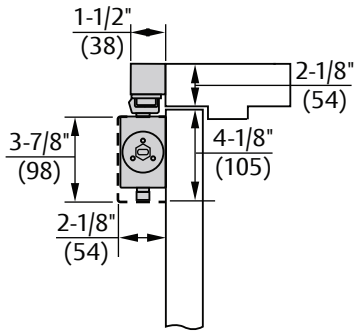
Pull (Hinge) Side Mounting

Model #	Description
7705PTDO	Primary Unit Controlled by Integral Smoke Detector
7705PTO	Support Unit Controlled by Remote Detection Equipment

7705PTDO Shown

Technical Details





Minimum Top Rail	
Without Drop Plate	With 7786 Drop Plate
3-1/2" (89mm)	1-7/8" (48mm)

2-1/8" (54mm) minimum ceiling clearance required for Power Track.

Door Size

	Door(s) Opening Inches (cm)		Model Number & Type
	Max.*	Min.**	
Single Door	48" (122)	36" (91)	(1) 7705PTDO Primary Unit
	48" (122)	32" (81)	(1) 7705PTO Support Unit
Pairs of Doors	96" (244)	68" (173)	(1) 7705PTDO Primary Unit and (1) 7705PTO Support Unit
	96" (244)	64" (163)	(2) 7705PTO Support Units (controlled by remote detection equipment)

* Maximum door size for door closer power.

** Minimum door opening for standard installation. Consult factory for door openings narrower than those shown.

Double Egress Doors: With reveals greater than 1/8" (3mm); a special handed arm for the pull (hinge) side Power Track is available. Accommodates reveals to 3" (76mm). Suffix "DE" to model number; specify hand.

P7705 POWER TRACK®

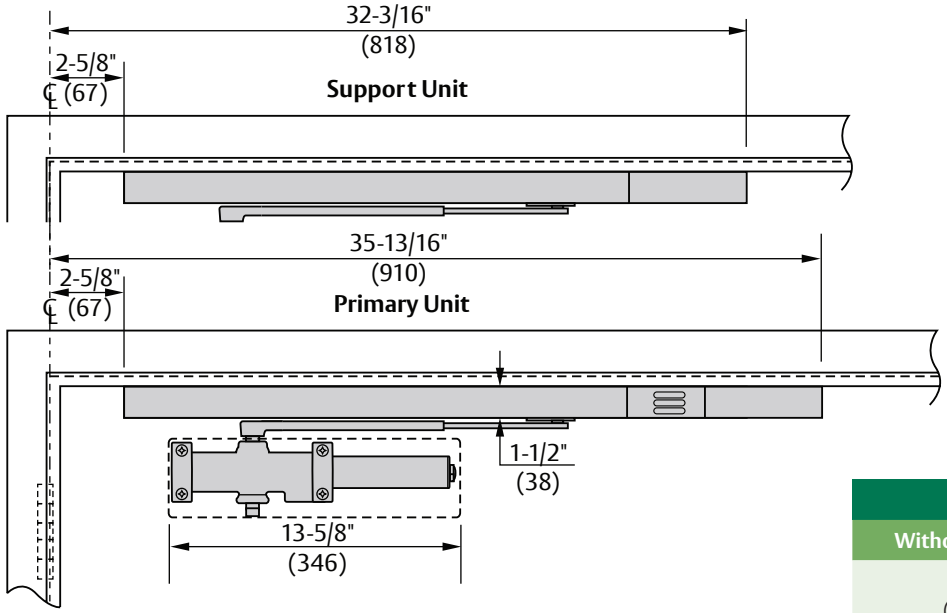
Push (Stop) Side Mounting

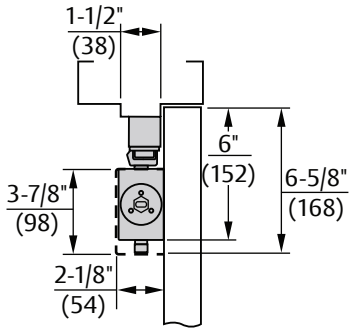
Model #	Description
P7705PTDO	Primary Unit Controlled by Integral Smoke Detector
P7705PTO	Support Unit Controlled by Remote Detection Equipment

NOTE: Interference with other hardware such as vertical rod exit devices, magnetic locks, and door coordinators, etc., must be considered when selecting this product.

P7705PTO Shown

Technical Details





Minimum Top Rail	
Without Drop Plate	With 7788 Drop Plate
6" (152mm)	2-3/4" (70mm)

1-1/2" (38mm) minimum frame soffit required for Power Track.

Door Size

	Door(s) Opening Inches (cm)		Model Number & Type
	Max.*	Min.**	
Single Door	48" (122)	36" (91)	(1) P7705PTDO Primary Unit
	48" (122)	33" (84)	(1) P7705PTO Support Unit
Pairs of Doors	96" (244)	68" (173)	(1) P7705PTDO Primary Unit and (1) P7705PTO Support Unit
	96" (244)	64" (163)	(2) P7705PTO Support Units

* Maximum door size for door closer power.
** Minimum door opening for standard installation.
Consult factory for door openings narrower than those shown.

ELECTRICAL INFORMATION

Model Number		No. Power Input Lines* (Pairs)	Operating Voltage	Amperage Draw		
				Smoke Detector		Solenoid Coil
				Sized Closers	Alarm	
Primary	7705PTDO P7705PTDO	1	24VAC/DC	.016 @ 24VDC	.035 @ 24VDC	.090 @ 24VDC
			120VAC, 60Hz			
Support	7705PTO P7705PTO		24VAC/DC	N/A	N/A	.090 @ 24VDC
			120VAC, 60Hz			.018 @ 120VAC

*Number of Input Lines (pairs) required to supply Operating Voltage.
This does not include signal or control lines (pairs) to Alarm Panels.

SUGGESTED SPECIFICATIONS

Closers for _____ doors shall be electromechanical closer-holder. Hold open to be achieved by electric solenoid locking of closer arm slide in its track. Track, arm, slide (and) solenoid (and integral smoke detector) to be contained in a single aluminum extrusion 1-1/2" (38mm) high, 1-1/2" (38mm) deep.

Closer shall be door mounted. Track and hold open mechanism shall be surface mounted to the frame face for application on the pull side of the door and frame soffit mounted for application on the push side of the door. Single point hold open shall be selective through a range of 85° to 110°. Hold open point to be achieved by adjustment of a telescoping closer arm.

Closer shall be hydraulic with full rack and pinion enclosed in a cast aluminum alloy shell. Hydraulic fluid shall be non-gumming and non-freezing. Closer shall have two non-critical valves to independently regulate sweep speed and latch speed. It shall have an adjustable backcheck cushioning valve and an adjustable backcheck positioning valve. All valves shall be adjustable with a hex-key. (Closer shall have spring power adjustment to permit 50% increase in closing power.) Closer to be enclosed in a molded full cover.

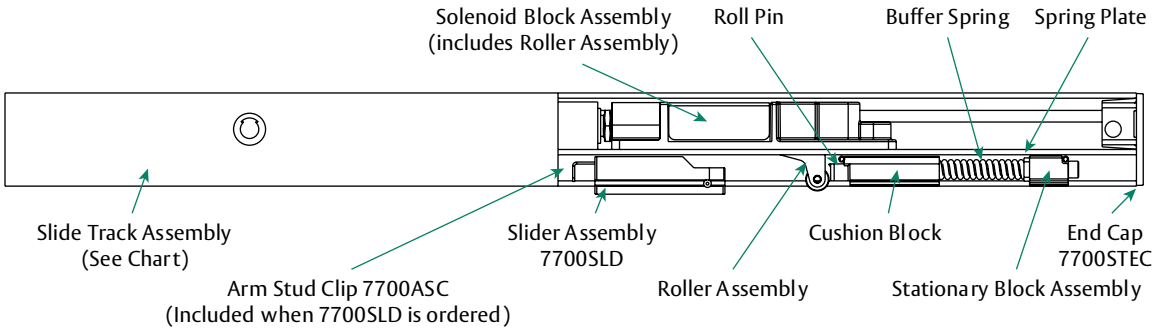
(Primary units to have an integral smoke detector with photoelectric chamber. Primary units integral smoke detector shall have latching alarm and reset switch.) (Support units to be controlled by U.L. Listed Smoke Detection Equipment.) Units to be fail safe and close the door during an interruption to the electrical power. The hold open solenoid coil shall have a maximum amperage draw of (.090 Amps at 24 volts) (.018 Amps at 120 volts). Unit shall have a switch to permit testing of the releasing device function without alarming the system.

All wiring connections shall be made without the need of wire nuts or soldering. Primary unit(s) shall require a (24VAC/DC) (120VAC, 60Hz) power input. Support unit(s) shall require a (24VAC/DC) (120, 60Hz) power input. Supplier to coordinate electrical requirements with electrical and alarm system engineers. Wiring (and conduit) by others. Electromechanical Closer-Holder to be Norton® Power Track® [(P)7700(PTO)(PTDO)].

TRACK ASSEMBLIES

Description	Voltage	Part Number^	
		Hinge Side	Stop Side
Primary or Support	24V	PTO24	PPTO24

Primary and Support Unit Track Assemblies include track, slider assembly and solenoid block assembly. Hook-up box not included.



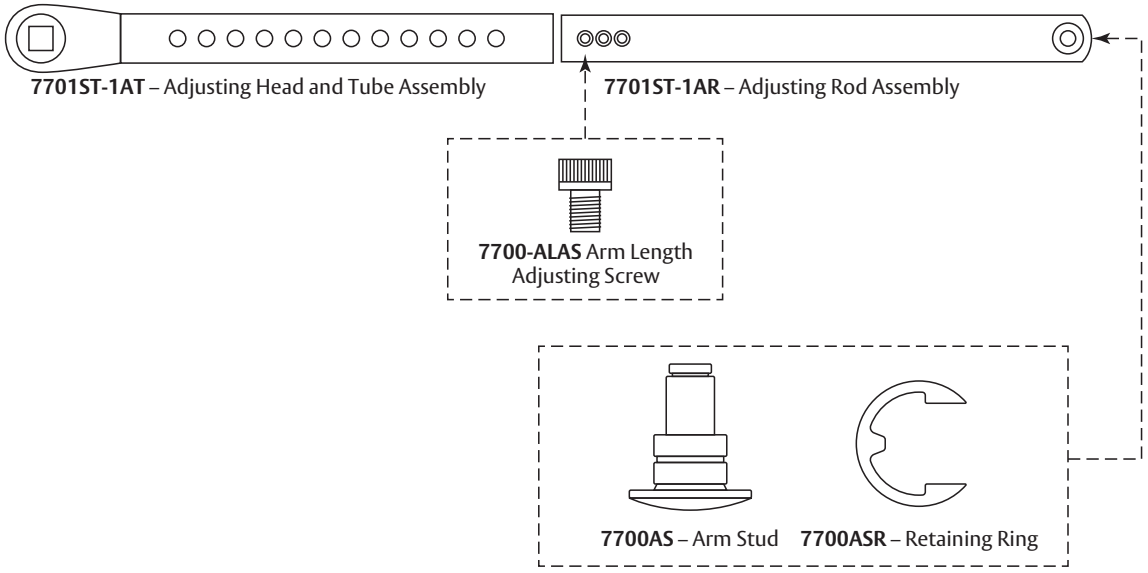
Hook-Up Box Cover Kit^	
Description	Part Number
Primary	PTDOHBCOV
Support	PTOHBCOV

Hook-Up Boards^		
Description	Voltage	Part Number
Primary or Support	24V	PTOPCB24
	120V	PTOPCB120

^ Not compatible with products manufactured prior to March 2009.

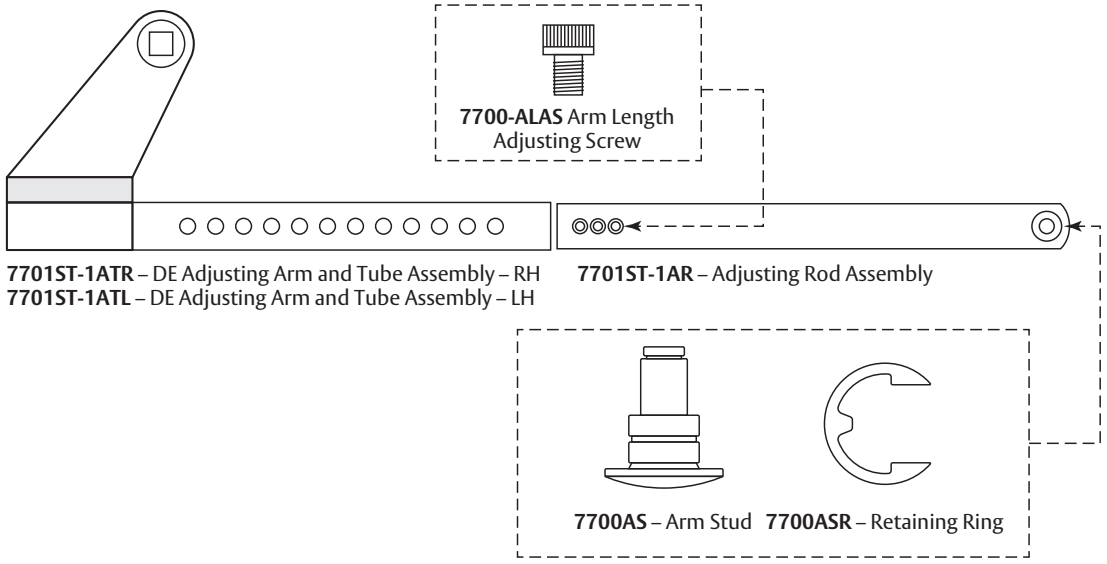
STANDARD ARM ASSEMBLY

7701ST-1A[1, 2]



DOUBLE EGRESS ARM ASSEMBLY

7701PT-DE-1R[1, 2] **– (Right Hand)**
7701PT-DE-1L[1, 2] **– (Left Hand)**



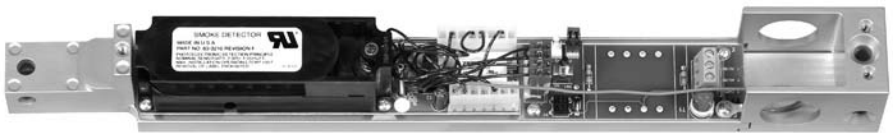
Notes:

1 Includes arm length adjusting screw #7700-ALAS
2 Includes arm tube & adjusting rod assembly
Mounting hardware included with all parts orders

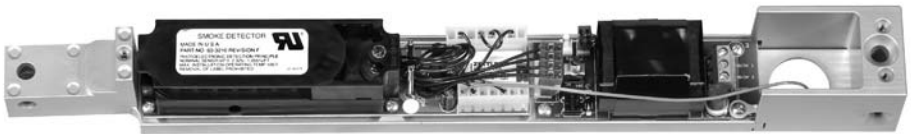
PARTS

Hook-Up Box (shown less cover**)

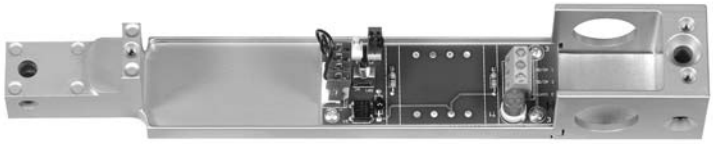
** For identification purposes only – box is only supplied with cover



Primary, 24V



Primary, 120V



Support, 24V

Support, 120V

Description	Voltage	Hook-Up Boxes^	
		Hinge Side	Stop Side
Primary	24V	PTDOHB24	PPTDOHB24
	120V	PTDOHB120	PPTDOHB120
Support	24V	PTOHB24	PPTOHB24
	120V	PTOHB120	PPTOHB120

Miscellaneous Parts	
Description	Part Number
Fuse^	PTO125V
Smoke Detector Board*^	MPDOSD24
Solenoid Block Assembly (24V)	PT24SOL
Push Side Hook-Up Box Plug Button	P7700PB

^ Not compatible with products manufactured prior to March 2009
* Same as Norton® 7200 Electromechanical Smoke Detector

HOW TO ORDER

P	7705	PTDO SUFFIXES	X	VOLTAGE	X	FINISH
Prefix	Door Closer					Refer to chart below

7705 – 7700 Series Door Closer

PTDO – Primary Unit with Integral Smoke Detector
PTO – Support Unit (used with area/ceiling detectors)
DE – Deep Reveal Arm for Double Egress Frames **(specify hand)**
Reveals 1/8" – 3" (3-76mm)
Hinge (pull) side units only

None – Unit mounted on pull (hinge) side of door
Maximum reveal 1/8" (3mm)
For greater reveals up to 3" (76mm) suffix "DE" to model number
P – Unit mounted on push (stop) side of door

Sprayed Finishes			
Description	**Specify Designation**	**Complements the following finishes**	**Old Designation**
Aluminum	689	628, 625, 629, 630, 651, 652	AL
Statuary Bronze	690	690 640, 613, 695	STAT
Dull Bronze	691	612, 637, 639	DB
Black	693	315	315
Medium Amber	694	312	312
Gold	696	605, 606, 632, 633	GB
Dark Oxidized Satin Bronze Equivalent	613E	—	—
Black Suede Powder	BSP	—	—
White Suede Powder	WSP	—	—

Product will be painted with a combination of waterborne acrylic and polyester powder coat.

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.

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160 Four Valley Drive | Vaughan, ON L4K 4T9 | 800.461.3007

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