



5700 Series LEO[®] Power Operators



Complies with A.D.A. Accessibility Guidelines



INTRODUCTION

Norton's 5700 Series is the latest generation of power door operators. Low energy door operators were once considered a necessity only for those with physical challenges. Today, due to the population's busy lifestyles, the convenience of "hands-free" door opening is more popular than ever. The patented design of LEO[®] is based on ease and simplicity. *LEO* installs in minutes rather than hours and consists of three basic components: inverter, motor and Norton's 1601 closer body.

What separates *LEO* from other operators is its ability to function as a standard door closer. When the door is opened manually, there is little resistance and the drive train and motor are not engaged. The 1601 closer, not the motor, controls the closing cycle. Since the door closer does not back-drive the motor during the closing cycle, there is no loss of closer efficiency. In the event of a power outage, the door can be manually opened and will close via the door closer's spring force.

LEO is listed with UL and ANSI/BHMA A156.19 and meets the requirements of ADA and ANSI/BHMA 156.4. *LEO* is ideal for doctors' offices, retirement facilities, schools, churches, and any location where noise is a major concern and special features are not a requirement. *LEO* can be activated via wall switch, radio frequency device or motion sensor, and is available for push or pull side applications. Based on its dual functionality, ease of use and quiet operation, *LEO* offers the customer a unique choice!



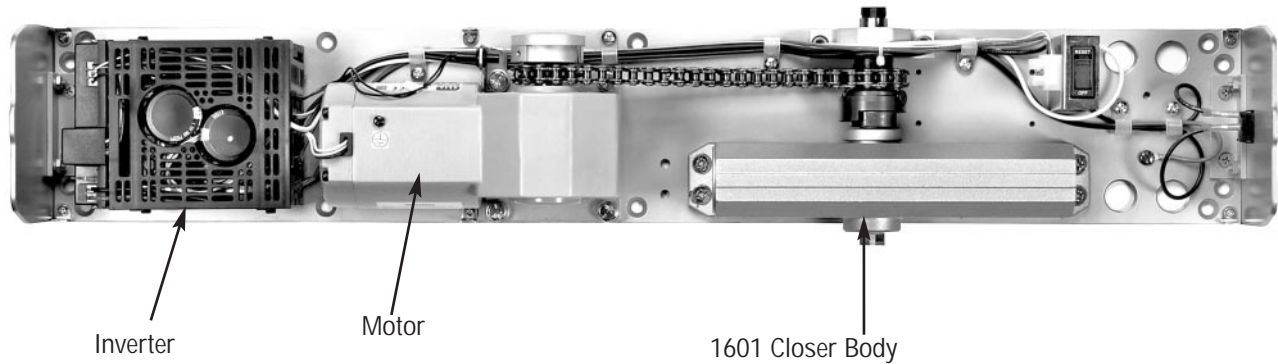
PATENT

- Patent 5,881,497
- Additional patent pending

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OVERVIEW



FEATURES AND FUNCTIONS

- Ease of installation and setup
 - Simple instructions
- Application versatility and ease of adjustment
 - Push or pull side mounting units available
- Operates as mechanical surface closer during close cycles, when door is opened manually or if power is turned off
 - Quiet operation
 - Spring force provides the feel of a normal manual door closer
 - Door can be opened manually if desired
- Norton® 1601/1601BF series *door closer*
 - Adjustable Spring Power
 - Backcheck Valve
 - Sweep Valve & Latch Valve
- Non-Handed
- Unit Activation Options
 - Wall switches
 - Motion sensor
 - Radio frequency device
- End-User On/Off Switch
- Hold Open options
 - 0-30 seconds (5 seconds minimum required for ADA and ANSI/BHMA A156.19)
- Obstruction Detection
 - Motor stops if door is obstructed during an opening
 - Door closes under manual spring force (not to exceed 15lbf)

ELECTRICAL DATA

- Power Input: 120 VAC, 60Hz
- Current Draw: .6A
- Relay Output: DPDT
 - Normally Open/Normally Closed (jumper)
 - For electric strike function

CERTIFICATIONS

- C-UL US listed for use on fire and smoke barrier doors
- 2-year warranty (refer to current Norton® price book for terms & conditions)
- Meets requirements for Americans with Disabilities Act (ADA)
- ANSI/BHMA A156.19 certified
- Meets ANSI/BHMA A156.4 requirements



STANDARD APPLICATIONS

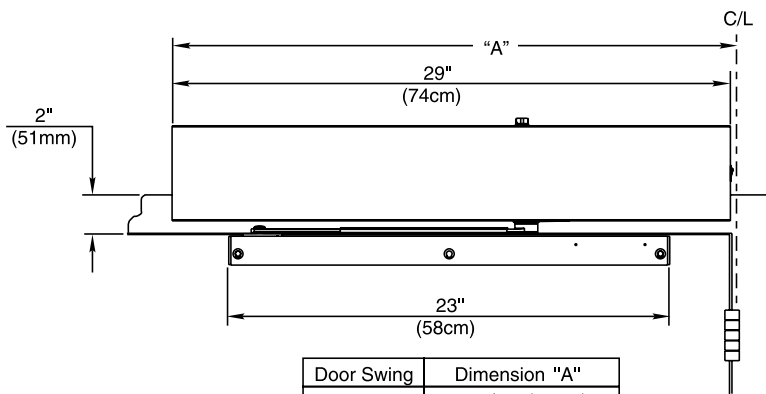


5710
HINGE (PULL) SIDE OF DOOR

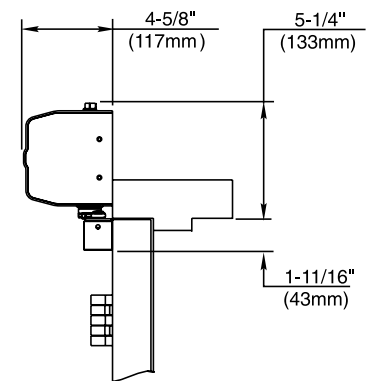
- Adjustable Stop
- 180° swing (trim permitting)

Minimum Door width
 Single Door - 29" (74cm)
 Double Door - 30" (76cm)

An auxiliary stop is suggested where severe conditions exist.



Door Swing	Dimension "A"
110	29-13/16" (76cm)
180	27-9/16" (70cm)



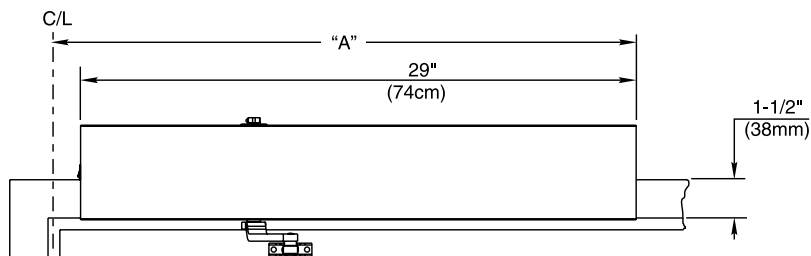
NOTE: Contact factory for use on doors exceeding 250 lbs.



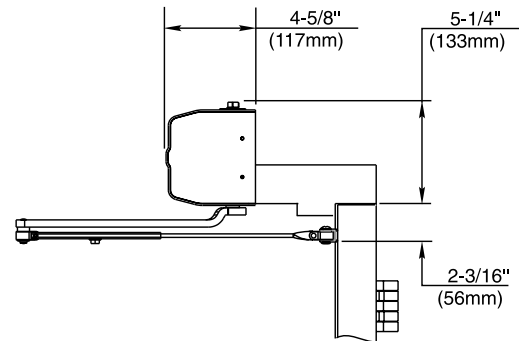
5730
STOP (PUSH) SIDE OF DOOR

STANDARD DUTY DOUBLE LEVER ARM

- Frame reveals 2-5/8" to 6-3/4" (67-171mm)
- An auxiliary door stop is required for these applications.
- 170° swing (trim permitting)

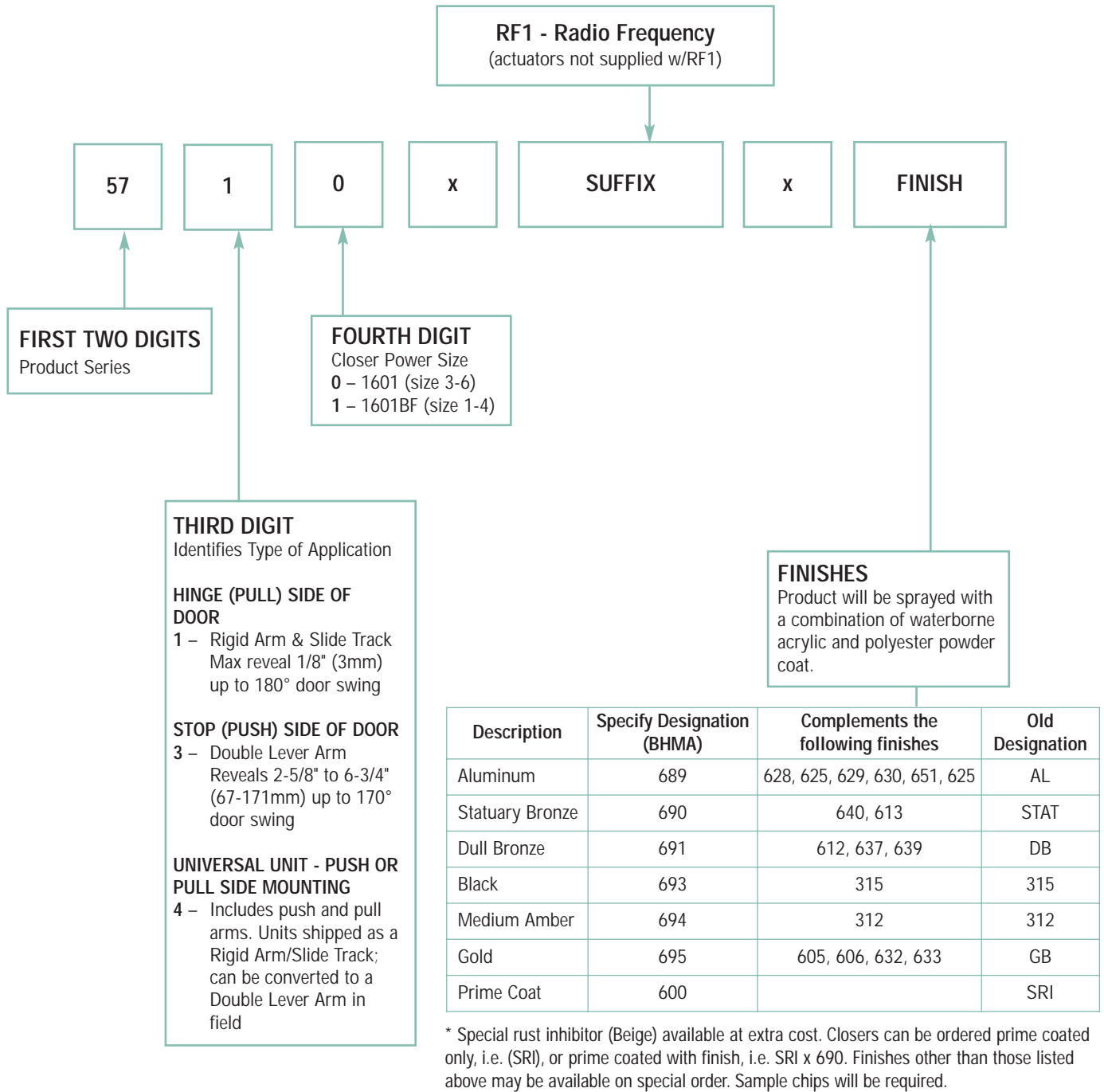


Door Swing	Dimension "A"
110	30-1/16" (76cm)
170	27-9/16" (70cm)



NOTE: Contact factory for use on doors exceeding 250 lbs.

HOW TO ORDER



Note: Door switches and sensors are not included with the 5700 Series Door Operators. These items must be ordered separately.

SIGNAGE

Supplied Standard



#428 (2 per operator)



#429 (1 per switch)



#433 (1 per switch)

ACCESSORIES



Motion Sensor #663

- 4-3/4" x 3-3/16" x 2" projection
- Unidirectional
- Black cover
- SPDT relay
- Adjustable angle pattern
- 24 VDC input
- Must not be placed where motion of door can be sensed



Key FOB
572

- Used with RF1 and 571KIT



574, 685 575, 576

- 6-5/8" square (box); 8-1/8" square (trim)
- 9 volt battery
- Temperature: -4° F to 122° F
- 15 amp @ 125VAC
- Flush or surface^ mounted
- Stainless steel with blue letters
- 574 and 576 - radio frequency (433MHz)
- Used with RF1 option and 571KIT
- 575 and 685 - hard wired*

* Switches may also be installed with single or double gang electrical box using fasteners included.

^ When surface mounted, switches project 2" from wall.



- 581
- 2-3/8"w x 4-3/16"h x 15/16"d
 - Single channel



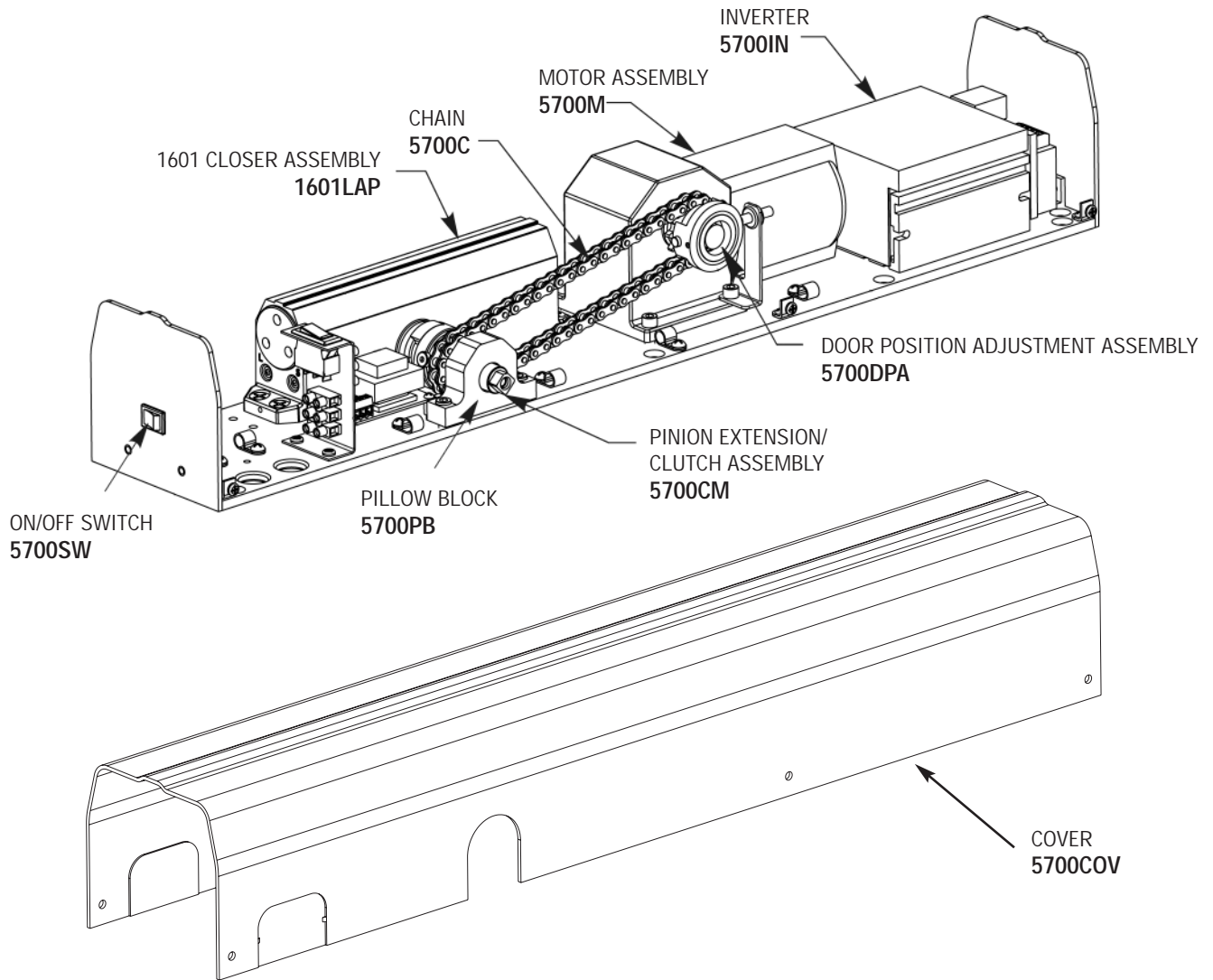
- 582
- 2-3/8"w x 4-3/16"h x 15-16"d
 - Two channel



Radio Frequency Kit
571KIT

- Radio Frequency Receiver (433 MHz)
- 24 VDC power supply
- Activation switches not included.
- Order 572, 581, 582, 574 or 576 separately.

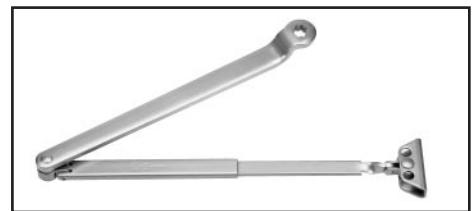
PARTS LIST



Arm and Track Assemblies

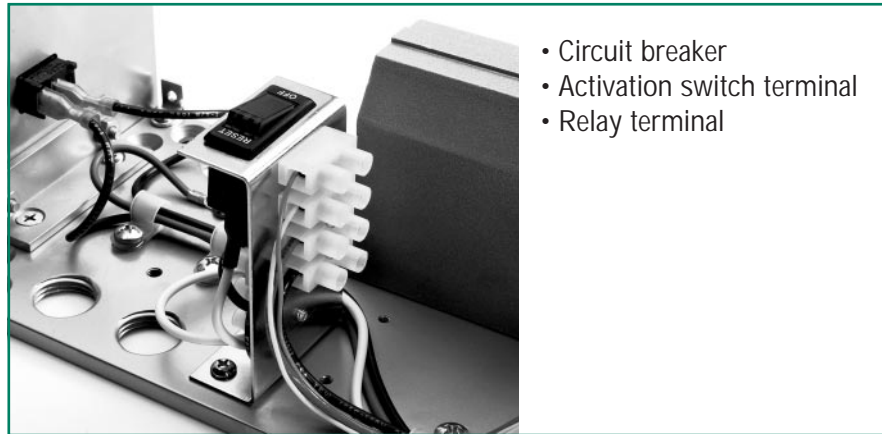


#5710-1 - Arm and Track Assembly
 #7701ST-1A - Arm Assembly
 #7200-1T - Track Assembly

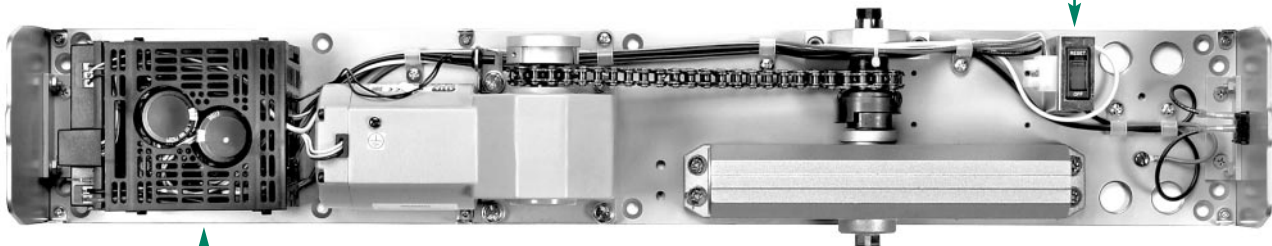


#7701-1A - Arm Assembly
 #7701-1W - Main Arm & Rod
 #7701-11A - Adjusting Tube & Shoe

TECHNICAL
 DETAILS



- Circuit breaker
- Activation switch terminal
- Relay terminal



POT	DESCRIPTION
COMP	Motor Torque at Hold Open Position
ACC	Door Mounting (Factory Set)
DEC/B	Hold Open Time (5-30 Seconds)
MIN	Motor Reversing Speed
MAX	Door Open Speed
CL	Obstruction Detection on Open

To be adjusted with trimpot tool supplied with unit

General Specifications

Door Controls ____ (interior) (exterior) swinging door(s) shall be of rack and pinion design contained within a precision cast aluminum housing. Door closing force shall be adjustable to ensure adequate closing control. Door closing speed shall be controlled by independent hydraulic adjustment valves in the sweep and latch range of the closing cycle. Door Operator shall provide conventional door closer opening forces unless the power operator motor is activated. Door Operator shall provide conventional door closing forces at all times except in the event of power outage during powered door open cycle. Door Operator opening force and speed shall be adjustable by independent electronic adjustment to ensure adequate opening control per accessibility codes. Door Operator shall have an adjustable hydraulic backcheck valve to cushion the door speed if door is opened violently. Door Operator shall have a manual adjustment to locate both full open and full closed door positions. Maximum door open shall be adjustable and capable to a maximum 180° conditions permitting. [(Door Operator shall be AUTOMATICALLY ACTIVATED, i.e., motion sensor.) (Door Operator shall be SELECTIVELY ACTIVATED by external initiating device, i.e., wall switch, etc.) (Door Operator shall be both AUTOMATICALLY ACTIVATED and SELECTIVELY ACTIVATED.)] Door operator shall have adjustable hold open time capability in range from 5 to 30 seconds. Door operator shall have input line rating of 120VAC, .6A. Units shall have relay contact for interfacing products having a contact rating of 30VDC at 1A or 125VAC at .5A. Unit shall have an external On/Off Switch to defeat powered opening when desired. Unit shall have an internal circuit breaker switch to interrupt input power for servicing. Unit shall be U.L. Listed for automatic closing door. Unit shall be in compliance with the requirements of the Americans With Disabilities Act (ADA), ANSI standards A117.1 and A156.19. Unit shall meet C-UL US.

Additional Detailed Specifications:

When activated, the unit shall, by means of an integral motor and chain drive, power open the door at both a speed and force that are adjustable to meet accessibility codes. The door shall be powered from a door closed position to a full door open position and remain in momentary hold open for ____seconds (adjustable 0 to 30 seconds) [(Unit shall power open door to full open position up to 180° (5710); 170° (5730), conditions permitting.) (Unit shall be capable of allowing the door to be opened manually from 0 to 180°, conditions permitting.)] Once unit reaches full hold open position, if reinitiated, unit's momentary hold open time shall restart from the initially set hold open time. If unit is initiated during the closing cycle, unit shall revert to opening cycle beginning at that door position. Obstruction detection on open shall neutralize and reverse motor action reverting motor to closed position thus allowing door to close under closer spring force only. This obstruction detection feature shall be integral to unit. During closing cycle, the unit shall close door under spring power not to exceed a closing force of 15 lbf.

NOTES

NOTES



For a complete listing of products and applications please visit our web site.

www.nortondoorcontrols.com

www.assaabloydsscanada.ca

Or contact us at:

Norton Door Controls

3000 Highway 74 East
Monroe, NC 28112
Tel: 800-438-1951
Fax: 800-338-0965

ASSA ABLOY Door Security Solutions Canada

160 Four Valley Drive
Vaughan, Ontario, Canada L4K 4T9
Tel: 800-461-3007

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