# 5700 SERIES Low Energy Power Operator



Norton<sup>®</sup> ASSA ABLOY

ASSA ABLOY, the global leader in door opening solutions



#### INTRODUCTION

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 5700 patented design is based on ease and simplicity. This operator installs in minutes rather than hours and consists of three basic components: inverter, motor and Norton's 1601 closer body.

What separates the 5700 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.

The 5700 is listed with UL and ANSI/BHMA A156.19 and meets the requirements of ADA and ANSI/BHMA A156.4. This operator can be activated via wall switch or radio frequency device and is ideal for doctor's offices, retirement facilities, schools or churches. Based on its dual functionality, ease of use and quiet operation, the 5700 offers the customer a unique choice.



#### **PATENTS**

• United States: 5,881,497, 7,316,096 and 7,484,333

• Canada: 2,568,877

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# 5700 SERIES

### LOW ENERGY POWER OPERATOR



#### FEATURES & 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 close 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)

- "Push and Close"
  - Allows the operator to skip the hold open time when it is not necessary or required
  - Adjustable door sensitivity
- Overload Safety Shut-Off
  - After two minutes of receiving a door activation signal, the inverter will time out and close the door
  - Prevents motor/inverter damage
- Motor Start Delay for Locking Hardware
  - O-5 second delay to allow locking hardware to release first
- Onboard power supply for accessories: 24VDC (1.1A)

#### **ELECTRICAL DATA**

- Power Input; 120 VAC, 60Hz
- Relay Output: SPDT
- Normally Open/Normally Closed (jumper)
- For electric strike function

#### **CERTIFICATIONS**

- ANSI/BHMA A156.19 certified
- Meets ANSI/BHMA A156.4 requirements
- UL / cUL listed for use on fire rated doors (1)
- UL10C listed for positive pressure fire test
- Comply with requirements for the Americans with Disabilities Act (A.D.A)
- This product is manufactured in an ISO 9001 facility



#### STANDARD APPLICATIONS

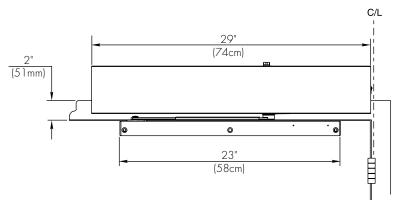


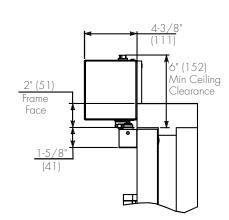
#### 5710 HINGE (PULL) SIDE OF DOOR

- Adjustable Stop
- 110° swing (trim permitting)

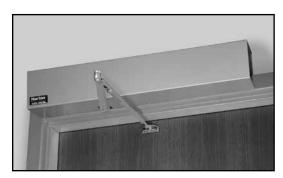
Minimum Door width Single Door - 29" (74cm) Double Door - 30" (76cm)

An auxiliary stop is suggested where severe conditions exist.





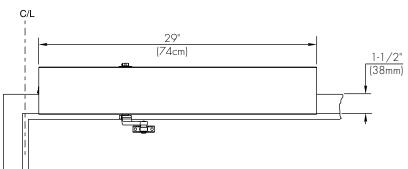
NOTE: Contact factory if door weight exceeds 250 lbs.

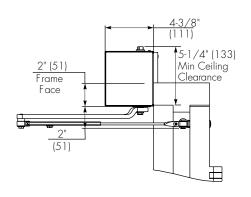


#### 5730 STOP (PUSH) SIDE OF DOOR

#### 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)

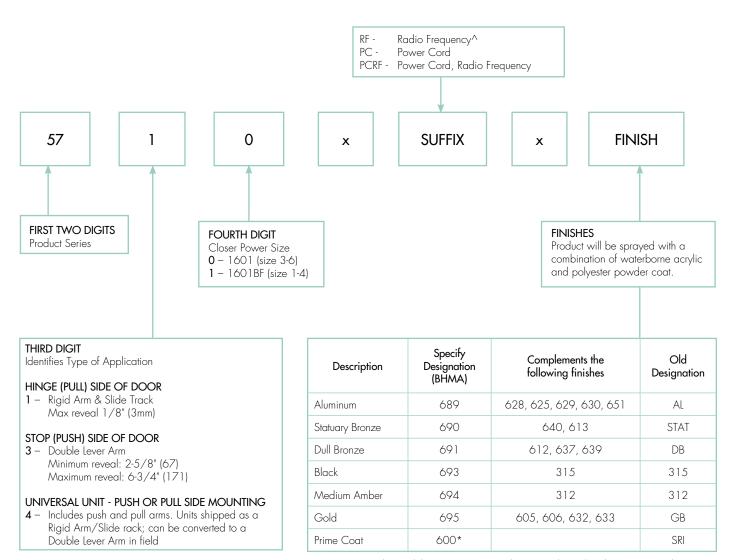




NOTE: Contact factory if door weight exceeds 250 lbs.



#### HOW TO ORDER



<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:  $5710 \times 600 \times 689$ ).

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

<sup>^</sup> Actuators not supplied w/ RF



#### OPERATIONAL SIGNAGE

#### #679 Signage Kit (supplied standard)







(1 per switch)

(1 per switch)

(2 per operator)

#### **ACCESSORIES**

#### Activating Door Switches





501 502

• 4-1/2" W. x 4-1/2" H.

- 15 amp @ 125 VAC
- Flush mounted hard wired
- Fits single or 2 gang electrical box
- 501 Stainless steel with black letters
- 502 Blue powder coat with white letters
- Specify #542 to order surface mount box for 501 or 502 switch



504

- 5" W. x 4-3/4" H.
- 2 SPDT UL listed switches-mom.
- 15 amp @ 125 VAC
- Fits 2-gang electrical box
- Stainless steel with blue letters







505, 531 507, 532



506, 533 534, 535

- 6" W. x 6" H.
- 9 volt battery
- 15 amp @ 125 VAC
- Flush mounted
- Stainless steel with blue letters
- 531, 532, 533 and 535 radio frequency (433MHz). Used with RF option and 539. Surface mount boxes are included.
- 507, 505, 506 and 534 hard wired\*. Surface mount boxes are not included. If required, specify: 555 - 6" square surface mount box 557 - 6" round surface mount box
- Switches may also be installed with single or double gang electrical box using fasteners included.



503

- 1-1/2" x 4-3/4" face plate
- SPDT UL listed switch-mom.
- 15 amp @ 125 VAC
- Fits 1-3/4" frame
- Stainless steel with blue letters

All hard wired switches are Momentary Contact SPDT, UL Listed.

## LOW ENERGY POWER OPERATOR



#### **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

#### **Transmitters**



#### 536

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

#### 538

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



#### 548

- Converts existing hard wired push plates to work with RF receivers offered after June 2013
- Single channel
- 9 volt

#### Touch Less Wall Switch





697

- Single gang and double gang
- Doppler radar
- Sensor requires movement for activation
- Variable relay-hold time from 1 to 10 seconds
- Range of 2" to 24" field adjustable
- 2-3/4" (Single); 4-1/2" (Double) W x 4-1/2" H

#### Low Profile Push Plate



- 36" x 6" activation zone
- 1" low profile depth
- Stainless steel face plate
- Adapts to either wireless or hardwired installations
- 638 Wireless
- 639 Hardwired

#### Switch Post



500 & 530

- $4" \times 6" \times 40" \times 3/16"$  wall thickness
- 9 volt battery
- RF temperature range: -4° F to 122° F
- 689 (aluminum) or 690 (dark bronze) finishes; specify when ordering
- Standard formed plastic cap
- Surface mounted (above ground)
- 530 radio frequency transmitter
- 500 hard wired switch
- 530POST post only; switch not included

Radio Frequency Receiver



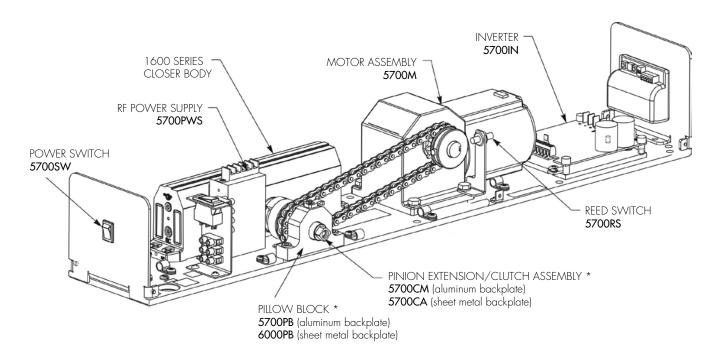
539

• 433 MHz

<sup>\*</sup> Use of motion sensors must be approved by the local authority having jurisdiction.



#### PARTS LIST



<sup>\*</sup>Note: Pinion Extension/Clutch Assembly and Pillow Block part numbers depend on the backplate shipped with your unit.

Part #	Description
5700CVR	Cover
5700C	Chain
5700DPA	Door Position Adjustment Assembly

#### ARM & TRACK ASSEMBLIES



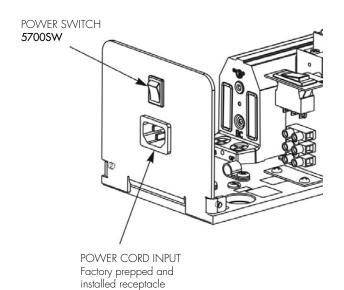
#5710-1 - Arm and Track Assembly #7701ST-1A - Arm Assembly #7200-1T - Track Assembly



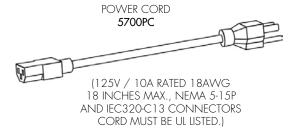
#7701-1 A - Arm Assembly #7701-1 W - Main Arm & Rod #7701-11 A - Adjusting Tube & Shoe



#### TECHNICAL DETAILS



**Note:** Consult local authority having jurisdiction to confirm use of power cord is acceptable. Operator must be furnished with the power cord from the factory. Power cords cannot be added to operators in the field. Maximum distance from operator to receptacle is 15".







#### ARCHITECTURAL SPECIFICATIONS

#### 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 intuiting of 120VAC, .6A or 240VAC, .3A. 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 meet C-UL U.S.

#### 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.

# 5700 SERIES LOW ENERGY POWER OPERATOR



NOTES



#### CONTACT US AT:

Norton Door Controls 3000 Highway 74 East Monroe, NC 28112 Tel: 877-974-2255 Fax: 800-338-0965

ASSA ABLOY Door Security Solutions Canada 160 Four Valley Drive Vaughan, Ontario, L4K 4T9 Canada

Tel: 800-461-3007 Fax: 905-738-2478

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

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