

# 5900 SERIES

Low Energy Power Operator



**Norton®**

**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

**INTRODUCTION**

The Norton 5900 Series is a full-featured, extremely quiet, low energy door operator designed for moderate to high traffic doors. This cost-effective operator is available for either push- or pull-side mounting and is ideal for any application designed to meet the Americans with Disabilities Act (A.D.A).

The 5900 is simple to install and set up. "One touch" programming combined with the operators built-in ability to calibrate door mass, offers our customers a smart, dependable solution. Power Assist, Obstruction Detection, Motor Start Delay and Stop on Stall are just a few features that set this electromechanical operator apart from the competition.

Ideal for senior housing/assisted living facilities, hospitals, office buildings, colleges or universities, places of worship, convention centers, etc.



**FEATURES**

- Ease of installation and setup
  - Simple instructions
  - "One touch" programming
- Application versatility and ease of adjustment
  - Non-handed units
  - Push- or pull-side mounting
  - Interfaces with electric hardware
  - Integrates with access control system
- Operation startup options
  - Wall switches
  - Motion sensor
  - Radio frequency device
  - Push and Go
- Presence Detector input
- Sync cable for double doors; synchronizes closing of two operators

**TABLE OF CONTENTS**

Functions, Electrical Data, Certifications, Specifications . . . . . 3

Standard Applications . . . . . 4

How to Order . . . . . 4

Operational Signs . . . . . 5

Accessories . . . . . 5-7

Parts List . . . . . 7

## FUNCTIONS

- Power Assist
  - When unit is activated, it allows the door to be opened manually with a force less than 5 lbs.
- Push and Go (selectable)
  - As the door is manually opened, the operator “senses” movement and opens door to the full-open position.
- Obstruction Detection
  - Open
    - Door closes if it hits an obstruction while opening
  - Close (Stop on Stall)
    - Door will stop once it hits an obstruction and rest against the obstruction until obstruction is removed
- Motor Startup Delay
  - Delays operator opening
- Infinite Hold Open
  - Door will hold open at set position until power is turned off
- Power Latch (selectable)
  - Increases latch power
- Selector mode switch (3 position)
  - Off - Disables signal inputs
  - On - Activates signal inputs
  - Hold Open - Activates the unit to the hold open position

## ELECTRICAL DATA

- Power input 120 VAC, 60 Hz (+10%, -15%)
- Current draw .75A
- 12VDC @ .5A output, 24VDC @ .25A output, 24VDC @ .4A output

**Note:** Dry relay contacts require optional relay logic module.

## CERTIFICATIONS

- ANSI/BHMA A156.19 certified 
- UL325 certified
- UL10C listed for positive pressure fire test
- Comply with requirements for the Americans with Disabilities Act (A.D.A)

## SPECIFICATIONS

Door Control (interior) (exterior) closing force shall be adjustable to ensure adequate closing control. Door Operator shall simulate conventional door closer opening and closing forces unless the power operator motor is activated. Door Operator shall have electronic backcheck to cushion the door speed if door is opened violently. [(Door Operator shall be AUTOMATICALLY ACTIVATED by either a slight push or pull in the direction of opening swing - Push and Go.) (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.)] Unit shall have delay switches for motor activation, electric lock interfacing, and hold open time. Units shall interface with latch retraction exit devices or similar products and have 12VDC @ .5A, 24VDC @ .25A, 24VDC @ .4A output for connection of electric strike, lock, radio frequency receiver, etc. Unit shall have a three-position Selector Mode Switch that will permit the unit to be switched “ON” to monitor for function inputs, switch to “H/O” for infinite hold open function or switched “OFF” which will disable function inputs allowing unit to be used as a manual door closer. Unit shall be U.L. Listed for automatic closing door. The Unit shall be adjustable to provide compliance with the requirements of the Americans with Disabilities Act (ADA). Unit shall be certified by BHMA to meet A156.19 requirements. Unit shall meet UL325, UL10C standards.

APPLICATIONS



Left hand shown

**5910**  
HINGE (PULL) SIDE OF DOOR  
5910 RIGID ARM AND SLIDE  
TRACK

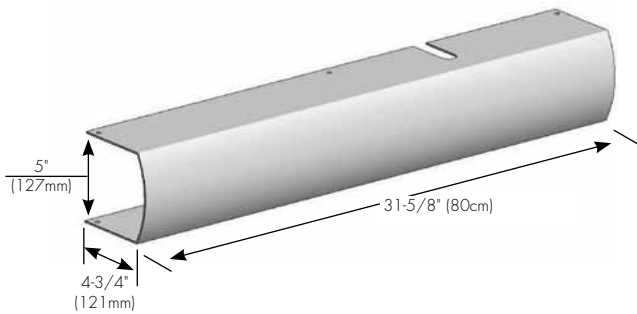
- Buffered stop assembly in slide track
  - 85° to 110° templated door openings in 5° increments
  - 1/8" (3mm) maximum frame reveal
- An auxiliary stop is suggested where severe conditions exist.



Left hand shown

**5930**  
STOP (PUSH) SIDE OF DOOR  
STANDARD-DUTY DOUBLE  
LEVER ARM

- Frame reveals 2-3/4" to 5-3/4" (70 to 146mm)
- An auxiliary door stop is required for these applications



**Dimensional Information:**

- Minimum ceiling clearance: 5-5/8" (143mm)
- Minimum door width: 32" (81cm); maximum 48" (122cm)
- Minimum frame face: 2" (5mm)
- Minimum top rail: 1-5/8" (41mm)

**Notes:**

- For additional information, the 5900 Series Instruction Manual is available online.
- Contact factory if door weight exceeds 200 lbs.

HOW TO ORDER

Note: All transmitters (door switches or key fob) must be ordered separately.

59	3	0	FINISH	For Radio Frequency Control, order 539 RF Receiver separately.												
<p><b>FIRST TWO DIGITS</b> Product Series</p>	<p><b>THIRD DIGIT</b> Identifies Type of Application</p> <p><b>HINGE (PULL) SIDE OF DOOR*</b></p> <p>1 – Rigid Arm &amp; Slide Track 110° maximum door swing maximum reveal 1/8" (3mm)</p> <p>5 – Double Egress Arm 110° maximum door swing with 1/8" (3mm) reveal; 95° maximum door swing with 3" (76mm) reveal.</p> <p><b>STOP (PUSH) SIDE OF DOOR</b></p> <p>3 – Standard-Duty Double Lever Arm 110° maximum door swing Reveals 2-3/4" to 5-3/4" (70 to 146mm)</p>		<p><b>FINISHES</b> Product will be sprayed with a combination of waterborne acrylic and polyester powder coat.</p>													
<table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <thead> <tr> <th>Description</th> <th>Specify Norton Designation (BHMA)</th> <th>Complements the following finishes</th> <th>Old Designation</th> </tr> </thead> <tbody> <tr> <td>Aluminum</td> <td>689</td> <td>628, 625, 629, 630, 651, 652</td> <td>AL</td> </tr> <tr> <td>Statuary Bronze</td> <td>690</td> <td>640, 613</td> <td>STAT</td> </tr> </tbody> </table>					Description	Specify Norton Designation (BHMA)	Complements the following finishes	Old Designation	Aluminum	689	628, 625, 629, 630, 651, 652	AL	Statuary Bronze	690	640, 613	STAT
Description	Specify Norton Designation (BHMA)	Complements the following finishes	Old Designation													
Aluminum	689	628, 625, 629, 630, 651, 652	AL													
Statuary Bronze	690	640, 613	STAT													

\*Consult Technical Support Department when door is hung on offset pivots

OPERATIONAL SIGNS

#679 Signage Kit (supplied standard)



(1 per switch)



(1 per switch)



(2 per 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

Executive Package (includes receiver and transmitter)  
#5900EXPKG



Switch Post



500 & 530

- 4" x 6" x 40" x 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

Relay Logic Module  
#5900RLM^



\* Use of motion sensor must be approved by local authority having jurisdiction.

^Provides auxilliary contacts for latch retraction (exit devices). Consult Norton Technical Product Support.

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



505, 531 507, 532

- 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.



506, 533 534, 535

- 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.

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



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

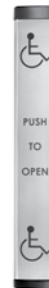
Vestibule Switches



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

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

Presence Detector



585

- Diffused active infrared technology
- 11.8" l x 1.9" h x 1.9" w
- Black anodized aluminum
- 9"x0" maximum mounting height
- Supply voltage: 24VAC/DC

All hard wired switches are Momentary Contact SPDT, UL Listed. Optional DPDT switches are available; suffix "D" to model number.

ACCESSORIES

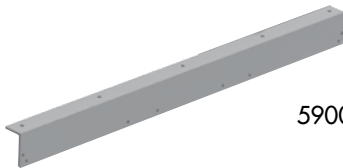
Switch Post



500 & 530

- 4" x 6" x 40" x 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

Drop Angle Plate



5900DAP

Radio Frequency Receiver



- 539
- 433 MHz

Transmitters



- 536
- 2-3/8"w x 4-3/16"h x 15/16"d
  - Single channel

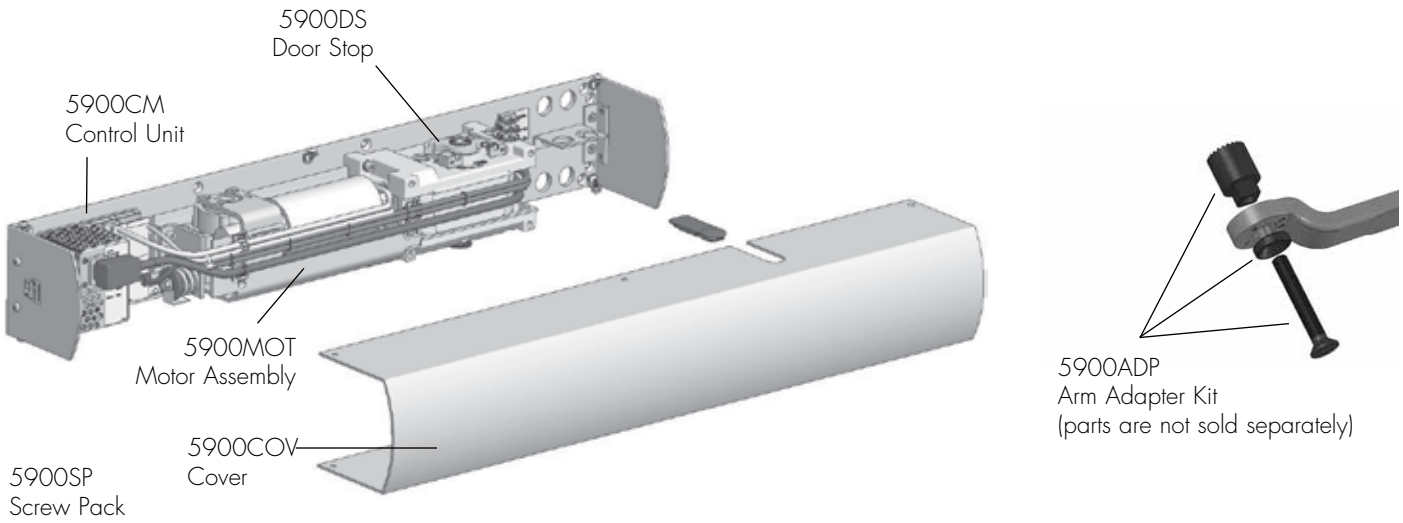


- 538
- 2-3/8"w x 4-3/16"h x 15-16"d
  - Double channel

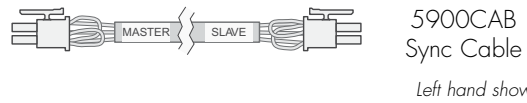


- 548
- Converts existing hard wired push plates to work with RF receivers offered after June 2013
  - Single channel
  - 9 volt

PARTS LIST



Arm and Track Assemblies



#6610-1 – Arm and Track Assembly  
 #7210-1A – Arm Assembly  
 #7200-1T – Track Assembly



#6630-1 – Arm Assembly  
 #6630-1W – Main Arm & Rod  
 #6620-12 – Adjusting Tube & Shoe



#6650-1L – Arm and Track Assembly (LH)  
 #6650-1R – Arm and Track Assembly (RH)  
 #7250-1L – Arm Assembly (LH)  
 #7250-1R – Arm Assembly (RH)  
 #6610-1T – Track Assembly



5900 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.nortondoорcontrols.com](http://www.nortondoорcontrols.com)  
[www.assaabloy.ca](http://www.assaabloy.ca)

Norton® is a registered trademark of Yale Security Inc., an ASSA ABLOY Group company. Other products' brand names may be trademarks or registered trademarks of their respective owners and are mentioned for reference purposes only. These materials are protected under U.S. copyright laws. All contents current at time of publication. Copyright © 2010-2015, Yale Security Inc., an ASSA ABLOY Group company. All rights reserved. Reproduction in whole or in part without the express written permission of Yale Security Inc. is prohibited.