

# ED50LE

## Low energy swing door operator



### Operator types and configurations

- 2-3/4" x 5-1/8" Fine Cover
- Surface applied

### Description

The ED50LE low energy swing door operator is the perfect solution for touch free access applications, offering a true manual door closer experience. Simple and easy to install, the ED50LE provides many features and functions to make existing doors easily accessible.

### Features

This medium-duty swing door operator can automate new or existing manual swing doors with a push plate, wave plate, or other "knowing act" device. The ED50LE combines advanced automatic power assist, minimal push forces (as low as ANSI size 1) and reliable closing. Outswing or inswing doors can be adapted for touch free access with push or pull mounting.

### Standards of compliance

Upon installation in conformance to manufacturers directives, the ED50LE can be configured to meet ANSI/BHMA A156.19, U.S. Standard for Power Assist and Low Energy Power Operated Doors

### Low energy power operated door

A door fitted with an ED50LE operator that opens the door upon receipt of a knowing act activating signal, does not generate more kinetic energy than specified in ANSI A156.19, and includes provisions to reduce the chance of user injury or entrapment. In an A156.19 application, this is achieved utilizing the following design factors:

- Reduced dynamic door panel contact forces
- Reduced static door panel contact forces
- Time delays
- Low opening and closing speeds
- Force limitations
- Signage
- Presence sensors (optional)

### Factsheet

## ED50LE Technical specifications

Configuration			
Header dimensions (H × D × L)		2-3/4" x 5-1/8" x 34" (Fine)	
Operator weight		26,5 lb	
Internal power supply available for accessories		24 volts DC ± 5% 1.5 A	
Maximum door opening angle		110° (door stop recommended)	
Maximum wire size		16 AWG	
Maximum door weight		220 lb at 48" door width	
Door width		Minimum 28" Maximum 48"	
Axle extensions		13/16" (20 mm) 1-3/16" (30 mm) 2-3/8" (60 mm)	
Reveal depth for pull arm		1-3/16" (30 mm)	
Reveal depth for standard push arm		0 to 9-3/4"	
Handing		Non-Handed	
Required operating conditions			
Ambient temperature		5°F to 122°F	
Power supply		115 volts AC ± 10%, 50/60 Hz Maximum 3.3 Amps, (SELV)	
Branch circuit protection (provided by others)		Maximum 15 Amps, dedicated branch circuit	
Protection class		NEMA 1	
Power wiring: black, white, bare copper (ground)		Maximum 12 AWG	
Operating noise		Maximum 50 db(A)	
Inputs			
Activation inputs	<b>X4*</b>	Interior, exterior	Normally open contact
Safety sensors	<b>X5</b>	Swing, approach sides, normally closed contact	
Night/bank (intercom system)	<b>X10</b> 57, 57a	8 to 24 volts DC/volts AC + 5%	
Night/bank (key switch)	<b>X1</b> 35, 3	<b>d2</b> parameter	Configure for Normally Open or Normally Closed
Deactivation of drive function	<b>X6</b> 4, 4a	<b>d1</b> parameter	Configure for Normally Open or Normally Closed
Operating specifications			
Automatic closing torque, lbf-ft <sup>2</sup>	Minimum 14.8 lb f	Maximum 49 lb f	
Manual closing torque, lbf-ft <sup>2</sup>	Minimum 9.6 lb f	Maximum 27.3 lb f	
Maximum opening speed, degrees per second <sup>1</sup>	27 °/s		
Maximum closing speed, degrees per second <sup>1</sup>	27 °/s		

### NOTES

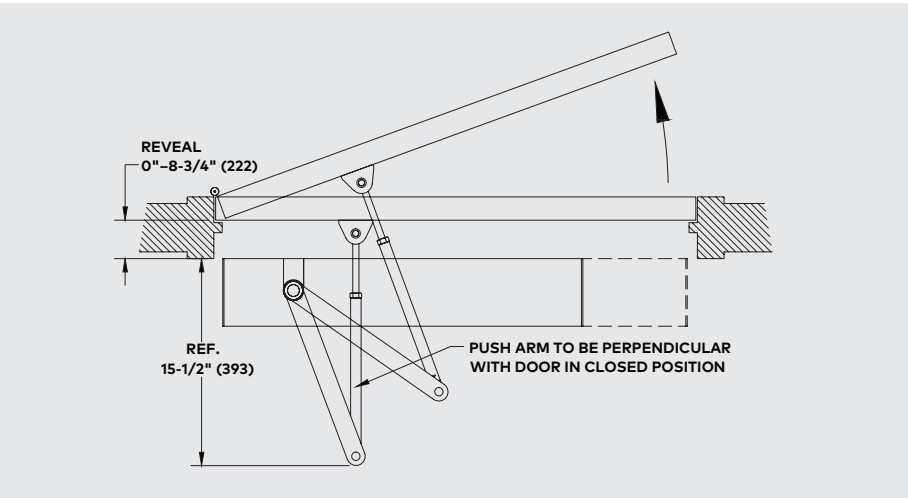
<sup>1</sup> Speeds automatically limited depending on door weight, set during learn cycle.

<sup>2</sup> In push version of slide channel with track installation type, forces are reduced by approximately 33%.

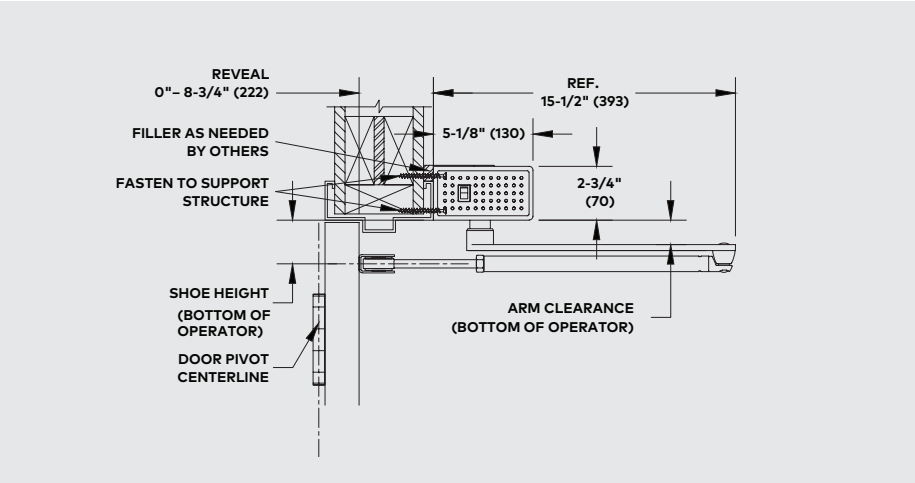
Door closer modes			
Automatic mode		Door opens automatically following pulse generation by a knowing act device or by push/pull.	
Push-N-Go mode		Door opens automatically following a slight manual movement of the door.	
Power assist		Available only in door closer mode, manual opening drive support is automatically adjusted to operator size.	
Integrated functions			
Opening force N (lbf)		<b>Fo</b> Parameter	Minimum 20 lbf (4.5)      Maximum 60 lbf (13.5.5)
Manual closing force N (lbf)		<b>Fc</b> Parameter	Minimum 20 lbf (4.5)      Maximum 60 lbf 13.5.5)
Maximum opening speed, degrees per second		27 °/s	May be limited by door weight after learning cycle.
Maximum closing speed, degrees per second		27 °/s	
Hold open time			
Automatic opening		<b>dd</b> Parameter	0 to 30 seconds
Night/bank		<b>dn</b> Parameter	0 to 30 seconds
Manual opening		<b>do</b> Parameter	0 to 30 seconds
Door blocking behavior		<b>hd</b> Parameter	Automatic, manual door modes
Electric strike delayed opening for locking mechanism		<b>Ud</b> Parameter	0 to 4 seconds
Door status	<b>X7</b> 97, 98, 99	<b>Sr</b> Parameter Door closed Door open Door closed, locked	Common Normally Open Normally Closed
Locking device feedback	<b>X3</b> 43,3	Motor lock	
Wind load control, maximum		<b>Fo, Fc</b> Parameters	22.5 lb f 100 N
Voltage independent braking circuit		Adjustable with potentiometer	
LED status indicators Service manual		Green Red Yellow	24 Vdc power Error codes Service interval
Program and Exit Only switches		4-button keypad, 2-digit display	
User interface		Overload protection	
TMP, temperature management program Service manual		Driving phase optimization	
IDC, initial drive control		Driving phase optimization	
Cycle counter		<b>CC</b> Parameter	0 to 1,000,000
Power assist function		<b>hA, hF, hS</b> Parameter	Drive support for manual opening door
Push & go function		<b>PG</b> Parameter	Auto opening of door at 4° open

ED50LE Fine Cover surface applied

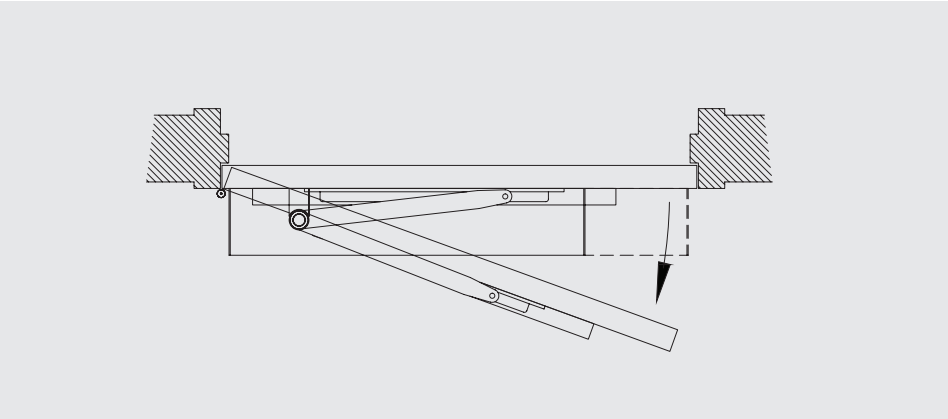
Plan view  
Single push operator  
Left hand door shown (right hand opposite)



Section view  
Push operator  
Left hand door shown (right hand opposite)



Plan view  
Single pull operator  
Right hand door shown (left hand opposite)

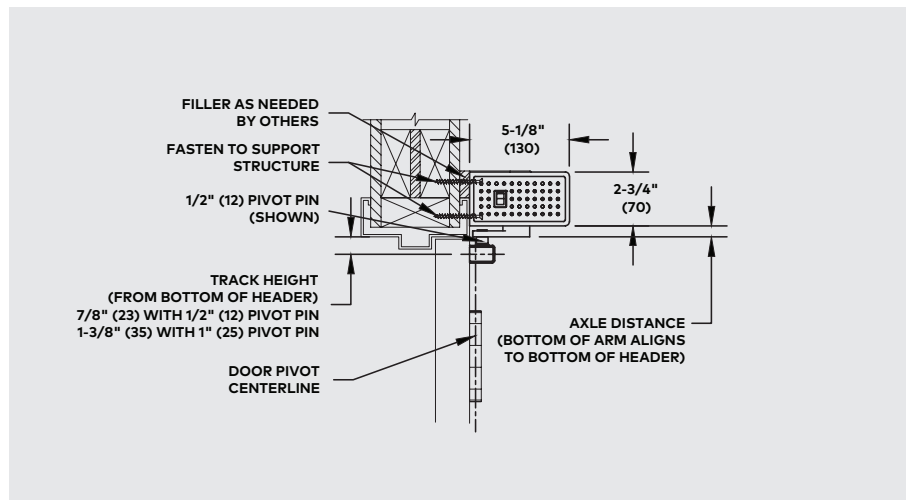


## ED50LE Fine Cover surface applied

### Section view

#### Pull operator

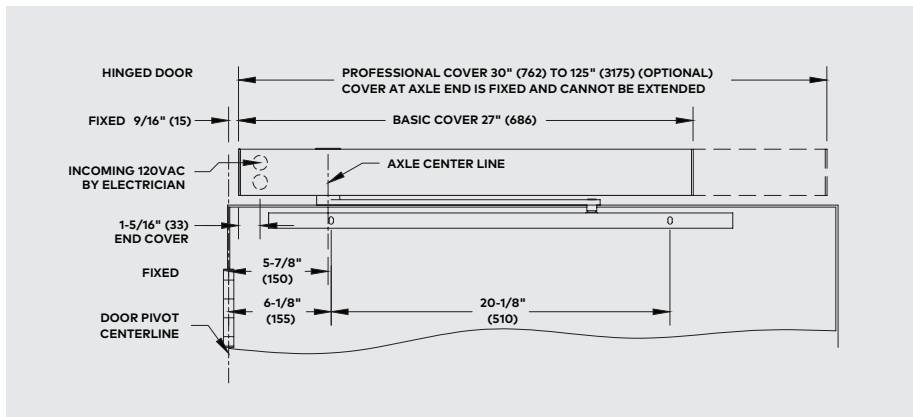
Right hand door shown (left hand opposite)



### Elevation view

#### Single pull operator

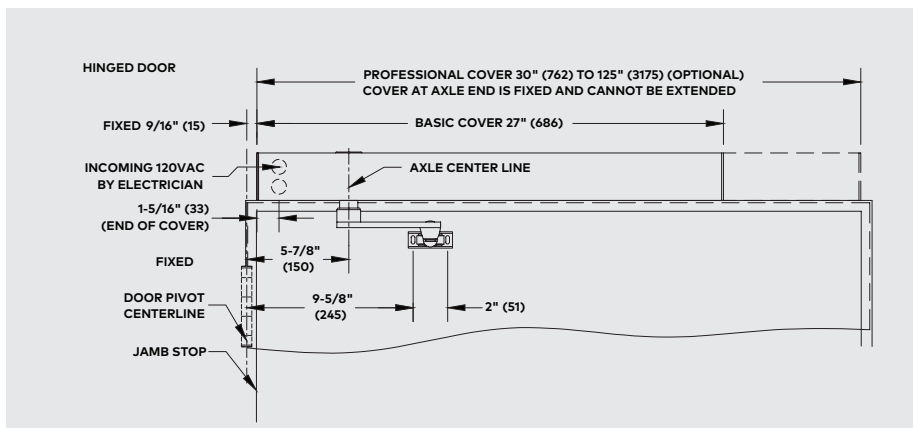
Right hand door shown (left hand opposite)



### Elevation view

#### Single Push operator

Left hand door shown (right hand opposite)



Accessories



**910TC Touch-free switch for the activation of automatic doors**

The 910 Series are available with three plate designs, touch-free, healthcare and stainless steel. The unique low-profile touchless actuator plate utilizing capacitive technology for the activation of automatic doors. The aesthetically pleasing design provides hands-free door operation when used in conjunction with a low energy swing door operator to help reduce the spread of germs and bacteria..

**The 910 Series is available in three models:**

Standard touch free actuators	
910TC	Waving hand
910TC-SS	Waving hand, stainless
910TC-HC	Wheelchair
910TC-HC-SS	Wheelchair, stainless
Narrow touch free actuators	
910NTC	Narrow, waving hand
910NTC-SS	Narrow, waving hand, stainless
910NTC-HC	Narrow, wheelchair
910NTC-HC-SS	Narrow, wheelchair, stainless



**912 Series Wireless, battery powered, touch free actuators**

The 912 Series wireless, battery-powered, actuators utilize proven infrared motion detection technology to ensure consistent, dependable touch-free activation. Adjustable to comply with ANSI A156.19 knowing act applications.

**The 912 Series is available in three models:**

912-WBT	Single switch
912N-WBT	Narrow single switch
912GL-WBT	Single switch

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**Any questions? We would be happy to advise you.**  
Contact us at: 1-800-523-8483

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