





LG-14-3RM-27-67-HS-24VDC

**User Manual** 

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Have any queries? Our expert engineers are here to help!









## **SAFETY PRECAUTIONS**

When installing and using your Progressive Automations linear actuator, basic safety precautions should always be followed. Please read all safety precautions thoroughly and be familiar with all functions of the product before use. Apply all other relevant precautions when operating electrical and moving mechanical devices.

## DANGER

To reduce the risk of electrical shock and injuries:

- Do not attempt to modify or repair the actuator.
- Avoid using the actuator in environments with explosive gases or flammable materials.
- Avoid using the actuator beyond its specified Ingress Protection rating.
- Make sure that the power source is properly grounded. Neglecting proper grounding can result in a dangerous electrical hazard.

## **▲** WARNING

To reduce personal harm and injury:

- Follow recommended load ratings and specifications for the actuator.
- Avoid leaving the actuator unattended during operation.
- Avoid operating the actuator in areas with high levels of airborne contaminants.
- Ensure a clear path for full extension and retraction of the actuator.
- Keep hands and body parts clear of the actuator while it is in motion.
- Exercise caution around pinch points and moving components during the actuator's operation.
- Keep all loose clothing, jewelry, and personal items away from the actuator's moving parts.

### OPERATING NOTES

### Warranty

Any attempts to disassemble or tamper with the actuator's internal components or operation outside of the advertised usage limitations will result in voiding the product's warranty. For more information on our warranty terms, visit: <a href="https://www.progressiveautomations.com/pages/warranty-terms">https://www.progressiveautomations.com/pages/warranty-terms</a>

#### **Force Restrictions**

Linear actuators must be used within the specified force rating outlined in this documentation. Load must be evenly distributed. Exceeding the recommended force rating may result in failure of the linear actuator. It may also damage the product and void the warranty. Please note that the weight of the load does not always equal the total force due to mechanical advantage, wherein the force may increase or decrease depending on the application.

#### **Operation Time**

Linear actuators must be operated within the specified operation time and frequency. Exceeding the duty cycle rating can significantly reduce the actuator's expected lifespan and will void the warranty.

# **SPECIFICATIONS**

### RATED LOAD CONFIGURATIONS

Rated L	Rated Load (lbf)		24 VDC Current (A)		ed¹ (inch/sec)
Dynamic	Static	No Load	Full Load	No Load	Full Load
67	270	4.0	6.0	1.97	1.97

<sup>&</sup>lt;sup>1</sup>Speed specifications have a ±10% tolerance.

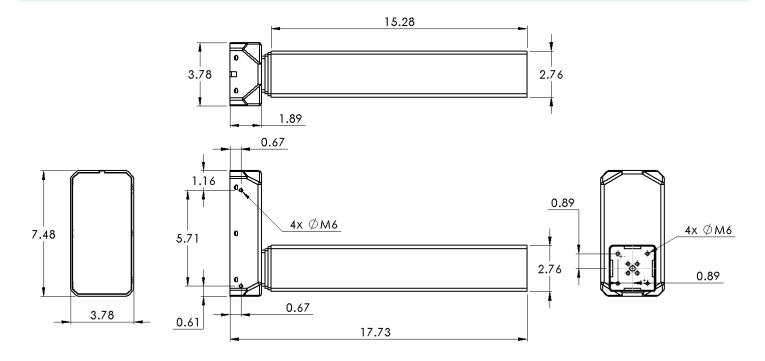
## **SPECIFICATIONS**

Input Voltage	24VDC
Travel Distance	27.2"
Height Range	18.1" to 45.3"
Feedback	Hall Effect Sensor
Operational Temperature	-10°C to 70°C (14°F to 158°F)
Lifting Mechanism	Electric Motor
Wire Length	12"
Stages	4
Shape	Square
Frame Material	Steel
Finish	Powder Coat - Black
Duty Cycle	10% (2 minutes on, 18 minutes off)
Noise Level	< 50 dB from 1.5m
Protection Level	IP51
Unit Weight	17.2 lbs

# **DIMENSIONS**

Note: All dimensions are listed in inches.

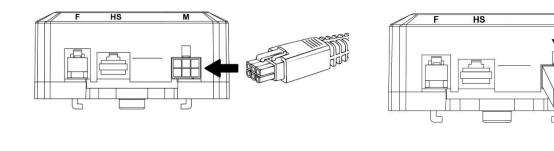
### **DIAGRAM**



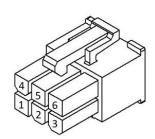
## **WIRING DIAGRAM**

**Note:** There may be more than 1 M port for multiple columns to be plugged in, depending on the control box chosen.

Plug the lifting columns into the M ports of the chosen control box for operation.



## HALL EFFECT - 6-PIN CONNECTOR



Pin Location	1	2	3	4	5	6
Function	Hall Effect 2 - signal leads when extending	Hall Effect GND	Hall Effect 5V	Motor - (Retract)	Motor + (Extend)	Hall Effect 1 - signal leads when retracting
Wire Color	Orange	Black	Red	Black	Red	Yellow
Wire Gauge	22 AWG	22 AWG	22 AWG	18 AWG	18 AWG	22 AWG

Parts	Force (lbs)	Part Name	Part Number	Mating Part Number
Housing	All	Molex Mini-Fit Jr. Receptacle Housing, 2-Row	39-01-2060	39-01-3063
Motor Terminals	All	Molex Mini-Fit Jr. Female Terminal, 18-24 AWG	39-00-0039 (Bag) 39-00-0038 (Reel)	39-00-0041 (Bag) 39-00-0040 (Reel)
Sensor Terminals	All	Molex Mini-Fit Jr. Female Terminal, 22-28 AWG	39-00-0047 (Bag) 39-00-0046 (Reel)	39-00-0049 (Bag) 39-00-0048 (Reel)