



Scan for more information

PA-10

User Manual

Table of Contents

Specifications.....	3
Dimensions.....	4
Speed/Current vs Load.....	5
Connectors & Feedback.....	6
Internal Components.....	7
Internal Descriptions.....	8



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



sales@progressiveautomations.com



1-800-676-6123



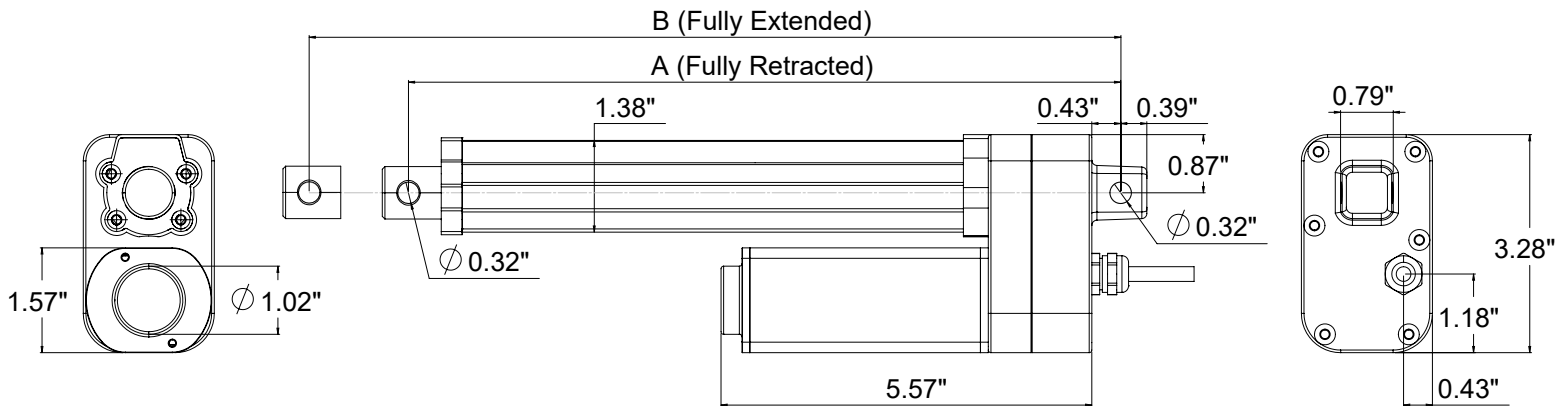
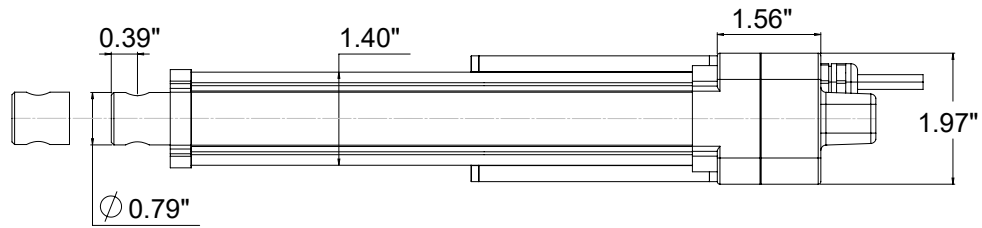
progressiveautomations.com

Specifications

Load (LBS)		No Load Current (A)		Full Load Current (A)		Speed (inch/sec)	
Dynamic	Static	12VDC	24VDC	12VDC	24VDC	No Load	Full Load
450	450	≤1.5	-	≤6.0	-	0.28	0.16
225	225	-	≤1.5	-	≤3.2	0.74	0.57
450	450	-	≤1.5	-	≤4.0	0.56	0.33
675	675	-	≤1.5	-	≤4.2	0.31	0.22

Input Voltage	12VDC or 24VDC
Stroke	1.0" to 36.0"
Features	400-hour Salt Spray Rating (Salt Spray Rating Unit Only)
Feedback	Optional
Duty Cycle	20%
Weather Protection	IP66
Overload Protection	None
Operational Temperature	-20°C to 70°C
Operating Noise	<45 dBA
Limit Switch	Built-In (Non-Adjustable)
Cable Length	60"
Connector	Molex Mini-Fit Jr 2-Pin
Front Mounting Hole Size	0.32"
Rear Mounting Hole Size	0.32"
Actuator Type	Mini, Industrial
Motor Type	Brushed DC Motor
Screw Type	ACME
Stroke Rod Material	Stainless Steel
Housing Material	Anodic Oxidation (Standard), Porcelain Plating (Salt Spray Rating)
Gear Material	Polyoxymethylene
Certifications	UL (Optional)
Compatible Mounting Brackets	BRK-09
Warranty	18 Months

Dimensions



Hole to Hole		Stroke	1	2	4	6	8	10	12	14	16	20	22	24	30	36
PA-10	A	6.7	6.7	8.7	10.7	12.7	14.7	16.7	18.7	20.7	25.1	27.1	29.9	35.9	41.9	
	B	7.7	8.7	12.7	16.7	20.7	24.7	28.7	32.7	36.7	45.1	49.1	53.9	65.9	77.9	

For stroke length less than 2.0"

A = 6.7"

B = Stroke + 6.7"

For stroke length greater than 16" and less than 23.5"

A = Stroke + 5.1"

B = Stroke + Stroke + 5.1"

For stroke length 2.0" to 16"

A = Stroke + 4.7"

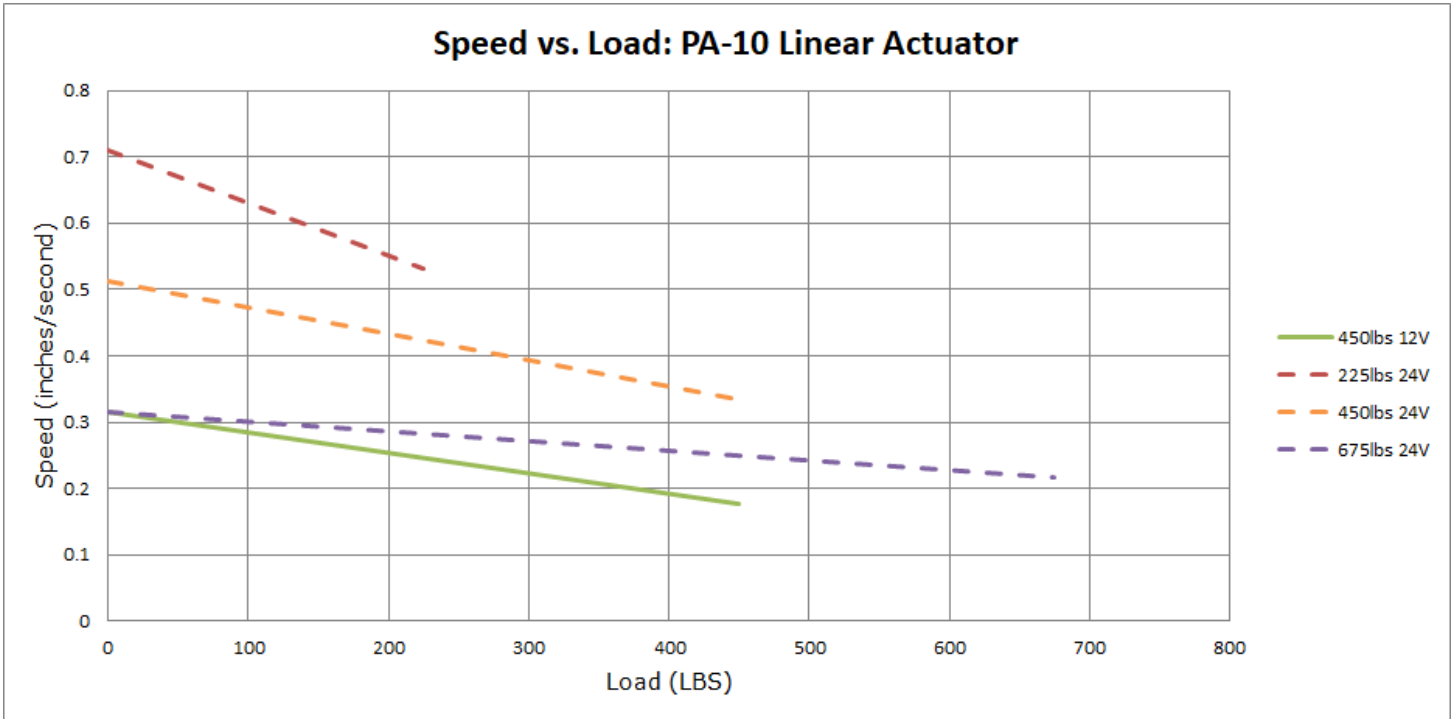
B = Stroke + Stroke + 4.7"

For Stroke Length 23.5" to 36.0"

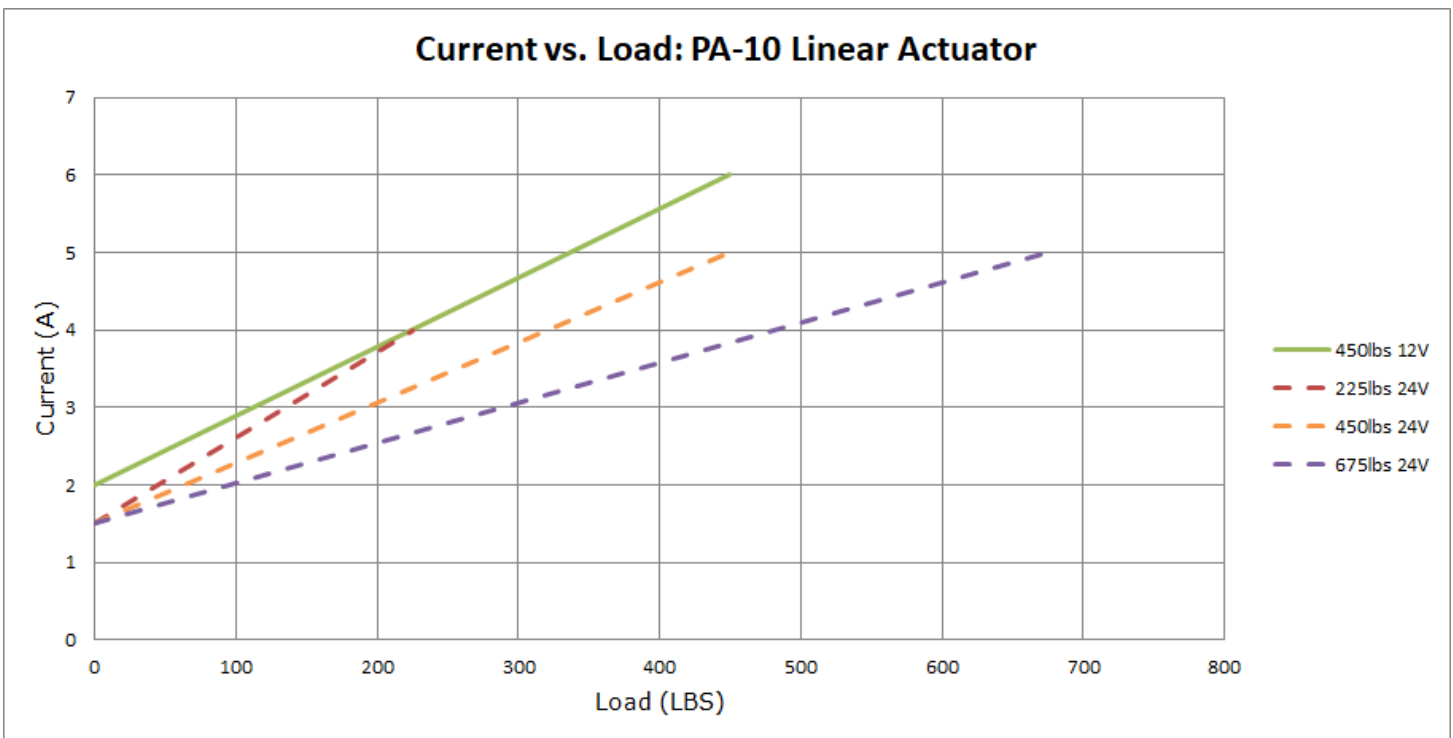
A = Stroke + 5.9"

B = Stroke + Stroke + 5.9"

Speed vs Load

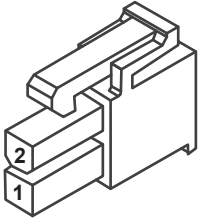


Current vs Load



Connectors & Feedback

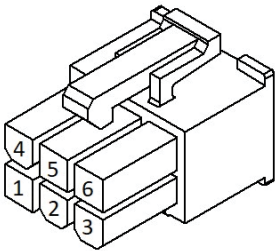
2-Pin Connector (Standard)



Motor	
1	2
M-	M+

Component	Part Name	Part Number	Mating Part Number
Housing	Mini-Fit Jr. Receptacle Housing, Dual Row, 6 Circuits, UL 94V-2, Natural	39-01-2020	39-01-3023
Pin 1 & 2	Molex Mini-Fit Junior Female Terminal, Tin-plated brass over copper, 18-24 AWG	39-00-0038	39-00-0040

6-Pin Hall Effect Connector



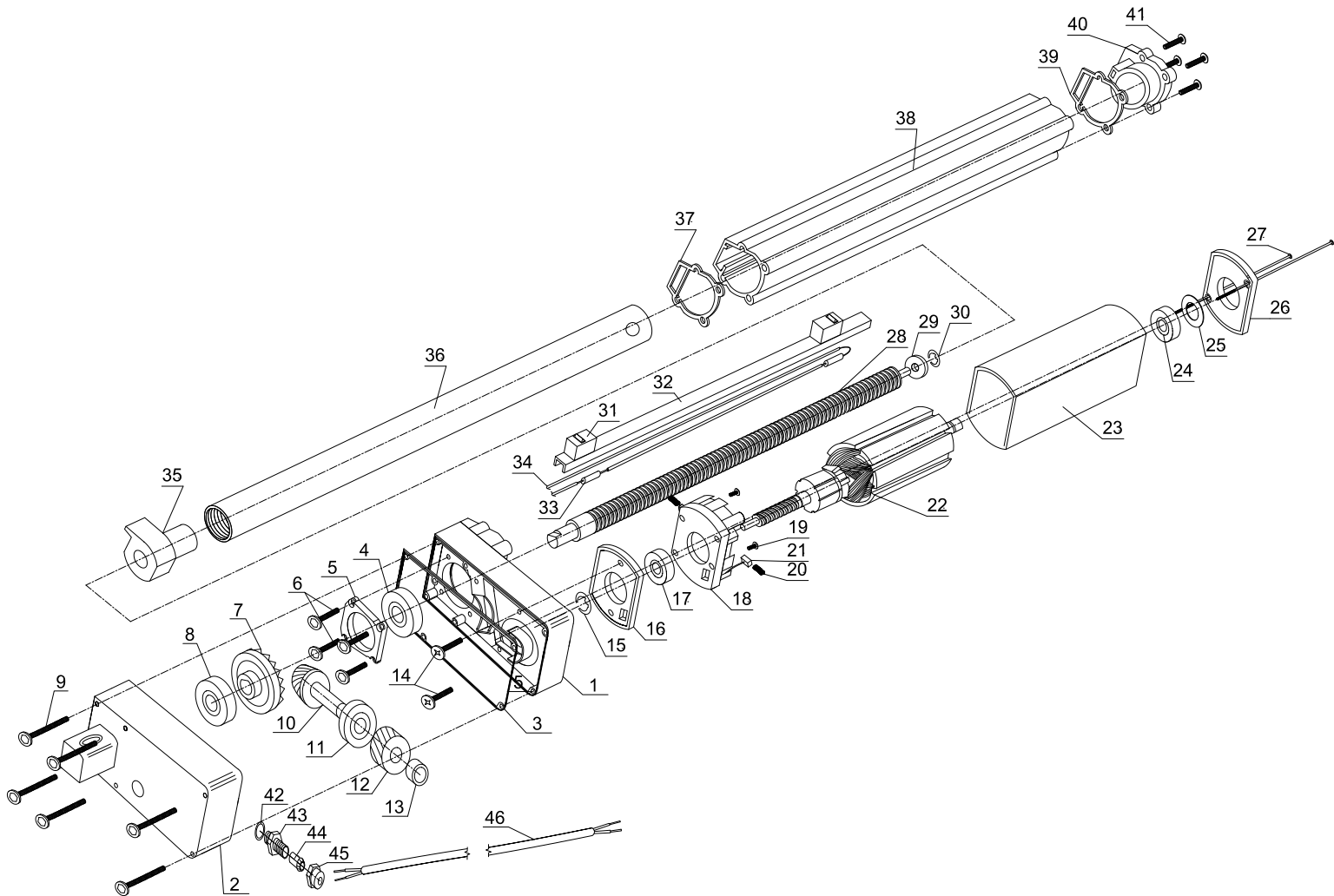
Hall Sensor				Motor	
1	2	3	6	4	5
Hall Effect Signal 2	GND	+5VDC	Hall Effect Signal 1	M- (Retract)	M+ (Extend)

Component	Part Name	Part Number	Mating Part Number
Housing	Mini-Fit Jr. Receptacle Housing, Dual Row, 6 Circuits, UL 94V-2, Natural	39-01-2060	39-01-3063
Pin 1 - 6	Molex Mini-Fit Junior Female Terminal, Tin-plated brass over copper, 18-24 AWG	39-00-0038	39-00-0040

Output Signal Extending		Output Signal Retracting	
Hall Effect 1 Signal		Hall Effect 1 Signal	
Hall Effect 2 Signal		Hall Effect 2 Signal	

Voltage (VDC)	Force (lbs)	Resolution (pulses/inch)
12	450	445
24	450	241
24	225	183
24	675	470

Internal Components



Internal Descriptions

Item	Description	Qty
1	Actuator Base	1
2	Actuator Base Cover with Mounting Hole	1
3	Actuator Base Gasket	1
4	Shaft Bearing	1
5	Shaft Support Plate	1
6	Shaft Mounting Screw	4
7	Shaft Gear	1
8	Shaft Drive Bottom Bearing	1
9	Actuator Base Cover Screw	6
10	Drive Gear	1
11	Gear Bearing	1
12	Motor Gear	1
13	Copper Bearing	1
14	Electric Motor Base Screw	2
15	Electric Motor Snap Ring	1
16	Electric Motor Base	1
17	Electric Motor Bottom Bearing	1
18	Brush Holder PCB	1
19	Brush Holder Screw	2
20	Electric Motor Brush Spring	2
21	Electric Motor Brush	2
22	Electric Motor Rotor	1
23	Electric Motor Enclosure with Stator	1
24	Electric Motor Top Bearing	1
25	Rotor Spring Washer	1
26	Electric Motor Top Cover	1
27	Electric Motor Enclosure Screw	2
28	Threaded Shaft Drive	1
29	Shaft Drive Top Cap	1
30	Shaft Drive Top Cap Snap Ring	1
31	Limit Switch	2
32	Limit Switches Base	1
33	Diode	2
34	Limit Switches Wiring	1
35	Shaft Bottom Guide with Limit Switches Arm	1
36	Shaft with Mounting Hole	1
37	Shaft Enclosure Bottom Gasket	1
38	Shaft Enclosure	1
39	Shaft Enclosure Top Gasket	1
40	Shaft Enclosure Top Cap	1
41	Shaft Enclosure Top Cap Screw	4
42	Power Cable Grommet O-Ring	1
43	Power Cable Grommet Base	1
44	Power Cable Gripper	1
45	Power Cable Grommet Top	1
46	Power Cable	1