

PA-13 Data Sheet



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Specifications

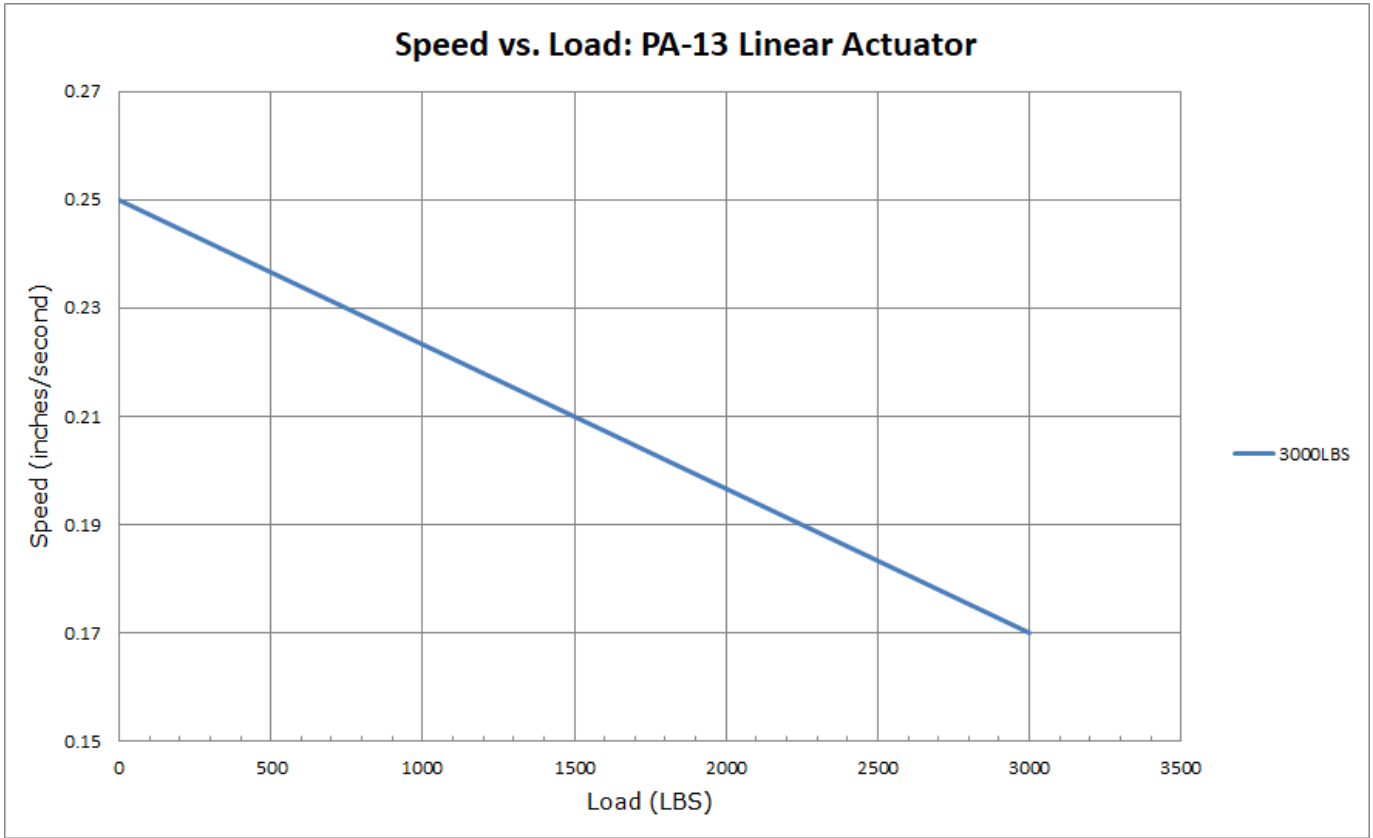


Load (LBS)		No Load Current (A)				Full Load Current (A)				Speed (inch/sec)	
Dynamic	Static	12VDC	24VDC	36VDC	48VDC	12VDC	24VDC	36VDC	48VDC	No Load	Full Load
3000	3500	4.0	2.4	1.8	1.2	20.0	10.5	7.5	5.3	0.25	0.17

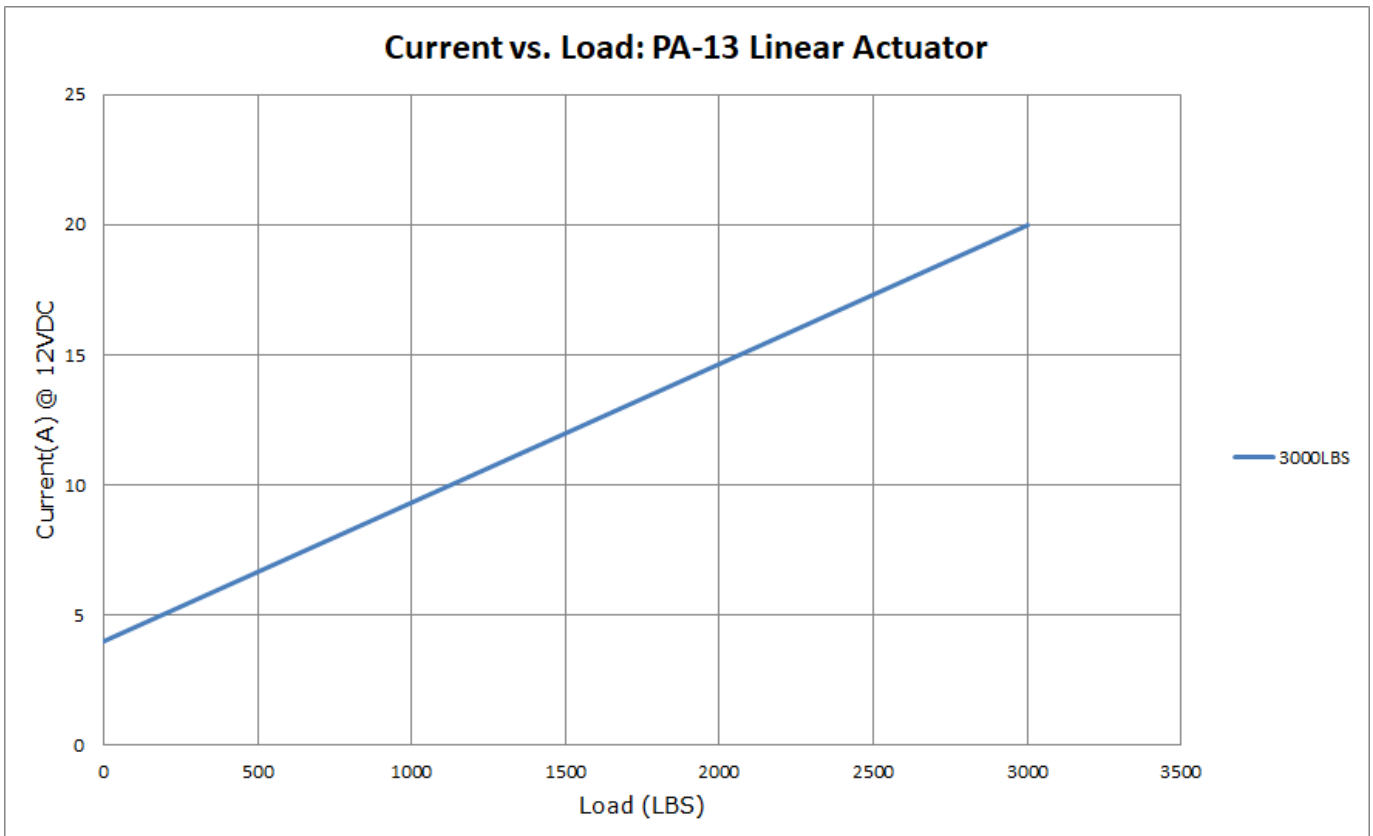
Stroke	1.25" to 40"
Limit Switch	Internal - Non-Adjustable
Limit Switch Feedback	N/A
Screw Type	ACME Screw
Motor Type	Brushed DC Motor
Connector Type	See Page 5
Wire Length	40" (customizable)
Housing Material	6062 Aluminum Alloy
Rod Material	Stainless Steel
Gear Material	Powder Metallurgy Steel Alloy
Color (Shaft)	Silver
Color (Motor End)	Black
Noise	<90dB
Duty Cycle	20% (4 minutes on, 16 minutes off)
Operational Temperature	-40°C to 60°C (-40°F to 140°F)
Protection Class	IP66
Feedback Options	Hall Effect or Potentiometer (see page 5)
Certifications	CE/RoHS
Mounting Brackets	See Page 6
Mounting Ends	Customizable



Speed vs Load



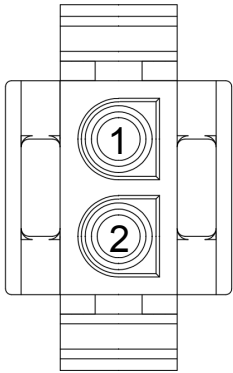
Current vs Load



Connectors & Feedback



2-Pin Connector (Standard)



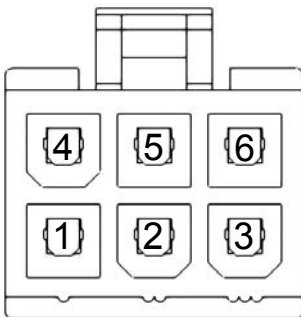
Motor	
1	2
M-	M+

Component	Part Name	Part Number	Mating Part Number
Housing	Tyco Electronics AMP Universal Mate-N-Lok PLUG	1-480698-0	1-480699-0

6-Pin Hall Effect Connector

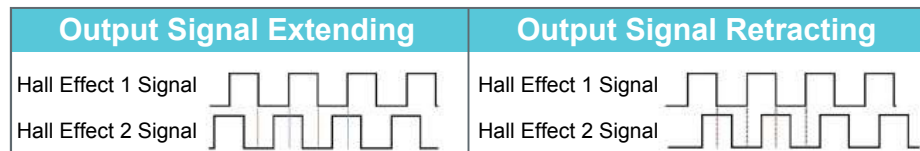
*For Stroke Lengths up to 40"

Front View



Motor		Hall Sensor			
4	5	2	3	1	6
M+ (Extend)	M- (Retract)	GND	+5VDC	Signal 2 Leads when Extending	Signal 1 Leads when Retracting

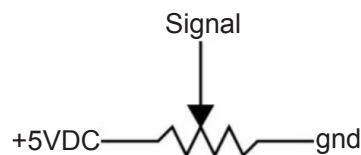
Component	Part Name	Part Number	Mating Part Number
Housing	Molex Mini Fit Jr 6-Pin Receptacle	39-01-2065	39-01-2069/ 39-01-2066



Force	Resolution (pulses/inch)
3000	92

Potentiometer Specifications

*For Stroke Lengths up to 6"



Resistance*	Number of Turns	Tolerance
0-10kΩ	10	+/- 5%

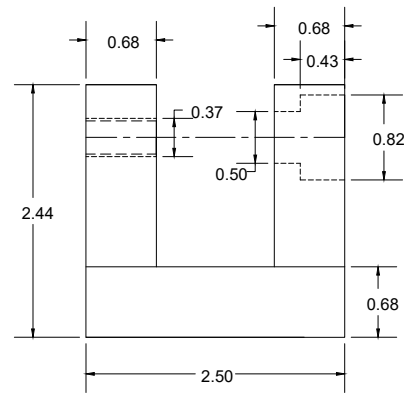
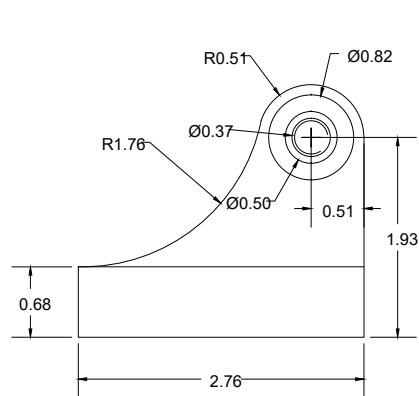
*Actual resistance value may vary within the 0-10kΩ range based on stroke length

Mounting Brackets

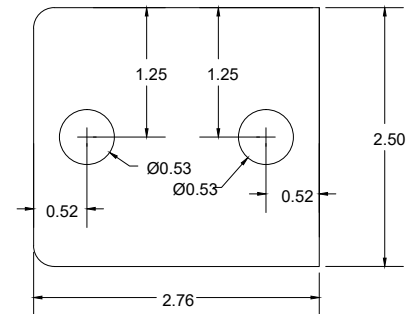
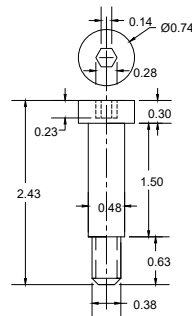
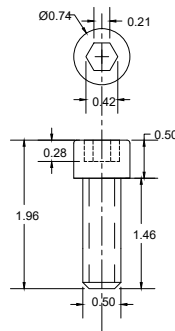


(Dimensions in inches)

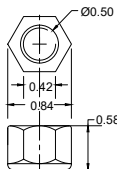
BRK-17



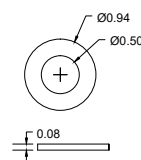
Bolt SAE 0.5" x 13 NC



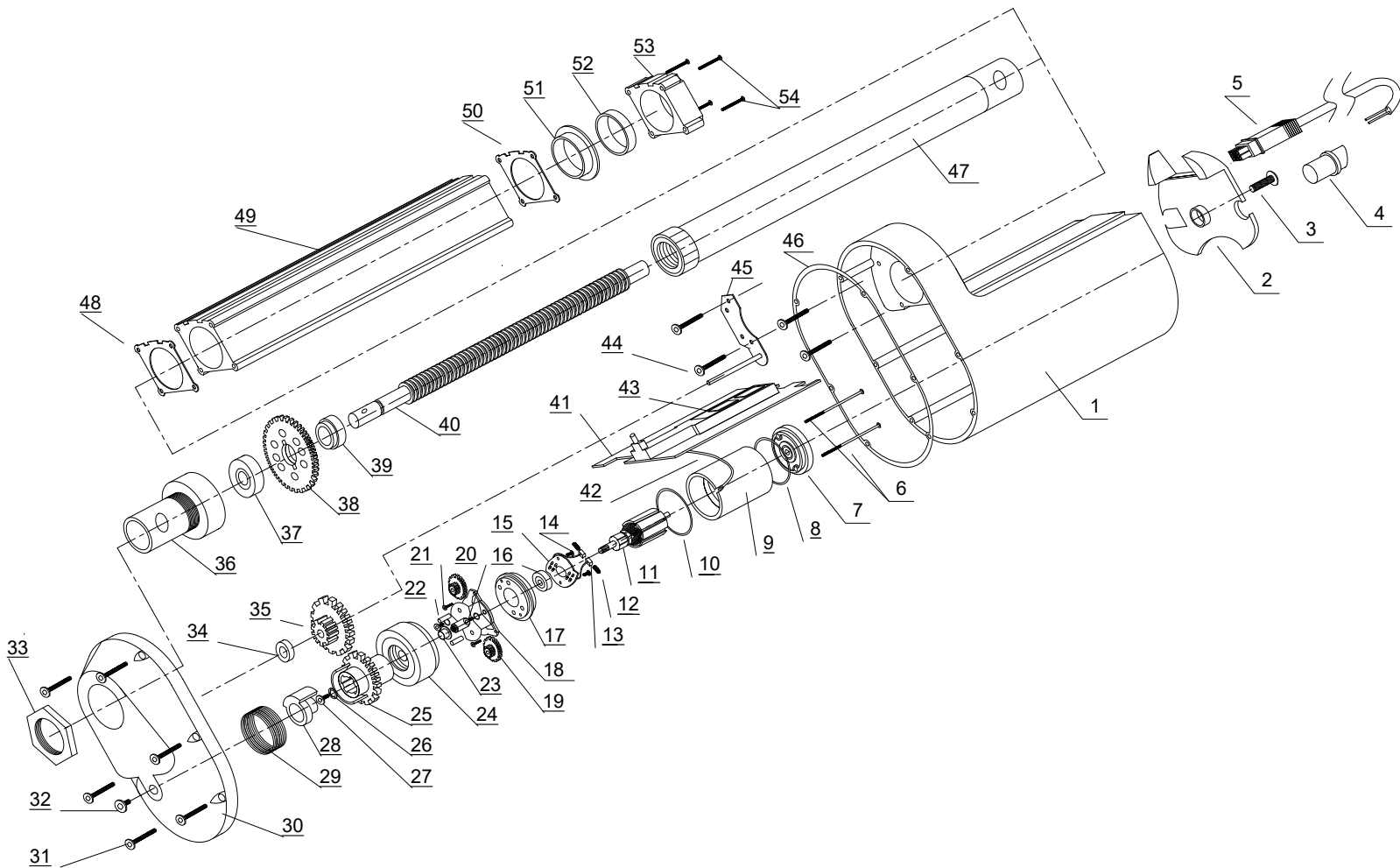
Nut SAE 0.5" x 13 NC



Thread SAE 3/8" x 16 NC



Internal Components



Internal Descriptions



Item	Description	Qty
1	Actuator Enclosure	1
2	Back Cover	1
3	Back Cover Screw	1
4	Optional Connector Plug	1
5	Power Cable with Connector	1
6	Motor Enclosure Screw	2
7	Electric Motor Cap with Rotor Bearing	1
8	Electric Motor Top Gasket	1
9	Electric Motor Enclosure with Stator	1
10	Motor Enclosure Bottom Gasket	1
11	Electric Motor Rotor	1
12	Electric Motor Brush Spring	2
13	Electric Motor Brush	2
14	PCB Screws	2
15	Brush Holder PCB	1
16	Electric Motor Bearing	1
17	Electric Motor Base	1
18	Direct Gear Wheel Bracket	1
19	Direct Gear Wheel	2
20	Direct Gear Bracket Screw	2
21	Electric Motor Mounting Screw	2
22	Direct Gear Pin	2
23	Direct Drive Washer	1
24	Direct Drive Drum	1
25	Main Drive Gear	1
26	Main Drive Gear Washer	1
27	Main Drive Gear Screw	1

Item	Description	Qty
28	Main Drive Engager	1
29	Main Drive Spring	1
30	Actuator Back Cover	1
31	Back Cover Screw	6
32	Main Drive Screw	1
33	Mounting Bracket Nut	1
34	Gear Spacer	1
35	Intermediate Gear Wheel	1
36	Actuator Bottom Mounting Bracket	1
37	Main Shaft Bearing	1
38	Main Shaft Gear Wheel	1
39	Main Shaft Spacer	1
40	Treaded Shaft Drive	1
41	Limit Switches PCB	1
42	Electric Motor Cable	1
43	Limit Switches	2
44	Shaft Enclosure Screw	4
45	Intermediate Gear Support	1
46	Enclosure Gasket	1
47	Shaft	1
48	Shaft Enclosure Bottom Gasket	1
49	Shaft Enclosure	1
50	Shaft Enclosure Top Gasket	1
51	Top Shaft Guide	1
52	Shaft Top Seal Ring	1
53	Shaft Enclosure Top Cap	1
54	Shaft Enclosure Top Cap Screw	4