

PA-13 Data Sheet



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Specifications



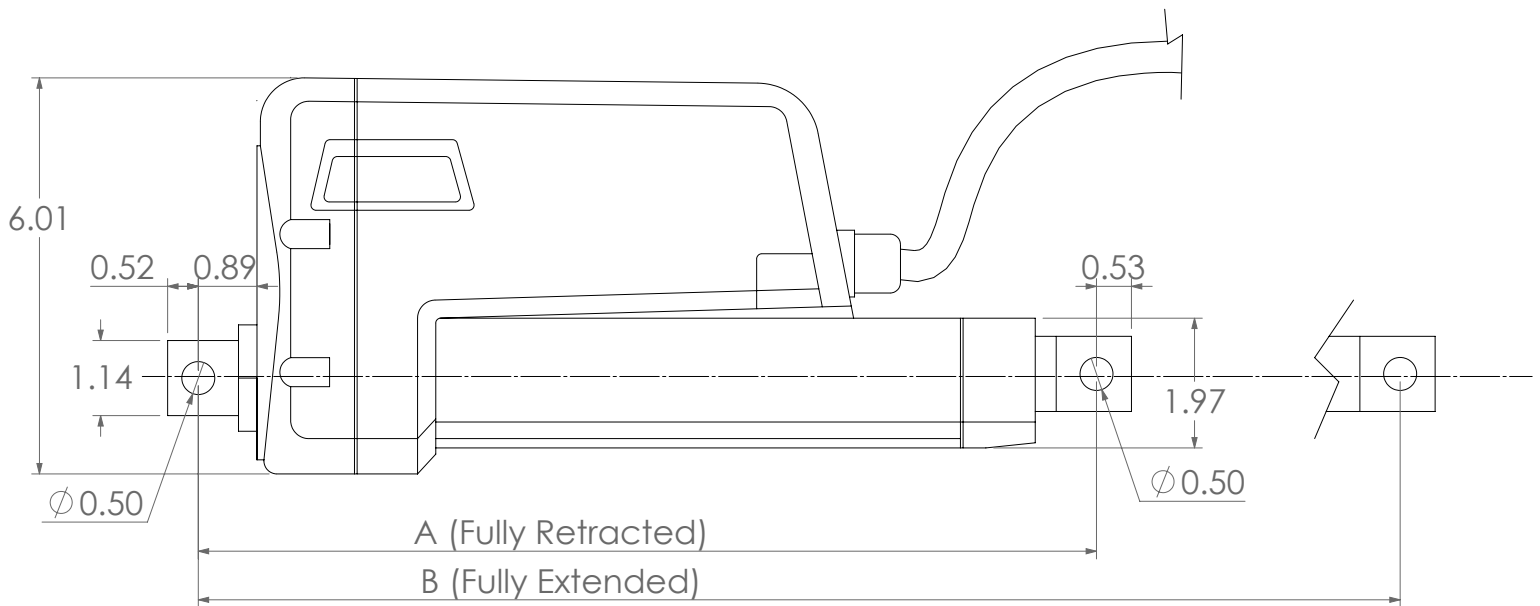
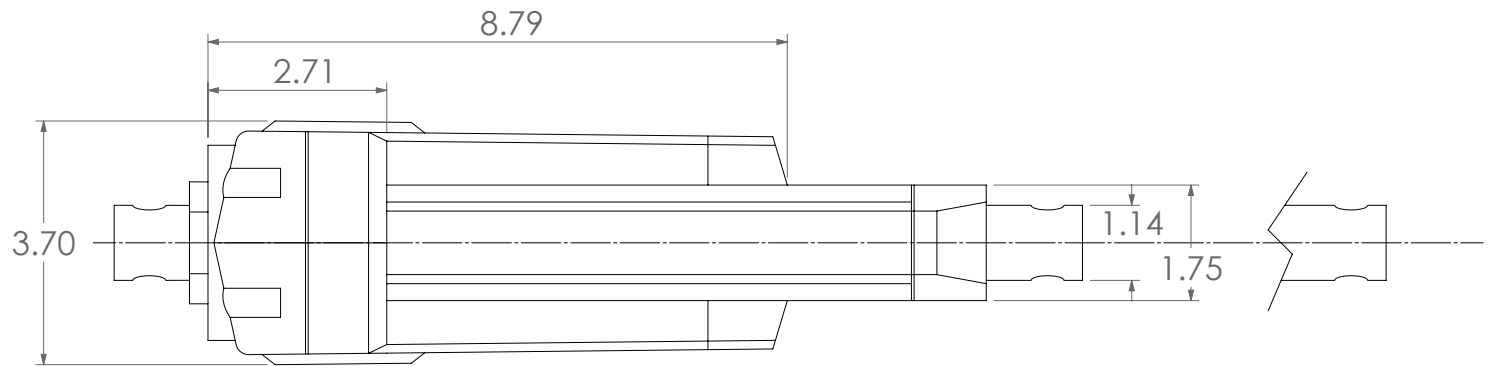
Load (LBS)		No Load Current (A)		Full Load Current (A)		Speed (inch/sec)	
Dynamic	Static	12VDC	24VDC	12VDC	24VDC	No Load	Full Load
3000	3372	4.0	2.4	20.0	10.5	0.23	0.16
2473	2698	4.0	2.4	20.0	10.5	0.33	0.24
2248	2698	4.0	2.4	20.0	10.5	0.51	0.28
1686	2023	4.0	2.4	20.0	10.5	0.51	0.35
1574	1798	4.0	2.4	20.0	10.5	0.67	0.37
1461	1798	4.0	2.4	20.0	10.5	0.79	0.43
1124	1349	4.0	2.4	20.0	10.5	0.98	0.55
1012	1236	4.0	2.4	20.0	10.5	0.98	0.51
719	899	4.0	2.4	20.0	10.5	1.5	0.94

Stroke	0.79" to 40"
Limit Switch	Internal - Non-Adjustable
Limit Switch Feedback	Customizable
Screw Type	ACME Screw, Ball 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)	Graphite
Noise	<90dB
Duty Cycle	20% (4 minutes on, 16 minutes off)
Overload Protection	Built-in Electric Shutoff
Operational Temperature	-40°C to 60°C (-40°F to 140°F)
Protection Class	IP66
Feedback Options	None, Hall Effect, Potentiometer, Limit Switch
Certifications	CE/RoHS
Mounting Brackets	BRK-17
Mounting Ends	Customizable



Dimensions

(Dimensions in inches)



Hole to Hole

PA-13	Stroke	4	6	8	10	12	14	16	18	24	30	40
	A	11.87	13.87	15.87	17.87	21.84	23.84	25.84	27.84	33.84	41.81	51.81
B	15.87	19.87	23.87	27.87	33.84	37.84	41.84	45.84	57.84	71.81	91.81	

For Stroke Length Less Than 4"

$$A = 11.87''$$

$$B = \text{Stroke Length} + 11.87''$$

For Stroke Length 12" and Greater

$$A = \text{Stroke Length} + 9.84''$$

$$B = \text{Stroke Length} \times 2 + 9.84''$$

For Stroke Length 4" and Greater

$$A = \text{Stroke Length} + 7.87''$$

$$B = \text{Stroke Length} \times 2 + 7.87''$$

For Stroke Length Greater Than 24"

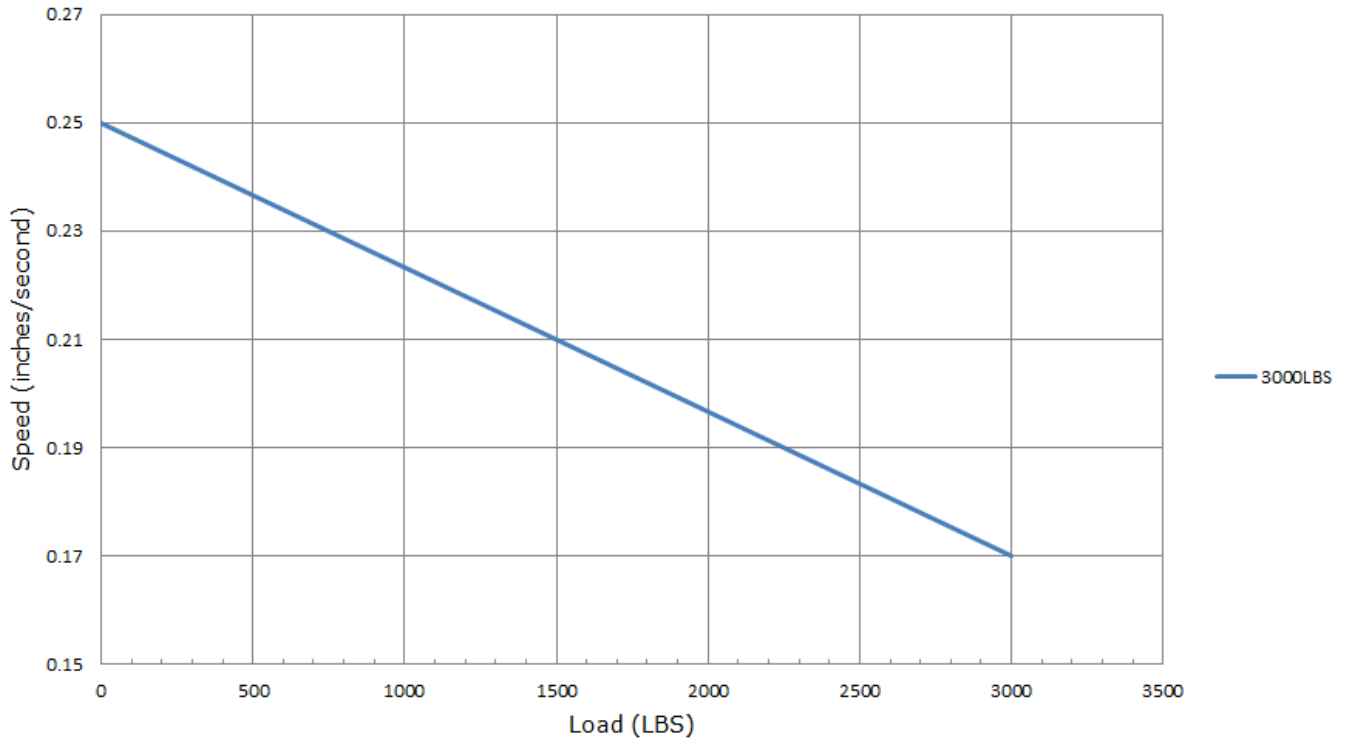
$$A = \text{Stroke Length} + 11.81''$$

$$B = \text{Stroke Length} \times 2 + 11.81''$$



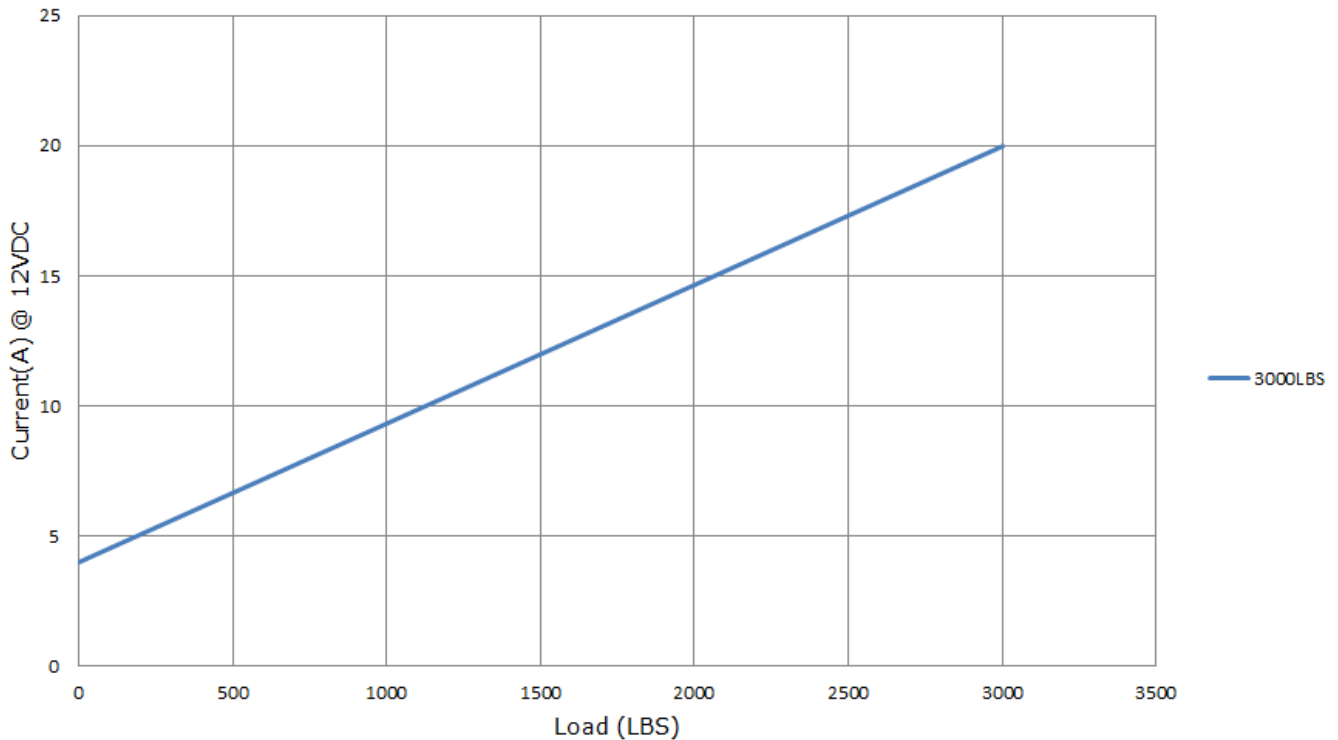
Speed vs Load

Speed vs. Load: PA-13 Linear Actuator



Current vs Load

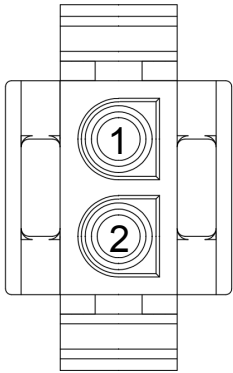
Current vs. Load: PA-13 Linear Actuator



Connectors & Feedback



2-Pin Connector (Standard)

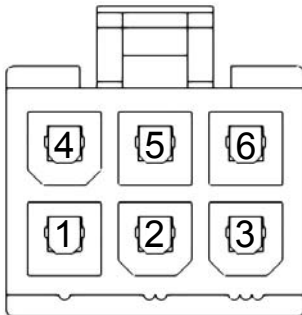


Motor	
1	2
M-	M+

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

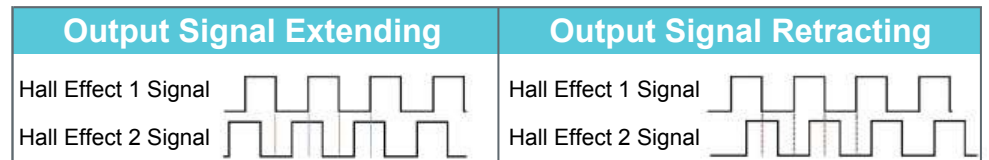
6-Pin Hall Effect Connector

*For Stroke Lengths up to 40"



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

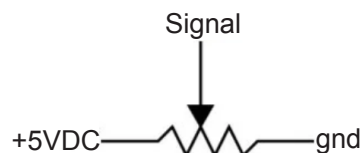
Component	Part Name	Part Number	Mating Part Number
Housing	Molex Mini Fit Jr 6-Pin Receptacle	39-01-2060	39-01-2061



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