

Compact. Programmable.

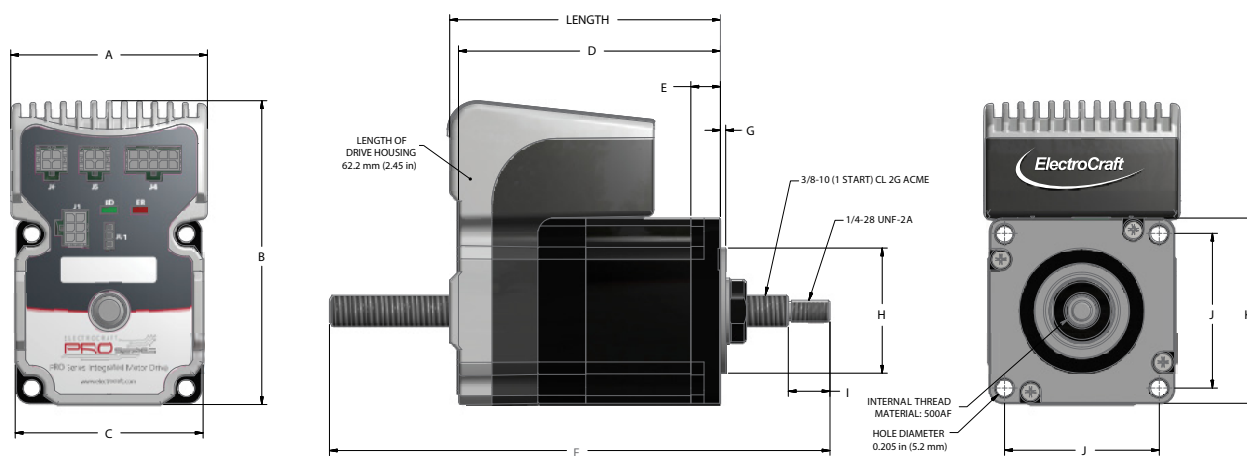
ElectroCraft's integrated motor/drive stepper linear actuators are a leap forward in actuator technology. This is linear motion in its most compact form, enabling users to reduce installation costs and machine footprint by installing simpler control and cabling architectures. The PRO Series integrated linear actuator makes the PS56 highly configurable, incorporating the full range of sequence control, I/O and communications options. The PS56 is available with a range of 3/8 inch standard threads, providing resolutions of up to .00025 in (.00635 mm) in full step open-loop mode with a 200 PPR stepper motor with even higher resolutions available in micro-stepping and closed-loop position control mode. Other thread options are available on request. Versions with ballscrews and special material parts are available for custom application-specific designs.



PS56 Integrated Motor Drive Controller

Size	56mm or Nema 23, 1.8°
Holding Torque	to 106 Ncm (130 oz-in)
Speed	to 50 RPS (3000 RPM)

Model	Units	Length	A	B	C	D	E	F	G	H	I	J	K
PS56-A64	mm	71	59.86	92.51	57.21	79.75	9.0	152.4±0.76	1.6	38.1±0.05	12.7	47.1	56.4
	inch	2.8	2.36	3.64	2.25	3.14	0.35	6.0±0.03	0.06	1.5±0.002	0.5	1.85	2.22
PS56-A106	mm	82	59.86	92.51	57.21	79.75	9.0	152.4±0.76	1.6	38.1±0.05	12.7	47.1	56.4
	inch	3.2	2.36	3.64	2.25	3.14	0.35	6.0±0.03	0.06	1.5±0.002	0.5	1.85	2.22



PS56 Model Number

1 - Motor Type

P S 5 6
Product Name Frame Size

2 - Torque

A 1 0 6
Drive Type Holding Torque (Ncm)

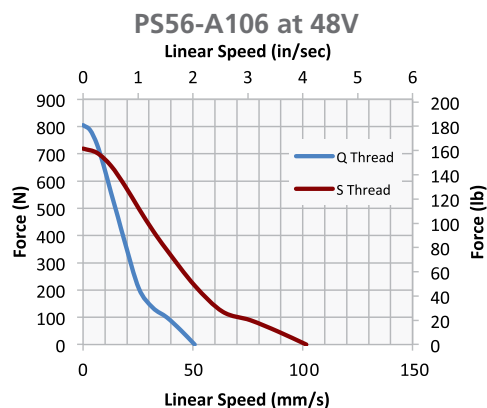
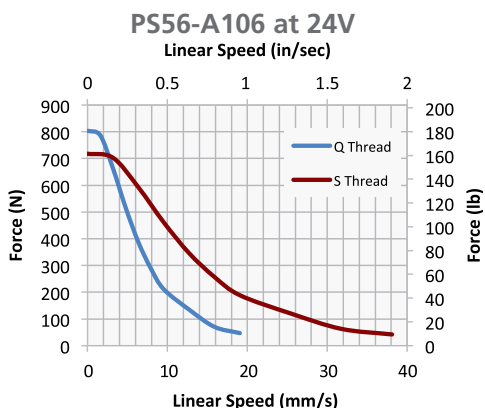
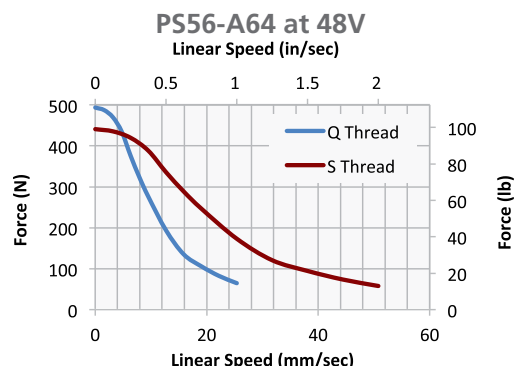
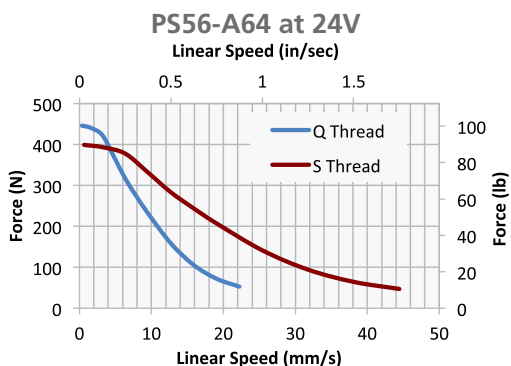
3 - Voltage

V 4 8
Voltage (Volts)

4 - Features

A 0 S B 7 - X - CAN
Drive Version Product Thread Screw Length End Mod Feedback Network

PS56 - Performance



PS56 Mechanical Data

PS56 Stack Size Mode/s

Stack Size Models	PS56-A64	PS56-A106
Holding Torque (oz-in)	90	130
Holding Torque (Ncm)	63.55	91.79
Length (inches)	2.80	3.24
Length (mm)	71.12	82.30
Rotor Inertia (oz-in-sec ²)	0.0022	0.0037
Rotor Inertia (kg-cm ²)	0.1554	0.2613
Phase Resistance ±10% (Ohms)	0.6	0.8
Phase Inductance ±10% (mH)	2.0	3.5
Weight (oz)	24.0	31.4
Weight (Kg)	0.7	0.9



PS56 Mechanical Data Cont.

Power Inputs	
Motor Supply Voltage (VDC)	12-48
Logic Supply Voltage (VDC)	9-36
Control Inputs	
AUX Analog Input (x1)	12-BIT, 0 - 5V
Digital inputs (x5) Enable, 2 Limit Switches, Plus 2 General Purpose	5 - 36V, NPN
Control Outputs	
Digital outputs (x2) Status, Plus 1 General Purpose	5 - 36V, 0.5A, NPN open Collector
Operation Modes	
Operation Mode	Single axis motion controller, Intelligent slave executing I/O triggered motion sequences, Multi-axis, distributed motion solution, Intelligent slave executing network (RS232 or CAN) triggered motion sequences
Communications	
Serial	RS232
CAN	CAN-bus 2.0
Environmental	
Operating Temperature (°C)	0 - +40
Storage Temperature (°C)	-40 - +80
Humidity Range Not Condensing (% Rh)	90
Protections	
Hardware protections	Short circuit - Phase to GND Short circuit - Phase to Phase Over-voltage Under-voltage I ² t
Regulatory Compliance	
CE	IEC60529
UL	UL508

