

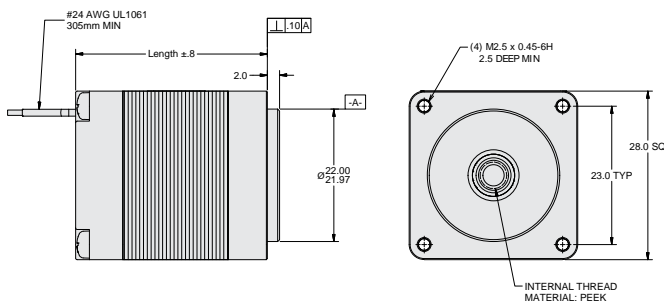
The **APES11M** is ElectroCraft's latest NEMA 11 stepper-based linear actuator. This compact yet powerful linear actuator can handle loads of up to 187N (42lbs) and speeds up to 254 mm/second (10 inches/second).

All components have been designed to exacting standards incorporating precision materials and processes, all intended to deliver reliable performance with accurate axial resolution in the microns. The ideal product for anything and everything that requires motion control in a small package.



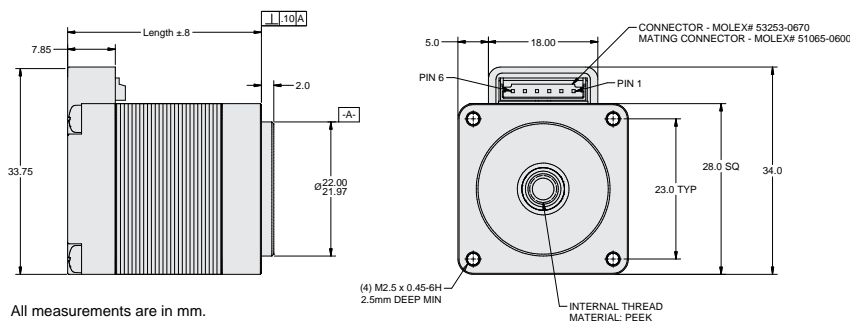
APES11M STEPPER LINEAR ACTUATOR	
Size	NEMA 11, 1.8°
Linear Speed mm/sec (in/sec)	254 (10)
Linear Force N (lb)	187 (42)

With flying leads



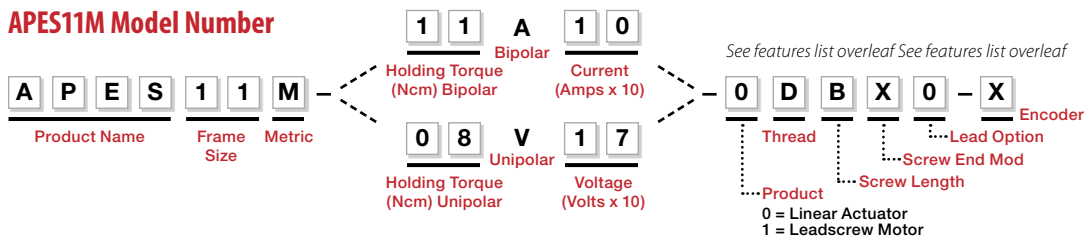
Model	Length mm (in)	Weight g (oz)	Holding Torque Ncm (oz-in)	Rotor inertia g-cm2 (oz-in-sec2)
APES11M-6V	31.9 (1.26)	113 (4)	6 (8.5)	8.69 (0.000123)
APES11M-8A			8 (11.3)	
APES11M-8V	39.6 (1.56)	142 (5)	8 (11.3)	12.36 (0.000175)
APES11M-11A			11 (15.6)	

With integral connector



All measurements are in mm.

APES11M Model Number



APES11M

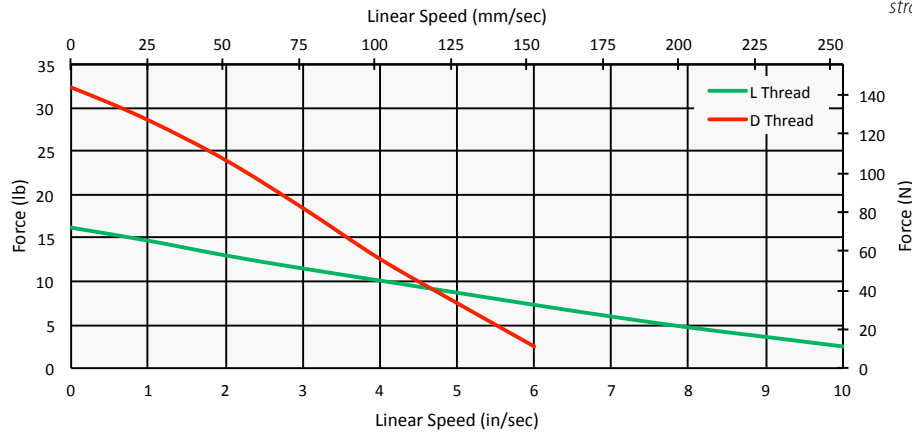
ElectroCraft AxialPower™ Enhanced

STEPPER LINEAR ACTUATOR

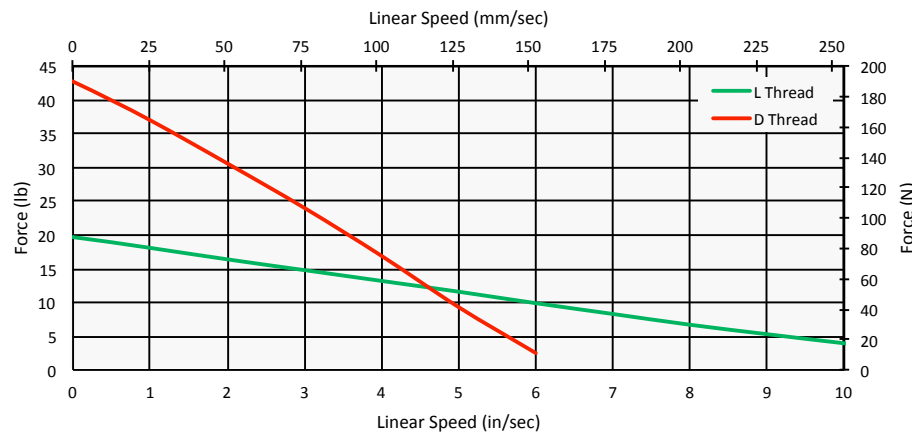


APES11M - 8A10 - 48V 1A Performance

Curves are approximated to straight lines for ease of use.



APES11M - 11A10 - 48V 1A Performance



Threads

Thread Designation	Thread Lead mm (in) / Rev	Linear Travel mm (in) / Full Step
D 0.187-20 (1 Start) CL 2G ACME	1.270 (0.050)	0.00635 (0.00025)
H 0.187-40 UNF (1 Start)	0.635 (0.025)	0.003175 (0.000125)
K 0.187-20 (4 Start) CL 2G ACME	5.080 (0.200)	0.025400 (0.001)
L 0.187-24 (3 Start) CL 2G ACME	3.175 (0.125)	0.015875 (0.000625)

Motor step rate calculation:
 Motor step rate (Full Step/sec) = [Speed (in/Sec) / Travel (in/Full Step)]
 Example "D" thread pitch: @2 in per sec = 8000 Full Steps/sec

Features

Screw Length	Diameter	End Modifications	Length of End Mod.	Lead Option	Encoder Option
X None	Screw Ø10-32 + 3/16"	1 6-32 UNC	0.5"	0 Flying Lead	X None
A 3"	Screw Ø10-32 + 3/16"	2 M2.5 x 0.45	0.5"	1 Connector	
B 6"	Screw Ø10-32 + 3/16"	3 0.098/0.097 Dia. [2.5mm]	0.5"	2 Integral Connector	
C 12"					
D 18"					
E 24"					

Available Windings

BIPOLAR

Metric	8A05	8A10	8A15	11A05	11A10	11A15
Voltage (V/Phase)	4.79	2.56	1.62	5.87	3.11	2.01
Current (A/Phase)	0.50	1.00	1.50	0.50	1.00	1.50
Phase Resistance (Ohm)	9.58	2.56	1.08	11.74	3.11	1.34
Phase Inductance (mH)	7.67	1.85	0.77	8.08	2.08	0.85

UNIPOLAR

Metric	6V14	6V27	8V17	8V33
Voltage (V/Phase)	1.38	2.63	1.66	3.20
Current (A/Phase)	1.84	0.94	1.84	0.94
Phase Resistance (Ohm)	0.75	2.80	0.90	3.40
Phase Inductance (mH)	0.23	1.00	0.36	1.50



Your Genius. Our Drive.

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