

# 11Y Series - High Torque Stepper Motors

FEATURES

- **NEMA 11 Frame Size**
- **1.8° Step Angle**
- **High Torque - Up To 17 oz-in**
- **High Step Accuracy and Resolution**
- **Can be Customized for**
  - **Winding Current**
  - **Shaft Options**
  - **Cables and Connectors**
- **CE Certified and RoHS Compliant**



DESCRIPTION

The 11Y Series High Torque Step Motors come in a small package with high torque density. These motors offer a great value without sacrificing quality. These motors were designed to offer the highest possible torque while minimizing vibration and audible noise. A board line of motor windings and stack lengths are available off-the-shelf, or the motors can be customized to fit your machine requirements. The standard 4 lead wire motors can be connected to allow the flexibility for your voltage, current, and maximum operating speed.

See Accessories on our website for optional motor adders such as encoders, cables, and connectors. See compatible drivers for the 11Y Series: [MBC15081](#), [MBC02581TB](#)

SPECIFICATIONS

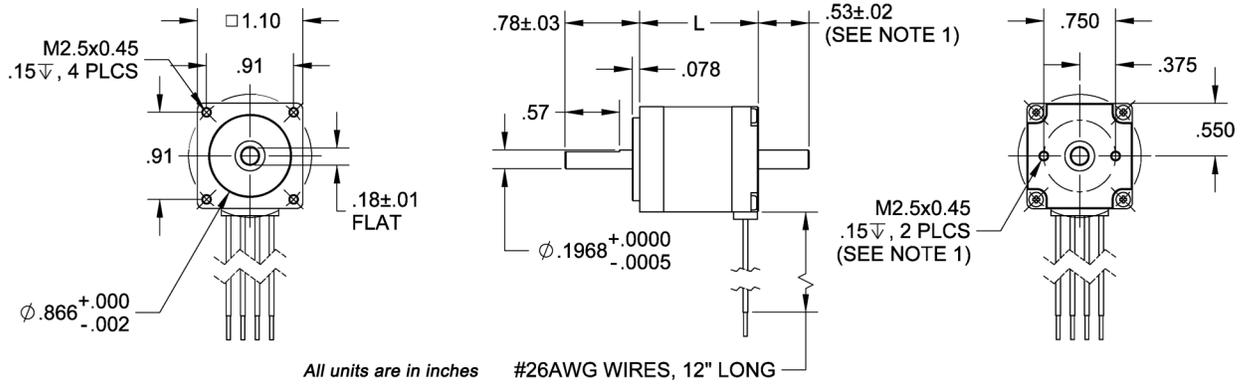
Model #	NEMA Size	Bipolar Torque (oz-in)	Series Current (A)	Series Voltage (V)	Series Inductance (mH)	Bipolar Series Resistance (ohm)	Rotor Inertia (oz-in-sec <sup>2</sup> )	Shaft Diameter (in)	# of Lead Wires	Weight (lbs)	"L" Length (in)
11Y102S-LW4	11	8.3	0.67	3.92	3.4	5.6	0.00013	0.197	4	0.24	1.25
11Y202S-LW4	11	13.2	0.67	4.76	4.9	6.8	0.00017	0.197	4	0.31	1.75
11Y302S-LW4	11	16.7	0.67	6.44	7.2	9.2	0.00025	0.197	4	0.44	2.00

\*Notes: The 7<sup>th</sup> character "S" denotes a single shaft, use "D" for double shaft. Double shafts include encoder mounting provisions. Custom leadwires, cables, connectors, shaft options, and windings are available upon request.

Step Angle Accuracy:	± 5% (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	± 10%	Dielectric Strength:	500VAC for 1 minute
Inductance Accuracy:	± 20%	Shaft Radial Play:	0.02mm Max (450g)
Temperature Rise:	80°C Max (2 Phases On)	End Play:	0.08mm Max (450g)
Ambient Temperature:	-20° to +50° C	Max Radial Force:	20N @ Base of Shaft
Insulation Type:	Class B (130° C Internal)	Max Axial Force:	2N Radial and Axial Play

L010169

DIMENSIONS



Note 1: Dual Shaft option only

WIRING INFORMATION

