

# 08Y Series - High Torque Stepper Motors

FEATURES

- **NEMA 8 Frame Size**
- **1.8° Step Angle**
- **IP50 Rated**
- **High Torque - Up To 4.9 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 08Y Series High Torque Stepper Motors offer high torque in a compact size. These motors were designed to offer the highest possible torque while minimizing vibration and audible noise. A broad line of motor windings and stack lengths are available off-the-shelf, or the motors can be customized to fit your machine requirements. The motor comes in a standard 4-lead configuration. We can also customize the winding to perfectly match your voltage, current, and maximum operating speed. Special shaft modifications, cables and connectors are also available upon request.

[See Accessories on this website for optional motor adders such as encoders, cables and connectors.](#) [See compatible drivers for the 08Y Series: MBC15081, MBC25081TB](#)

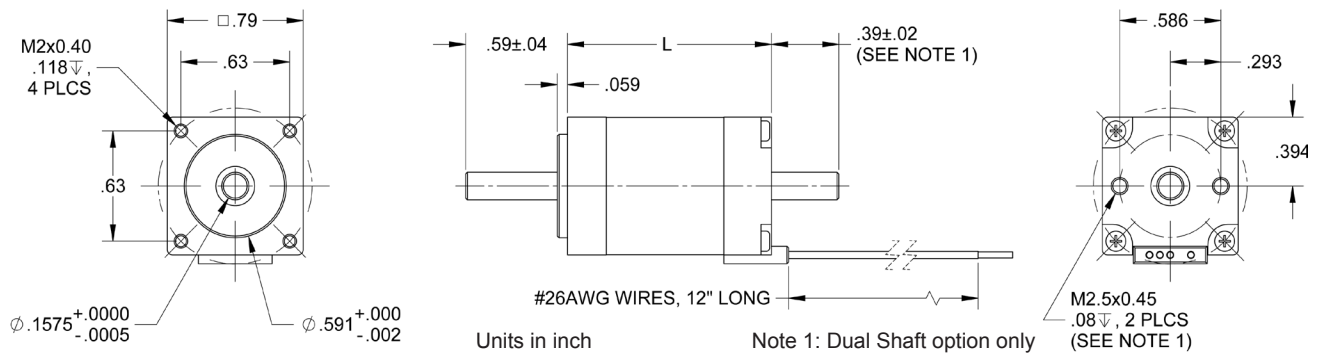
SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Series RMS Current (A)	Series Peak Current (A)	Series Inductance (mH)	Bipolar Series Voltage (V)	Bipolar Series Resistance (ohm)	Rotor Inertia (oz-in-sec <sup>2</sup> )	Shaft Diameter (in)	# of Lead Wires	Weight (lbs)	"L" Length (in)
08Y102S-LW4	8	2.5	0.60	0.85	1.7	3.90	6.5	0.000028	0.1575	4	0.13	1.18
08Y302S-LW4	8	4.2	0.80	1.13	1.5	4.32	5.4	0.000042	0.1575	4	0.22	1.65
08Y403S-LW4	8	4.9	1.10	1.56	1.1	2.97	2.7	0.000061	0.1575	4	0.20	1.89

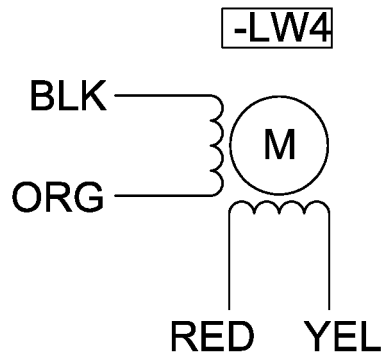
Notes: The 7<sup>th</sup> character "S" denotes a single shaft, use "D" for double shaft. Custom leadwires, cables, connectors, and windings are available upon request.

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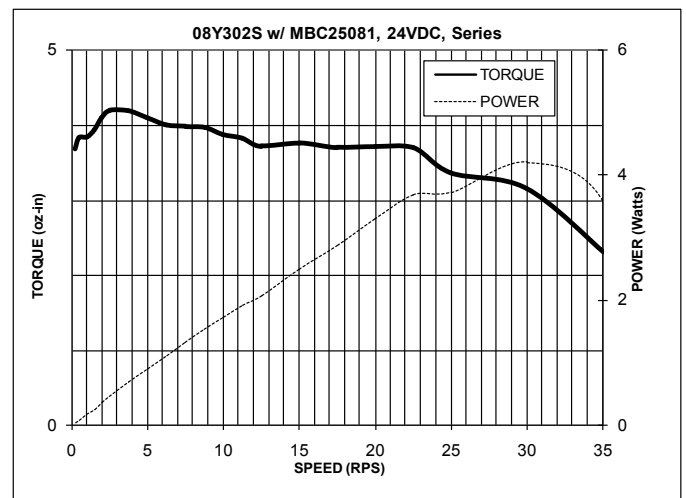
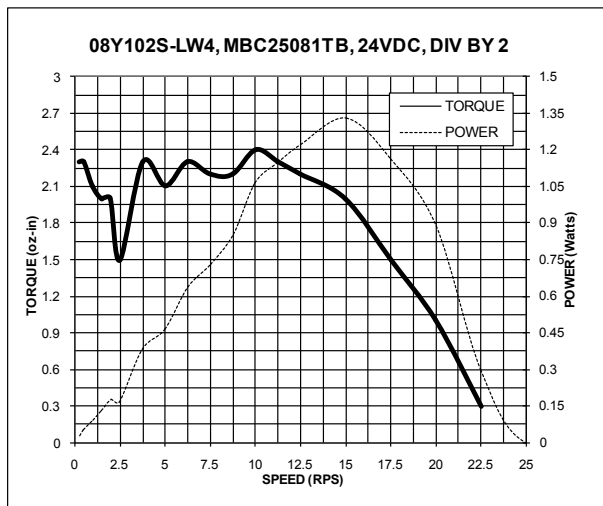
DIMENSIONS



WIRING INFORMATION



TORQUE CURVES



SPECIFICATIONS

Step Angle Accuracy:	$\pm 5\%$ (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	$\pm 10\%$	Dielectric Strength:	500VAC for 1 minute
Inductance Accuracy:	$\pm 20\%$	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