

14Y Series - High Torque Stepper Motors



FEATURES

- **NEMA 14 Frame Size**
- **1.8° Step Angle**
- **High Torque - Up to 19 oz-in**
- **High Step Accuracy and Resolution**
- **Low Vibration and Noise**
- **Shaft Flat as Standard**
- **Can be Customized for**
 - **Winding Current**
 - **Shaft Options**
 - **Cables and Connectors**
- **CE Certified and RoHS Compliant**



DESCRIPTION

The 14Y Series High Torque Stepper 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 broad line of motor windings and stack lengths are available off-the-self, or the motors can be customized to fit your machine requirements. The standard 4-lead motors are connected in the series configuration. We can also customize the winding to perfectly match 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 14Y Series: MBC15081, MBC25081TB

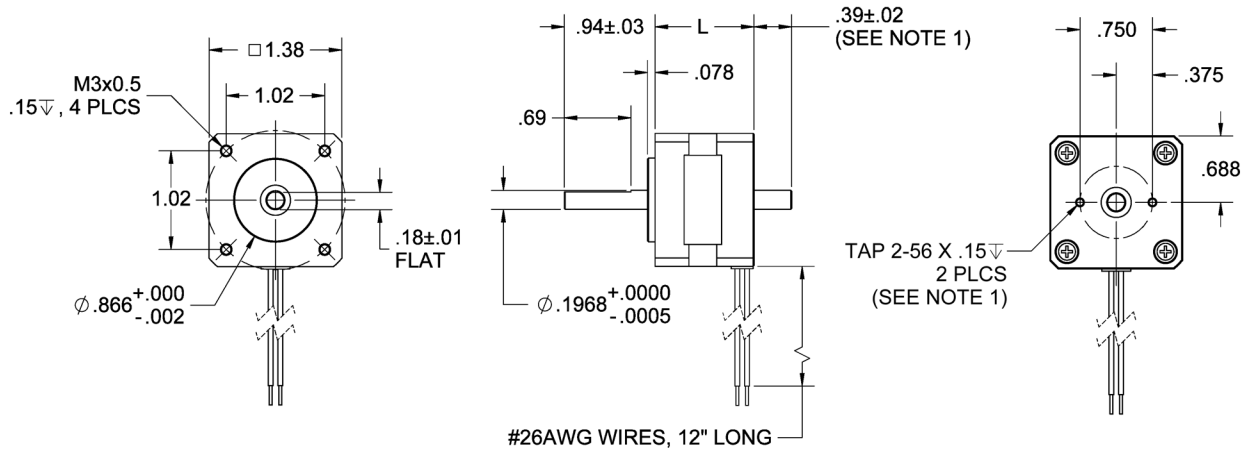
SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Series Voltage (V)	Series Current (A)	Series Resistance (Ohms)	Series Inductance (mH)	Rotor Inertia (oz-in-sec ²)	Shaft Diameter (in)	# of Lead Wires	Weight (lbs)	L Length (in)
14Y001S-LW4	14	9	7.4	0.28	26	27	0.00016	0.197	4	0.33	1.02
14Y001D-LW4	14	9	7.4	0.28	26	27	0.00016	0.197	4	0.33	1.02
14Y002S-LW4	14	9	3.3	0.60	5.5	6.0	0.00016	0.197	4	0.33	1.02
14Y002D-LW4	14	9.72	3.3	0.60	5.5	6.0	0.00016	0.197	4	0.33	1.02
14Y101S-LW4	14	14	15.75	0.35	45	30	0.00016	0.197	4	0.33	1.10
14Y101D-LW4	14	14	15.75	0.35	45	30	0.00016	0.197	4	0.33	1.10
14Y102S-LW4	14	14	4.2	0.70	6.0	7.5	0.00016	0.197	4	0.33	1.10
14Y102D-LW4	14	14	4.2	0.70	6.0	7.5	0.00016	0.197	4	0.33	1.10
14Y105S-LW4	14	12.5	1.75	1.75	1.0	1.2	0.00016	0.197	4	0.33	1.10
14Y105D-LW4	14	12.5	1.75	1.75	1.0	1.2	0.00016	0.197	4	0.33	1.10
14Y202S-LW4	14	19	4.9	0.70	7.0	10	0.00020	0.197	4	0.40	1.42
14Y202D-LW4	14	19	4.9	0.70	7.0	10	0.00020	0.197	4	0.40	1.42
14Y203S-LW4	14	19	4.0	1.00	4.0	5.2	0.00020	0.197	4	0.40	1.42
14Y203D-LW4	14	19	4.0	1.00	4.0	5.2	0.00020	0.197	4	0.40	1.42
14Y304S-LW4	14	59	4.2	1.5	2.8	3.8	0.00061	0.197	4	0.66	2.05
14Y304D-LW4	14	59	4.2	1.5	2.8	3.8	0.00061	0.197	4	0.66	2.05

Note: The 7th 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

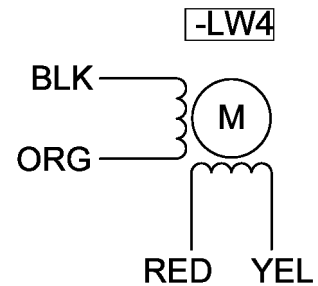


Note: All units are in Inches

Note1: Applies to dual shaft option only

WIRING INFORMATION

Connection	Lead Wire Connection	Lead Wire Color
4 - Lead Bipolar Series MBC Series	Phase 1 (A)	Black
	Phase 3 (/A)	Orange
	Phase 2 (B)	Red
	Phase 4 (/B)	Yellow



SPECIFICATIONS

Step Angle Accuracy:	+/- 5% (Full Step, No Load)	Insulation Type:	Class B
Resistance Accuracy:	+/- 10%	Insulation Resistance:	100M Ohm Min, 500VDC
Inductance Accuracy:	+/- 20%	Dielectric Strength:	500 VAC for one minute
Temperature Rise:	80° C Max (2 Phases On)	Max Radial Force:	4.5 lbs (0.79" from flange)
Ambient Temperature:	-20° to +50°C	Max Axial Force:	2.2 lbs-Force

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