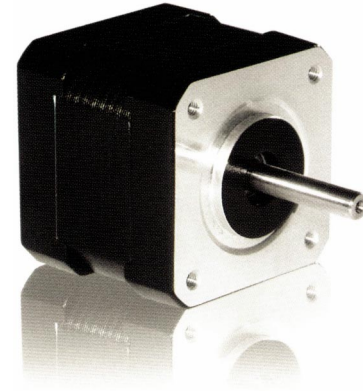


# 14Y Series - High Torque Stepper Motors



## 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**
- **Can be Customized for**
  - Winding Current
  - Shaft Options
  - Cables and Connectors



## 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-shelf, 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.

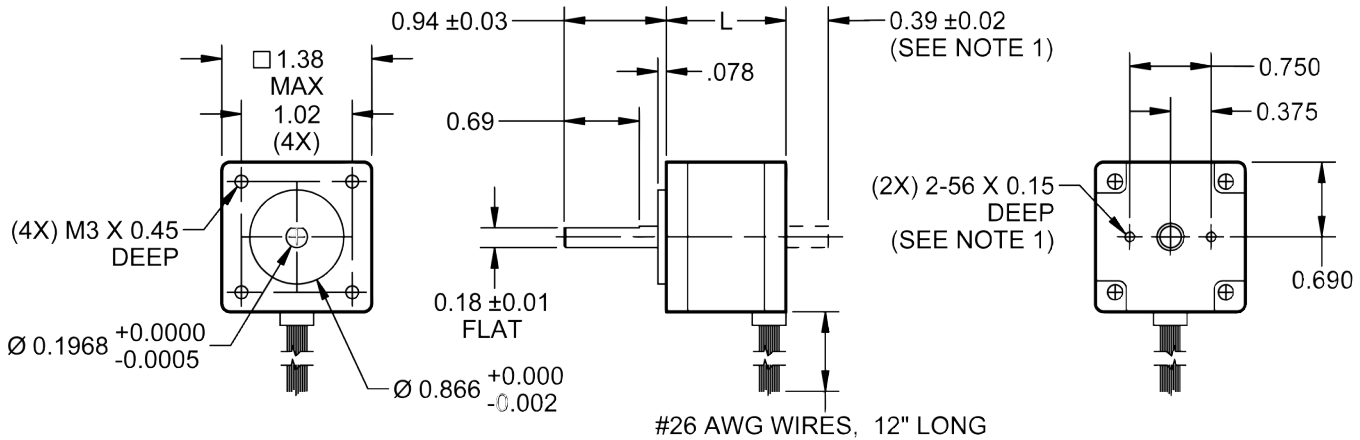
**See Accessories on our website for optional motor adders such as encoders, cables and connectors. See compatible drivers for the 14Y Series: MBC15081, MBC25081TB**

## 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 <sup>2</sup> )	Shaft Diameter (in)	# of Lead Wires	Weight (lbs)	L Length (in)
14Y001S-LW4	14	9	7.4	0.28	26	27	.00014	.197	4	0.29	1.02
14Y002S-LW4	14	9	3.2	0.60	5.4	3.5	.00014	.197	4	0.29	1.02
14Y101S-LW4	14	14	10	0.50	40	30	.00014	.197	4	0.31	1.10
14Y102S-LW4	14	14	4.2	0.70	6.0	7.5	.00016	.197	4	0.33	1.10
14Y202S-LW4	14	13	1.4	0.70	2.0	2.9	.00020	.197	4	0.40	1.42
14Y203S-LW4	14	19	2.7	1.00	2.7	4.3	.00020	.197	4	0.40	1.42

Note: 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.

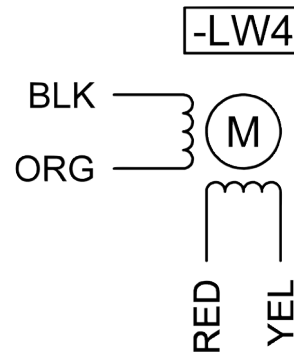
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DIMENSIONS

(All units are inches)

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



WIRING INFORMATION

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: 500VAC 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

SPECIFICATIONS