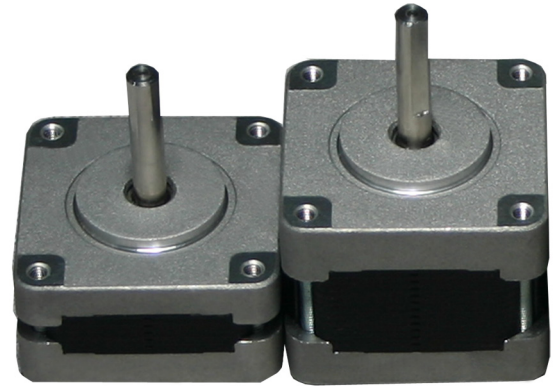


15Y Series - High Torque Stepper Motors



FEATURES

- **NEMA 15 Frame Size**
- **1.8° Step Angle**
- **IP50 Rated**
- **High Torque - Up To 50 oz-in**
- **High Step Accuracy and Resolution**
- **Shaft Flat as Standard**
- **Can be Customized for**
 - **Winding Current**
 - **Shaft Options**
 - **Cables and Connectors**
 - **Encoders and Brakes**
- **CE Certified and RoHS Compliant**



DESCRIPTION

The 15Y 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. These motors come standard with 4 leads for wiring in bipolar series. We can also customize the winding to perfectly match your voltage, current, and maximum operating speed. Other leadwire configurations are available upon request.

See [Accessories](#) on our website for optional motor adders such as encoders, cables, and connectors. See compatible drivers for the 15Y Series: [MBC15081](#), [MBC25081TB](#)

SPECIFICATIONS

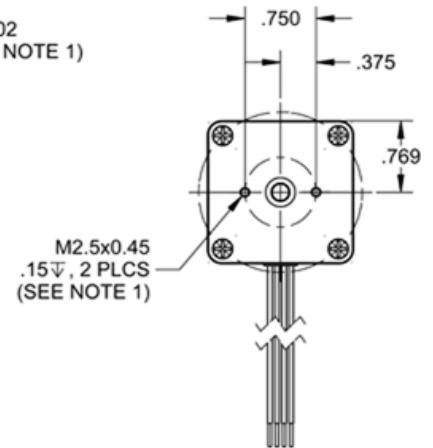
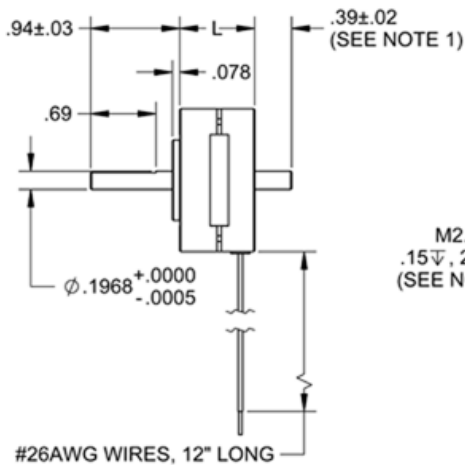
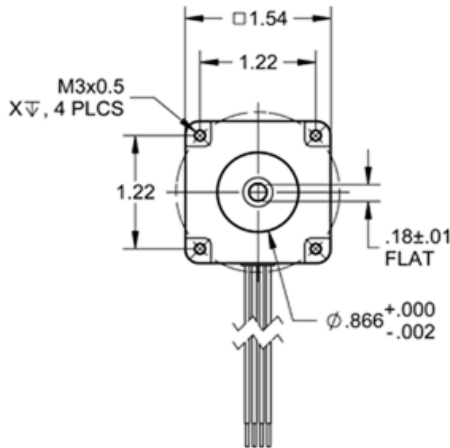
Model #	# of Lead Wires	Shaft Type	Bipolar Torque (oz-in)	Bipolar Current (A)	Bipolar Voltage (V)	Bipolar Resistance (ohms)	Bipolar Inductance (mH)	"L" Length (in)	Rotor Inertia (oz-in-sec ²)	Weight (lbs)
15Y001S-LW4	4	Single	9	0.4	2.64	6.6	6.0	0.79	0.00015	0.33
15Y001D-LW4	4	Dual	9	0.4	2.64	6.6	6.0	0.79	0.00015	0.33
15Y102S-LW4	4	Single	25	0.65	4.55	7.0	9.3	1.339	0.00028	0.40
15Y102D-LW4	4	Dual	25	0.65	4.55	7.0	9.3	1.339	0.00028	0.40
15Y202S-LW4	4	Single	40	0.7	8.4	12.0	23.0	1.50	0.00034	0.44
15Y202D-LW4	4	Dual	40	0.7	8.4	12.0	23.0	1.50	0.00034	0.44
15Y203S-LW4	4	Single	40	1.1	4.4	4.0	7.0	1.50	0.00034	0.44
15Y303S-LW4	4	Single	50	1.0	6.5	6.5	12.0	1.73	0.00057	0.55
15Y303D-LW4	4	Dual	50	1.0	6.5	6.5	12.0	1.73	0.00057	0.55

Notes: Custom leadwires, cables, connectors, and windings are available upon request.

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DIMENSIONS

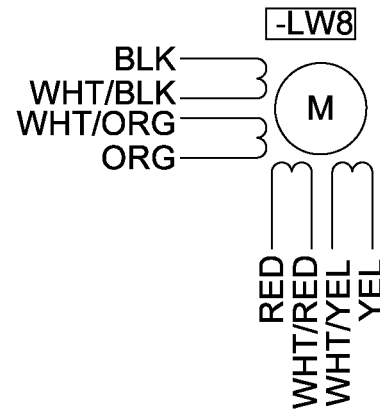
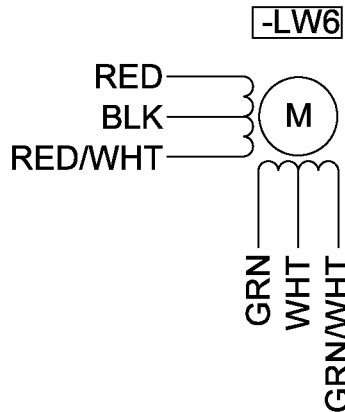
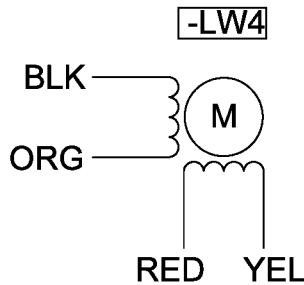
PART NUMBER	"L" DIMENSION	"X" DIMENSION
15Y0XXX-LWX	.787	.079
15Y1XXX-LWX	1.339	.150
15Y2XXX-LWX	1.496	.150
15Y3XXX-LWX	1.732	.150



All units are in inches

Note1: Applies to dual shaft option only

WIRING INFORMATION



Connection	Lead Wire Connection	Lead Wire Cutter
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 Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	± 10%	Dielectric Strength:	500VAC for 1 minute
Inductance Accuracy:	± 20%	Shaft Radial Play:	0.00079" Max (1.0 lb load)
Temperature Rise:	80° C Max (2 Phases On)	Shaft Axial Play:	0.00315" Max (1.0 lb load)
Ambient Temperature:	-20° to +50°C	Max Radial Force:	6.3 lbs (0.79" from flange)
Insulation Type:	Class B (130°C Internal)	Max Axial Force:	2.3 lbs-Force