15Y Series - High Torque Stepper Motors



- NEMA 15 Frame Size
- 1.8° Step Angle
- High Torque Up to 50 oz-in
- High Step Accuracy and Resolution
- Low Vibration and Noise
- Can be Customized for
 - -Winding Current
 - -Shaft Options
 - -Cables and Connectors
 - -Encoders and Brakes
- CE Certified and RoHS Compliant





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.

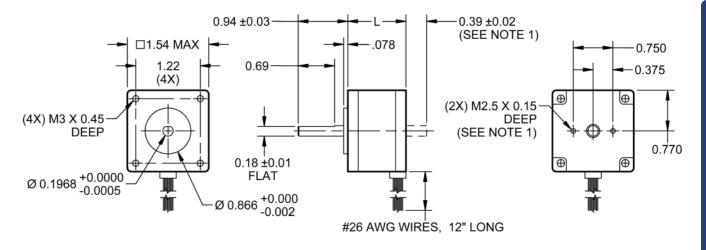
See Accessories on this website for optional motor adders, such as encoders, cables and connectors. See compatible drivers for the 15Y Series: MBC15081, and MBC25081TB.

Model #	# of Lead Wires	Shaft Type	Bipolar Torque (oz-in)	Bipolar Current (A)	Bipolar Voltage (V)	Bipolar Resistance (ohms)	Bipolar Inductance (mH)	L Length (inches)	Rotor Inertia (oz-in-sec²)	Weight (lbs)
15Y001S-LW4	4	Single	9	0.4	2.64	6.6	7.5	0.79	0.00015	0.33
15Y001D-LW4	4	Dual	9	0.4	2.64	6.6	7.5	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	0.7	8.4	12.0	23.0	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

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

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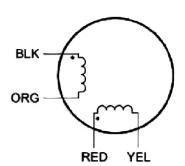




(All units are inches)

PART NUMBER	"L " DIMENSION
15Y0XXX-LWX	0.787
15Y1XXX-LWX	1.339
15Y2XXX-LWX	1.496
15Y3XXX-LWX	1.732

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



Step Angle Accuracy:	+/- 5% (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	+/- 10%	Dielectric Strength:	500 VAC 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	Max Axial Force:	2.3 lbs-Force