

17Y9 Series - High Torque Stepper Motors



FEATURES

- **NEMA 17 Frame Size**
- **0.9° Step Angle**
- **High Torque - Up to 70 oz-in**
- **High Step Accuracy and Resolution**
- **Low Vibration and Noise**
- **Can be Customized for**
 - Winding Current
 - Shaft Options
 - Cables and Connectors



DESCRIPTION

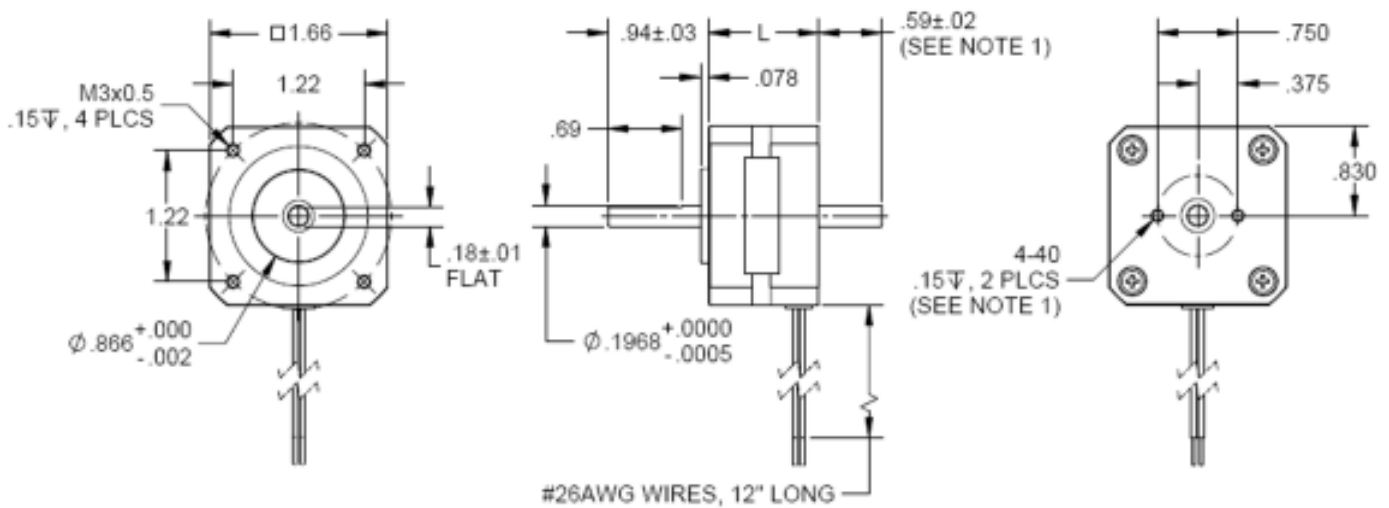
The 17Y9 Series High Torque Stepper Motors offer a great value without sacrificing quality. These motors have a 0.9° step angle making them higher precision than the typical 1.8° version. However, like the standard versions, motors were designed to offer the highest possible torque while minimizing vibration and audible noise. A broad line of motor windings and stack lengths are available off-the-shelf. We have both 4-Lead and 6-Lead motors that can be connected in series or unipolar to allow the maximum flexibility for your application. We can also customize the winding to perfectly match voltage, current, and maximum operating speed to meet your requirements.

See Accessories on our website for optional motor adders such as encoder, cables and connectors. Gearbox options can be found in Gearboxes. See compatible drivers for the 17Y9 Series: MBC15081 and MBC25081TB

SPECIFICATIONS

Model #	Shaft Type	NEMA Size	Bipolar Torque (oz-in)	Series Current (A)	Unipolar Current (A)	Bipolar Inductance (mH)	Rotor Inertia (oz-in-sec ²)	Shaft Diameter (in)	# of Terminals	Weight (lbs)	L Length (in)
17Y9100.5S-LW6	Single	17	43	0.22	0.31	132	0.0005	0.197	6	0.5	1.30
17Y9101S-LW6	Single	17	43	0.42	0.60	38	0.0005	0.197	6	0.5	1.30
17Y9102S-LW6	Single	17	43	0.67	0.95	16	0.0005	0.197	6	0.5	1.30
17Y9104S-LW4	Single	17	43	1.33	-	4.2	0.0005	0.197	4	0.5	1.30
17Y9200.8S-LW6	Single	17	65	0.28	0.40	120	0.0008	0.197	6	0.6	1.57
17Y9201S-LW6	Single	17	65	0.57	0.80	26.8	0.0008	0.197	6	0.6	1.57
17Y9202S-LW6	Single	17	65	0.85	1.20	13.6	0.0008	0.197	6	0.6	1.57
17Y9204S-LW4	Single	17	65	1.68	-	3.2	0.0008	0.197	4	0.6	1.57
17Y9301S-LW6	Single	17	86	0.28	0.40	152	0.0010	0.197	6	0.8	1.89
17Y9301.6S-LW6	Single	17	86	0.57	0.80	40	0.0010	0.197	6	0.8	1.89
17Y9302S-LW6	Single	17	86	0.85	1.20	16	0.0010	0.197	6	0.8	1.89
17Y9304S-LW4	Single	17	86	1.68	-	4.1	0.0010	0.197	4	0.8	1.89

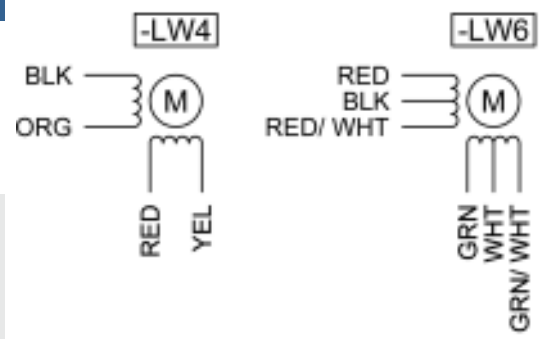
Notes: The 8th character "S" denotes single shaft, use "D" for double shaft. Custom leadwires, cables, connectors, and windings are available upon request.



(All units are inches)

DIMENSIONS

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
6 - Lead Unipolar BLD, TM Series	Phase 1	Red
	Phase 3	Red/White
	Phase 2	Green
	Phase 4	Green/White
	Common Phase 1 & 3	Black
	Common Phase 2 & 4	White



WIRING INFORMATION

Step Angle Accuracy:	+/- 5% (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	+/- 10%	Dielectric Strength:	500VDC for one minute
Inductance Accuracy:	+/- 20%	Radial Play:	0.02" at 1.0 lbs
Temperature Rise:	80° C Max (2 Phases On)	End Play:	0.08" at 1.0 lbs
Ambient Temperature:	-20° to +50° C	Max Radial Force:	4.5 lbs (0.79" from flange)
Insulation Type:	Class B	Max Axial Force:	2.2 lbs-Force

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