Specifications of High Torque Step Motors

1. FEATURES

- *NEMA 17 Frame Size*
- *1.8° Step Angle (0.9° and 3.6° also available)*
- *High Torque - Up to 111 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*

2. DESCRIPTION

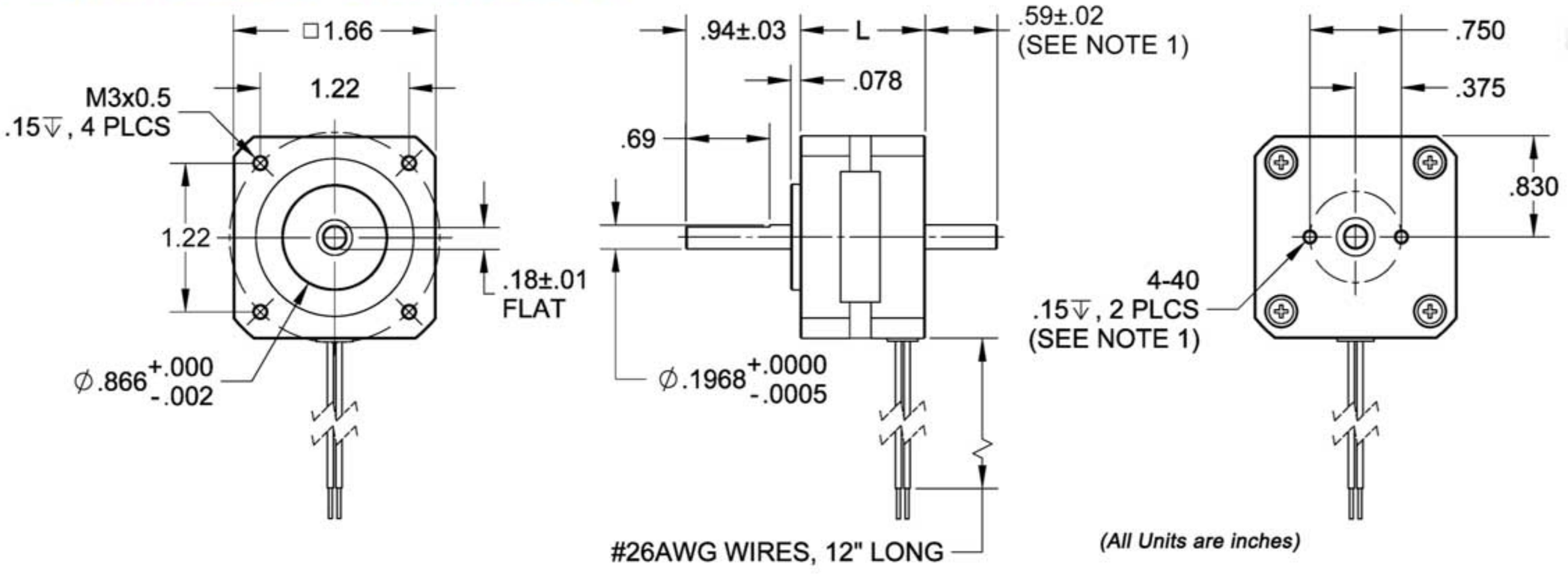
The 17Y Series High Torque Step Motors offer a great value without sacrificing quality. These motors were designed to offer the highest possible torque while minimizing vibration and audible noise. A broad line of motor windings and stack lengths are available off-the-shelf, or the motors can be customized to fit your machine requirements. We can customize the winding to perfectly match your voltage, current, and maximum operating speed for maximum flexibility.

3. TECHNICAL NOTES

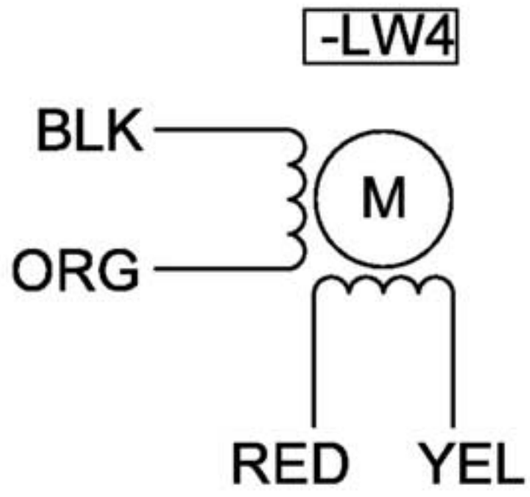
	Model #	NEMA Size	Bipolar Torque (oz-in)	Bipolar Current (A)	Bipolar Inductance (mH)	Rotor Inertia (oz-in-sec^2)	Shaft Diameter (in)	# of Lead Wires	Weight (lbs)	L Length (in)
	17Y201S-LW4	17	50	0.28	90	0.00076	0.197	4	0.62	1.57
*	17Y201D-LW4	17	50	0.28	90	0.00076	0.197	4	0.62	1.57

Note: All Shafts have a flat unless otherwise noted. The character "S" denotes single shaft, and use "D" for double shaft. Model # 17Y201D-LW4 is currently used in our Motorized Translation Stage MT90X-30.

4. DIMENSION DRAWINGS



5. WIRING INFORMATION



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

6. 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:	0.02" Max (1.0 lbs)
Temperature Rise:	80°C Max (2 Phases On)	End Play:	0.08" Max (1.0 lbs)
Ambient Temperature:	-20° to +50° C	Max Radial Force:	6.29 lbs (0.79" from flange)
Insulation Type:	Class B	Max Axial Force:	2.24 lbs-Force

7. PIN LAYOUT OF CONNECTOR FOR MODEL MT90X-30