

2S57A Series - High Torque Stepper Motors



FEATURES

- **57mm Frame Size**
- **1.8° Step Angle**
- **High Torque - Up To 3.0 Nm**
- **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 RoHS Compliant**



DESCRIPTION

The 2S57A 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.

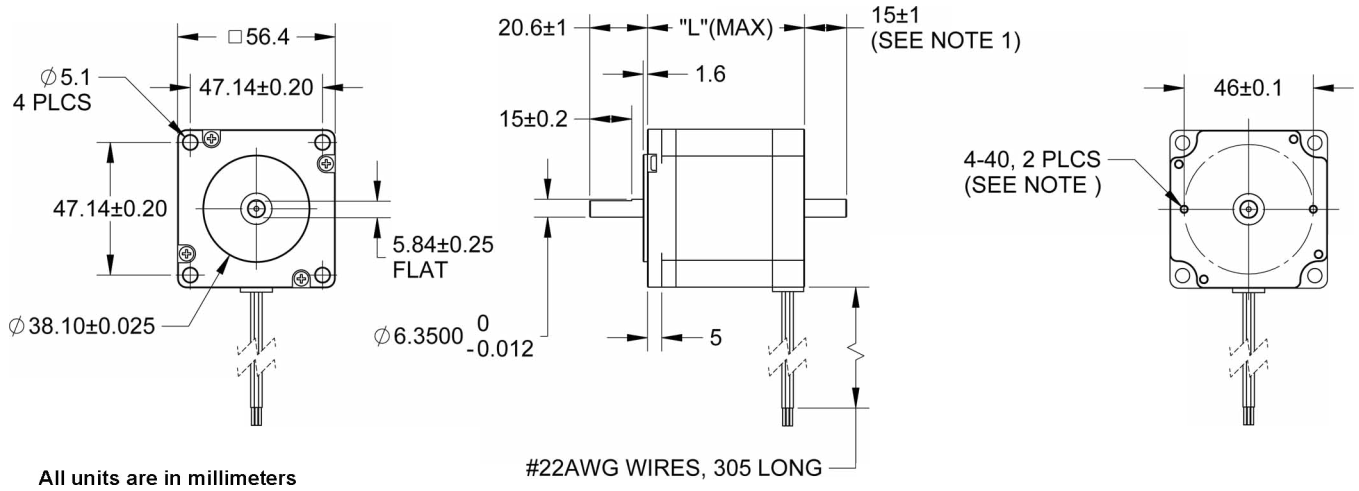
SPECIFICATIONS

Model #	Frame Size (mm)	Bipolar Torque (Nm)	Bipolar Current (A)	Bipolar Voltage (V)	Bipolar Resistance (ohms)	Bipolar Inductance (mH)	Rotor Inertia (g-cm ²)	Shaft Diameter (mm)	# Lead Wires	Weight (kg)	"L" Length (mm)
2S57A-056-014-4X	57	1.2	1.4	4.5	3.6	12.0	300	6.35	4	0.7	56
2S57A-056-021-4X	57	1.2	2.1	3.2	1.5	4.4	300	6.35	4	0.7	56
2S57A-076-014-4X	57	1.9	1.4	6.3	2.2	14.4	480	6.35	4	1.0	76
2S57A-076-021-4X	57	1.9	2.1	4.2	1.0	6.4	480	6.35	4	1.0	76
2S57A-115-021-4X	57	3.0	2.1	8.8	2.1	20.0	650	6.35	4	1.5	115

Notes: The 16th character "X" denotes a single or dual shaft. Use "S" for single shaft, or "D" for dual shaft. Dual shafts include encoder mounting provisions. Custom leadwires, cables, connectors, and windings are available upon request.

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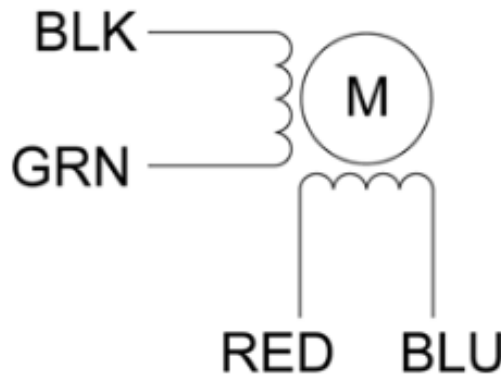
DIMENSIONS



Note 1: Applies to dual shaft option only

WIRING INFORMATION

Connection	Lead Wire Connection	Lead Wire Color
4 - Lead Bipolar	Phase 1 (A)	Black
	Phase 3 (A\)	Green
	Phase 2 (B)	Red
	Phase 4 (B\)	Blue



SPECIFICATIONS

Step Angle Accuracy:	± 5% (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Max Axial Force:	15N	Dielectric Strength:	500VAC for 1 Minute
Inductance Accuracy:	± 20%	Shaft Radial Play:	0.02 Max (450g-load)
Temperature Rise:	80°C Max (2 Phases On)	End Play:	0.08 Max (450g-load)
Ambient Temperature:	-20° to +50° C	Max Radial Force:	75N (20mm from flange)
Insulation Type:	Class B		

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