

23L65 Series - Sealed High Torque Stepper Motors



FEATURES

- **NEMA 23 Frame Size**
- **Splashproof IP65 Sealed Stepper Motor**
- **1.8° Step Angle**
- **High Torque - Up to 260 oz-in**
- **High Step Accuracy and Resolution**
- **Low Vibration and Noise**
- **Can be Customized for**
 - **Shaft Options**
 - **Cables and Connectors**
- **CE Certified and RoHS Compliant**



DESCRIPTION

The 23L65 Series High Torque Stepper Motors are designed to withstand slashdown, humid or damp environments, and water sprayback conditions. The IP65 sealed properties ensure that moisture be kept out of the motors internal electronics. In addition, these motors provide the highest possible torque available in a sealed size 23 stepper. The 23L65 series is an excellent choice for lab automation, biotech, and semiconductor automation equipment, just to name a few. Customized options are also available upon request. [See Accessories on our website for optional motor adders such as encoders, cables and connectors.](#) For Gearbox options, see gearboxes on our website. For compatible drivers, consider [MBC15081](#), [MBC25081TB](#), [MBC05641](#) and [DPE](#) or [DPY Series Driver Packs](#).

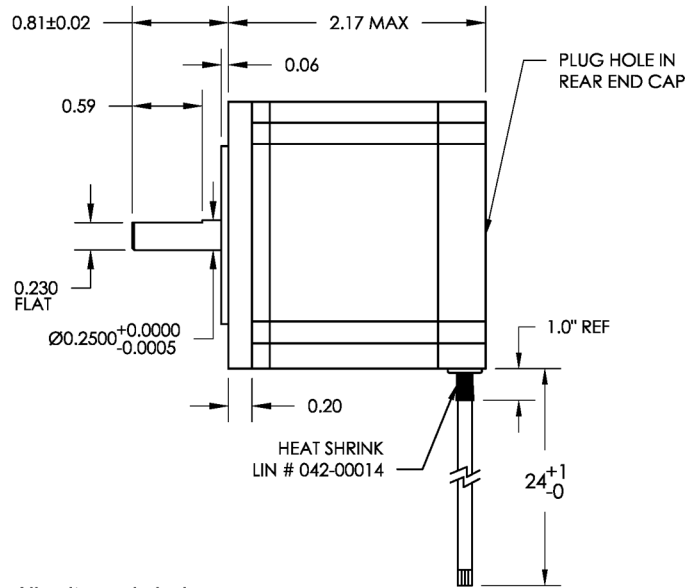
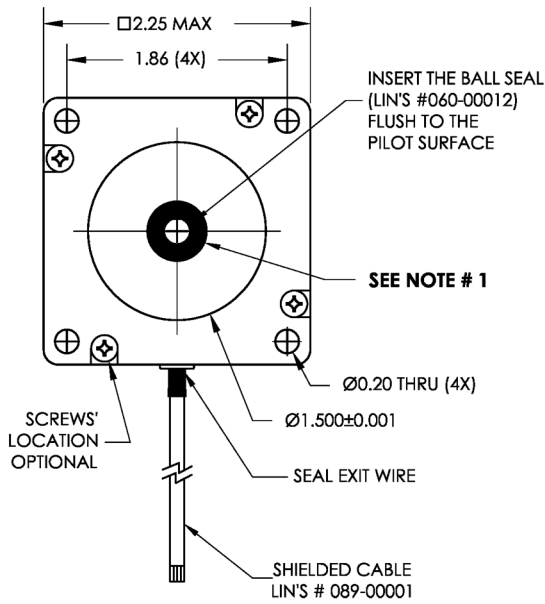
SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Bipolar Current (A)	Bipolar Inductance (mH)	Rotor Inertia (oz-in-sec ²)	Shaft Diameter (in)	# Lead Wires	Weight (lbs)	"L" Length (in)
23L65004S-LW4	23	72	2.0	1.2	0.0018	0.25	4	1.05	1.73
23L65006S-LW4	23	72	3.0	0.6	0.0018	0.25	4	1.05	1.73
23L65104S-LW4	23	130	2.0	2.5	0.0039	0.25	4	1.50	2.17
23L65106S-LW4	23	130	3.0	1.1	0.0039	0.25	4	1.50	2.17
23L65204S-LW4	23	210	2.0	3.6	0.0067	0.25	4	2.20	3.10
23L65206S-LW4	23	210	3.0	1.6	0.0067	0.25	4	2.20	3.10
23L65304S-LW4	23	260	2.0	5.6	0.0088	0.25	4	2.20	4.02
23L65306S-LW4	23	260	3.0	3.0	0.0088	0.25	4	2.20	4.02

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

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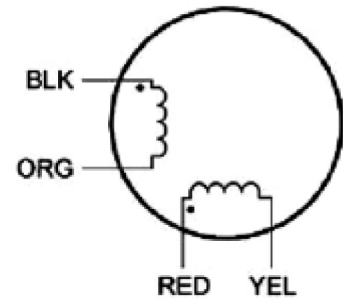
DIMENSIONS



All units are in inches

WIRING INFORMATION

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



SPECIFICATIONS

Step Angle Accuracy:	$\pm 5\%$ (full step, no load)	Insulation Resistance:	100M Ohm, Min. 500VDC
Resistance Accuracy:	$\pm 10\%$	Dielectric Strength:	500VAC
Inductance Accuracy:	$\pm 20\%$	Radial Play:	0.00079" at 1.0lbs
Temperature Rise:	80°C (2 phase on)	End Play:	0.00315" at 1.0lbs
Ambient Temperature:	-20°C - +50°C	Max Radial Force:	6.3lbs (0.79" from flange)
Insulation Type:	Class B	Max Axial Force:	2.3lbs