

17Y65 Series - Sealed High Torque Stepper Motors



FEATURES

- **NEMA 17 Frame Size**
- **Splash Proof IP65 Sealed Stepper Motor**
- **1.8° Step Angle**
- **High Torque - Up to 111 oz-in**
- **High Step Accuracy and Resolution**
- **Low Vibration and Noise**
- **Can be Customized for**
 - **Shaft Options**
 - **Cables and Connectors**
- **IP65 Rating**
- **RoHS Compliant**

DESCRIPTION

The 17Y65 Series High Torque Stepper Motors are designed to withstand splashdown, humid or damp environments, and water sprayback conditions. The IP65 sealed properties of this series ensure that moisture be kept out of the motors internal electronics. In addition, these compact motors provide the highest possible torque available in a sealed size 17 stepper. The 17Y65 series is an excellent choice for lab automation, biotech, and semiconductor automation equipment, just to name a few. There are four stack lengths available in order to meet your specific system requirements. Customized options are also available upon request.

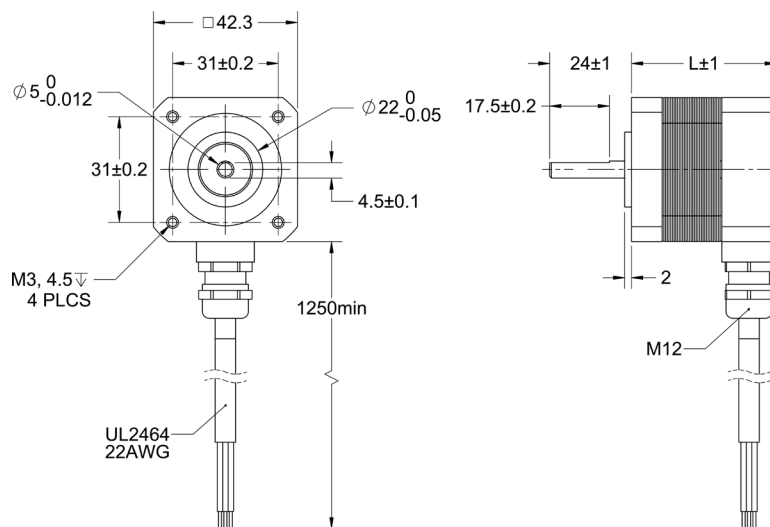
See [Accessories](#) on our website for optional motor adders such as encoders, cables and connectors. For Gearbox options, see gearboxes. For compatible drivers, consider MBC15081, MBC25081TB, and DPE or DPY Series Driver Packs.

SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Bipolar Current (A)	Bipolar Series RMS Voltage (V)	Bipolar Series Inductance (mH)	Bipolar Series Resistance (Ω)	Rotor Inertia (oz-in-sec ²)	Shaft Diameter (in)	# Lead Wires	Weight (lbs)	"L" Length (in)
17Y65102S-CS4	17	28	0.7	5.3	10	7.4	0.00054	0.1968	4	0.55	1.67
17Y65202S-CS4	17	50	0.85	5.7	10	6.7	0.00076	0.1968	4	0.73	1.90
17Y65302S-CS4	17	61	0.85	5.7	11	6.7	0.00096	0.1968	4	0.88	2.22
17Y65402S-CS4	17	111	0.85	10.3	29	12.1	0.00144	0.1968	4	1.21	2.71

Notes: All Shafts are smooth unless otherwise noted. Custom leadwires, cables, connectors, and windings are available upon request.

DIMENSIONS



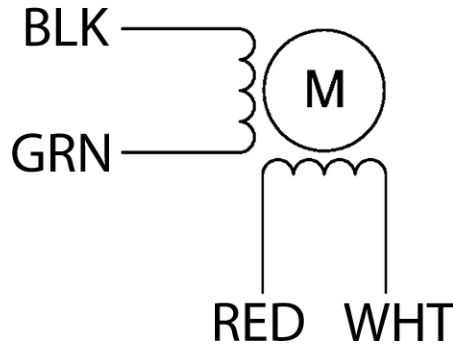
Units are in mm

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WIRING



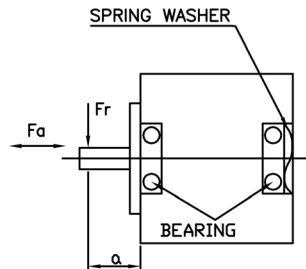
Exciting Sequence

CW DIRECTION	STEP	A	C	B	D
↓	1	+		+	
	2		+	+	
	3		+		+
	4	+			+
	1	+		+	

CW, See from Flange Side

SPECIFICATIONS

PERMISSIBLE RADIAL+AXIAL FORCE



Axial-Force	Fa=10 N Max.
Distance	a=20 mm
Radial-Force	Fr=28 N Max.
Shaft Radial Play	0.02mm Max. @4N
Shaft Axial Play	0.08mm Max. @4N

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 (130°C Internal)	Max Axial Force:	2.24 lbs-Force

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