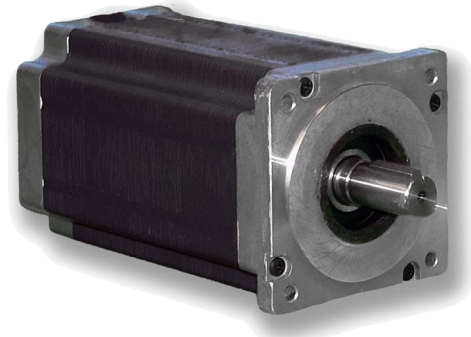


34N Series - High Torque Stepper Motors



FEATURES

- **NEMA 34 Frame Size**
- **1.8° Natural Step Angle**
- **Holding Torque Ratings Up to 2180 oz.in.**
- **Substantial Increase In Torque Over Standard Motors**
- **High Acceleration and Increased Rotor Inertia**
- **4 Stack Lengths**
- **Microstep Increments as Small as 0.0072° (with our MBC082561 driver)**
- **3% Typical Step Accuracy - Non Cumulative**
- **Rugged Construction**
- **Higher Temperature Characteristics**
- **CE Certified and RoHS Compliant**



DESCRIPTION

The 34N Series High Torque Stepper Motors use advanced magnetic technologies to provide significantly higher torque levels than what is available in standard step motors. These motors are available with a variety of windings to meet any application specific requirement. The torque levels reached with this stepper motor line make them cost effective alternatives to servo motors in many applications. These motors can be specified in place of standard motors to reduce system size and cost, or increase system performance, without the need to go to larger sized motors or drivers.

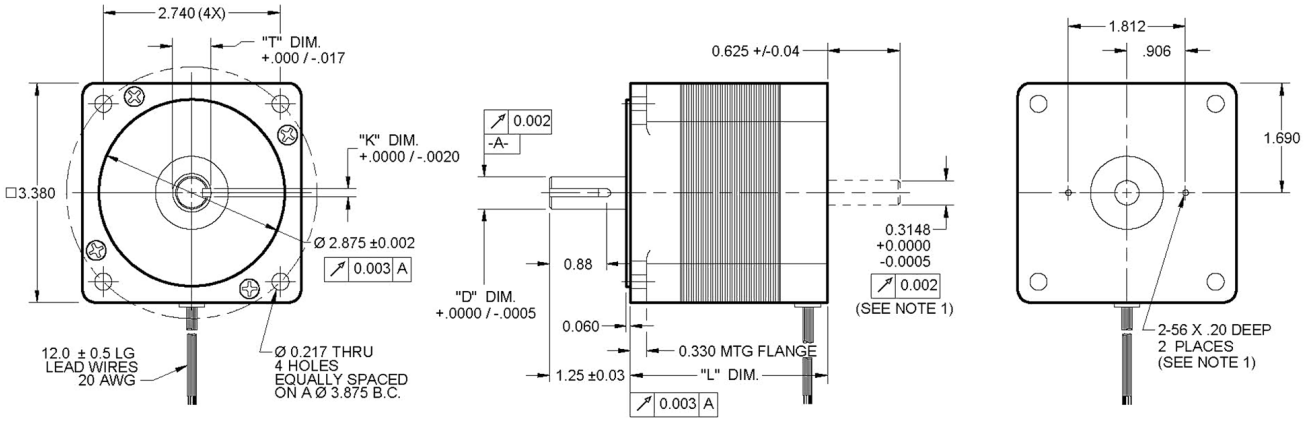
See Accessories on our website for optional motor adders such as encoders, brakes, cables, and connectors. For gearbox options, see Gearboxes. For compatible drivers, consider MBC05641, MBC10641, MBC12101, MBC082561, MLA10641, and Driver Packs.

SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Series Current (A)	Unipolar Current (A)	Parallel Current (A)	Unipolar Inductance (mH)	Rotor Inertia (oz-in-sec ²)	Shaft Diameter (in)	# of Lead Wires	Weight (lbs)	L Length (in)
34N104S-LW8	34	635	1.4	2.0	2.8	12.5	0.020	0.500	8	5.00	3.13
34N108S-LW8	34	645	2.7	3.9	5.4	3.5	0.020	0.500	8	5.00	3.13
34N112S-LW8	34	650	4.3	6.1	8.6	1.4	0.020	0.500	8	5.00	3.13
34N207S-LW8	34	1195	2.5	3.5	5.0	6.50	0.038	0.500	8	8.40	4.65
34N214S-LW8	34	1195	5.0	7.1	10.0	1.80	0.038	0.500	8	8.40	4.65
34N307S-LW8	34	1710	2.5	3.5	5.0	9.00	0.057	0.625	8	11.9	6.13
34N314S-LW8	34	1715	5.0	7.0	10.0	2.30	0.057	0.625	8	11.9	6.13
34N412S-LW8	34	2180	4.4	6.2	8.8	4.70	0.075	0.625	8	15.1	7.68
34N416S-LW8	34	2140	5.6	8.0	11.2	2.60	0.075	0.625	8	15.1	7.68

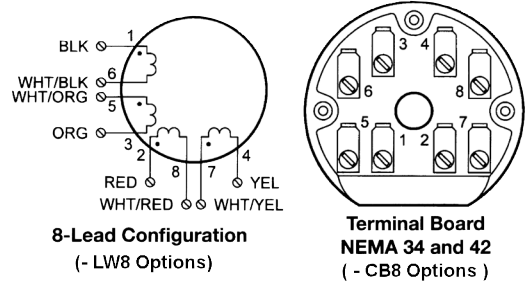
Notes: The 7th character "S" denotes a single shaft, use "D" for double shaft. Custom leadwires, cables, connectors, and windings are available upon request. For conduit box on single shaft motors add "-CB8" instead of "-LW8". Conduit box option will add length to the motor.

L010431



DESCRIPTION

Connection	Lead Wire Connection	Lead Wire Color	Terminal #
4 - Lead Bipolar Series MBC or MLP Series	A	Black	1
	A	Orange	3
	B	Red	2
	B	Yellow	4
	None	White/Black & White/Orange	6 & 5
4 - Lead Bipolar Series MBC or MLP Series	None	White/Red & White/Yellow	8 & 7
	A	Black & White/Orange	1 & 5
	A	Orange & White/Black	3 & 6
	B	Red & White/Yellow	2 & 6
	B	Yellow & White/Red	4 & 8
6 - Lead Unipolar BLD, TM Series	Phase 1	Black	1
	Phase 3	Orange	3
	Phase 2	Red	2
	Phase 4	Yellow	4
	Common Phase 1 & 3	White/Black & White/Orange	6 & 5
	Common Phase 2 & 4	White/Red & White/Yellow	8 & 7
Ground		Green/Yellow	Motor Frame



WIRING INFORMATION

Step Angle Accuracy:	+/- 3% (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	+/- 10%	Dielectric Strength:	820VAC/s for 3mA
Inductance Accuracy:	+/- 20%	Shaft Radial Play:	0.02" Max (1.0 lb load)
Temperature Rise:	80° C Max (2 Phases On)	Shaft Axial Play:	0.08" Max (1.0 lb load)
Ambient Temperature:	-20° to +50° C	Max Radial Force:	49.5 lbs (0.79" from flange)
Insulation Type:	Class B	Max Axial Force:	13.5 lbs-Force

SPECIFICATIONS