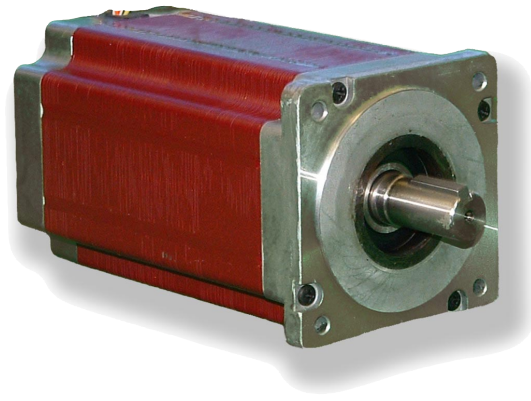


34K Series - Super High Torque Stepper Motor



FEATURES

- **NEMA 34 Frame Size**
- **1.8° Natural Step Angle**
- **Holding Torque Ratings Up to 2790 oz-in**
- **Substantial Increase In Torque Over Standard & High Torque Motors**
- **High Acceleration and Increased Rotor Inertia**
- **4 Stack Lengths**
- **Microstep Increments as Small as 0.0072° (with our MBC082561 driver)**
- **1.5% Typical Step Accuracy**
- **Rugged Construction**
- **Higher Temperature Characteristics**
- **CE Certified and RoHS Compliant**



DESCRIPTION

These Super High Torque Stepper Motors use advanced magnetic technologies to provide significantly higher torque levels than what is available in all other stepper motors. These motors are available in a variety of windings to meet any application specific requirement. The torque levels reached with this step 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.

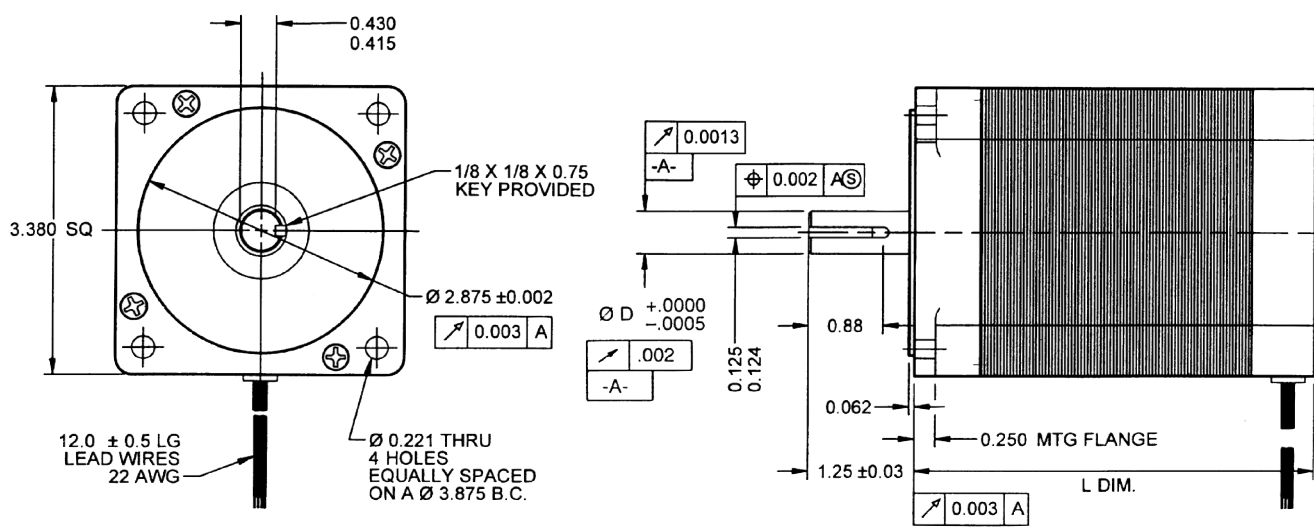
See Accessories on this website for optional motor adders such as encoders, brakes, cables, and connectors. For gearbox options, see Gearboxes. For compatible drivers, see the MBC05641, MBC12101, MBC082561, MBC10641 and MLA10641 Series, or Driver Packs.

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) |
|-------------|-----------|------------------------|--------------------|----------------------|----------------------|--------------------------|---|---------------------|-----------------|--------------|---------------|
| 34K104S-LW8 | 34 | 805 | 1.4 | 2.0 | 2.80 | 10.2 | 0.02 | 0.500 | 8 | 5.00 | 3.13 |
| 34K108S-LW8 | 34 | 820 | 2.7 | 3.9 | 5.40 | 2.80 | 0.02 | 0.500 | 8 | 5.00 | 3.13 |
| 34K112S-LW8 | 34 | 830 | 4.3 | 6.1 | 8.60 | 1.20 | 0.02 | 0.500 | 8 | 5.00 | 3.13 |
| 34K207S-LW8 | 34 | 1510 | 2.5 | 3.5 | 5.00 | 5.70 | 0.038 | 0.500 | 8 | 8.40 | 4.65 |
| 34K214S-LW8 | 34 | 1535 | 5.0 | 7.1 | 10.0 | 1.40 | 0.038 | 0.500 | 8 | 8.40 | 4.65 |
| 34K307S-LW8 | 34 | 2145 | 2.5 | 3.5 | 5.00 | 7.00 | 0.057 | 0.625 | 8 | 11.9 | 6.13 |
| 34K314S-LW8 | 34 | 2150 | 5.0 | 7.0 | 10.0 | 1.70 | 0.057 | 0.625 | 8 | 11.9 | 6.13 |
| 34K412S-LW8 | 34 | 2790 | 4.4 | 6.2 | 8.80 | 3.60 | 0.075 | 0.625 | 8 | 15.1 | 7.68 |
| 34K416S-LW8 | 34 | 2725 | 5.6 | 8.0 | 11.2 | 2.00 | 0.075 | 0.625 | 8 | 15.1 | 7.68 |

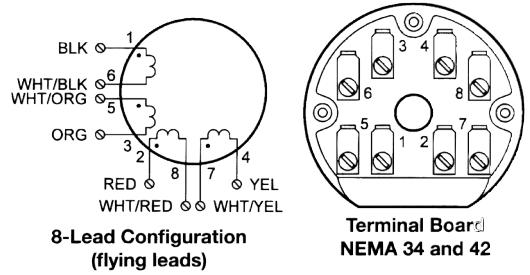
Notes: The 8th character "S" denotes a single shaft, use "D" for double shaft. Custom leadwires, cables, connectors, and windings are available upon request.

L010373



(All units are inches)

| 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 Parallel 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 & 7 |
| | /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 |



DIMENSIONS

WIRING INFORMATION

SPECIFICATIONS

| | | | |
|----------------------|----------------|------------------------|--------------------|
| Step Angle Accuracy: | +/- 1.5% | Insulation Type: | Class B |
| Resistance Accuracy: | +/- 10% | Insulation Resistance: | 100M ohms @ 500VDC |
| Full Step Angle: | 1.8° | Max Radial Force: | 20lbs |
| Ambient Temperature: | -20° C - 40° C | Max Axial Force: | 13lbs |