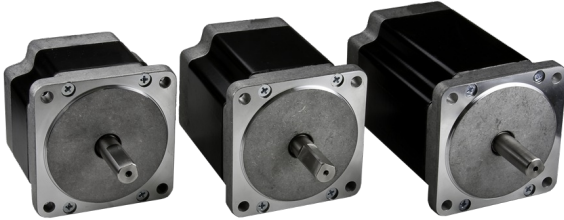


## HT34-504

NEMA 34 High Torque Step Motor



### Product Features

- 2-phase hybrid step motor
- High torque design
- Standard NEMA 34 dimensions
- Series or parallel wiring



### Description

The HT34-504 two-phase stepper motor is suitable for a wide range of motion control applications. Terminated with 8 motor leads, the motor can be connected in a few different ways, including bipolar series and bipolar parallel.





- HT34-504 is a replacement for [HT34-474](#).

### Specifications

|                                   |                            |
|-----------------------------------|----------------------------|
| <b>Part Number</b>                | HT34-504                   |
| <b>Frame Size</b>                 | NEMA 34                    |
| <b>Motor Type</b>                 | High torque                |
| <b>Part Number w/Double Shaft</b> | NA                         |
| <b>Part Number w/Encoder</b>      | HT34-504D-YAA              |
| <b>Motor Length</b>               | 2.62 inches                |
| <b>Number of Lead Wires</b>       | 8                          |
| <b>Lead Wire Configuration</b>    | flying leads, no connector |
| <b>Lead Wire/Cable Length</b>     | 12 inches                  |
| <b>Lead Wire Gauge</b>            | 22 AWG                     |
| <b>Unipolar Holding Torque</b>    | 297 oz-in                  |
| <b>Bipolar Holding Torque</b>     | 397 oz-in                  |
| <b>Step Angle</b>                 | 1.8 deg                    |
| <b>Bipolar Series Current</b>     | 3.18 A/phase               |

|                                    |                                 |
|------------------------------------|---------------------------------|
| <b>Bipolar Series Resistance</b>   | 0.96 Ohms/phase                 |
| <b>Bipolar Series Inductance</b>   | 6.8 mH/phase                    |
| <b>Bipolar Parallel Current</b>    | 6.30 A/phase                    |
| <b>Bipolar Parallel Resistance</b> | 0.24 Ohms/phase                 |
| <b>Bipolar Parallel Inductance</b> | 1.7 mH/phase                    |
| <b>Unipolar Current</b>            | 4.50 A/phase                    |
| <b>Unipolar Resistance</b>         | 0.48 Ohms/phase                 |
| <b>Unipolar Inductance</b>         | 1.7 mH/phase                    |
| <b>Rotor Inertia</b>               | 1.56E-02 oz-in-sec <sup>2</sup> |
| <b>Integral Gearhead</b>           | No                              |
| <b>Weight</b>                      | 3.5 lbs                         |
| <b>Storage Temperature</b>         | -30 to 70 °C                    |
| <b>Operating Temperature</b>       | -20 to 50 °C                    |
| <b>Insulation Class</b>            | Class B (130 °C)                |
| <b>Maximum Radial Load</b>         | 28 lbs                          |
| <b>Maximum Thrust Load</b>         | 6.3 lbs                         |
| <b>Shaft Run Out</b>               | 0.002 inch T.I.R. max           |
| <b>Radial Play</b>                 | 0.001 inch max w/ 1.1 lb load   |
| <b>End Play</b>                    | 0.003 inch max w/ 1.1 lb load   |
| <b>Perpendicularity</b>            | 0.004 inches                    |
| <b>Concentricity</b>               | 0.002 inches                    |

## Downloads

|                            |  |
|----------------------------|--|
| <b>Datasheet</b>           |  <a href="#">StepMotorWiring-8-lead-striped.pdf</a> |
| <b>2D Drawing</b>          |  <a href="#">HT34-504_RevB.pdf</a>                  |
| <b>3D Drawing</b>          |  <a href="#">34HT66D.igs</a>                        |
| <b>Speed-Torque Curves</b> |  <a href="#">STR_speed-torque.pdf</a>               |
| <b>Agency Approvals</b>    | There are no related agency approval documents at this time.   |
| <b>Application Notes</b>   | There are currently no Application Notes available for this product.   |