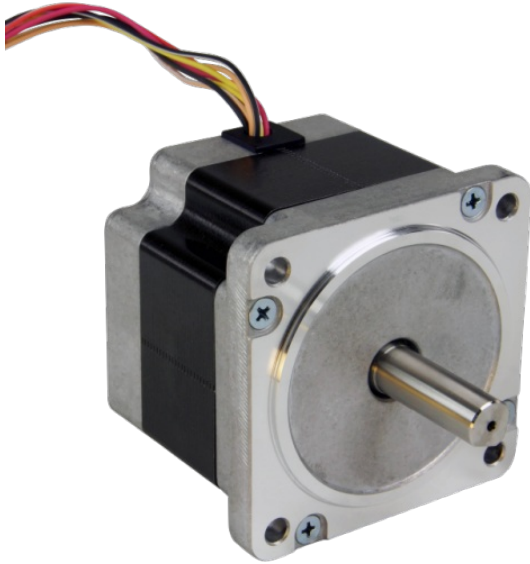


HT34-504

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

Product 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](#) .

UL Recognized









The single and double-shaft versions of this motor are UL Recognized in the US and Canada, file no. E472271. The encoder is not included in the listing.

Specifications

Part Number:	HT34-504
Frame Size:	NEMA 34
Motor Type:	High torque
Part Number w/Double Shaft:	HT34-504D
Part Number w/Encoder:	HT34-504D-YAA
Motor Length:	2.62 inches
Number of Lead Wires:	8
Lead Wire Configuration:	flying leads, no connector
Lead Wire/Cable Length:	12 inches inches
Lead Wire Gauge:	22 AWG
Unipolar Holding Torque:	297 oz-in
Bipolar Holding Torque:	397 oz-in
Step Angle:	1.8 deg
Bipolar Series Current:	3.18 A/phase
Bipolar Series Resistance:	0.96 Ohms/phase
Bipolar Series Inductance:	6.8 mH/phase
Bipolar Parallel Current:	6.30 A/phase
Bipolar Parallel Resistance:	0.24 Ohms/phase
Bipolar Parallel Inductance:	1.7 mH/phase
Unipolar Current:	4.50 A/phase
Unipolar Resistance:	0.48 Ohms/phase
Unipolar Inductance:	1.7 mH/phase
Rotor Inertia:	1.56E-02 oz-in-sec ²
Integral Gearhead:	No
Weight:	3.5 lbs
Storage Temperature:	-30 to 70 °C

Operating Temperature:	-20 to 50 °C
Insulation Class:	Class B (130 °C)
Maximum Radial Load:	28 lbs
Maximum Thrust Load:	6.3 lbs
Shaft Run Out:	0.002 inch T.I.R. max
Radial Play:	0.001 inch max w/ 1.1 lb load
End Play:	0.003 inch max w/ 1.1 lb load
Perpendicularity:	0.004 inches
Concentricity:	0.002 inches

Downloads

Datasheet:	 <u>StepMotorWiring-8-lead-striped.pdf</u>  <u>Stepper Motor Life data-110817.pdf</u>
Product PDF - S3 Link:	http://s3.amazonaws.com/applied-motion-pdf/HT34-504.pdf
2D Drawing:	 <u>HT34-504_RevE.pdf</u>  <u>HT34-504D-YAA_RevB.pdf</u>
3D Drawing:	 <u>34HT66D.igs</u>  <u>HT34-504D_66_5mm-YAAEnc.igs</u>
Speed-Torque Curves:	 <u>STR_speed-torque.pdf</u>  <u>ST_Speed_Torque_revF_Size34.pdf</u>

Products in the Series *CORE Step Motors*

Part Number	Frame Size	Length	Holding Torque	Series Current	Parallel Current	Rotor Inertia
HT08-220	NEMA 8	1.24	2.12	NA	0.35	2.83E-05
HT08-221	NEMA 8	1.85	4.53	NA	0.35	5.95E-05
HT11-020	NEMA 11	1.22	7.08	NA	1.0	1.27E-04
HT11-021	NEMA 11	2.05	14.16	NA	1.0	2.55E-04
HT17-268	NEMA 17	1.31	31.2	0.67	1.34	5.38E-04
HT17-271	NEMA 17	1.57	52.4	0.85	1.70	8.07E-04
HT17-275	NEMA 17	1.90	77.9	0.85	1.70	1.16E-03
HT17-278	NEMA 17	2.47	113	1.0	2.0	1.74E-03
HT23-594	NEMA 23	1.61	76.5	1.41	2.83	1.91E-03
HT23-598	NEMA 23	2.13	158	2.12	4.24	3.68E-03
HT23-601	NEMA 23	2.99	269	2.12	4.24	6.51E-03
HT23-603	NEMA 23	4.37	354	2.5	5.0	1.06E-02
HT34-504	NEMA 34	2.62	397	3.18	6.30	1.56E-02
HT34-505	NEMA 34	3.78	850	3.18	6.30	2.62E-02
HT34-506	NEMA 34	4.94	1260	2.80	5.60	3.89E-02