Applied Motion Products, Inc.
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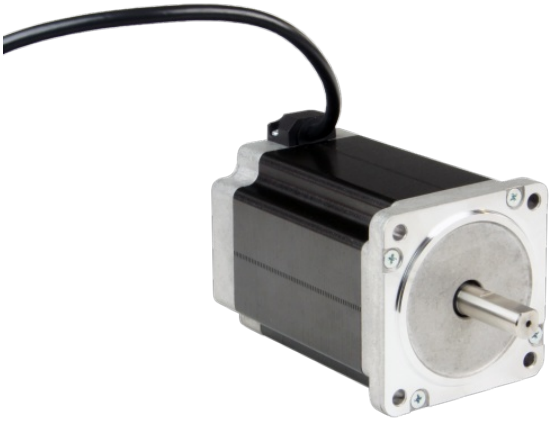
Product Datasheet

www.Applied-Motion.com

HT34-506C

NEMA 34 Step Motor with 10 Foot Shielded Cable



Product Features

- *2-phase hybrid step motor*
- *High torque design*
- *Standard NEMA 34 dimensions*
- *Optimized for 24 – 80 VDC bus voltage*

Description

Product Description:

The HT34-506 two-phase stepper motor is designed for use with the ST10 and STR8 stepper drives and is suitable for a wide range of motion control applications. The motor is optimized for use with DC powered drives and comes with an integral 10 ft shielded cable.

Single and double shaft versions are available. The HT34-506DC-YAC includes an optical encoder with 10 foot cable and rugger metal cover.

The motor is terminated with 8 motor leads plus 1 ground lead.

Specifications

Part Number:	HT34-506C
Frame Size:	NEMA 34
Motor Type:	High torque
Part Number w/Double Shaft:	HT34-506DC
Part Number w/Encoder:	HT34-506DC-YAA
Part Number w/Encoder & Cover:	HT34-506DC-YAC
Motor Length:	4.94 inches
Number of Lead Wires:	8
Lead Wire Configuration:	shielded cable, no connector
Lead Wire/Cable Length:	10 feet inches
Lead Wire Gauge:	22 AWG
Unipolar Holding Torque:	906 oz-in
Bipolar Holding Torque:	1260 oz-in
Step Angle:	1.8 deg
Bipolar Series Current:	2.8 A/phase
Bipolar Series Resistance:	2.6 Ohms/phase
Bipolar Series Inductance:	21.6 mH/phase
Bipolar Parallel Current:	5.6 A/phase
Bipolar Parallel Resistance:	0.63 Ohms/phase
Bipolar Parallel Inductance:	5.4 mH/phase
Unipolar Current:	4.0 A/phase
Unipolar Resistance:	1.29 Ohms/phase
Unipolar Inductance:	5.4 mH/phase
Rotor Inertia:	0.0387 oz-in-sec^2
Integral Gearhead:	No

Weight:	8.4 lbs
Storage Temperature:	-40 +70 °C
Operating Temperature:	-20 +50 °C
Insulation Class:	B
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:	http://s3.amazonaws.com/applied-motion-pdf/HT34-506C.pdf
2D Drawing:	HT34-506C_RevD.pdf HT34-506DC_RevC.pdf HT34-506DC-YAA_RevA.pdf HT34-506DC-YAC_RevA.pdf
3D Drawing:	HT34-506C.igs HT34-506DC.igs HT34-506DC-ZAA.igs HT34-506DC-ZAC.igs
Speed-Torque Curves:	STR_speed-torque.pdf

Products in the Series *Cabled Step Motors*

Part Number	Frame Size	Length	Holding Torque	Series Current	Parallel Current	Rotor Inertia
HT23-552	NEMA 23	1.71	84.4	0.71	1.41	1.70E-03
HT23-553	NEMA 23	2.17	167	0.71	1.41	4.25E-03
HT23-554	NEMA 23	3.05	255	0.71	1.41	6.80E-03
HT23-598C	NEMA 23	2.35	158	2.12	4.24	0.0036
HT23-601C	NEMA 23	3.20	269	2.12	4.24	0.0064
HT34-495	NEMA 34	3.11	555	2.15	4.30	2.27E-02
HT34-496	NEMA 34	4.63	1110	2.05	4.10	4.53E-02
HT34-497	NEMA 34	6.14	1694	2.55	5.10	6.80E-02
HT34-506C	NEMA 34	4.94	1260	2.8	5.6	0.0387
HT34-696	NEMA 34	4.59	1110	2.05	4.1	3.87E-02
HW23-598	NEMA 23	2.34	158	2.12	4.24	3.68E-03
HW23-601	NEMA 23	3.21	269	2.12	4.24	6.51E-03
HW23-753	NEMA 23	2.19	153	0.71	1.41	3.12E-03
HW23-754	NEMA 23	3.23	227	0.71	1.41	6.51E-03
HW24-108	NEMA 24	3.72	354	NA	4.0	1.27E-02
HW34-506	NEMA 34	5.0	1260	2.8	5.6	3.87E-02
HW34-696	NEMA 34	4.59	1062	2.03	4.06	3.87E-02