

HW34-506

IP65 Rated, NEMA 34 High Torque Step Motor



Product Features

- 2-phase hybrid step motor
- Rated IP65 for wet and dusty environments
- High torque design
- Standard NEMA 34 dimensions
- Integral 10 ft shielded cable w/ cable gland
- Sealed laminations
- Front shaft seal
- Single shaft version standard
- Double shaft version with encoder available



Description

The HW34-506 two-phase stepper motor is suitable for a wide range of motion control applications including wet factory environments and outdoor use. The IP65 rating means the motor is dust proof and resistant to lower pressure water jets. Key features of this rating include an integral 10 ft shielded cable, a nickel plated brass cable gland, sealed laminations and a front shaft contact seal. This motor also has an internal corrosion-resistant film coating, further protecting it in wet and humid environments.

A double-shaft version with encoder is available, part number HW34-506D-YAC.

IP65 specifies a product that is dust tight (no ingress of dust; complete protection against contact) and protected against water jets (water projected by a nozzle from any direction shall have no harmful effects). To see our motor design operating in a rain simulation chamber check out this [video](#).

Specifications

Part Number	HW34-506
Frame Size	NEMA 34
Motor Type	High torque
Part Number w/Double Shaft	NA
Part Number w/Encoder	HW34-506D-YAC
Motor Length	5.0 inches
Number of Lead Wires	8
Lead Wire Configuration	shielded cable, no connector
Lead Wire/Cable Length	10 ft
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	2.6 mH/phase
Bipolar Parallel Current	5.6 A/phase
Bipolar Parallel Resistance	0.65 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	3.87E-02 oz-in-sec ²
Integral Gearhead	No
Weight	8.4 lbs
Storage Temperature	-40 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/ 2.2 lb load
Perpendicularity	0.004 inches

