HW23-601

Applied Motion Products

IP65 Rated, NEMA 23 High Torque Step Motor

1pc. - 232.00 50pc. - 174.00



Product Features

- 2-phase hybrid step motor
- Rated IP65 for wet and dusty environments
- High torque design
- Standard NEMA 23 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

Product Description:

The HW23-601 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 HW23-601D-ZAC.

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 <u>video</u>.

Please note: This motor has features which do not conform to standard NEMA for gearhead ordering purposes. Stated lead time for a gearhead ordered with this motor may be longer than shown. Please call for delivery on a gearhead being ordered with this motor.

Specifications

Part Number:	HW23-601
Frame Size:	NEMA 23
Motor Type:	High torque
Part Number w/Encoder:	HW23-601D-ZAC
Motor Length:	3.21 inches
Number of Lead Wires:	8
Lead Wire Configuration:	shielded cable, no connector
Lead Wire/Cable Length:	120 inches
Lead Wire Gauge:	22 AWG
Unipolar Holding Torque:	191 oz-in
Bipolar Holding Torque:	269 oz-in
Step Angle:	1.8 deg
Bipolar Series Current:	2.12 A/phase
Bipolar Series Resistance:	2.2 Ohms/phase
Bipolar Series Inductance:	6.8 mH/phase
Bipolar Parallel Current:	4.24 A/phase
Bipolar Parallel Resistance:	0.7 Ohms/phase
Bipolar Parallel Inductance:	1.7 mH/phase
Unipolar Current:	3.00 A/phase
Unipolar Resistance:	1.1 Ohms/phase
Unipolar Inductance:	1.7 mH/phase
Rotor Inertia:	6.51E-03 oz-in-sec ²
Integral Gearhead:	No
Weight:	2.2 lbs
Storage Temperature:	-30 to 70 °C
Operating Temperature:	-20 to 50 °C

Insulation Class:	Class B (130 °C)
Shaft Run Out:	0.002 inch T.I.R. max
Radial Play:	0.0008 inch max w/ 1.1 lb load
End Play:	0.003 inch max w/ 2.2 lb load
Perpendicularity:	0.004 inches
Concentricity:	0.002 inches

Downloads

Family Datasheet:	HW-099-Errata.pdf StepMotorWiring-8-lead-cabled-striped.pdf
Datasheet:	http://s3.amazonaws.com/applied-motion-pdf/HW23-601.pdf
2D Drawing:	HW23-601_RevD.pdf HW23-601D-ZAC_RevC.pdf
3D Drawing:	☐ <u>HW23-601.igs</u> ☐ <u>HW23-601D-ZAC.igs</u>
Speed-Torque Curves:	StepMtrAppData_HW23-601_RevA.pdf

Pricing

	HW23-601 Part No. w/ Single Shaft	HW23-601D-ZAC Part No. w/ Encoder
1pc.	\$232.00	\$476.00
25pc.	\$199.52	\$409.36
50pc.	\$174.00	\$357.00
100pc.	Request a Quote for 100+ piece pricing.	