

HT23-553

NEMA 23 High Torque Step Motor

1pc. - 94.00
50pc. - 70.50



Product Features

- 2-phase hybrid step motor
- High torque design
- Standard NEMA 23 dimensions
- Optimized for high bus voltage



Description

Product Description:

The HT23-553 two-phase stepper motor is designed for use with the STAC5 and STAC6 series of stepper drives and is suitable for a wide range of motion control applications. The motor is optimized for use with high bus-voltage drives and comes with an integral 10 ft shielded cable.

The motor is terminated with 8 motor leads plus 1 ground lead making it easy to connect the motor to the drive depending on the drive voltage being used. For 120 VAC applications the motor leads must be connected in parallel. For 220 VAC applications the motor leads must be connected in series.








Note: The HT23-553 step motor supersedes the HT23-549 step motor in 120 VAC applications with the STAC6 stepper drives.

Specifications

Part Number:	HT23-553
Frame Size:	NEMA 23
Motor Type:	High torque
Part Number w/Double Shaft:	HT23-553D
Part Number w/Encoder:	HT23-553D-ZAA
Part Number w/Encoder & Cover:	HT23-553D-ZAC
Motor Length:	2.17 inches
Number of Lead Wires:	8
Lead Wire Configuration:	shielded cable, no connector
Lead Wire/Cable Length:	120 inches
Lead Wire Gauge:	24 AWG
Unipolar Holding Torque:	118 oz-in
Bipolar Holding Torque:	167 oz-in
Step Angle:	1.8 deg
Bipolar Series Current:	0.71 A/phase
Bipolar Series Resistance:	14.4 Ohms/phase
Bipolar Series Inductance:	51.2 mH/phase
Bipolar Parallel Current:	1.41 A/phase
Bipolar Parallel Resistance:	3.6 Ohms/phase
Bipolar Parallel Inductance:	12.8 mH/phase
Unipolar Current:	1.00 A/phase
Unipolar Resistance:	7.2 Ohms/phase
Unipolar Inductance:	12.8 mH/phase
Rotor Inertia:	4.25E-03 oz-in-sec ²
Integral Gearhead:	No

Weight:	1.5 lbs
Storage Temperature:	-40 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:	0.001 inch max w/ 1.0 lb load
End Play:	0.003 inch max w/ 2.2 lb load
Perpendicularity:	0.004 inches
Concentricity:	0.003 inches

Downloads

Family Datasheet:	 StepMotorWiring-8-lead-cabled-solid.pdf
Datasheet:	http://s3.amazonaws.com/applied-motion-pdf/HT23-553.pdf
2D Drawing:	 HT23-553_RevF.pdf  HT23-553D-ZAA_RevA.pdf
3D Drawing:	 23HT54D.igs  HT23_57mm_w_ZAA_encoder.igs
Speed-Torque Curves:	 STAC5_speed-torque.pdf  STAC6_speed-torque.pdf

Pricing

	HT23-553 Part No. w/ Single Shaft	HT23-553D Part No. w/ Double Shaft	HT23-553D- ZAA Part No. w/ Encoder	HT23-553D-ZAC Part No. w/ Encoder & Cover
1pc.	\$94.00	\$94.00	\$220.00	\$331.00
25pc.	\$80.84	\$80.84	\$189.20	\$284.66
50pc.	\$70.50	\$70.50	\$165.00	\$248.25
100pc.	Request a Quote for 100+ piece pricing.			