1-800-525-1609 Tel (831) 761-6555 Fax (831) 761-6544

### **Product Datasheet**

www.Applied-Motion.com

HT23-550

NEMA 23 High Torque Step Motor

1pc. - 140.00 50pc. - 105.00



#### **Product Features**

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



### Description

#### **Product Description:**

The HT23-550 two-phase stepper motor is designed for use with the STAC6 series of stepper drives (120 VAC input versions only) and is suitable for a wide range of motion control applications. The motor comes with an integral 10 ft shielded cable and a preassembled drive connector for easy connection to a STAC6 drive.

When not used with STAC6 drives, the preassembled drive connector can be removed to reveal 8 motor leads plus 1 ground lead. The 8 motor leads can be connected in one of three ways to the step motor drive of your choice: bipolar series (required for STAC6 drives), bipolar parallel, or unipolar.

**Note:** The HT23-550 step motor has been superseded by the <u>HT23-554</u> step motor for use in all new applications with STAC6 stepper drives.

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:	HT23-550		
Frame Size:	NEMA 23		
Motor Type:	High torque		
Part Number w/Double Shaft:	HT23-550D		
Part Number w/Encoder:	HT23-550D-ZAA		
Motor Length:	3.05 inches		
Number of Lead Wires:	8		
Lead Wire Configuration:	shielded cable w/ connector		
Lead Wire/Cable Length:	10 feet inches		
Lead Wire Gauge:	24 AWG		
Unipolar Holding Torque:	180 oz-in		
Bipolar Holding Torque:	255 oz-in		
Step Angle:	1.8 deg		
Bipolar Series Current:	1.41 A/phase		
Bipolar Series Resistance:	4.5 Ohms/phase		
Bipolar Series Inductance:	15.2 mH/phase		
Bipolar Parallel Current:	2.83 A/phase		
Bipolar Parallel Resistance:	1.1 Ohms/phase		
Bipolar Parallel Inductance:	3.8 mH/phase		
Unipolar Current:	2.00 A/phase		
Unipolar Resistance:	2.2 Ohms/phase		
Unipolar Inductance:	3.8 mH/phase		
Rotor Inertia:	6.80E-03 oz-in-sec <sup>2</sup>		
Integral Gearhead:	No		
Weight:	2.2 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/ 1.0 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/HT23-550.pdf	
2D Drawing:	HT23-550_revG.pdf  HT23-550D-ZAA_RevA.pdf	
3D Drawing:	23HT76D.igs HT23_76mm_w_ZAA_encoder.igs	
Speed-Torque Curves:	STAC6_speed-torque.pdf	

# Pricing

	HT23-550 Part No. w/ Single Shaft	HT23-550D Part No. w/ Double Shaft	HT23-550D-ZAA Part No. w/ Encoder
1pc.	\$140.00	\$140.00	\$266.00
25рс.	\$120.40		
50pc.	\$105.00		
100pc.	Request a Quote for 100+ piece pricing.		