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Product Datasheet

www.Applied-Motion.com

HT23-595

NEMA 23 High Torque Step Motor

Product Features

- *2-phase hybrid step motor*
- *High torque design*
- *Standard NEMA 23 dimensions*
- *Series or parallel wiring*
- *Optimized for microstepping*

Description

Product Description:

The HT23-595 two-phase stepper motor is suitable for a wide range of motion control applications. Terminated with 8 motor leads, the motor can be connected in a few different ways, including bipolar series and bipolar parallel.

Specifications

Part Number:	HT23-595
Frame Size:	NEMA 23
Motor Type:	High torque
Part Number w/Double Shaft:	HT23-595D
Part Number w/Encoder:	HT23-595D-ZAA
Motor Length:	1.61 inches
Number of Lead Wires:	8
Lead Wire Configuration:	flying leads, no connector
Lead Wire/Cable Length:	18 inches inches
Lead Wire Gauge:	22 AWG
Unipolar Holding Torque:	53.8 oz-in
Bipolar Holding Torque:	76.5 oz-in
Step Angle:	1.8 deg
Bipolar Series Current:	2.12 A/phase
Bipolar Series Resistance:	1.2 Ohms/phase
Bipolar Series Inductance:	2.4 mH/phase
Bipolar Parallel Current:	4.24 A/phase
Bipolar Parallel Resistance:	0.3 Ohms/phase
Bipolar Parallel Inductance:	0.6 mH/phase
Unipolar Current:	3.0 A/phase
Unipolar Resistance:	0.6 Ohms/phase
Unipolar Inductance:	0.6 mH/phase
Rotor Inertia:	1.91E-03 oz-in-sec^2
Integral Gearhead:	No
Weight:	0.93 lbs
Storage Temperature:	-30 to 70 °C

Operating Temperature:	-20 to 50 °C
Insulation Class:	Class B (130 ºC)
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:	StepMotorWiring-8-lead-striped.pdf Stepper Motor Life data-110817.pdf
Product PDF - S3 Link:	http://s3.amazonaws.com/applied-motion-pdf/HT23-595.pdf
2D Drawing:	HT23-595_RevD.pdf HT23-595D-ZAA_RevA.pdf
3D Drawing:	23HT39D.igs HT23_39mm_w_ZAA_encoder.igs
Speed-Torque Curves:	STR2_speed-torque.pdf