

Applied Motion Products, Inc. 404 Westridge Dr. Watsonville, CA 95076, USA 1-800-525-1609 Tel (831) 761-6555 Fax (831) 761-6544

### **Product Datasheet**

www.Applied-Motion.com

1pc. - 93.00 50pc. - 69.75

# HT23-598C

NEMA 23 Step Motor with 10 Foot Shielded Cable



## Product Features

- 2-phase hybrid step motor
- High torque design
- Standard NEMA 23 dimensions





### Description

#### **Product Description:**

The HT23-598 two-phase stepper motor is designed for use with the ST5 and STR4 stepper drives and is suitable for a wide range of motion control applications. The motor is optimized for use with DC powered drives and comes with an integral 10 ft shielded cable.

Single and double shaft versions are available. The HT23-598DC-ZAC includes an optical encoder with 10 foot cable and rugged metal cover.

The motor is terminated with 8 motor leads plus 1 ground lead.

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:	HT23-598C
Frame Size:	NEMA 23
Motor Type:	High torque
Part Number w/Double Shaft:	HT23-598DC
Part Number w/Encoder:	HT23-598DC-ZAA
Part Number w/Encoder & Cover:	HT23-598DC-ZAC
Motor Length:	2.35 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:	120 oz-in
Bipolar Holding Torque:	158 oz-in
Step Angle:	1.8 deg
Bipolar Series Current:	2.12 A/phase
Bipolar Series Resistance:	2.0 Ohms/phase
Bipolar Series Inductance:	5.6 mH/phase
Bipolar Parallel Current:	4.24 A/phase
Bipolar Parallel Resistance:	0.5 Ohms/phase
Bipolar Parallel Inductance:	1.4 mH/phase
Unipolar Current:	3.00 A/phase
Unipolar Resistance:	1.0 Ohms/phase
Unipolar Inductance:	1.4 mH/phase
Rotor Inertia:	0.0036 oz-in-sec <sup>2</sup>
Integral Gearhead:	No

Weight:	1.32 lbs		
Storage Temperature:	-30 +70 °C		
Operating	-20 +50 °C		
Temperature:			
Insulation Class:	В		
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:	http://s3.amazonaws.com/applied-motion-pdf/HT23-598C.pdf	
2D Drawing:	<ul> <li>d HT23-598C_RevB.pdf</li> <li>d HT23-598DC_RevB.pdf</li> <li>d HT23-598DC-ZAC_RevA.pdf</li> <li>d HT23-598DC-ZAA_RevA.pdf</li> </ul>	
3D Drawing:	HT23-598C.igs HT23-598DC.igs HT23-598DC-ZAA.igs HT23-598DC-ZAC.igs	
Speed-Torque Curves:	<ul> <li>✓ ST_speed-torque.pdf</li> <li>✓ STR_speed-torque.pdf</li> <li>✓ STR2_speed-torque.pdf</li> </ul>	

# Pricing

	HT23-598C Part No. w/ Single Shaft	HT23-598DC Part No. w/ Double Shaft	HT23-598DC- ZAA Part No. w/ Encoder	HT23-598DC-ZAC Part No. w/ Encoder & Cover	
1pc.	\$93.00	\$93.00	\$219.00	\$330.00	
25pc.	\$79.98	\$79.98	\$205.98	\$285.52	
50pc.	\$69.75	\$69.75	\$195.75	\$249.00	
100pc.	Request a Quote for 100+ piece pricing.				