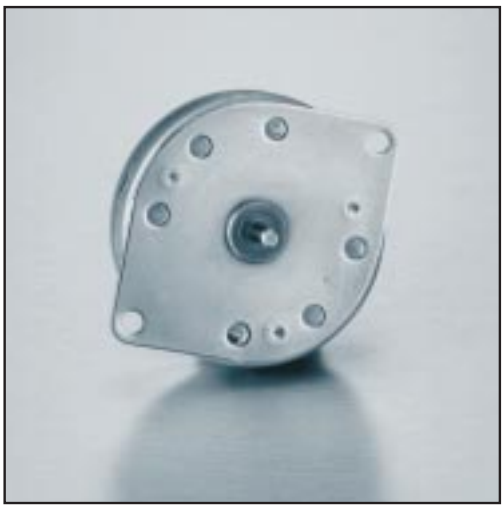
44M100D Series Stepper Motors



Standard Motor

Typical Modifications

Stepper Motor Features:

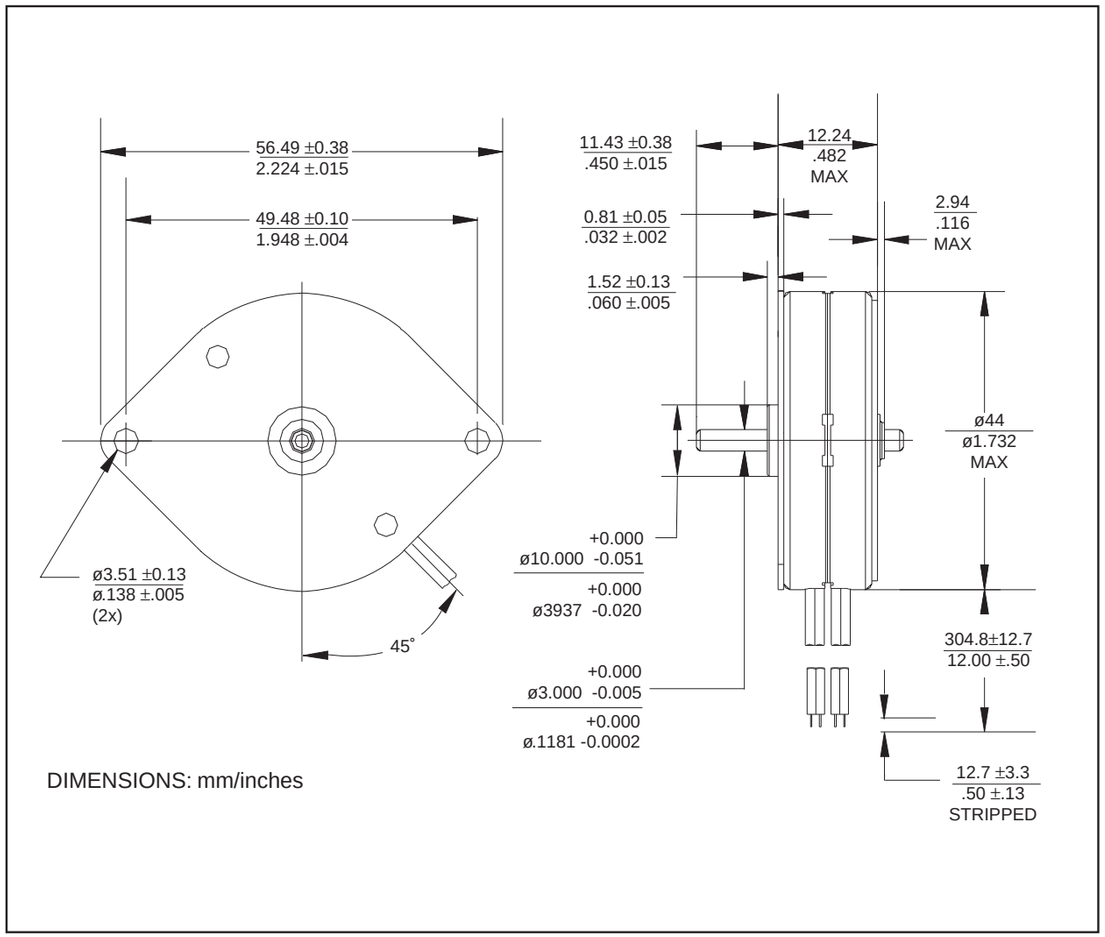
- 3.6° Step Angle (or 100 Steps per Revolution)
- 2 Watts Input Power per Winding
- Permanently Lubricated Sintered Bearings
- Available in Bipolar Construction Only
- Super Thin Design for Limited Space Application
- Excellent for Open-Loop Systems

Specifications	
Part Number	44M100D1B (Bipolar)
DC Operating Voltage (V)	5
Resistance per Winding (ohms) ±10%	12.5
Inductance per Winding (mH) ±20%	7.0
Holding Torque* (min, mNm/oz-in)	38.8/5.5
Detent Torque (max, mNm/oz-in)	19.7/2.8
Step Angle*	3.6° ± .25°
Steps per Revolution	100 steps
Rotor, Moment of Inertia (gm^2)	8.20×10^{-4}
Insulation Resistance at 500 Vdc	100 megohms, min.
Lead Wire Type	AWG #28, UL 3265 (125°C, 150V)
Bearing Type	Sintered Bronze Sleeve
Operating Temperature (Casing)	100°C, MAX
Ambient Temperature Range	OPERATION: -0°C TO 60°C STORAGE: -40°C TO 85°C
Dielectric Strength	650±50 Vrms, 50Hz, for 1 to 2 seconds
Weight (g/oz)	80/2.82

*Measured with Two Phases Energized

Overall Dimensions

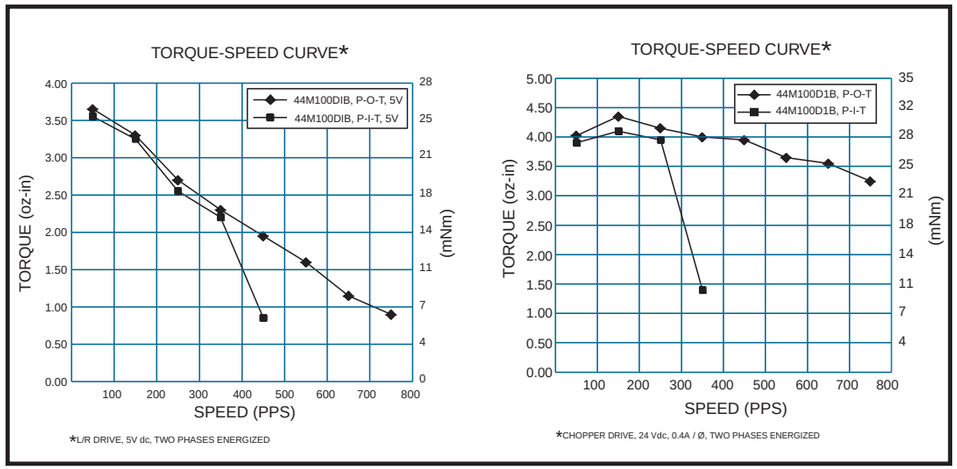
Series 44M100D Stepper Motors

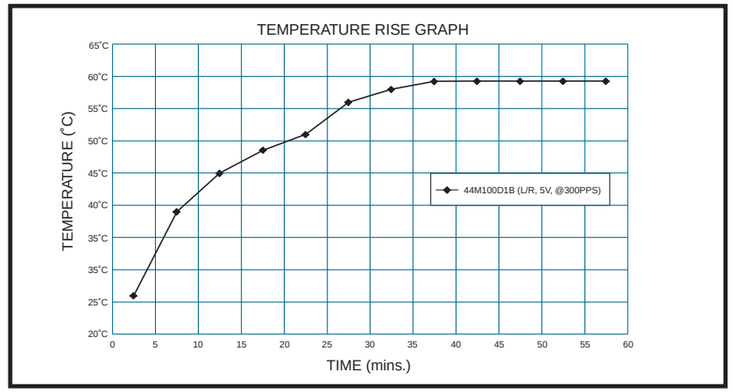


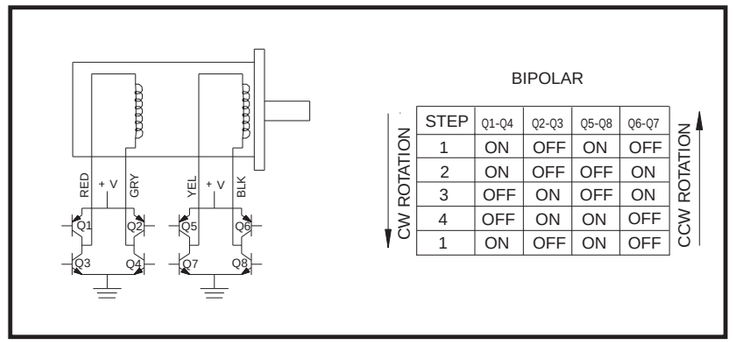
DIMENSIONS: mm/inches

The above outline drawing represents standard construction as illustrated in photo on cover. Modifications to this design are possible to better satisfy specific application needs. They include, but are not limited to, changes of output shaft and mounting plate dimensions, lead egress position, bearing system, electrical windings, as well as adding transmission devices (mounted pinion or pulley) and connecting system (terminals and housing). Photos on cover show two typical modifications. Contact a THOMSON AIRPAX MECHATRONICS technical specialist to discuss your application.

THOMSON AIRPAX MECHATRONICS







Schematic Bipolar Switching Sequence. Direction of Rotation Viewed from Shaft End.

It is the responsibility of the product user to determine the suitability of Thomson components for a specific application. Defective products will be replaced without charge if promptly returned. No liability will be assumed beyond such replacement.

THOMSON AIRPAX MECHATRONICS