



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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44M SERIES

SMALL BUT POWERFUL

**GENERAL SPECIFICATIONS**

Step Angle	3.6°
Step Accuracy	± 0.4°
Operating Temperature	100°C Max
Ambient Temperature Range	-20°C ~ +70°C
Insulation Resistance at 500Vdc	100MΩ
Dielectric Withstanding Voltage	650 ± 50 VRMS, 2 sec

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OPENS PDF IN NEW WINDOW

The specifications in this publication are believed to be accurate and reliable. However, it is the responsibility of the product user to determine the suitability of Portescap products for a specific application. While defective products will be replaced without charge if promptly returned, no liability is assumed beyond such replacement.

Portescap Danaher Motion motors will not be CE marked where the Low Voltage Directive, the Electro-Magnetic Compatibility or other appropriate EU directives are not applicable - this is an EU legal requirement.

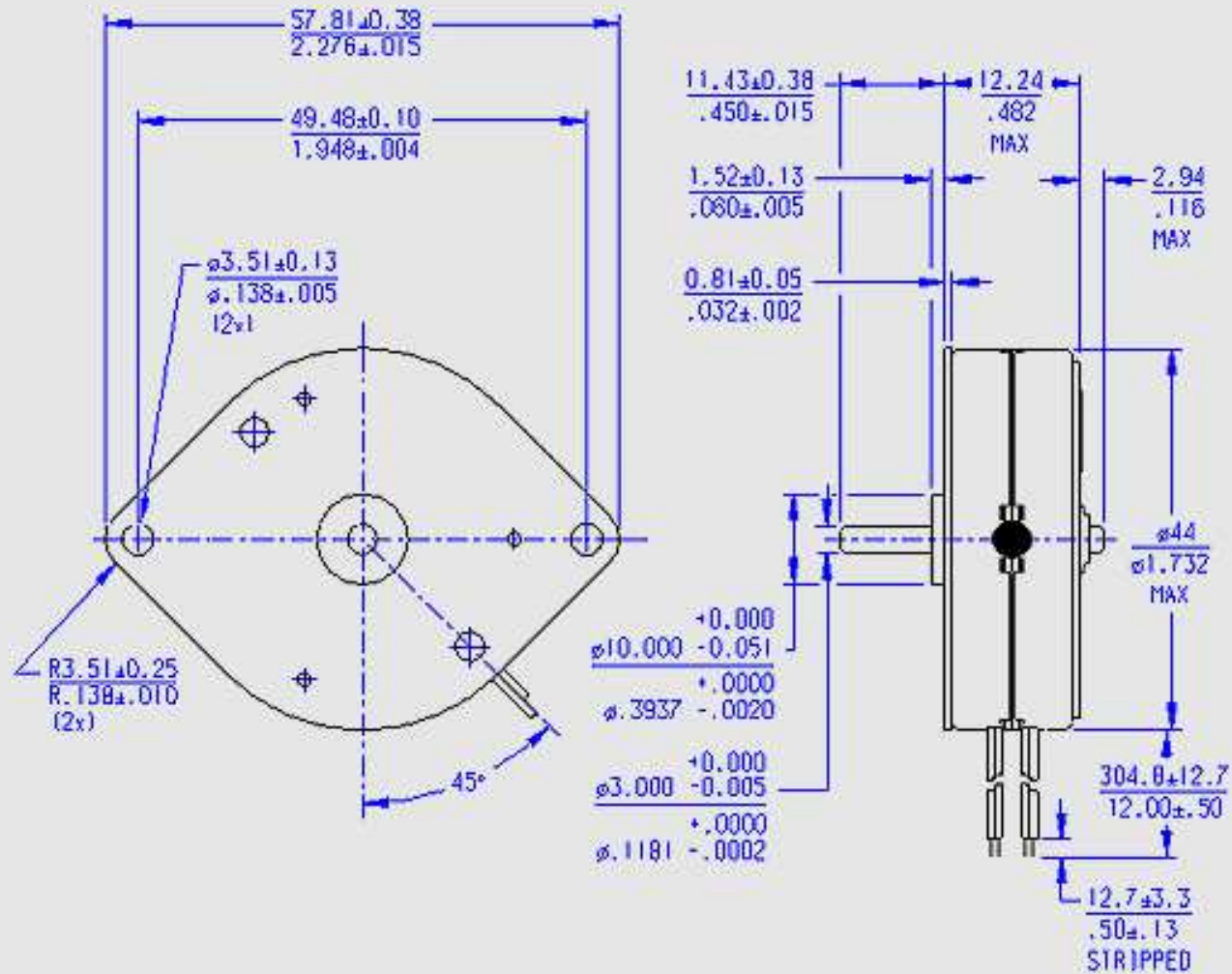
TECHNICAL SPECIFICATIONS

	BIPOLAR	
Part Number	44M100D1B	44M100D2B
DC Operating Voltage	5	12
Resistance per Winding (ohms)	12.5	70
Inductance per Winding (mH)	6.7	35
Holding Torque* (mNm/oz-in)	46.6 / 6.6	46.6 / 6.6
Rotor Moment of Inertia (g.m ²)	8.3 x 10 ⁻⁴	8.3 x 10 ⁻⁴
Detent Torque (mNm/oz-in)	8.47 / 1.20	8.47 / 1.20
Step Angle	3.6°	3.6°
Step Angle Tolerance*	± 0.4°	± 0.4°
Steps per Revolution*	100	100
Max. Operating Temperature	100°C	100°C
Ambient Temperature Range		
Operating	-20°C to 70°C	-20°C to 70°C
Storage	-40°C to 85°C	-40°C to 85°C
Bearing Type	Sintered bronze sleeve	Sintered bronze sleeve
Insulation Resistance at 500Vdc	100 megohms	100 megohms
Dielectric Withstanding Voltage	650 ± 50 VRMS, 2 sec	650 ± 50 VRMS, 2 sec
Weight (g/oz)	88 / 3.1	88 / 3.1
Leadwires	28 AWG, UL Style 3265	28 AWG, UL Style 3265

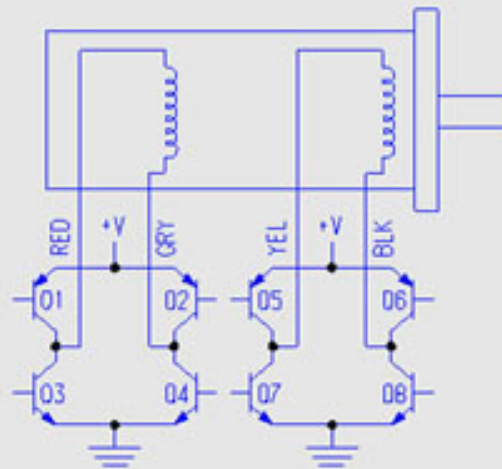
* Measured with 2 phases energized

MECHANICAL DIMENSIONS

UNITS = MM / INCHES



WIRING DIAGRAM



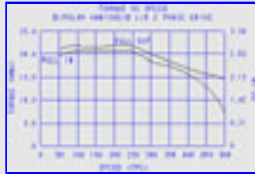
BIPOLAR

STEP	01-04	02-03	05-08	06-07
1	ON	OFF	ON	OFF
2	ON	OFF	OFF	ON
3	OFF	ON	OFF	ON
4	OFF	ON	ON	OFF
1	ON	OFF	ON	OFF

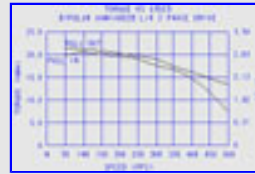
CW ROTATION
CCW ROTATION

MOTOR DYNAMICS

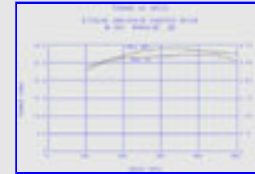
CLICK ON A THUMBNAIL TO MAGNIFY



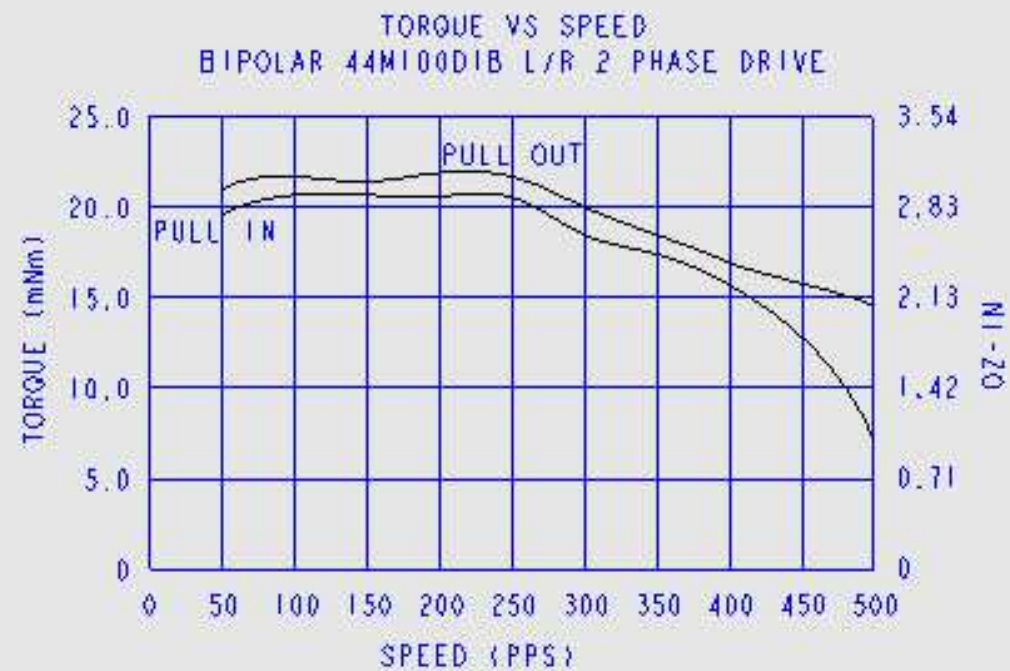
44M100D1B, Bipolar,
L/R Drive



44M100D2B, Bipolar,
L/R Drive



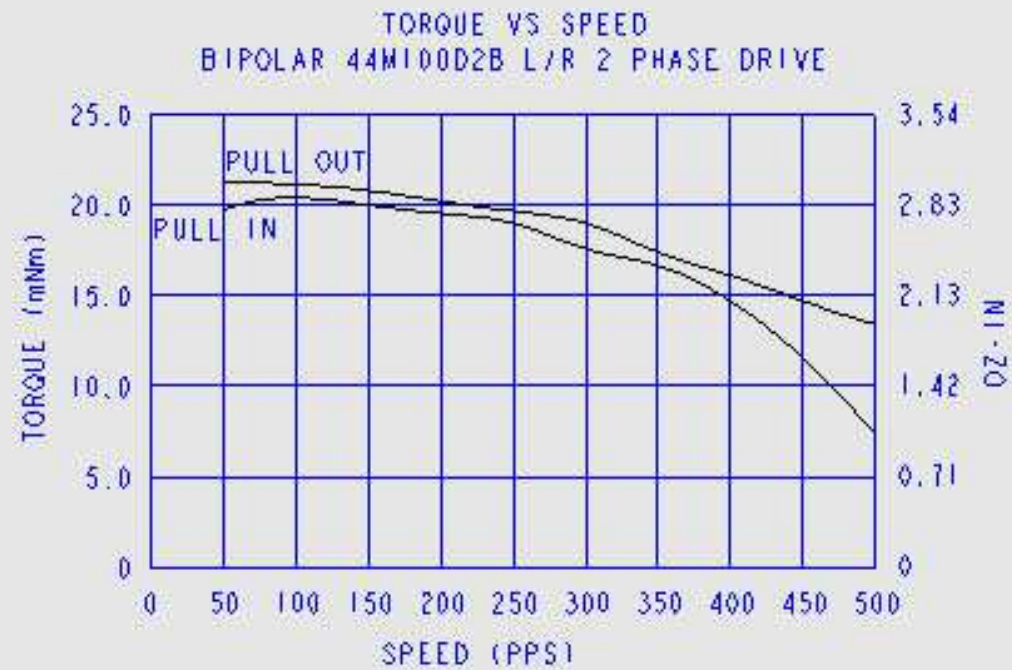
44M100D1B, Bipolar,
Chopper Drive



MOTOR DYNAMICS



CHART INDEX





TORQUE VS SPEED

BIPOLAR 44M100D1B CHOPPER DRIVE
@ 36V, 400mA/Ø, 2Ø

