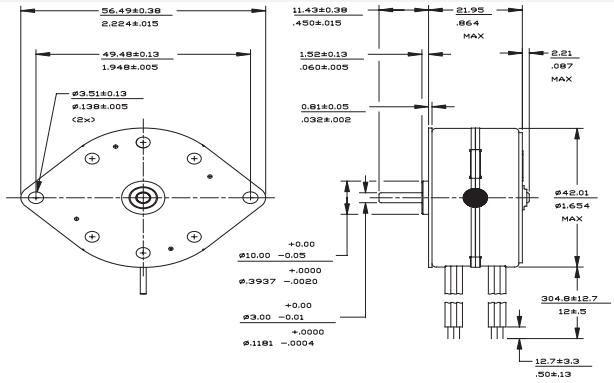
42L048D RoHS Compliant Ø42mm 131 mNm

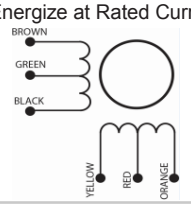


Dimensions in mm

42L048D

Electrical Data		42L048D1U Unipolar	42L048D2U Unipolar	42L048D1B Bipolar	42L048D2B Bipolar	
1	Operating Voltage	5	12	5	12	VDC
2	Resistance per Phase, ± 10%	5.2	30.0	5.2	30.0	Ohms
3	Inductance per Phase, typ	2.1	11.3	4.2	22.3	mH
4	Rated Current per Phase *	0.96	0.40	0.96	0.40	A
Coil independent parameters						
5	Holding Torque, MIN *	106 (15.1)	106 (15.1)	131 (18.5)	131 (18.5)	mNm (oz-in)
6	Detent Torque, Max		29.7 (4.2)			mNm (oz-in)
7	Rotor Inertia		19.5 (0.1066)			gcm^2 ($oz\text{-}in\text{-}s^2$)
8	Step Angle		7.5			Degree
9	Absolute accuracy 2 ph. On, Full step		± .5			Degree
10	Steps per Revolution		48.0			
11	Ambient Temp Range (operating)		-20 to +70 (-4 to +158)			°C (°F)
12	Maximum Coil Temperature		130 (266)			°C (°F)
13	Bearing Type		Sintered Bronze Sleeve			
14	Insulation Resistance at 500 VDC		100.0			Mohms
15	Dielectric Withstanding Voltage		650 for 2 seconds			VAC
16	Weight		116.4 (4.1)			g (oz)
17	Leadwire		AWG #26, UL 1430 (105°C, 300V)			
All Motor Data Values at 20°C Unless Otherwise Specified						

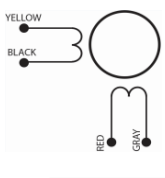
* Energize at Rated Current, 2 Phase On



UNIPOLAR COIL				
YELLOW	ORANGE	BROWN	BLACK	RED/GREEN
+	-	+	-	+
+	-	-	+	+
-	+	-	+	+
-	+	+	-	+
+	-	+	-	+

CW ↓ CC ↑

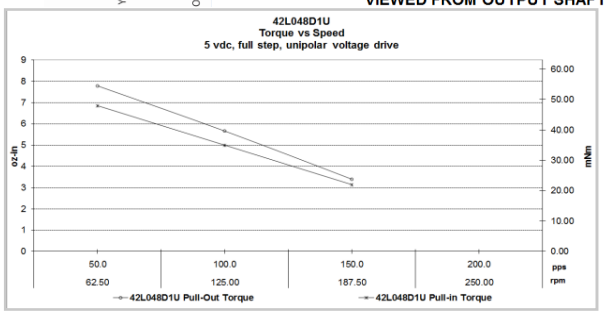
VIEWED FROM OUTPUT SHAFT

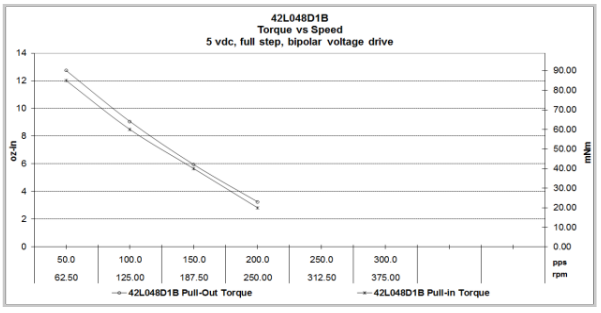


BIPOLAR COIL			
RED	GRAY	YELLOW	BLACK
+	-	+	-
+	-	-	+
-	+	-	+
-	+	+	-
+	-	+	-

CW ↓ CCW ↑

VIEWED FROM OUTPUT SHAFT





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