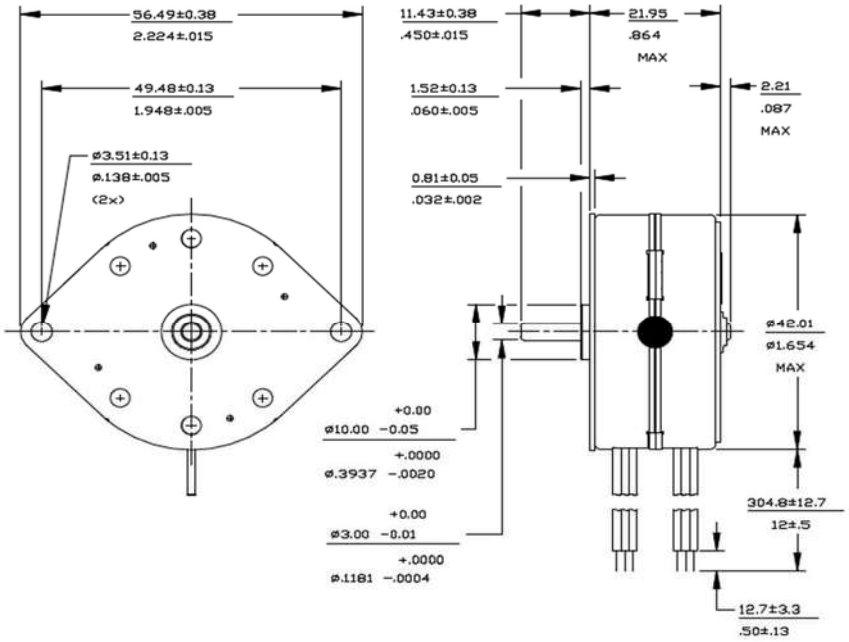
42L048D RoHS Compliant Ø42mm 18.5 mNm

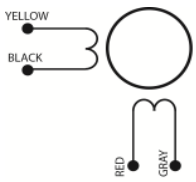


42L048D

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)	29.7 (4.2)	29.7 (4.2)	29.7 (4.2)	mNm (oz-in)
7 Rotor inertia		19.5 (0.1066)	19.5 (0.1066)	19.5 (0.1066)	19.5 (0.1066)	(gcm^2) (oz-in-s^2)
8 Step Angle		7.5	7.5	7.5	7.5	Degree
9 Absolute accuracy 2 ph. On, Full step		± .5	± .5	± .5	± .5	Degree
10 Steps per Revolution		48	48	48	48	
11 Ambient Temp Range (operating)		-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	°C (°F)
12 Maximum Coil Temperature		130 (266)	130 (266)	130 (266)	130 (266)	°C (°F)
13 Bearing Type		Sintered Bronze Sleeve	Sintered Bronze Sleeve	Sintered Bronze Sleeve	Sintered Bronze Sleeve	
14 Insulation Resistance at 500 VDC		100	100	100	100	Mohms
15 Dielectric Withstanding Voltage		650 for 2 seconds	650 for 2 seconds	650 for 2 seconds	650 for 2 seconds	VAC
16 Weight		116.4 (4.1)	116.4 (4.1)	116.4 (4.1)	116.4 (4.1)	g (oz)
17 Leadwire		AWG 26, UL 1430	AWG 26, UL 1430	AWG 26, UL 1430	AWG 26, UL 1430	

All Motor Data Values at 20°C Unless Otherwise Specified

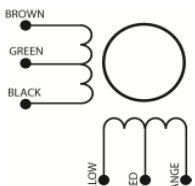
* Energize at Rated Current, 2 Phase On



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

CW CCW

VIEWED FROM OUTPUT SHAFT



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

CW CCW

VIEWED FROM OUTPUT SHAFT

(C) 2013. Portescap. Specifications subject to change without notice.