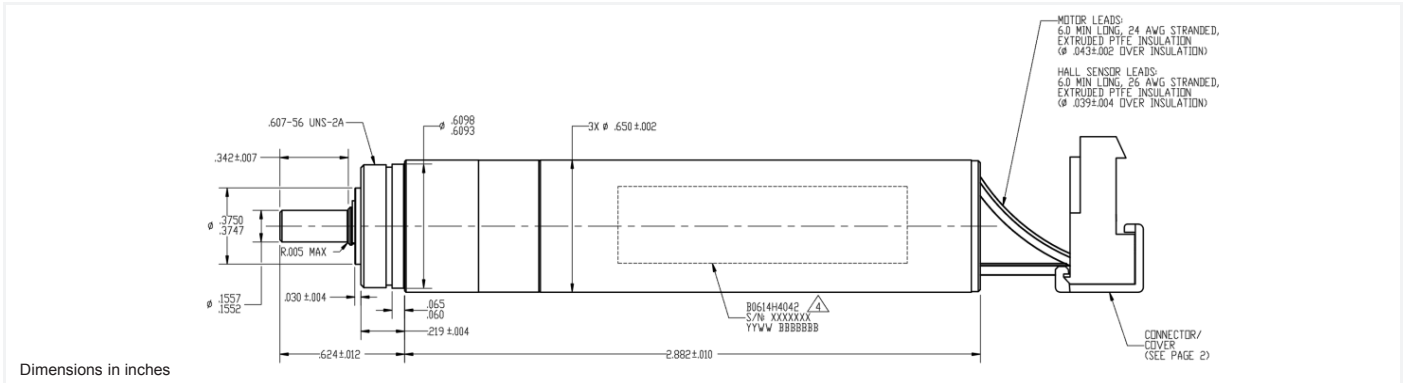


ARTHROSCOPIC JOINT SHAVER – Brushless Slotted

Ø 0.65 in.



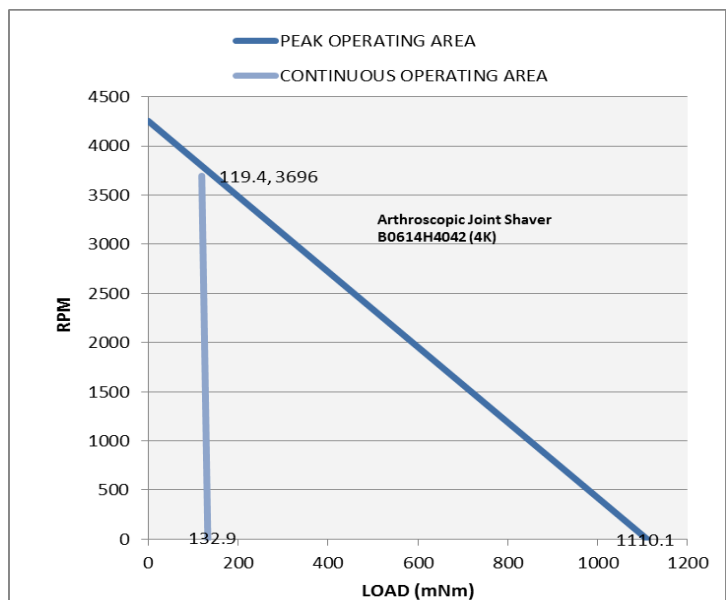
**B0614H4042**

Electrical Data	Part Number	B0614H4042	Units
1 Nominal Voltage	$U_N$	24	Volt
2 Max No-Load Current ( ±50%)	$I_{nl}$	600	mA
3 No-Load Speed	$W_{nl}$	4,255	rpm
4 Resistance - Phase to Phase	R	1.03	ohm
5 Continuous Stall Torque	$T_{cs}$	119.4 (16.9)	mNm (oz-in)
6 Continuous Stall Current	$I_{cs}$	2.59	A
7 Peak Torque for 1s	$T_{pk}$	1110.1 (157.2)	mNm (oz-in)
8 Peak Current	$I_{pk}$	22.9	A
9 Back EMF Constant	$K_e$	5.640	v/1000 rpm
10 Torque Constant	$K_t$	53.88 (7.62)	mNm/A (oz.-in/A)
11 Motor Regulation $R/K_t^2$	-	0.4	$10^9/Nms$
12 Motor Regulation $K_t/R^{1/2}$	-	53.1	mNm/W <sup>1/2</sup>
13 Inductance - Phase to Phase	L	0.180	mH @1Khz
<b>General Data</b>			
14 Thermal Resistance (winding to ambient)	$R_{th}$	12.5	°C/W
15 Thermal Time Constant	$t_w$	950	s
16 Mechanical Time Constant	$t_m$	2.43	ms
17 Electrical Time Constant	$t_e$	0.17	ms
18 Rotor Inertia	J	12.56 (17.8)	kgm <sup>2</sup> 10 <sup>-8</sup> (oz-in-sec <sup>2</sup> 10 <sup>-6</sup> )
19 Max Winding Temperature	-	155 (311)	°C (°F)
20 Shaft Load Max.: radial (static)	-	63.0 (14.2), @ 5mm from front of bearing	N (lb)
axial (static)	-	30.56 (6.87)	N (lb)
21 Mass	M	107 (3.8)	g (oz)
22 Length	L	73.3 (2.9)	mm (in)
23 Tolerances	-	Tolerances on all values ±10% unless otherwise specified.	

Lead color	Function
Blue	Phase A
Brown	Phase B
Violet	Phase C
Red	4.5 to 24 vdc
Yellow	Hall 1
Orange	Hall 2
White	Hall 3
Black	Supply RTN

Notes

- Solution includes a BLDC motor and 6:1 gearhead
- Three phase motor with Wye connections
- Designed for sterilization in an autoclavable
- Hall sensors: supply voltage 4.5V - 24V
- Typical housing material 303 SS
- Typical shaft material 17-4 PH
- Motor is RoHS Compliant
- Above parameters specified for 25 Deg C ambient temperature



V121616