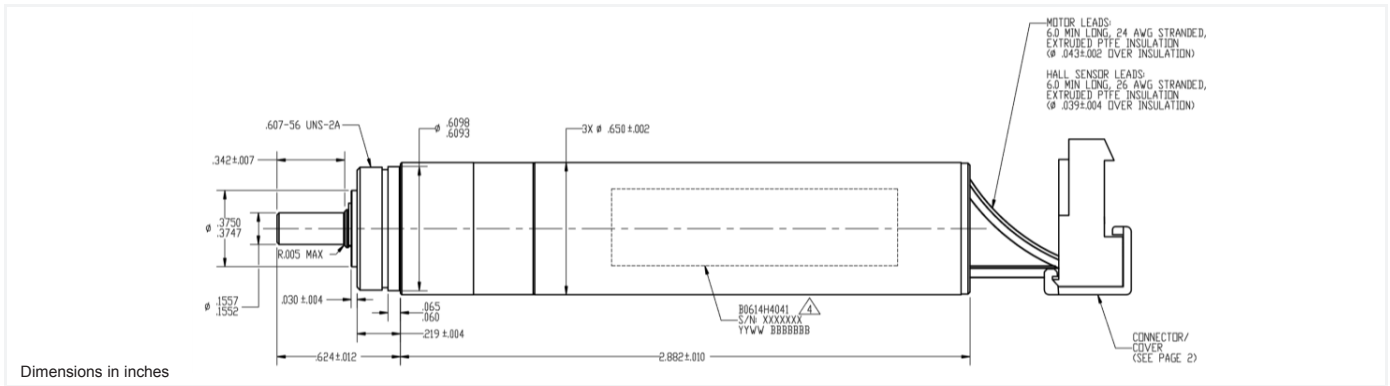


ARTHROSCOPIC JOINT SHAVER – Brushless Slotted

Ø 0.65 in.



B0614H4041

Electrical Data	Part Number	B0614H4041	Units
1 Nominal Voltage	U_N	24	Volt
2 Max No-Load Current (±50%)	I_{nl}	645	mA
3 No-Load Speed	W_{nl}	7,277	rpm
4 Resistance - Phase to Phase	R	0.36	ohm
5 Continuous Stall Torque	T_{cs}	117.7 (16.7)	mNm (oz-in)
6 Continuous Stall Current	I_{cs}	4.37	A
7 Peak Torque for 1s	T_{pk}	1865 (264)	mNm (oz-in)
8 Peak Current	I_{pk}	66.0	A
9 Back EMF Constant	K_e	3.300	v/1000 rpm
10 Torque Constant	K_t	31.38 (4.44)	mNm/A (oz.-in/A)
11 Motor Regulation R/K_t^2	-	0.4	10 ³ /Nms
12 Motor Regulation $K_t/R^{1/2}$	-	52.3	mNm/W ^{1/2}
13 Inductance - Phase to Phase	L	0.060	mH @1Khz
General Data			
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	2.50	ms
17 Electrical Time Constant	t_e	0.16	ms
18 Rotor Inertia	J	12.56 (17.8)	kgm ² 10 ⁻⁸ (oz-in-sec ² 10 ⁻⁶)
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

