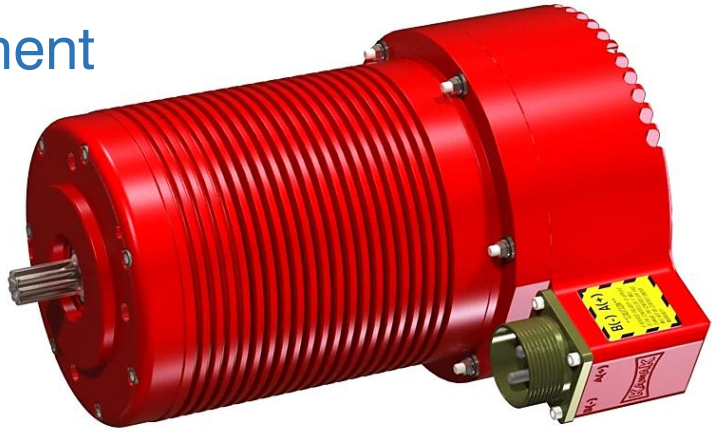
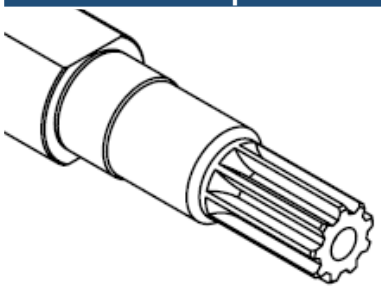
BLDC- IP66 Harsh Environment High Output Motor



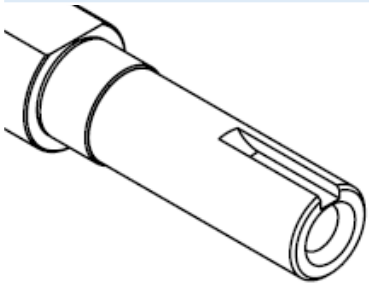
- Peak Torque……11 Nm
- Max Speed……3700 rpm
- Supply Voltage…….28 vdc
- High Efficiency…….90%

Motor Performance		
Supply voltage ***(per 704F military standard)***	**VDC**	28
No load current	**A**	5
No load speed	**RPM**	3700
	rad/s	387.5
Rated speed[1]	**RPM**	3150
	rad/s	329.9
Rated torque[1]	**Nm**	11
	in-lb	97
Rated current[1]	**A**	140
Max. efficiency		90%
Torque constant[2]	**Nm/A**	0.082
Speed constant	**V/(rad/s)**	0.074
	V/kRPM	7.7
Speed/ torque gradient	**rpm/Nm**	48
	(rad/s)/Nm	5.04
Number of poles		8
Thermal Data		
Thermal resistance motor housing to ambient[3]	**°C/W**	0.075
Thermal resistance ESC to housing[3]	**°C/W**	0.058
Thermal time constant	**min**	15
Max. controller temperature	**°C**	105
Other Specifications		
IP Rating		IP66
Weight	**lbf**	26
	lbm	0.808
	kg	11.8

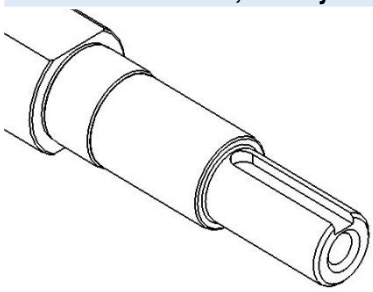
Motor Output Shaft Options



ANSI B92.1-1996, 5/8”-9 Spline



ANSI B17-1, ¾” Keyed Shaft



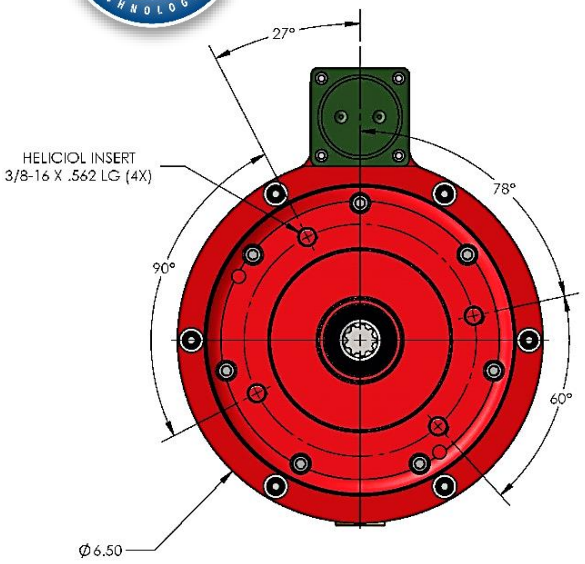
Non Standard, 19/32” Keyed Shaft

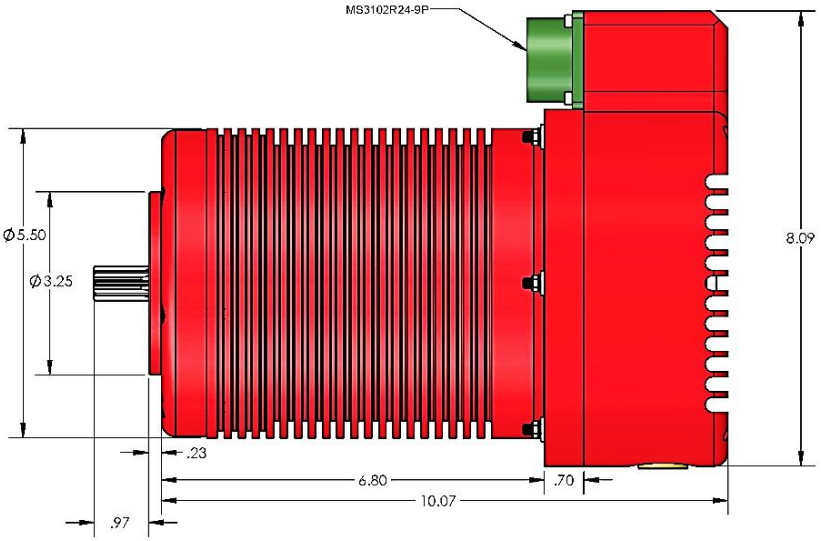
[1] Rated output is maximum continuous output with a nominal airflow of 3.5 m/s

[2] Kt represents $\frac{d\tau}{dI}$. Total current will be slightly higher. See graph of Current Vs. Torque

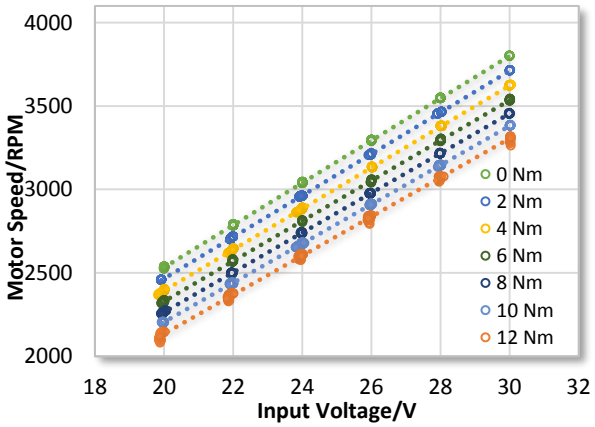
[3] Thermal resistance to ambient measured at nominal airflow of 3.5 m/s

High Output 28V Brushless DC Motors

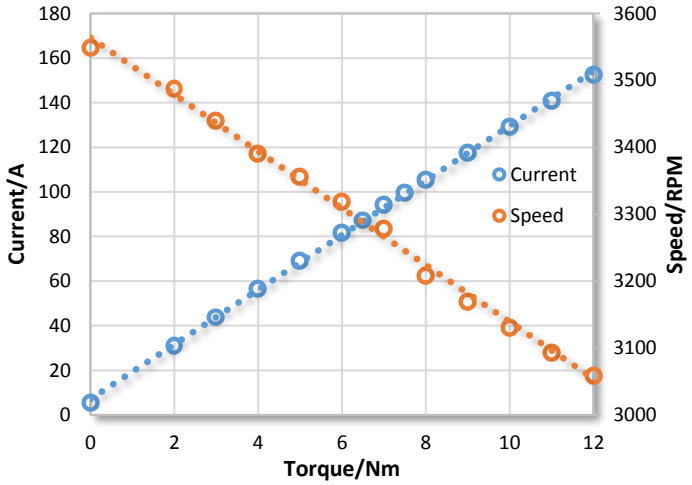




Motor Speed Vs. Input Voltage

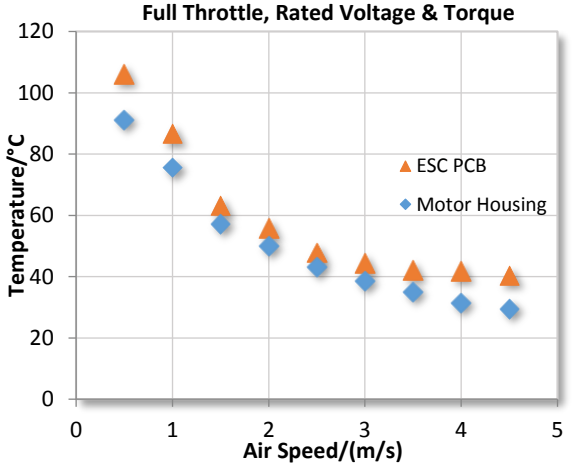


Motor Performance



Temperature Rise

Full Throttle, Rated Voltage & Torque



Motor Efficiency