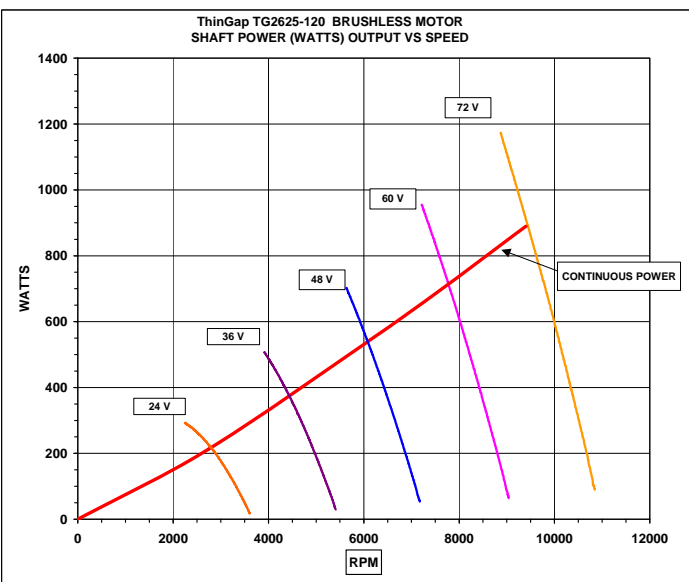
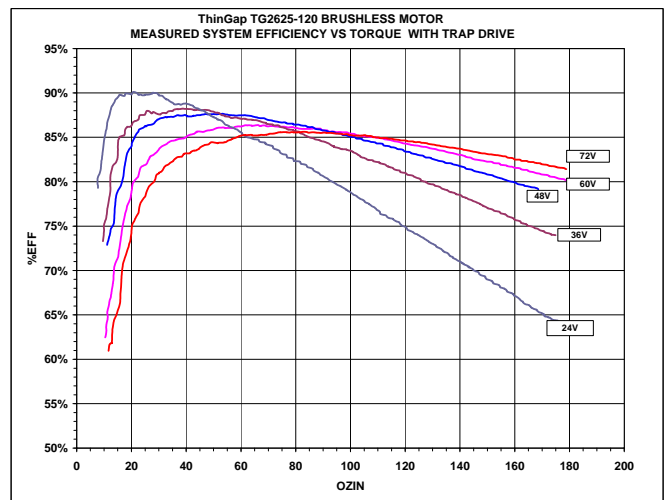
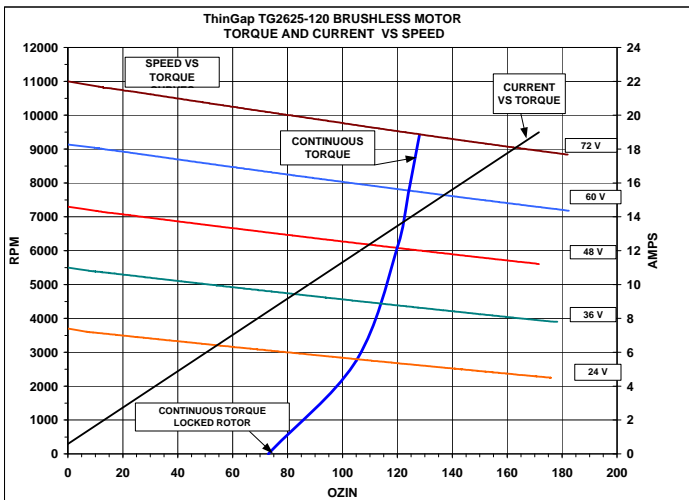
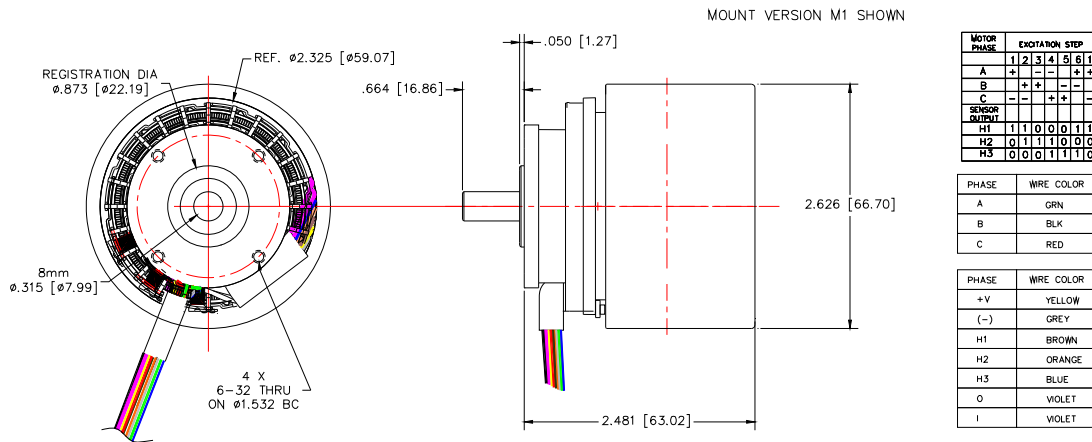




- High Speed
- High power – 1.1 H.P.
- 600 oz-in. peak torque
- 90% peak system efficiency
- No cogging or hysteresis torque
- Other mounting configurations available
- 8 Pole Y Coil
- 3 Mounting Options

TG2330 BRUSHLESS DC MOTOR				
Peak torque ¹	T_{pk}	600		oz-in.
Peak current ¹	I_{pk}	67		amps
Power density	-	8.1	31.3	W/oz
Continuous voltage	V_{cont}	24	66	V_{dc}
Shaft power ²	P_{cont}	210	813	W
Speed	ω_{cont}	2,710	8,650	rpm
Torque	T_{cont}	105	127	oz-in.
Current	I_{cont}	12.3	15.0	amps
Maximum locked rotor torque	T_{lr}	73		oz-in.
Maximum locked rotor current	I_{lr}	8.0		amps
No load voltage	V_{nl}	24	72	V_{dc}
No load speed	ω_{nl}	3,700	11,000	rpm
No load current	I_{nl}	0.35	0.95	amps
Motor constant	K_m	16.3		oz-in./sqrt (W)
Torque constant -trap drive	K_t	9.1		oz-in./amp
Back EMF constant	K_v	0.067		$V_{dc}/rad/sec$
Back EMF constant	K_e	142		rpm/ V_{dc}
Terminal resistance	R_t	0.31		Ω
Cogging and hysteresis torque	T_c/T_h	0		oz-in.
Viscous drag torque	T_{ac}	0.76		oz-in./krpm
Friction torque	T_{fr}	0.05		oz-in.
Armature inductance	L	10		μH
Mechanical time constant	T_m	29		mS
Electrical time constant	T_e	0.032		mS
Maximum system efficiency	-	90		%
Motor weight ³	Wt	26		oz
Rotor inertia	J	5.52E-02		oz-in.-sec ²
Max rotor temperature ⁴	-	70		°C
Max stator winding temperature ⁴	-	110		°C

1-Torque vs. current is linear and thermally limited to short duration. 2-Motor testing performed at 25 °C ambient-no forced air cooling, with mounting heat sink of 3" x 0.375" x 8" aluminum. 3-Weight shown with wiring. 4-Magnet temperature stability limited. Tests performed using a 20-amp, 80 V_{dc} trapezoidal BLDC PWM controller with 50 μH inductor each leg that adds .027 Ω phase resistance. Input power includes driver and 50uH inductor losses.



THINGAP CORPORATION
 (805) 477-9741
 (805) 477-7535 Fax