

Motor Winding	C4-161								C4-162									
	K		I		F		D		M			J			H			
Nominal Supply Voltage, V _T (V)	90	75	48	75	48	48	24	24	12	90	75	48	75	48	24	48	24	12
Max Speed, n _{max} (rpm)	3,500	2,700	1,400	5400	3100	6500	3000	4500	1800	3,500	2,700	1,500	5,200	3,000	1,400	5,000	2,200	1,000
Cont. Torque, T _c (Nm) @ 20°C		0.21		0.21		0.19		0.18			0.41		0.38			0.37		
Standstill Torque, T _s (Nm) @ 20°C	1.19	1.02	0.69	1.57*	1.14	1.67*	1.02*	1.33*	0.73*	2.85*	2.54	1.73	3.58*	2.76*	1.54	3.38*	2.07*	1.08
Max Cont. Power, P (W)		55		60		70		75			85		100			110		
Current @ Cont. Torque, I _c (A)		1.37		2.35		4.1		5.5			2.24		3.96			5.5		
Current @ Standstill Torque, I _s (A)	8.5	7.1	4.5	21.6*	13.7	46.5*	22.8*	46*	22.0*	18.7*	15.5	9.8	53.3*	33.7*	16.3	67.0*	33.0*	15.7
No Load Current, I _{NL} (A)	0.19	0.18	0.15	0.39	0.31	0.84	0.58	0.99	0.72	0.22	0.2	0.16	0.53	0.41	0.3	0.72	0.49	0.38
Torque Const., K _T (Nm/A)		0.165		0.096		0.051		0.035			0.192		0.101			0.071		
Back EMF Const, K _e (V/krpm)		17.4		10.2		5.35		3.75			20.3		10.7			7.5		
DC Resistance, R (Ω)		10.4		3.4		1.01		0.5			4.74		1.38			0.7		
Inductance, L (mH)		14.4		4.9		1.36		0.67			7.7		2.1			1.03		
Elec Time Const., T _e (msec)		1.4		1.4		1.3		1.3			1.6		1.5			1.5		
Mech Time Const., T _m (msec)		19		18		19		20			12		13			13		
Inertia, J _M (kgcm ²) excl. feedback		0.49		0.49		0.49		0.49			0.927		0.927			0.927		
Weight, M (kg), excl. feedback		1.6		1.6		1.6		1.6			2.1		2.1			2.1		
Static Friction, T _F (Nm)		0.017		0.017		0.017		0.017			0.02		0.02			0.02		
Viscous Damping, F ₁ (Nm/krpm)		0.003		0.003		0.003		0.003			0.005		0.005			0.005		

* Max Recommended value of peak current (I_{PK}) = 18A for good brush life

Tachogenerator Option

Tachogenerator Model	TGF 1568
Voltage, K _G (V/krpm)	3.0 / 7.0
Ripple (pk-pk/avg)	3%
Inertia, J _T (kgm ²)	0.13x10 ⁻⁴
Weight, M _T (kg)	0.5

Encoder Option

Encoder Type	Incremental (A quad B with index Z & complements)
Power Supply	5V DC ± 5%, 200mA max
Output	Line Driver, 20mA Max source/sink
Resolution (ppr)	1024 / 2048 / 4096
Frequency Response	200 kHz max