

Motor Winding	C4-161								C4-162									
	K			I		F		D		M			J			H		
Nominal Supply Voltage, Vt (V)	90	75	48	75	48	48	24	24	12	90	75	48	75	48	24	48	24	12
Max Speed, nmax (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, Tc (Nm) @ 20°C		0.21			0.21		0.19		0.18		0.41			0.38			0.37	
Standstill Torque, Ts (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, Ic (A)		1.37			2.35		4.1		5.5		2.24			3.96			5.5	
Current @ Standstill Torque, Is (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, INL (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., Kt (Nm/A)		0.165			0.096		0.051		0.035		0.192			0.101			0.071	
Back EMF Const, Ke (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., Te (msec)		1.4			1.4		1.3		1.3		1.6			1.5			1.5	
Mech Time Const., Tm (msec)		19			18		19		20		12			13			13	
Inertia, JM (kgcm <sup>2</sup> ) 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, Tf (Nm)		0.017			0.017		0.017		0.017		0.02			0.02			0.02	
Viscous Damping, F1 (Nm/krpm)		0.003			0.003		0.003		0.003		0.005			0.005			0.005	

\* Max Recommended value of peak current (IPK) = 18A for good brush life

**Tachogenerator Option**

Tachogenerator Model	TGF 1568
Voltage, KG (V/krpm)	3.0 / 7.0
Ripple (pk-pk/avg)	3%
Inertia, JT (kgm <sup>2</sup> )	0.13x10 <sup>-4</sup>
Weight, MT (kg)	0.5

**Encoder Options:**

**Flexmount Encoder**

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

**Single Ended Modular Encoder**

Encoder Type	Incremental (A quad B with index Z)
Power Supply	5V DC , 85mA max
Output	TTL Squarewave Output
Resolution (ppr)	512/ 900/1024
Frequency Response	100 kHz max

**Differential Modular Encoder**

Encoder Type	Incremental (A quad B with index Z & complements)
Power Supply	5V DC , 85mA max
Output	Internal Line Driver 26C31 (can source/sink 20mA at TTL levels)
Resolution (ppr)	512/ 900/1024
Frequency Response	100 kHz max