TYPE 12 BRUSHLESS PERMANENT MAGNET MOTOR

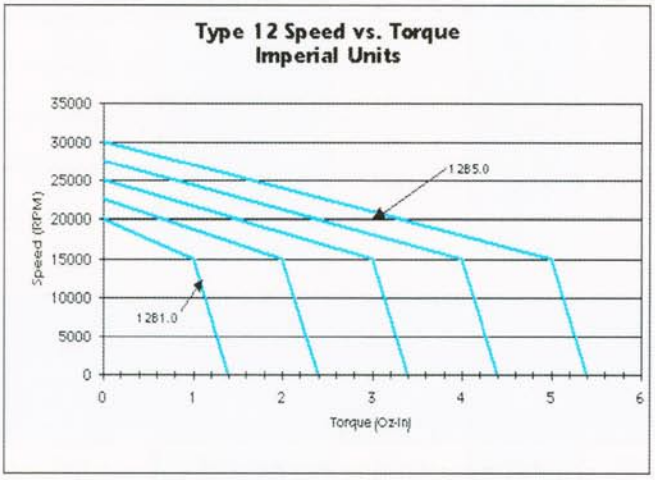
PERFORMANCE AT +25° C UNIT TEMPERATURE

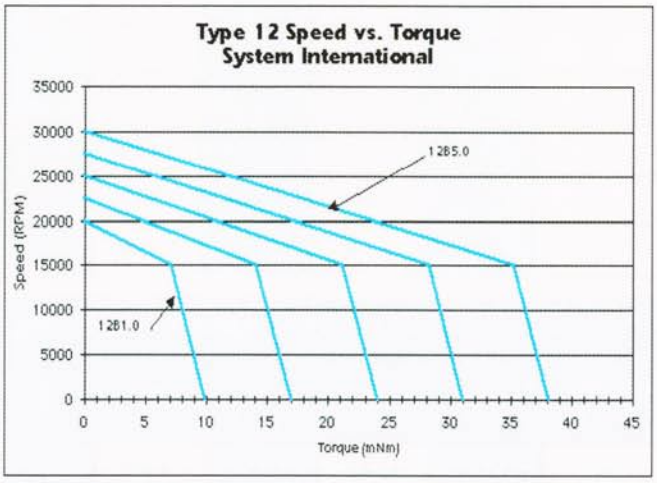
Km= 0.9

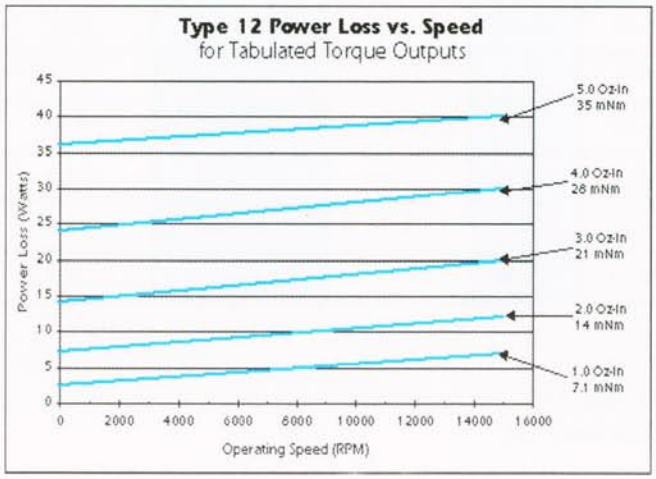
MOTOR TYPE	DATA AT MAXIMUM POWER OUTPUT					DATA AT STALL			NO LOAD SPEED	TORQUE CONSTANT	
	MOTOR TORQUE		MOTOR SPEED	POWER OUTPUT	POWER LOSS	MOTOR TORQUE		POWER LOSS		270 VOLT SUPPLY (SEE NOTE 3)	
	Oz-In	mNm	RPM	WATTS	WATTS	Oz-In	mNm	Watts	RPM	Oz-In/Amp	mNm/Amp
12B1.0	1.0	7	15000	11	7	1.4	10	2.5	22000	15.9	112
12B2.0	2.0	14	15000	22	12	2.4	17	7.1	24000	14.5	102
12B3.0	3.0	21	15000	33	20	3.4	24	14	25500	13.8	97
12B4.0	4.0	28	15000	44	30	4.4	31	24	27000	13.2	93
12B5.0	5.0	35	15000	55	40	5.4	38	36	29000	12.5	88

Notes:

1. Other performance characteristics are available on request.
2. Two phase or three phase windings as required.
3. To determine torque constant at other supply voltages, multiply the tabulated torque constant by your operational voltage, then divide this figure by 270.
4. Unit operational temperature range: -80° C to +225° C. Wider temperature ranges available.
5. See pages 14 through 17 for motor temperature rise data.







TYPE 12 CONSTANTS (@ 25° C For Reference Only)			
Parameter	**Symbol**	**Units**	**Value**
Inertia	J_M	Oz-In-sec^2	9.00 E-06
		kgm^2	6.36 E-08
Motor Constant	K_M	Oz-In/w $^{.5}$	0.9
		mNm/w $^{.5}$	6.4
Electrical Time Constant (L/R)	τ_e	sec	1.8 E-04
Coulomb Friction	F_C	Oz-In	0.15
		mNm	1.06
Viscous Friction	B_V	Oz-In/rpm	2.67 E-05
		mNm/rpm	1.89 E-04