6V LP Motor Parameters			Notes
	#4826	#4829	
Catalog			
Gear ratio	74.8300000	226.76	G
Rated Voltage	6.0000000	6	V_rated
Encoder current (A)	0.0200000	0.02	Based on no load difference
Motor No-load current (A)	0.1000000	0.1	i_free
No-load speed (output RPM)	80.0000000	27	w_free
Stall Current (A)	2.0000000	2	i_stall
Stall torque (kg cm)	7.5000000	17	t_stall
Mass (kg)	0.1040000	0.106	
Calculated			
Motor resistance based on stall (Ohms)	3.000	3.000	=V_rated/i_stall
Kt G : Motor torque constant (kg cm / A)	3.750	8.500	Kt G = t_stall/i_stall
Kt G : Motor torque constant (N m / A)	3.6775E-01	8.3357E-01	Kt G (N m / A)
Ke G : Motor electric constant (V/RPM)	7.1250E-02	2.1111E-01	Ke G =(v_rated - R_m *i_free)/w_free in terms of output shaft speed
Ke G : Motor electric constant (V/ (rad/sec))	6.8039E-01	2.0160E+00	Ke G in V per (radians/sec of output shaft speed)
Friction (kg cm / RPM)	4.6875E-03	3.1481E-02	friction per output RPM = K_t*i_free/w_free
Friction (kg cm / (radian/sec))	4.4762E-02	3.0063E-01	friction per radians per second
friction (N m / rad/s)	4.3897E-03	2.9481E-02	friction in newton meters per output speed rad/s
Inductance L in Henries	1.0000E-03	1.0000E-03	Motor inductance
J inertia (kg cm^2)	2.1060E-02	2.1465E-02	shaft and gear box? = 1/2 M R^2. Assume 1/2 mass rotates as cylinder of radius=0.9 cm
J inertial kg m^2	2.1060E-06	2.1465E-06	
J / G	2.81E-08	9.47E-09	
Motor parameters			
Ke = Ke G / G V/(rad/sec)	9.0924E-03	8.8903E-03	In terms of motor speed not gear output speed
Kt = Kt G / G (N m / A)	4.9145E-03	3.6760E-03	In terms of motor torque not gear torque