

Brushless Limited Angle Torodial Motors

TD-2250-A SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, T_P	18.8	oz-in
Motor Constant, K_M	4.77	oz-in/ \sqrt{W}
Excursion Angle	± 7.5	degrees
Number of Poles	4	
Weight	7.5	oz (nom)
Motor Inertia, J_M	2.26E-03	oz-in-s ²
Friction Torque, T_F	0.5	oz-in
Electrical Time Constant, τ_E	26.866	ms
Mechanical Time Constant, τ_M	0.20	ms
Winding Constants	Value	Units
Torque Sensitivity, K_T	33	oz-in/amp
Back EMF, K_E	0.233	V per rad/s
Terminal Resistance, R_M	0.67	ohms (nom)
Terminal Inductance, L_M	18	mH (nom)
Voltage, Stalled at Peak Torque, V_P	24	volts
Amps at Peak Torque, I_P	0.648	amps

TD-2250-A Typical Outline Drawing

