

# TD-1750-E-1 SPECIFICATIONS

## MOTOR CHARACTERISTICS @ 25° C

Specification	Units	Value
Peak Torque, $T_P$	oz-in	7.5
Motor Constant, $K_M$	oz-in / $\sqrt{W}$	1.35
Excursion Angle	degrees	$\pm 60$
Number of Poles		2
Weight	oz (nom)	5
Motor Inertia, $J_M$	oz-in-s <sup>2</sup>	1.90E-03
Friction Torque, $T_F$	oz-in	0.3
Electrical Time Constant, $T_E$	ms	0.529
Mechanical Time Constant, $T_M$	ms	152

## MOTOR WINDING CONSTANTS

Specification	Units	Value
Torque Sensitivity, $K_T$	oz-in/amp	2.5
Back EMF, $K_E$	V per rad/s	0.017
Terminal Resistance, $R_M$	ohms (nom)	3.4
Terminal Inductance, $L_M$	mH (nom)	1.8
Voltage, Stalled at Peak Torque, $V_P$	volts	9
Amps at Peak Torque, $I_P$	amps	2.5

## MECHANICAL DIMENSIONS (INCHES)

