

# TD-4180-A-1 SPECIFICATIONS

## MOTOR CHARACTERISTICS @ 25° C

Specification	Units	Value
Peak Torque, $T_P$	oz-in	336
Motor Constant, $K_M$	oz-in / $\sqrt{W}$	26.5
Excursion Angle	degrees	$\pm 10$
Number of Poles		6
Weight	oz (nom)	48
Motor Inertia, $J_M$	oz-in-s <sup>2</sup>	6.8E-02
Friction Torque, $T_F$	oz-in	0.1
Electrical Time Constant, $T_E$	ms	2.000
Mechanical Time Constant, $T_M$	ms	13.75

## MOTOR WINDING CONSTANTS

Specification	Units	Value
Torque Sensitivity, $K_T$	oz-in/amp	73
Back EMF, $K_E$	V per rad/s	.515
Terminal Resistance, $R_M$	ohms (nom)	7.6
Terminal Inductance, $L_M$	mH (nom)	14
Voltage, Stalled at Peak Torque, $V_P$	volts	14
Amps at Peak Torque, $I_P$	amps	2

## MECHANICAL DIMENSIONS (INCHES)

