

# D-9000-A-1ES SPECIFICATIONS

## MOTOR CHARACTERISTICS @ 25° C

Specification	Units	Value
Peak Torque, $T_p$	oz-in	46
Motor Constant, $K_M$	oz-in / $\sqrt{W}$	1.65
Number of Poles		24
Weight	oz (nom)	20
Motor Inertia, $J_M$	oz-in-s <sup>2</sup>	$2.80 \times 10^{-2}$
Friction Torque, $T_F$	oz-in	0.42
Electrical Time Constant, $T_E$	ms	2.9
Mechanical Time Constant, $T_M$	ms	7.17
Temperature Rise, TPR <sup>*</sup>	°C / W	0.89
Ripple Torque, $T_R$	max. avg. to peak (%)	4

## MOTOR WINDING CONSTANTS

Specification	Units	Value
Torque Sensitivity, $K_T$	oz-in / amp	3.71
Back EMF, $K_E$	V per rad/s	5.03
Terminal Resistance, $R_M$	ohms (nom)	4.78
Terminal Inductance, $L_M$	mH (nom)	14
Voltage, Stalled at Peak Torque, $V_p$	volts	59.3
Amps at Peak Torque, $I_p$	amps	12.4

## MECHANICAL DIMENSIONS (INCHES)

