

# D-3180-C-2AE SPECIFICATIONS

## MOTOR CHARACTERISTICS @ 25° C

Specification	Units	Value
Peak Torque, $T_P$	oz-in	445
Motor Constant, $K_M$	oz-in / $\sqrt{W}$	27.6
Number of Poles		10
Weight	oz (nom)	36
Motor Inertia, $J_M$	oz-in-s <sup>2</sup>	3.50E-02
Friction Torque, $T_F$	oz-in	10
Electrical Time Constant, $T_E$	ms	0.769
Mechanical Time Constant, $T_M$	ms	6.51
Temperature Rise, TPR'	°C / W	5
Ripple Torque, $T_R$	max. avg. to peak (%)	7

## MOTOR WINDING CONSTANTS

Specification	Units	Value
Torque Sensitivity, $K_T$	oz-in / amp	44.5
Back EMF, $K_E$	V per rad/s	0.314
Terminal Resistance, $R_M$	ohms (nom)	2.60
Terminal Inductance, $L_M$	mH (nom)	2
Voltage, Stalled at Peak Torque, $V_P$	volts	24
Amps at Peak Torque, $I_P$	amps	9.2

## MECHANICAL DIMENSIONS (INCHES)

