

D-3180-P-1ES Specifications

D-3180-P-1ES SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, T_P	5.07	oz-in
Motor Constant, K_M	0.286	oz-in/ \sqrt{W}
Number of Poles	10	
Weight	3.5	oz (nom)
Motor Inertia, J_M	3.88×10^{-4}	oz-in-s ²
Friction Torque, T_F	0.10	oz-in
Electrical Time Constant, τ_E	1.49	ms
Mechanical Time Constant, τ_M	3.50	ms
Temperature Rise, Housed TPR ¹	4.3	°C/W
Ripple Torque T_R	5	max. avg. to peak (%)
Winding Constants	Value	Units
Torque Sensitivity, K_T	0.811	oz-in/amp
Back EMF, K_E	1.10	V per rad/s
Terminal Resistance, R_M	8.03	ohms (nom)
Terminal Inductance, L_M	12	mH (nom)
Voltage, Stalled at Peak Torque, V_P	50.2	volts
Amps at Peak Torque, I_P	6.25	amps

Brush Motors

D-3180-P-1ES Typical Outline Drawing

