

# DB-1890-A-1S Specifications

## DB-1890-A-1S SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, $T_p$	45	oz-in
Motor Constant, $K_M$	2.52	oz-in/ $\sqrt{W}$
Number of Poles	16	
Number of Phases	3"Y"	
Weight	1.8	oz (nom)
Motor Inertia, $J_M$	9.00E-04	oz-in-s <sup>2</sup>
Friction Torque, $T_F$	2.0	oz-in
Electrical Time Constant, $\tau_E$	0.04	ms
Mechanical Time Constant, $\tau_M$	20.11	ms
Temperature Rise, Housed TPR'	18.5	°C/W
Sensors	No	
Winding Constants	Value	Units
Torque Sensitivity, $K_T$	3.90	oz-in/amp
Back EMF, $K_E$	0.028	V per rad/s
Terminal Resistance, $R_M$	2.40	ohms (nom)
Terminal Inductance, $L_M$	0.11	mH (nom)
Voltage, Stalled at Peak Torque, $V_p$	27.8	volts
Amps at Peak Torque, $I_p$	11.6	amps

### DB-1890-A-1S Typical Outline Drawing

