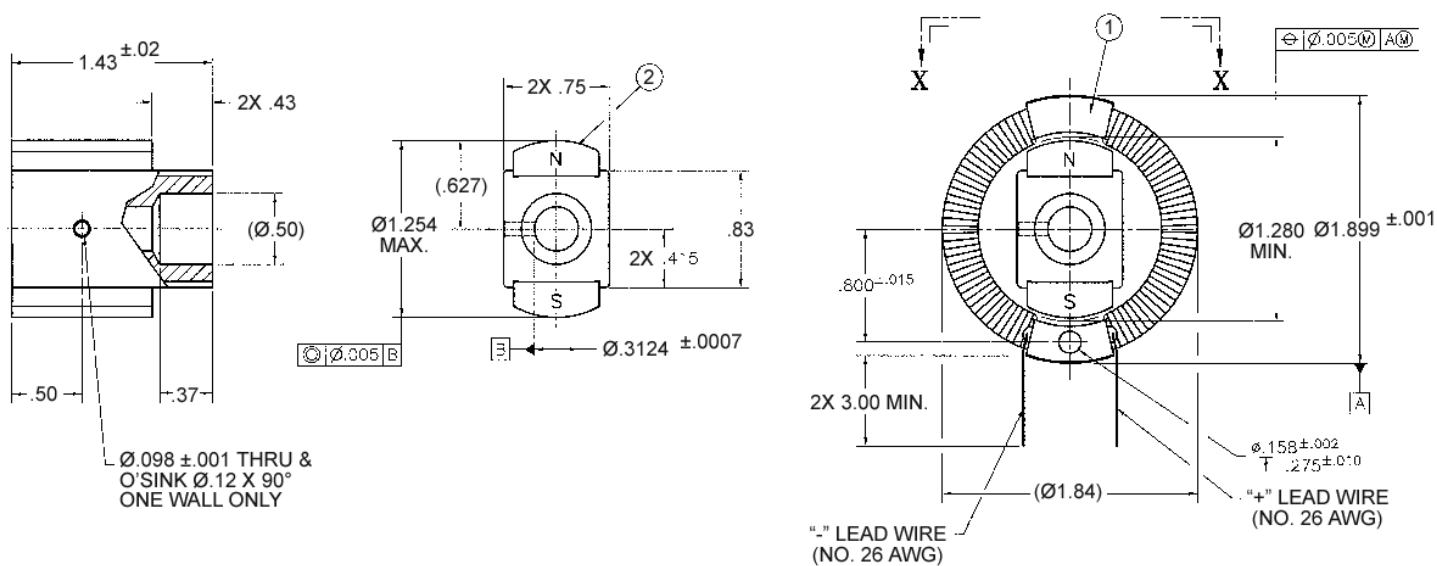


# Brushless Limited Angle Torodial Motors

## TD-1900-A SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, $T_P$	18	oz-in
Motor Constant, $K_M$	3.51	oz-in/ $\sqrt{W}$
Excursion Angle	$\pm 35$	degrees
Number of Poles	2	
Weight	10	oz (nom)
Motor Inertia, $J_M$	3.40E-03	oz-in-s <sup>2</sup>
Friction Torque, $T_F$	0.5	oz-in
Electrical Time Constant, $\tau_E$	0.625	ms
Mechanical Time Constant, $\tau_M$	39.37	ms
Winding Constants	Value	Units
Torque Sensitivity, $K_T$	6.28	oz-in/amp
Back EMF, $K_E$	0.044	V per rad/s
Terminal Resistance, $R_M$	3.2	ohms (nom)
Terminal Inductance, $L_M$	2	mH (nom)
Voltage, Stalled at Peak Torque, $V_P$	10	volts
Amps at Peak Torque, $I_P$	3	amps

### TD-1900-A Typical Outline Drawing



Dimensions are in inches