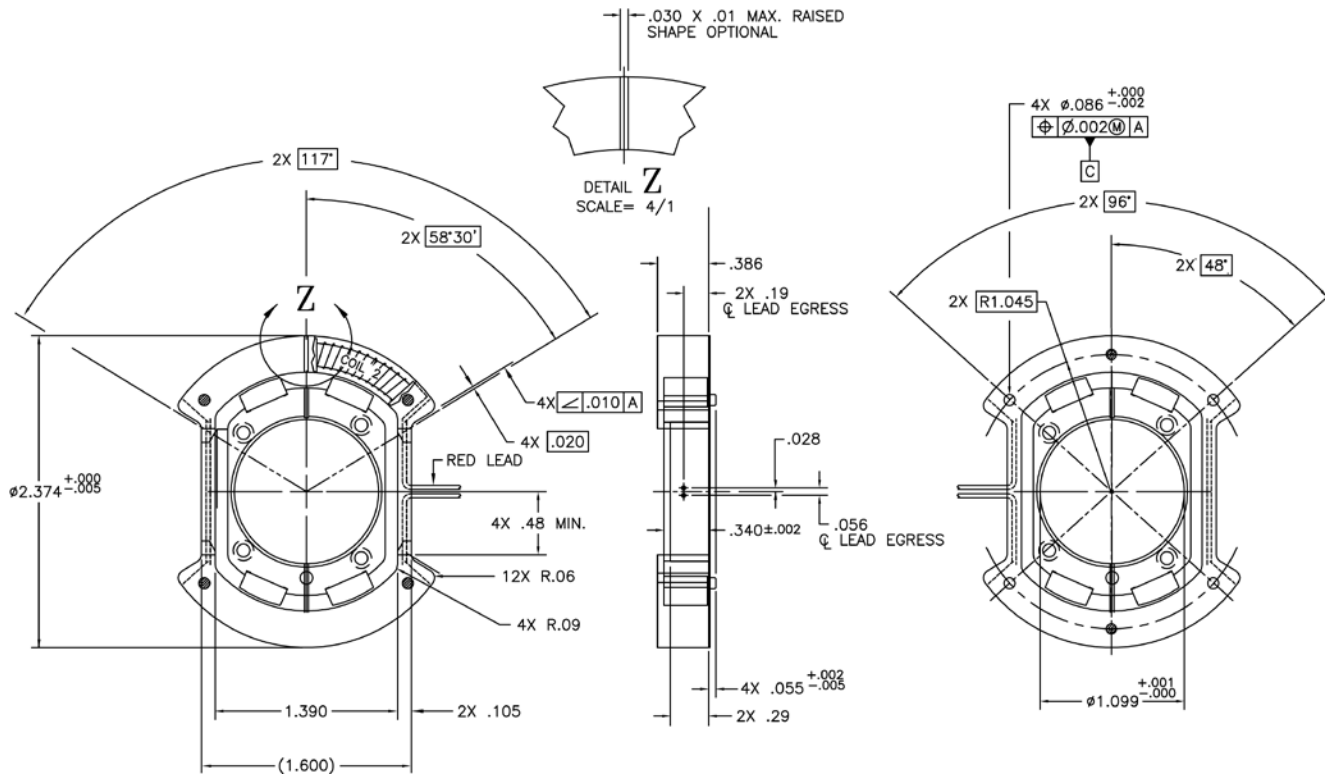


# Brushless Limited Angle Torodial Motors

## TD-2380-A-1S SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, $T_P$	12.5	oz-in
Motor Constant, $K_M$	2.04	oz-in/ $\sqrt{W}$
Excursion Angle	$\pm 8$	degrees
Number of Poles	4	
Weight	3.5	oz (nom)
Motor Inertia, $J_M$	1.78E-03	oz-in-s <sup>2</sup>
Friction Torque, $T_F$	0.35	oz-in
Electrical Time Constant, $\tau_E$	0.500	ms
Mechanical Time Constant, $\tau_M$	6.10	ms
Winding Constants	Value	Units
Torque Sensitivity, $K_T$	5	oz-in/amp
Back EMF, $K_E$	0.35	V per rad/s
Terminal Resistance, $R_M$	6	ohms (nom)
Terminal Inductance, $L_M$	3	mH (nom)
Voltage, Stalled at Peak Torque, $V_P$	15	volts
Amps at Peak Torque, $I_P$	2.5	amps

### TD-2380-A-1S Typical Outline Drawing



Dimensions are in inches