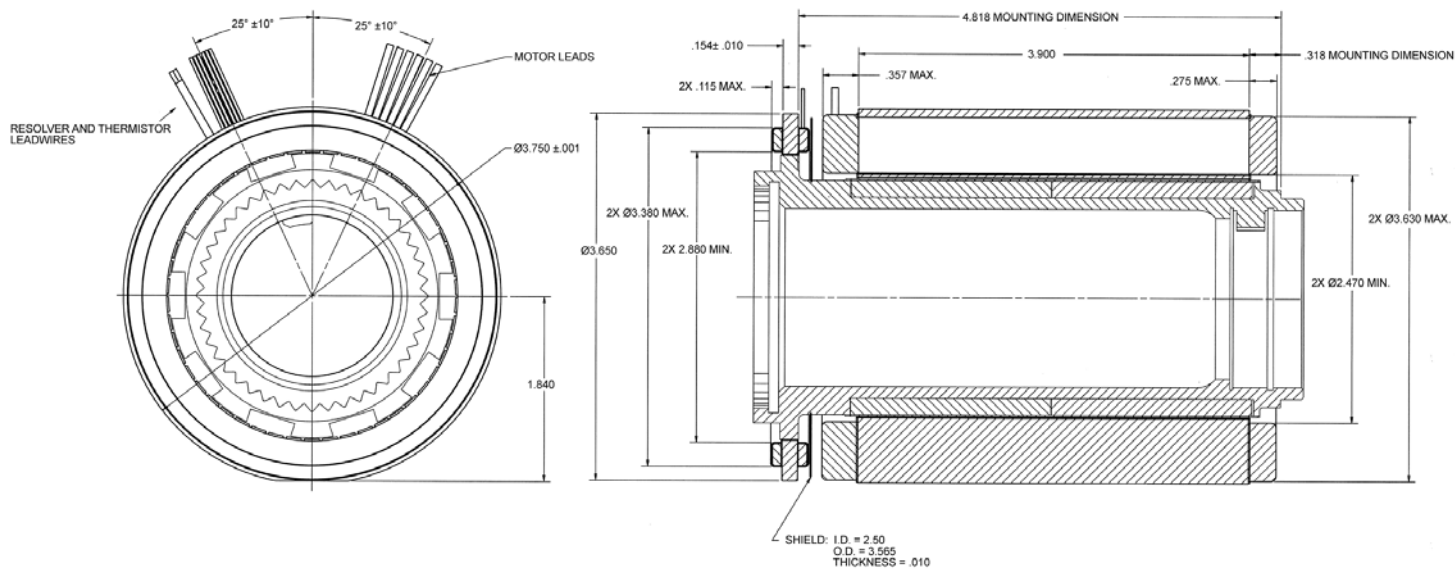


Brushless Torque Motors

DB-3750-A-2ES SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, T_P	5583	oz-in
Motor Constant, K_M	113	oz-in/ \sqrt{W}
Number of Poles	20	
Number of Phases	3"Y"	
Weight	113	oz (nom)
Motor Inertia, J_M	8.78E-02	oz-in-s ²
Friction Torque, T_F	27	oz-in
Electrical Time Constant, τ_E	1.61	ms
Mechanical Time Constant, τ_M	0.95	ms
Temperature Rise, Housed TPR'	1.0	°C/W
Sensors	No	
Winding Constants	Value	Units
Torque Sensitivity, K_T	140	oz-in/amp
Back EMF, K_E	0.985	V per rad/s
Terminal Resistance, R_M	1.50	ohms (nom)
Terminal Inductance, L_M	2.4	mH (nom)
Voltage, Stalled at Peak Torque, V_P	60	volts
Amps at Peak Torque, I_P	40.0	amps

DB-3750-A-2ES Typical Outline Drawing



Note: Shown as solid lamination design.

Dimensions are in inches