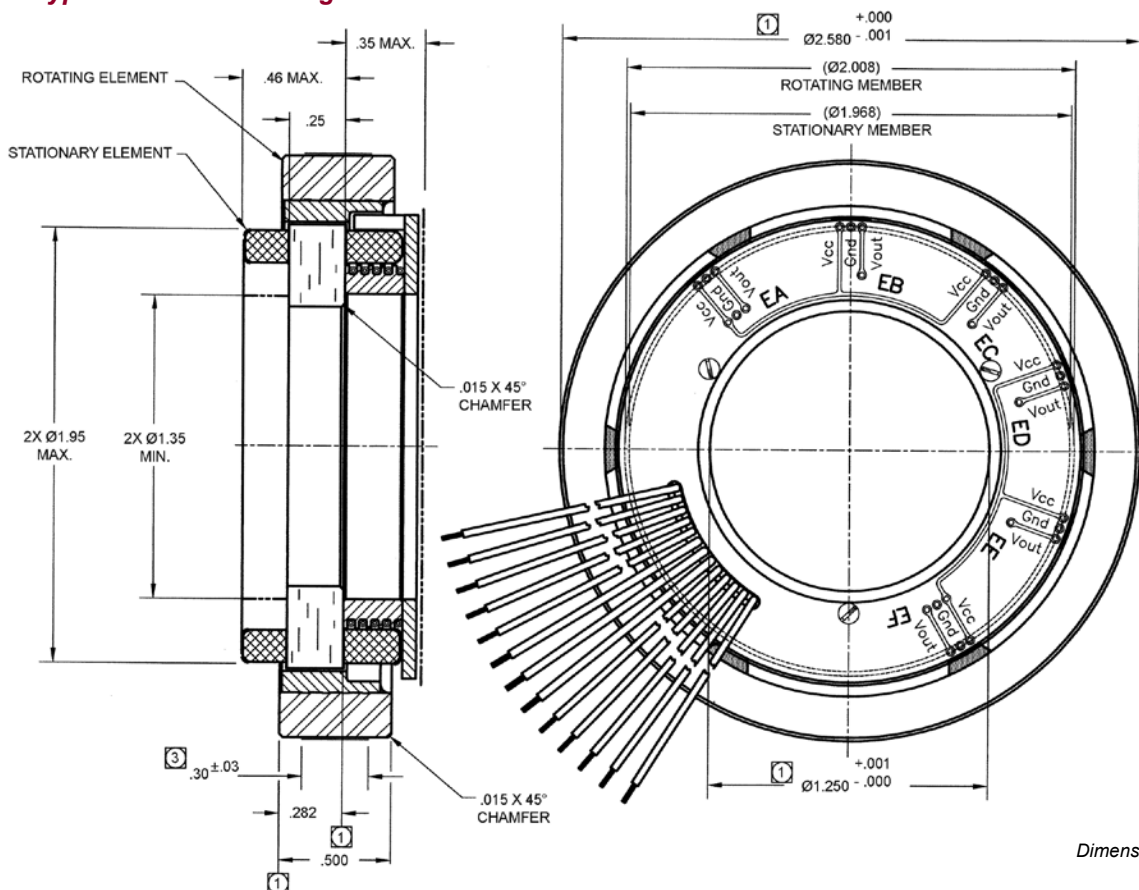


# Brushless Torque Motors

## DB-2580-A-1S SPECIFICATIONS @ 25°C

Size Constants	Value	Units
Peak Torque, $T_p$	46	oz-in
Motor Constant, $K_M$	2.56	oz-in/ $\sqrt{W}$
Number of Poles	6	
Number of Phases	3"Y"	
Weight	7.8	oz (nom)
Motor Inertia, $J_M$	1.58E-02	oz-in-s <sup>2</sup>
Friction Torque, $T_F$	0.50	oz-in
Electrical Time Constant, $\tau_E$	0.42	ms
Mechanical Time Constant, $\tau_M$	342.44	ms
Temperature Rise, Housed TPR'	12.5	°C/W
Sensors	Yes	
Winding Constants	Value	Units
Torque Sensitivity, $K_T$	2.80	oz-in/amp
Back EMF, $K_E$	0.020	V per rad/s
Terminal Resistance, $R_M$	1.20	ohms (nom)
Terminal Inductance, $L_M$	0.50	mH (nom)
Voltage, Stalled at Peak Torque, $V_p$	19.5	volts
Amps at Peak Torque, $I_p$	16.25	amps

### DB-2580-A-1S Typical Outline Drawing



Dimensions are in inches