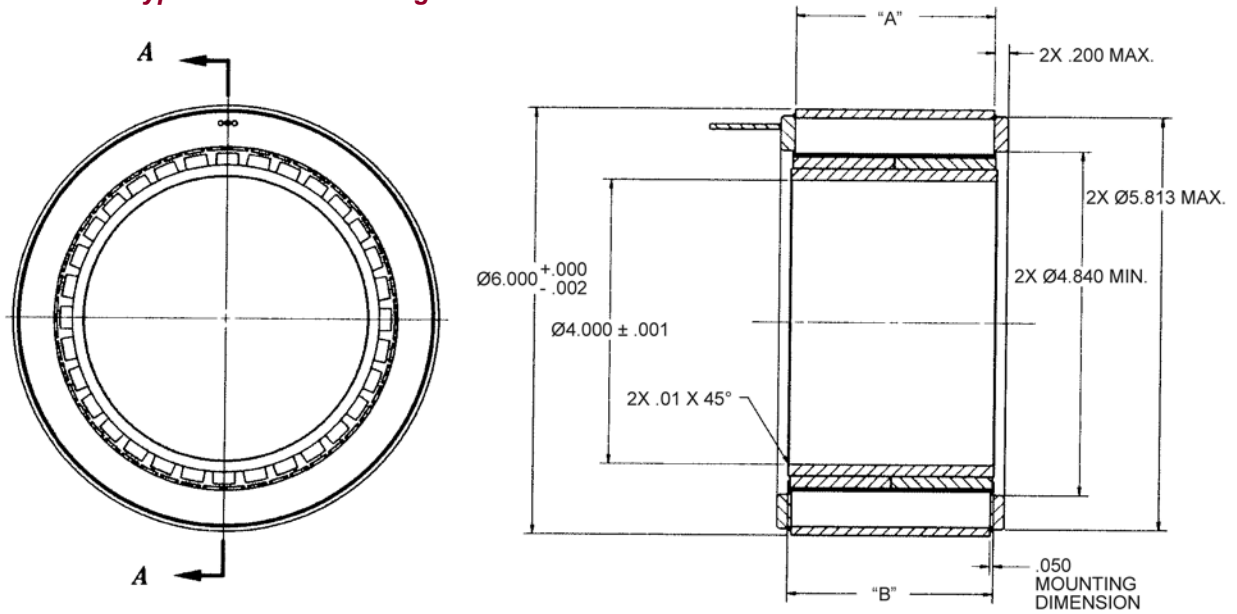


Brushless Torque Motors

DB-6000 SERIES SPECIFICATIONS @ 25°C

Part Number		DB-6000-B-2ES	DB-6000-C-2ES	DB-6000-D-2ES	DB-6000-E-2ES	DB-6000-F-2ES	DB-6000-G-2ES
Size Constants	Units						
Peak Torque, T_P	oz-in	10083	8407	6727	5048	3368	1686
Motor Constant, K_M	oz-in/ \sqrt{W}	270	243	213	178	137	84
Number of Poles		32	32	32	32	32	32
Number of Phases		3"Y"	3"Y"	3"Y"	3"Y"	3"Y"	3"Y"
Weight	oz (nom)	156	136	110	84.6	59.1	33.7
Motor Inertia, J_M	oz-in-s ²	0.637	0.532	0.427	0.321	0.216	0.111
Friction Torque, T_F	oz-in	125	104	83	62	42	20
Electrical Time Constant, τ_E	ms	1.92	1.87	1.76	1.65	1.47	0.99
Mechanical Time Constant, τ_M	ms	1.24	1.27	1.34	1.43	1.62	2.24
Temperature Rise, Housed TPR'	°C/W	0.72	0.90	1.1	1.3	1.7	2.4
Sensors		No	No	No	No	No	No
Winding Constants	Units						
Torque Sensitivity, K_T	oz-in/amp	504	420	336	252	168	84.3
Back EMF, K_E	V per rad/s	3.56	2.97	2.38	1.78	1.19	0.60
Terminal Resistance, R_M	ohms (nom)	3.49	2.99	2.50	2.00	1.50	1.01
Terminal Inductance, L_M	mH (nom)	6.7	5.6	4.4	3.3	2.2	1.0
Voltage, Stalled at Peak Torque, V_P	volts	69.8	59.8	50.0	40.0	30.0	20.2
Amps at Peak Torque, I_P	amps	20	20	20	20	20	20

DB-6000 Series Typical Outline Drawing



Modular	"A"	"B"
	inches	inches
DB-6000-B-2ES	2.950	3.050
DB-6000-C-2ES	2.450	2.550
DB-6000-D-2ES	1.950	2.050
DB-6000-E-2ES	1.450	1.550
DB-6000-F-2ES	0.950	1.050
DB-6000-G-2ES	0.450	0.550

Tolerances are:

Angles ± 0.5
 $.XXX \pm .005$
 $.XX \pm .01$
 $.X \pm .03$

Dimensions are in inches

Dimensions and tolerances are in accordance with ASME Y14.5 - 1994

Unless otherwise Specified
 Finish: E.S. 411
 For machined surfaces