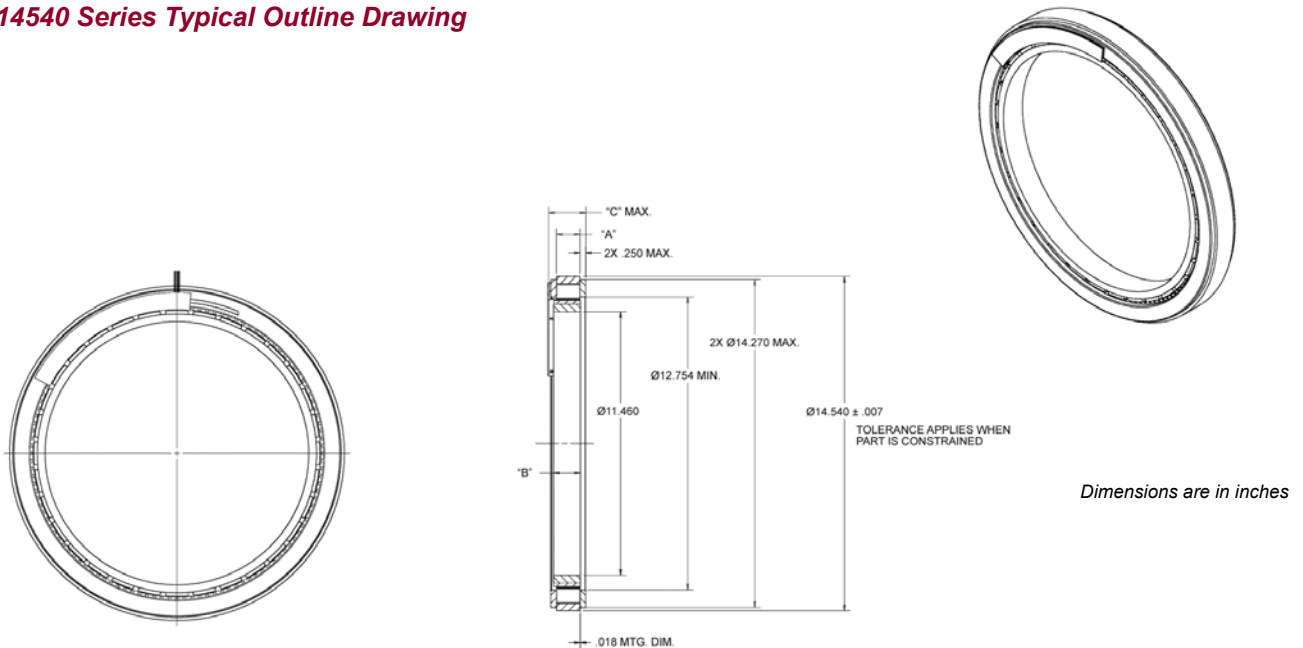


Brushless Torque Motors

DB-14540 SERIES SPECIFICATIONS @ 25°C

Part Number		DB-14540-A-1ES	DB-14540-B-1ES	DB-14540-C-1ES	DB-14540-D-1ES	DB-14540-E-1ES
Size Constants	Units					
Peak Torque, T_p	oz-in	21674	43273	67041	86523	108319
Motor Constant, K_M	oz-in/ \sqrt{W}	324	579	812	976	1142
Number of Poles		32	32	32	32	32
Number of Phases		3"Y"	3"Y"	3"Y"	3"Y"	3"Y"
Weight	oz (nom)	171	312	464	584	720
Motor Inertia, J_M	oz-in-s ²	5.22	8.52	13.7	17.0	20.8
Friction Torque, T_F	oz-in	64	128	200	256	320
Electrical Time Constant, τ_E	ms	1.03	1.66	2.09	2.35	2.55
Mechanical Time Constant, τ_M	ms	7.05	3.59	2.95	2.53	2.26
Temperature Rise, Housed TPR'	°C/W	0.74	0.57	0.46	0.39	0.34
Sensors		Yes	Yes	Yes	Yes	Yes
Winding Constants	Units					
Torque Sensitivity, K_T	oz-in/amp	639	1265	1955	2515	3149
Back EMF, K_E	V per rad/s	4.52	8.94	13.8	17.8	22.2
Terminal Resistance, R_M	ohms (nom)	3.90	4.77	5.80	6.64	7.60
Terminal Inductance, L_M	mH (nom)	4.0	7.9	12	16	19
Voltage, Stalled at Peak Torque, V_p	volts	132	163	199	228	261
Amps at Peak Torque, I_p	amps	33.9	34.2	34.3	34.4	34.4

DB-14540 Series Typical Outline Drawing



Modular	"A"	"B"	"C"
	inches	inches	inches
DB-14540-A-1ES	0.520	0.715	1.20
DB-14540-B-1ES	1.020	1.165	1.700
DB-14540-C-1ES	1.570	1.873	2.250
DB-14540-D-1ES	2.020	2.323	2.700
DB-14540-E-1ES	2.520	2.839	3.200
Tolerances	Per Drawing	Per Drawing	Maximum

Tolerances are:

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

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

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