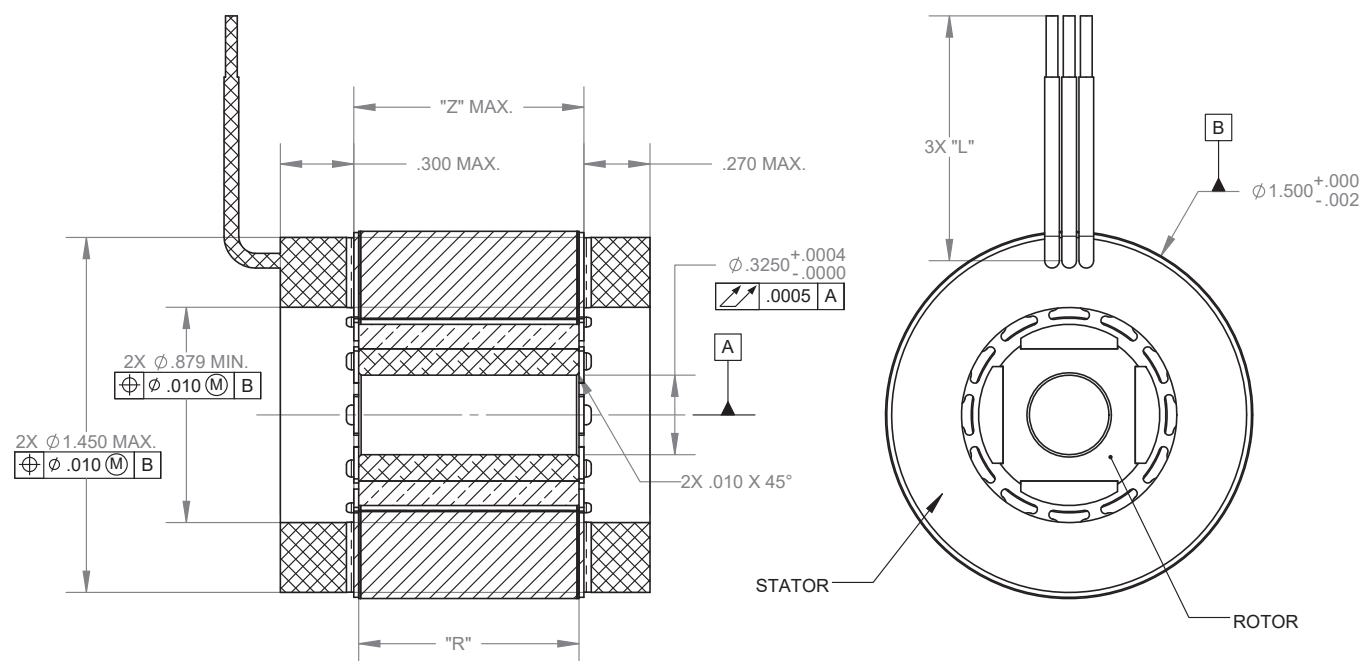
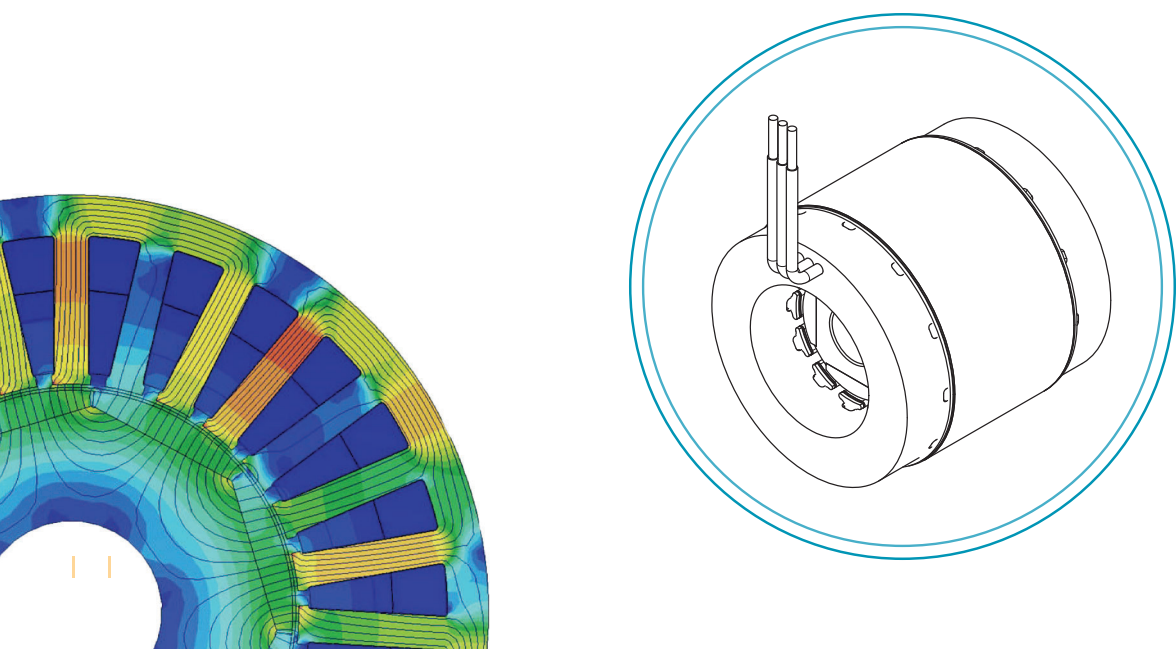


"Superior Torque" (ST) 1500 Series Technical Illustration



PART NO.	DESCRIPTION	"Z" MAX	LEAD WIRE GAGE	"L" ± .500	"R" ± .005
6100250-01	O&M DWG, 1509/4 STD ROTOR AND STATOR SET	.970	16	12	0.900
6100250-02	O&M DWG, 1509/8 STD ROTOR AND STATOR SET	.970	16	12	0.900
6100250-03	O&M DWG, 1512/3 STD ROTOR AND STATOR SET	1.270	14	12	1.200
6100250-04	O&M DWG, 1512/6 STD ROTOR AND STATOR SET	1.270	16	12	1.200
6100250-05	O&M DWG, 1518/2 STD ROTOR AND STATOR SET	1.870	14	12	1.800
6100250-06	O&M DWG, 1518/4 STD ROTOR AND STATOR SET	1.870	16	12	1.800



GENERIC PART NUMBER	1509/4	1509/8	1512/3	1512/6	1518/2	1518/4
STATOR OD (IN)	1.5	1.5	1.5	1.5	1.5	1.5
STATOR STACK LENGTH (IN)	0.9	0.9	1.2	1.2	1.8	1.8
ROTOR ID (IN)	0.325	0.325	0.325	0.325	0.325	0.325
ROTOR LENGTH (IN)	0.9	0.9	1.2	1.2	1.8	1.8
TURNS PER COIL	4	8	3	6	2	4
RESISTANCE (L-L)	0.0592	0.237	0.0381	0.153	0.0213	0.0851
INDUCTANCE (L-L)	0.04915	0.1995	0.03605	0.146	0.02345	0.0945
LEAD WIRE AWG	16	16	14	16	14	16
KE (V/1KRPM, PEAK)	1.14	2.28	1.14	2.28	1.14	2.28
KT (IN-OZ/A, PEAK)	1.89	3.77	1.89	3.77	1.89	3.77
KT (IN-OZ/ARMS), TIME-AVERAGED	1.65	3.29	1.65	3.29	1.65	3.3
KM (IN-OZ/SQRT(W))	7.77	7.74	9.68	9.64	12.95	12.92
WEIGHT (OZ)	6.16	6.16	7.92	7.92	11.5	11.5
ROTOR INERTIA (KG-M ²)	2.00E-06	2.00E-06	2.66E-06	2.66E-06	3.99E-06	3.99E-06
POLE COUNT	4	4	4	4	4	4
COGGING TORQUE, PEAK (IN-OZ)	1.4	1.4	1.87	1.87	2.8	2.8
HYSTERESIS DRAG TORQUE (IN-OZ)	0.231	0.231	0.308	0.308	0.464	0.464
ELECTROMAGNETICS VISCOUS DRAG (IN-OZ/RPM ²)	3.36E-10	3.36E-10	4.49E-10	4.48E-10	6.76E-10	6.76E-10
DESIGN CURRENT (RMS, SINE DRIVE)	13.40	6.68	18.00	8.99	28.60	14.30
DESIGN VOLTAGE	28	56	28	56	28	56
DESIGN RPM	20000	20000	20000	20000	20000	20000
NO-LOAD RPM	24600	24600	24600	24600	24600	24600
DESIGN TORQUE (IN-OZ)	22.1	22	29.7	29.6	47.1	47.1
DESIGN OUPUT POWER (W)	326	325	439	438	697	697
ELECTROMECHANICAL EFFICIENCY AT DESIGN OUTPUT POWER	93.7	93.7	94.3	94.3	94.8	94.8

