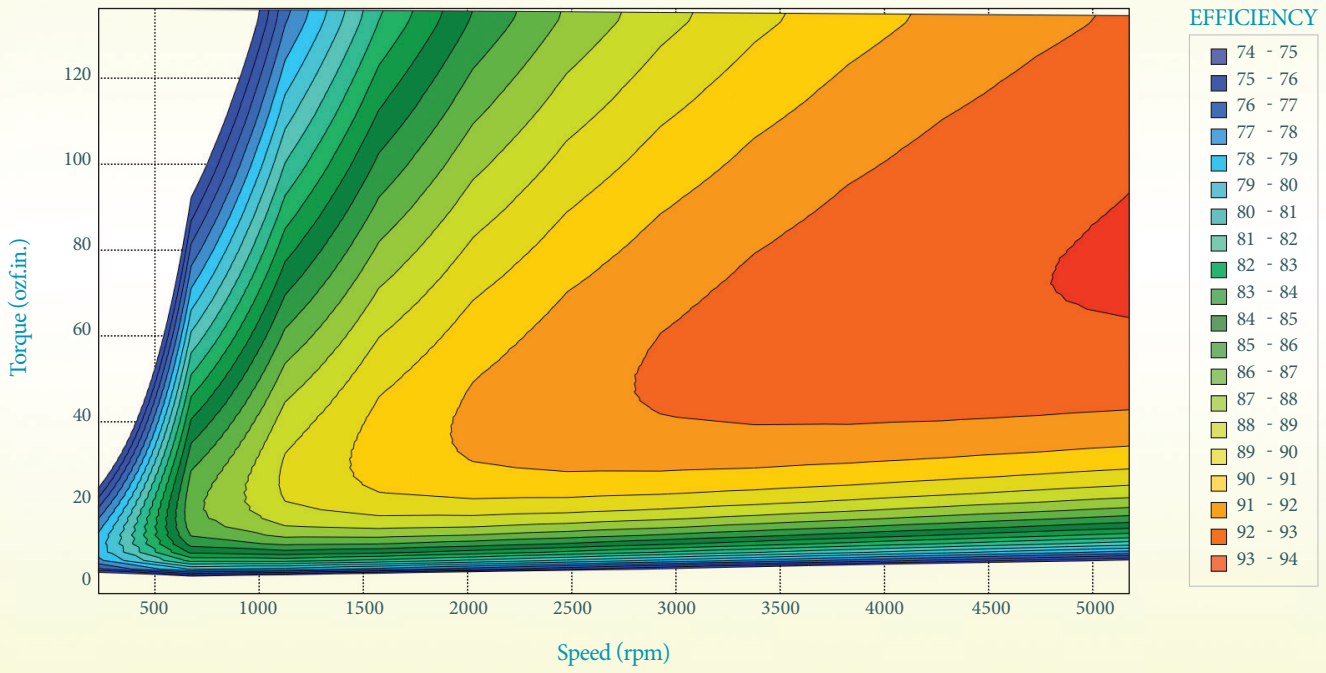
3.0" OD 18s16p Series Ultimate Torque Frameless Motors

PERFORMANCE TABLE

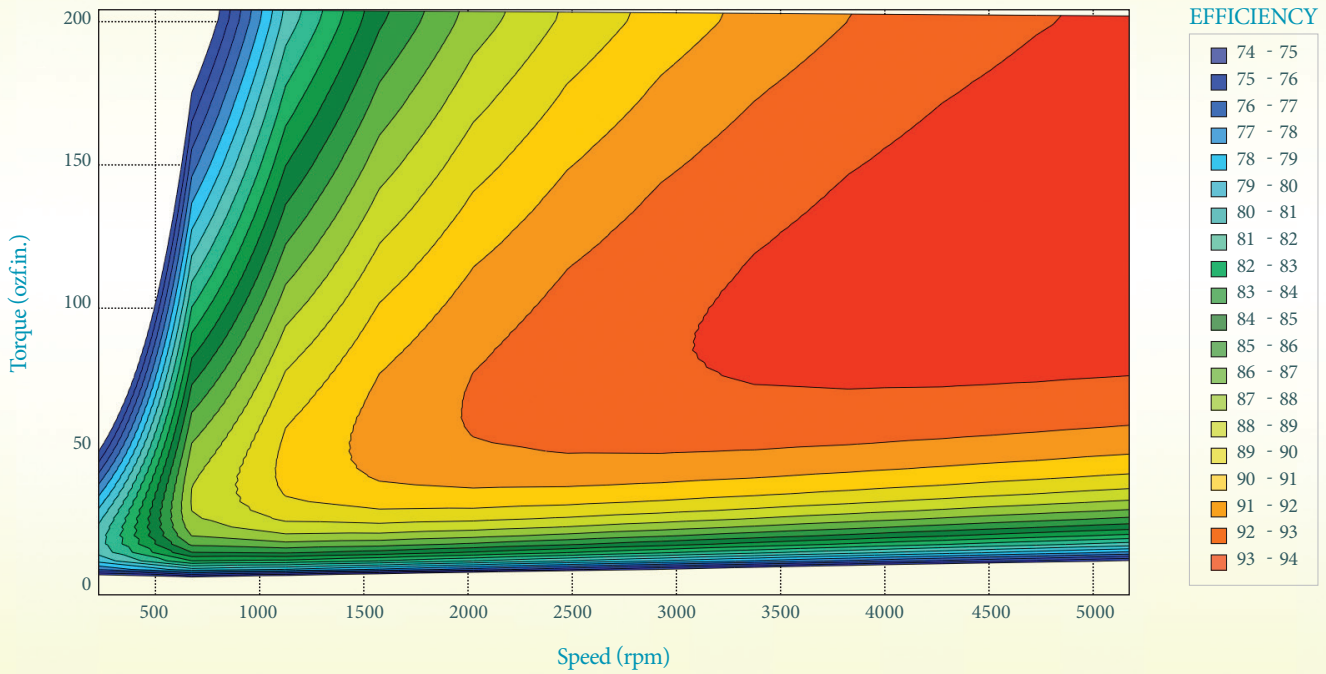
GENERIC PART NUMBER	UT-3005-16P/10	UT-3008-16P/10	UT-3010-16P/10	UT-3015-16P/10	UT-3020-16P/10	UT-3030-16P/10
AVEOX INTERNAL P/N (SENSORLESS)	6100328-01	6100328-06	6100328-02	6100328-05	6100328-03	6100328-04
STATOR OD (IN)	3					
STATOR STACK LENGTH (IN)	0.50	0.75	1.00	1.50	2.00	3.00
RATED SPEED (RPM)	4500					
RATED TORQUE (IN-OZ)	94	141	188	282	375	563
Km (IN-OZ/√w)	22.91	31.30	38.58	50.93	61.35	78.68
MAGNETIC POLES	16					
WEIGHT (OZ)	9.68	13.90	18.00	26.40	34.70	51.40
ROTOR INERTIA ($KG*M^2$)	4.70E-05	7.03E-05	9.37E-05	1.40E-04	1.87E-04	2.80E-04
HYSTERESIS DRAG TORQUE (IN-OZ)	1.18	1.77	2.36	3.54	4.72	7.07
ELECTROMAGNETIC VISCOUS DRAG (IN-OZ/RPM)	4.16E-04	6.25E-04	8.33E-04	1.25E-03	1.67E-03	2.50E-03
COGGING TORQUE, PEAK (IN-OZ)	0.297	0.446	0.595	0.892	1.19	1.78
Kt (IN-OZ/Arms)	12.51	18.77	25.03	37.54	50.05	75.08
Ke (V/1kRPM, PEAK)	8.02	12.03	16.03	24.05	32.07	48.10
INDUCTANCE (L-L, mH)	0.166	0.243	0.320	0.473	0.627	0.934
RESISTANCE (L-L, Ω)	0.199	0.240	0.280	0.362	0.444	0.607
TEMPERATURE SENSORS	2X OMEGA RTD, P/N RTD-1-F3105-36-T-B					
LEAD WIRE AWG PER M22759/11	18					

EFFICIENCY MAPS

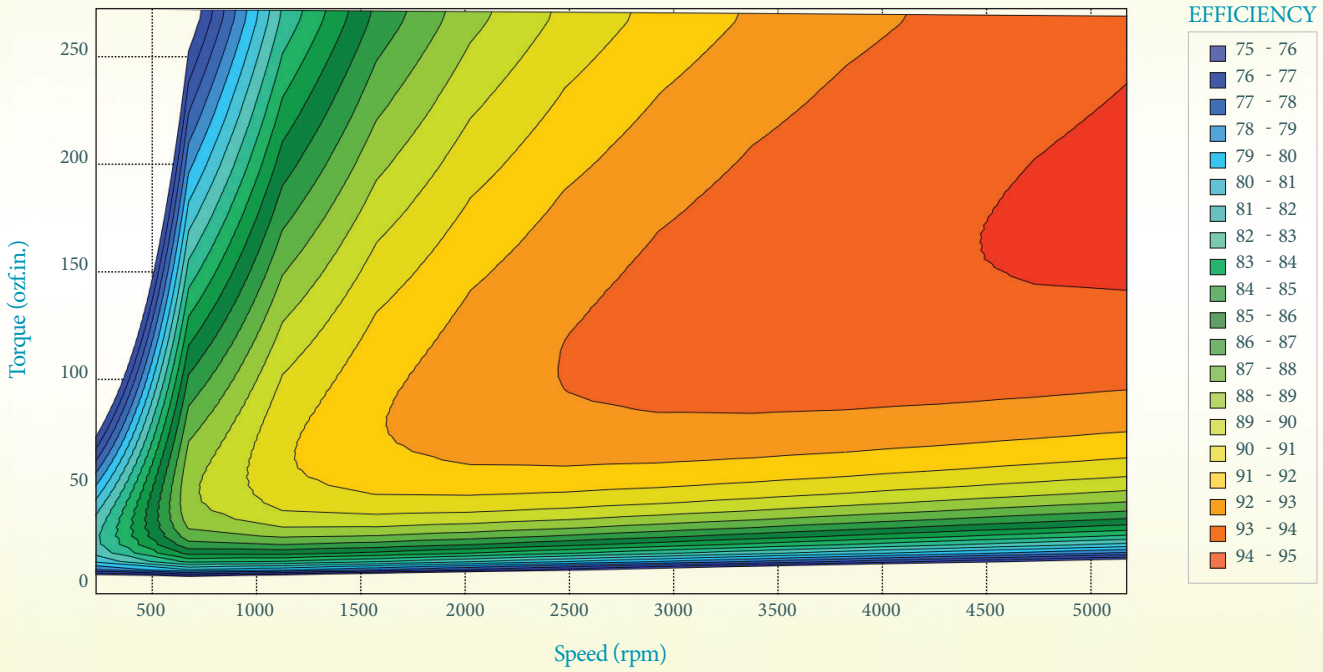
UT-3005-16P/10



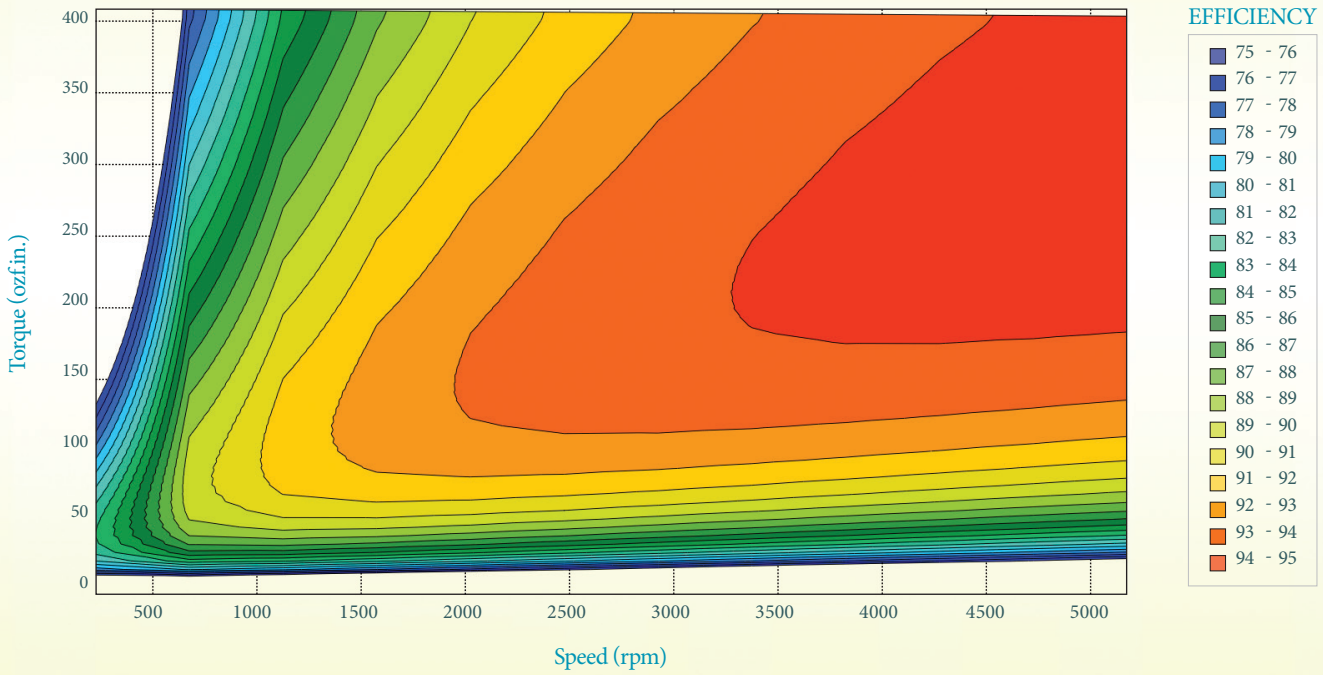
UT-3008-16P/10



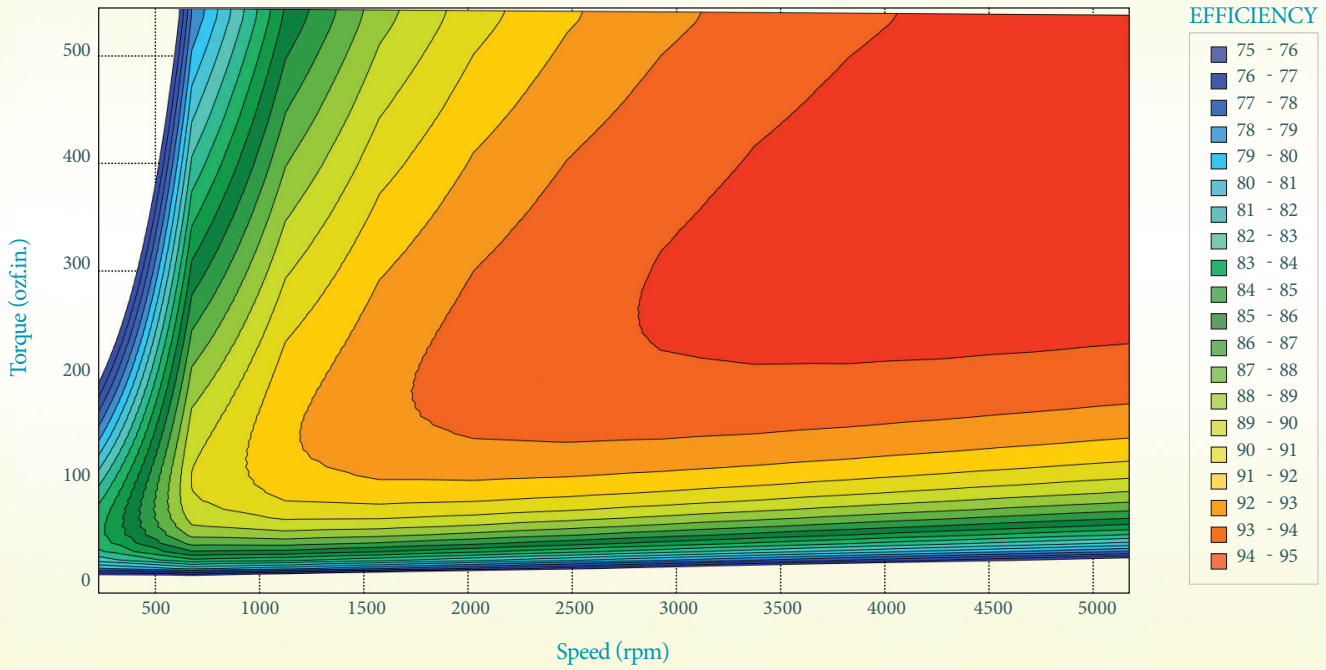
UT-3010-16P/10



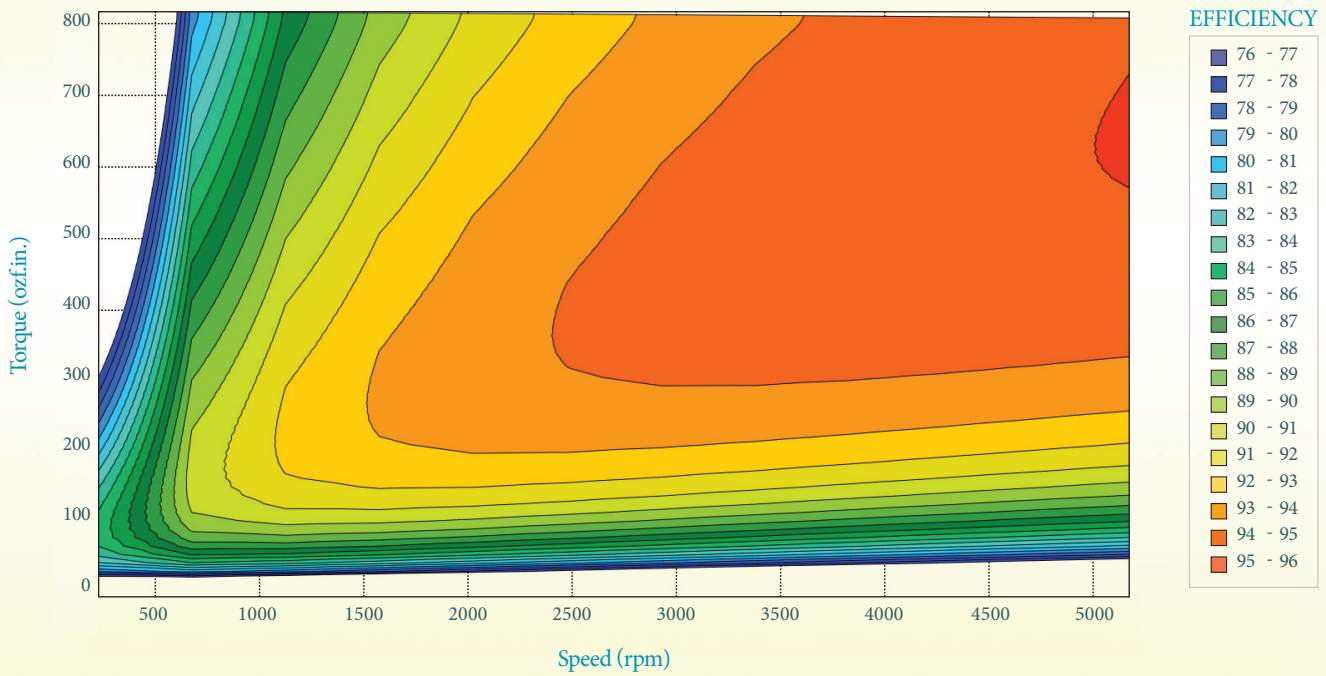
UT-3015-16P/10



UT-3020-16P/10



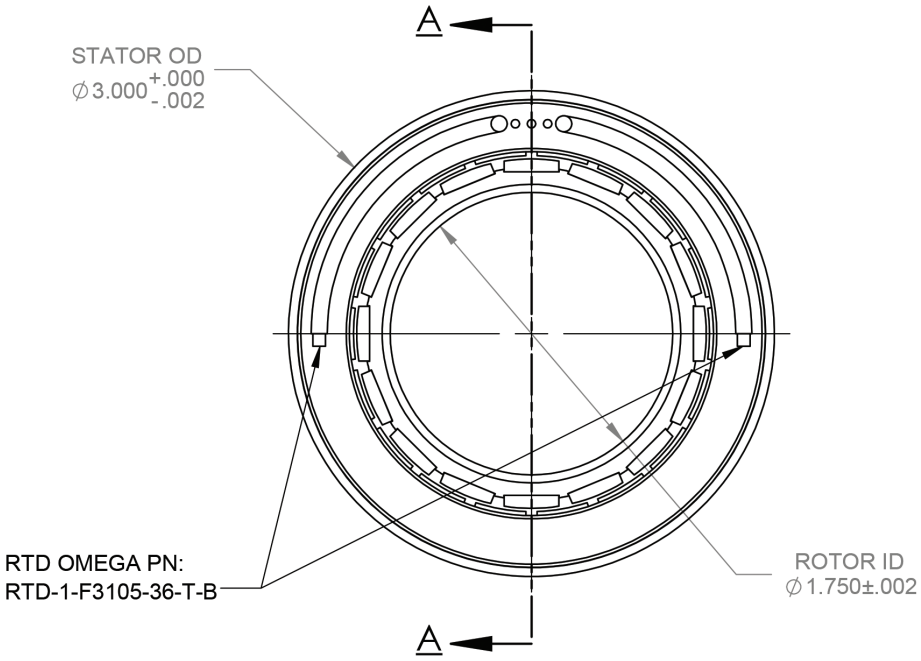
UT-3030-16P/10

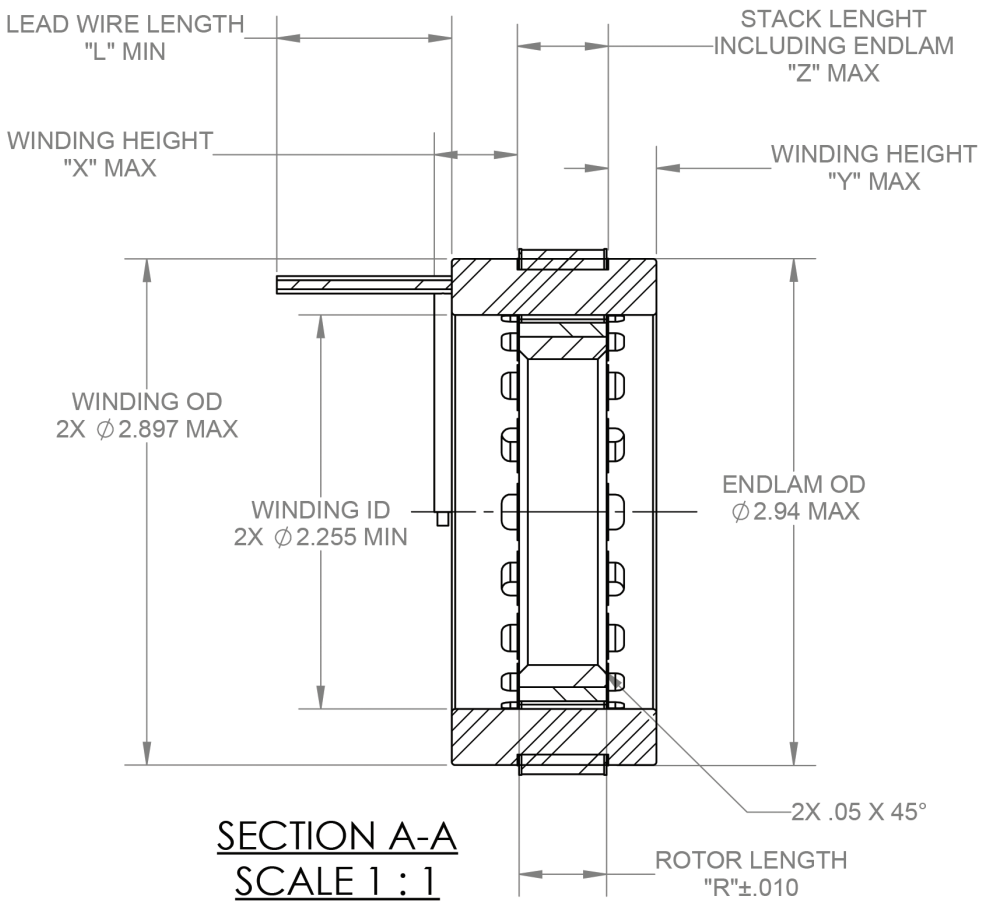


SPECIFICATIONS

PART NUMBER	DESCRIPTION	ROTOR LENGTH "R"	LEAD WIRE AWG	LEAD WIRE LENGTH "L"	STACK LENGTH "Z" INCLUDING ENDLAM	ENDTURN HEIGHT, LEAD SIDE "X"	ENDTURN HEIGHT, BOTTOM "Y"
6100328-01	O&M DWG STATOR AND ROTOR SET UT-3005-16P/10, SENSORLESS	0.500	18	12	0.58	0.475	0.275
6100328-06	O&M DWG STATOR AND ROTOR SET UT-3008-16P/10, SENSORLESS	0.750	18	12	0.83	0.475	0.275
6100328-02	O&M DWG STATOR AND ROTOR SET UT-3010-16P/10, SENSORLESS	1.000	18	12	1.08	0.475	0.275
6100328-05	O&M DWG STATOR AND ROTOR SET UT-3015-16P/10, SENSORLESS	1.500	18	12	1.58	0.475	0.275
6100328-03	O&M DWG STATOR AND ROTOR SET UT-3020-16P/10, SENSORLESS	2.000	18	12	2.08	0.475	0.275
6100328-04	O&M DWG STATOR AND ROTOR SET UT-3030-16P/10, SENSORLESS	3.000	18	12	3.08	0.475	0.275

OUTLINE DRAWING





SECTION A-A
SCALE 1 : 1