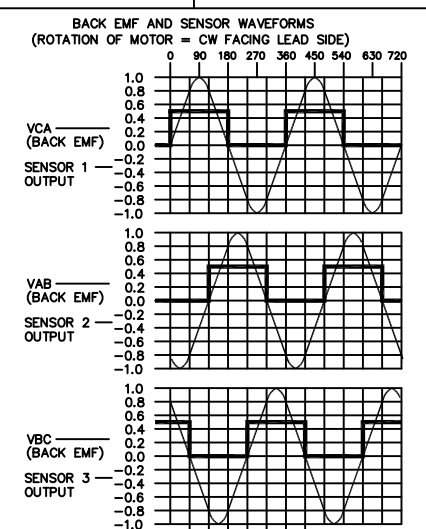


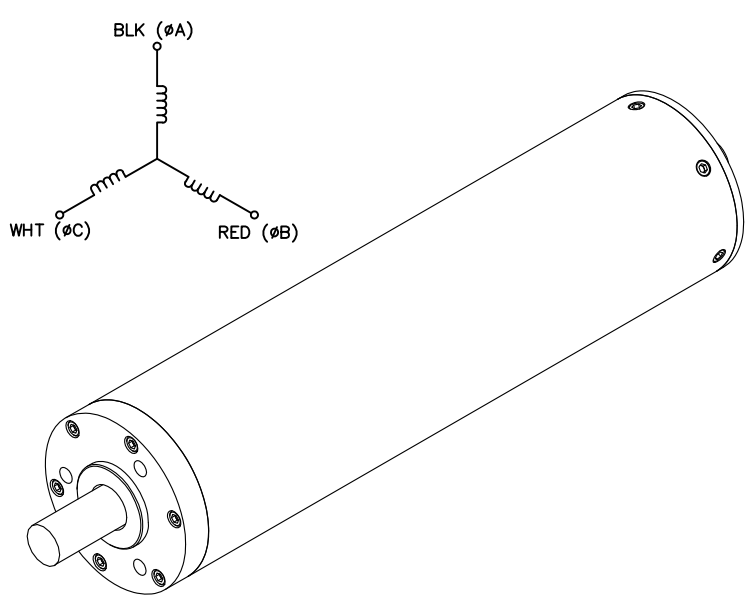
WINDING CONSTANTS*	UNITS	TOL	SYM	WDG A
DC RESISTANCE	OHMS	±12.5%	R	6.26
VOLTAGE @ T _p	VOLTS	NOMINAL	V _p	28.0
CURRENT @ T _p	AMPERES	NOMINAL	I _p	4.48
TORQUE SENSITIVITY	OZ-IN/AMP	±10%	K _T	89.2
BACK EMF CONSTANT	VOLTS/(RAD/SEC)	±10%	K _B	0.63
INDUCTANCE @ 1 KHz	MILLIHENRY	REF	L	4.25

MOTOR PARAMETERS*	UNITS	SYM	VALUE
PEAK TORQUE	OZ-IN	T _p	400.0
CONTINUOUS STALL TORQUE **	OZ-IN	I _{CS}	172.0
MOTOR CONSTANT	OZ-IN/√WATT	K _M	35.7
ELECTRICAL TIME CONSTANT	MILLISECOND	t _E	0.68
MECHANICAL TIME CONSTANT	MILLISECOND	t _M	2.12
POWER I ² R @ T _p	WATTS	P _p	126.0
DAMPING FACTOR (ZERO IMPEDANCE)	OZ-IN/(RAD/SEC)	F ₀	8.98
FRICTION TORQUE	OZ-IN	T _F	10.0
ROTOR INERTIA	OZ-IN SEC ²	J _M	0.019
THEO. NO-LOAD SPEED @ 250 VDC	RPM	S ₀	3790
SPEED @ 125 OZ-IN & 250 VDC	RPM	S _L	3600
THEO ACC @ T _p	RAD/SEC ²	α _T	2.1x10 ⁴
THERMAL RESISTANCE ***	°C/WATT	θ _{TH}	1.5
MAX ALLOWABLE WINDING TEMP	°C	TEMP	220
PHASES/WINDING TYPE			3/Y
POLES			8
WEIGHT	OZ	W _T	TBD

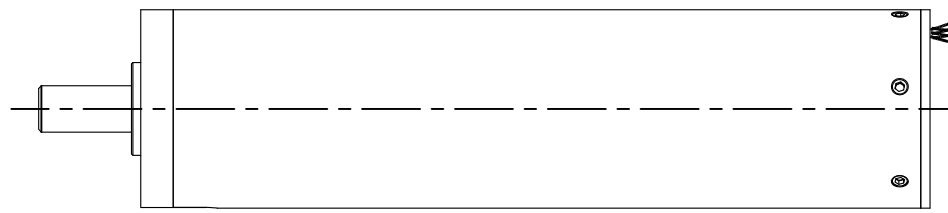
* 25°C AMBIENT TEMP
 ** 149°C AMBIENT, 220°C WINDING TEMP
 *** MOTOR IS IMMERSSED IN OIL 149°C (300°F)



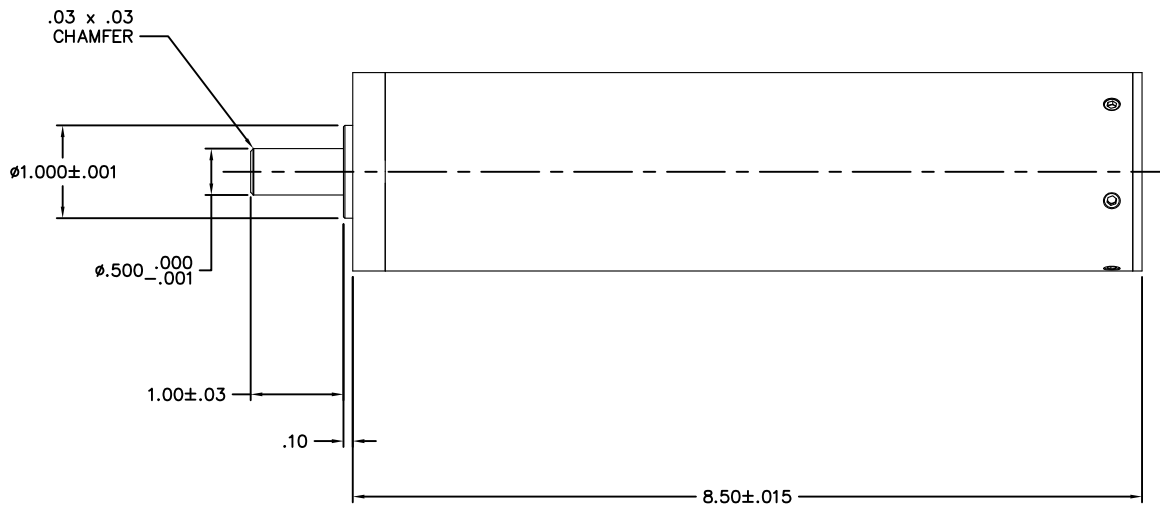
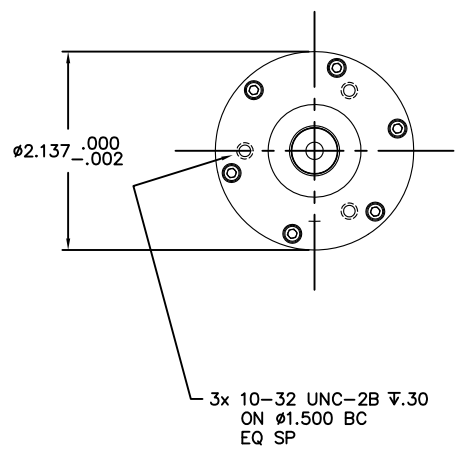
COLOR	1	2	3	4	5	6
WHT	+	+	-	-	-	-
BLK	-	+	+	-	-	-
RED	-	-	+	+	-	-
BRN	1	1	0	0	0	1
ORG	0	1	1	1	0	0
YEL	0	0	0	1	1	1
BLU						
GRN						



LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
X1	110xxx	INITIAL RELEASE	JWT		



LEAD WIRES: TEFLON
 PER MIL-W-16878/4
 3x #22 AWG (MOTOR PHASE LEADS)
 5x #24 AWG (HALL SENSOR LEADS)
 18" MIN. LONG



THESE COMMODITIES, TECHNOLOGY OR SOFTWARE IF EXPORTED FROM THE UNITED STATES SHALL BE IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW IS PROHIBITED.

Proprietary rights of BEI Kimco are involved in the subject matter of this material and all manufacturing, reproduction, use, and sales pertaining to such subject matter are expressly reserved. This confidential and proprietary document is submitted for a specified purpose, and the recipient by accepting this material agrees that this material will not be used, copied, or reproduced in whole or in part nor its contents revealed in any manner or to any person except to meet the purpose for which it was delivered.

THIRD ANGLE PROJECTION
 UNLESS OTHERWISE SPECIFIED:
 -ALL DIMENSIONS ARE IN INCHES
 -BREAK SHARP EDGES .015 MAX.
 -SURFACE ROUGHNESS √63
 -DIMENSIONS APPLY AFTER FINISH
 -MAX FILLET R .010
 -DIAMETERS SHALL NOT EXCEED A ROUNDTOP OF .005 FIM
 TOLERANCES:
 DECIMALS ANGULAR
 .X ± .03 ±0° 30'
 .XX ± .01
 .XXX ± .005
 DO NOT SCALE DRAWING

BEI KIMCO MAGNETICS DIVISION
 VISTA, CA 92081

DRAWN J. THOMPSON	DATE 8/08/101	TITLE BRUSHLESS DC MOTOR			
MECH CHECK		SIZE D	FSCM NO. 55789	DWG NO. DII22-85-001A	REV X1
APPD		FILE NO. M:\DII\DII22-85-001A	SCALE: NONE	SHEET 1 OF 1	

3. ALL ABBREVIATIONS IAW ASME Y14.38.
 2. INTERPRET DRAWING IAW ASME Y14.100.
 1. INTERPRET DIMENSIONING AND TOLERANCING IAW ASME Y14.5M-1994.
 NOTES: UNLESS OTHERWISE SPECIFIED

DII22-85-001A X1