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DII14-60-000A

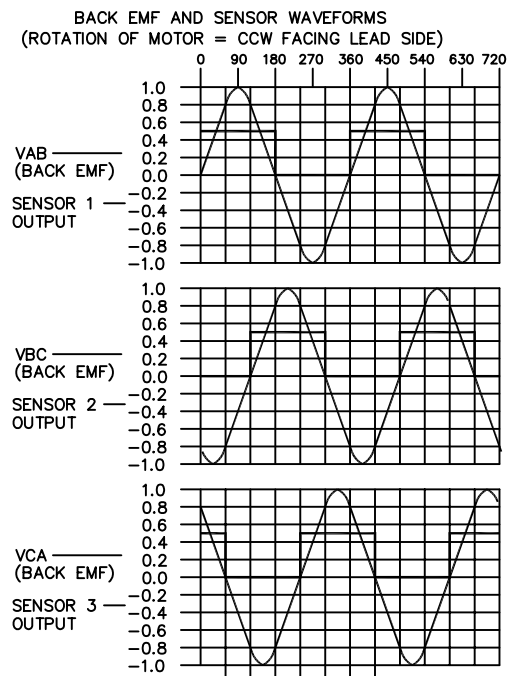
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WINDING CONSTANTS *	UNITS	TOL	SYM	WDG Z
DC RESISTANCE	OHMS	±12.5%	R	1.90
VOLTAGE @ T <sub>p</sub>	VOLTS	NOMINAL	V <sub>p</sub>	11.23
CURRENT @ T <sub>p</sub>	AMPERES	NOMINAL	I <sub>p</sub>	5.9
TORQUE SENSITIVITY	OZ IN/AMP	±10%	K <sub>T</sub>	11.0
BACK EMF CONSTANT	VOLTS/(RAD/SEC)	±10%	K <sub>B</sub>	0.078
INDUCTANCE	MILLIHENRY	±30%	L	1.85

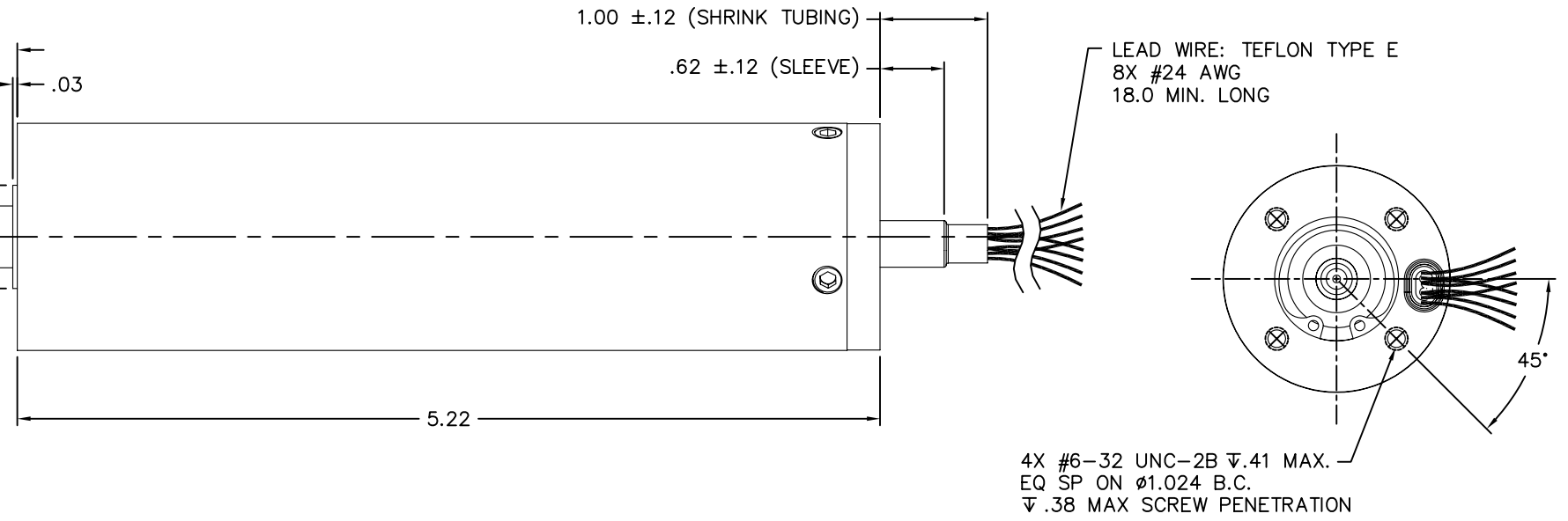
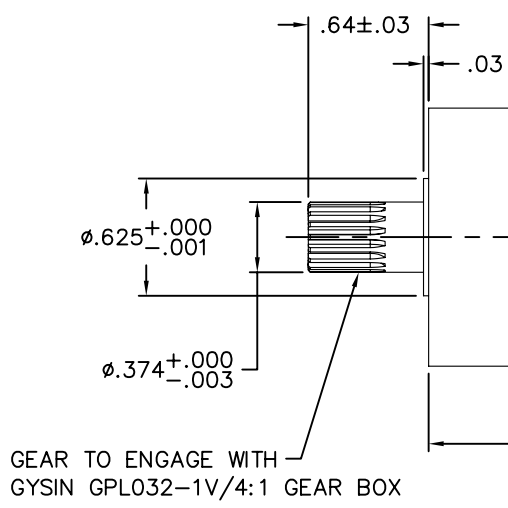
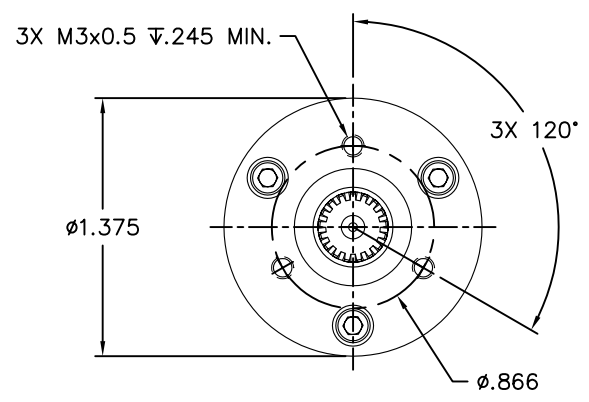
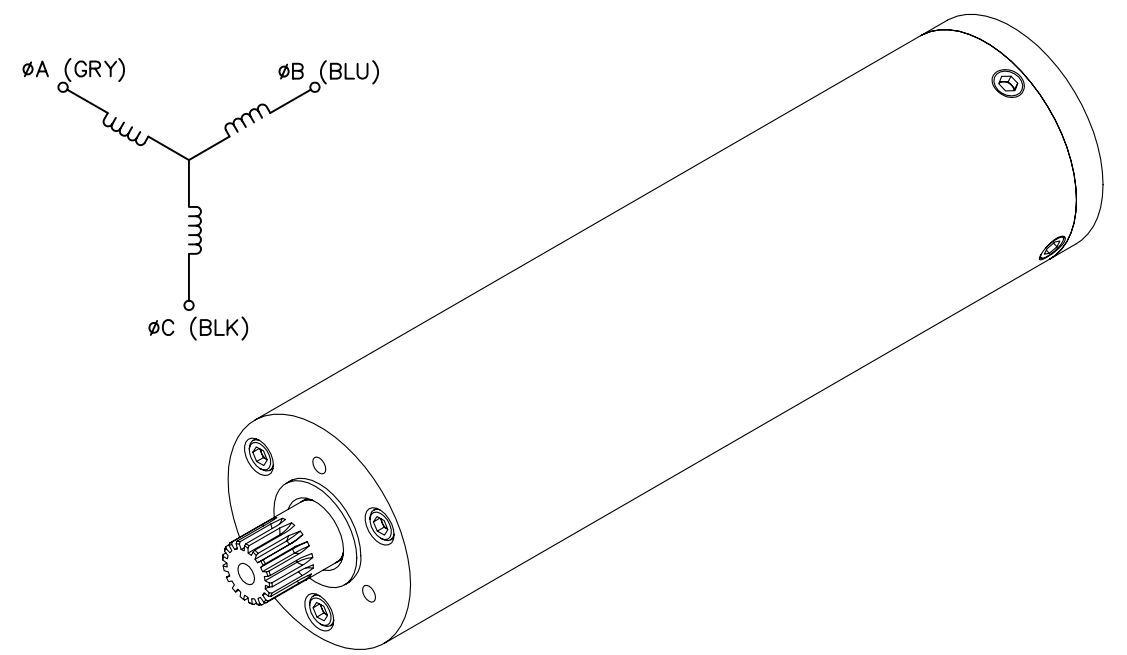
MOTOR PARAMETERS *	UNITS	SYM	VALUE
PEAK TORQUE	OZ IN	T <sub>p</sub>	65.0
CONTINUOUS STALL TORQUE **	OZ IN	T <sub>CS</sub>	32.0
MOTOR CONSTANT	OZ IN/√WATT	K <sub>M</sub>	7.98
ELECTRICAL TIME CONSTANT	MILLISECOND	τ <sub>E</sub>	0.97
MECHANICAL TIME CONSTANT	MILLISECOND	τ <sub>M</sub>	2.21
POWER I <sup>2</sup> R @ T <sub>p</sub>	WATTS	P <sub>p</sub>	66.0
DAMPING FACTOR (ZERO IMPEDANCE)	OZ IN/(RAD/SEC)	F <sub>0</sub>	0.45
FRICITION TORQUE	OZ IN	T <sub>F</sub>	5.0
ROTOR INERTIA	OZ IN SEC <sup>2</sup>	J <sub>M</sub>	0.001
MAX ALLOWABLE SPEED	RPM	S <sub>M</sub>	3100
SPEED @ 15 OZ IN & 24 VDC	RPM	S <sub>L</sub>	2630
THEO ACC @ T <sub>p</sub>	RAD/SEC <sup>2</sup>	α <sub>T</sub>	6.5x10 <sup>4</sup>
THERMAL RESISTANCE	°C/WATT	θ <sub>TH</sub>	5.4
MAX ALLOWABLE WINDING TEMP	°C	TEMP	220
PHASES/WINDING TYPE			3/Y
POLES			4
WEIGHT	OZ	W <sub>T</sub>	25.6

\* 25°C AMBIENT TEMP  
 \*\* 25°C AMBIENT, 220°C WINDING TEMP



	COLOR	1	2	3	4	5	6
MOTOR LEADS	A	GRY	+	+	-	-	
	B	BLU	-	+	+	-	
	C	BLK	-	-	+	+	
SENSOR LEADS	1	BRN	1	1	0	0	1
	2	ORN	0	1	1	1	0
	3	YEL	0	0	0	1	1
	Vcc+	RED					
GND	WHT						

LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
A	100015	INITIAL RELEASE	SLM	BD	01/28/10



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

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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 RUNOUT OF .005 FIM.

TOLERANCES:  
 DECIMALS: .X ± .03, .XX ± .01, .XXX ± .005  
 ANGULAR: ±0° 30'

DO NOT SCALE DRAWING

**BEI KIMCO MAGNETICS DIVISION**  
 VISTA, CA 92081

DRAWN McGHEE	DATE 01/25/10	TITLE BLDC MOTOR		
MECH CHECK J. THOMPSON	01/28/10	SIZE B	FSCM NO. 55789	DWG NO. DII14-60-000A
APPD B. Du	01/28/10	SCALE: NONE	SHEET 1 OF 1	REV A
FILE NO. M:\TOP LEVEL\DII\...				

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