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LA14-24-000A

B

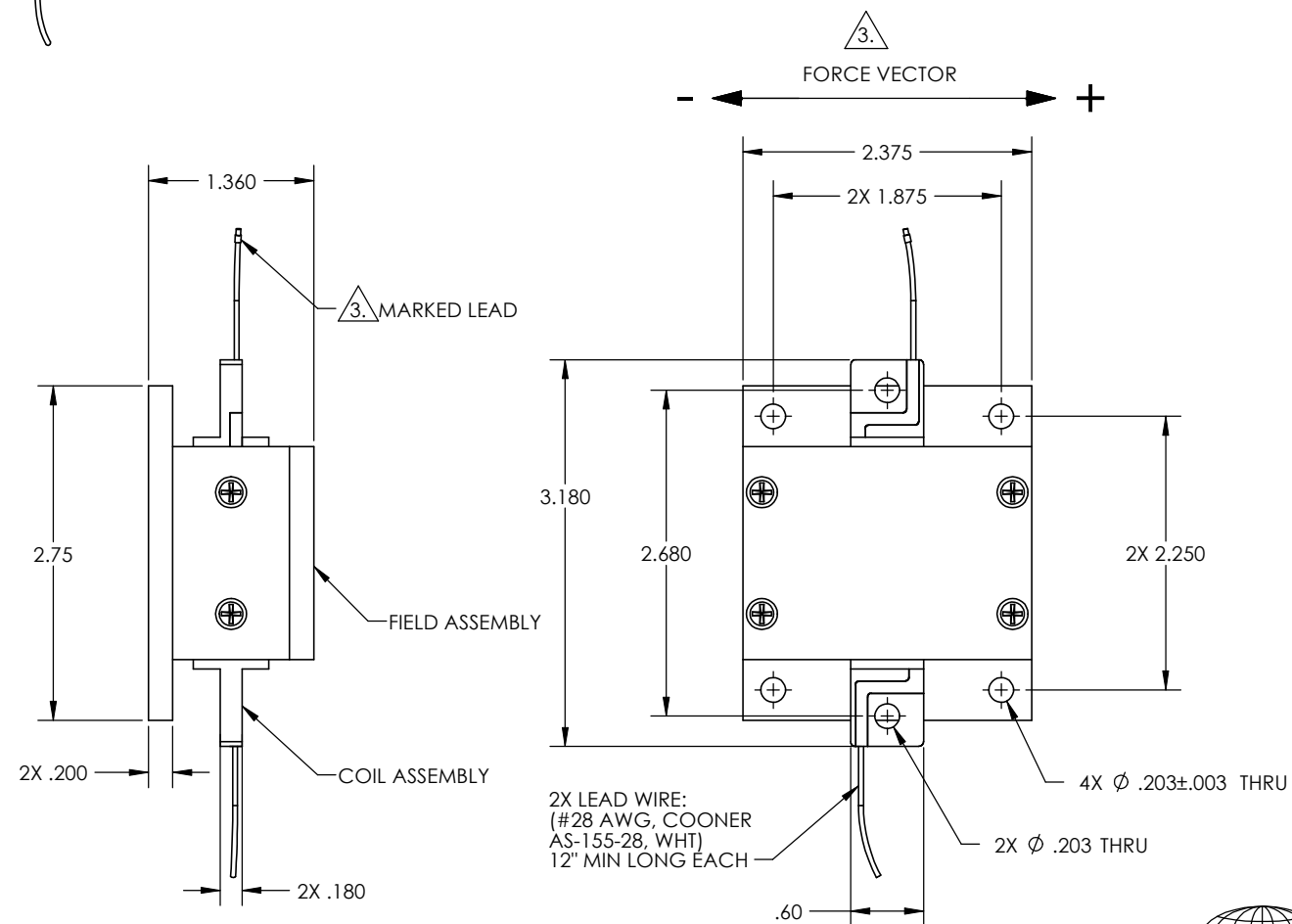
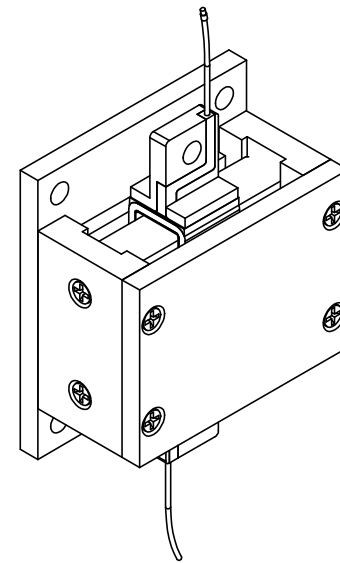
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LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
A	96-0611	UPDATE PARAMETERS	NPF	ACM	06/10/96
B	100156	UPDATE FORMAT & PARAMETER TABLE	RG	MG	06/09/10

Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	5	
Voltage @ F _p	Volts	Nominal	V _p	21.9	
Current @ F _p	Amps	Nominal	I _p	4.38	
Force Sensitivity	LB/Amp	± 10%	K _F	1.6	
	N/Amp	± 10%		7.12	
Back EMF Constant	V/(ft/sec)	± 10%	K _B	2.17	
	V/(m/sec)	± 10%		7.12	
Inductance ****	micro-Henry	± 15%	L	3.5	

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	LB	F _P	7
	N		31.1
Continuos Stall Force ***	LB	F _{CS}	3.35
	N		14.9
Actuator Constant	LB/√Watt	K _A	0.72
	N/√Watt		3.2
Electrical Time Constant	micro-sec	τ _E	700
Mechanical Time Constant	milli-sec	τ _M	34.4
Power I ² R @ F _p	Watts	P _P	95.7
Stroke	± in		0.437
	± mm		11.1
Clearance on Each side of Coil	in		0.02
	mm		0.50
Thermal Resistance of Coil	°C/Watt	θ _{TH}	3.4
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	OZ	WT _C	0.77
	G		21.8
Weight of Field Assembly	OZ	WT _T	227
	G		643.5

* AT MID-STROKE POSITION AND @ 25 °C AMBIENT TEMPERATURE
 ** 10 SECONDS @ 25 °C AMBIENT & 155 °C COIL TEMPERATURE
 *** @25 °C AMBIENT & 155 °C COIL TEMPERATURE
 **** MEASURED AT 1000 Hz.



3. A POSITIVE (+) VOLTAGE APPLIED TO THE MARKED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.

2. INTERPRET DRAWING IAW 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 ANGULAR
 .X ±.03 ±0°30'
 .XX ±.01
 .XXX ±.005
 DO NOT SCALE DRAWING

BEI KIMCO MAGNETICS DIVISION
VISTA, CA 92081

DRAWN VERNACCHIA	DATE 09/16/88	TITLE LINEAR ACTUATOR	
CHECK GUERRERO	DATE 06/03/10	SIZE C	REV B
APPD A. MORCOS	DATE 06/13/96	FSCM NO. 55789	DWG NO. LA14-24-000A
FILE NO. L\TOL LEVEL\LA\	SCALE: NONE	SHEET: 1 OF 1	

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