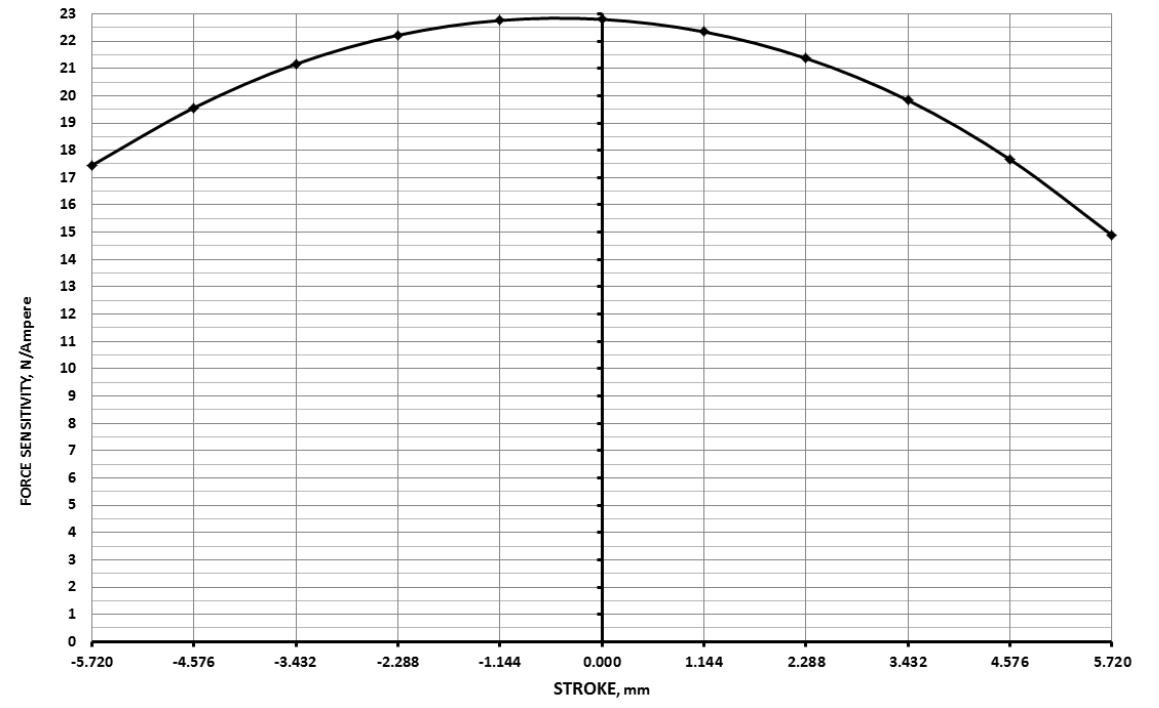


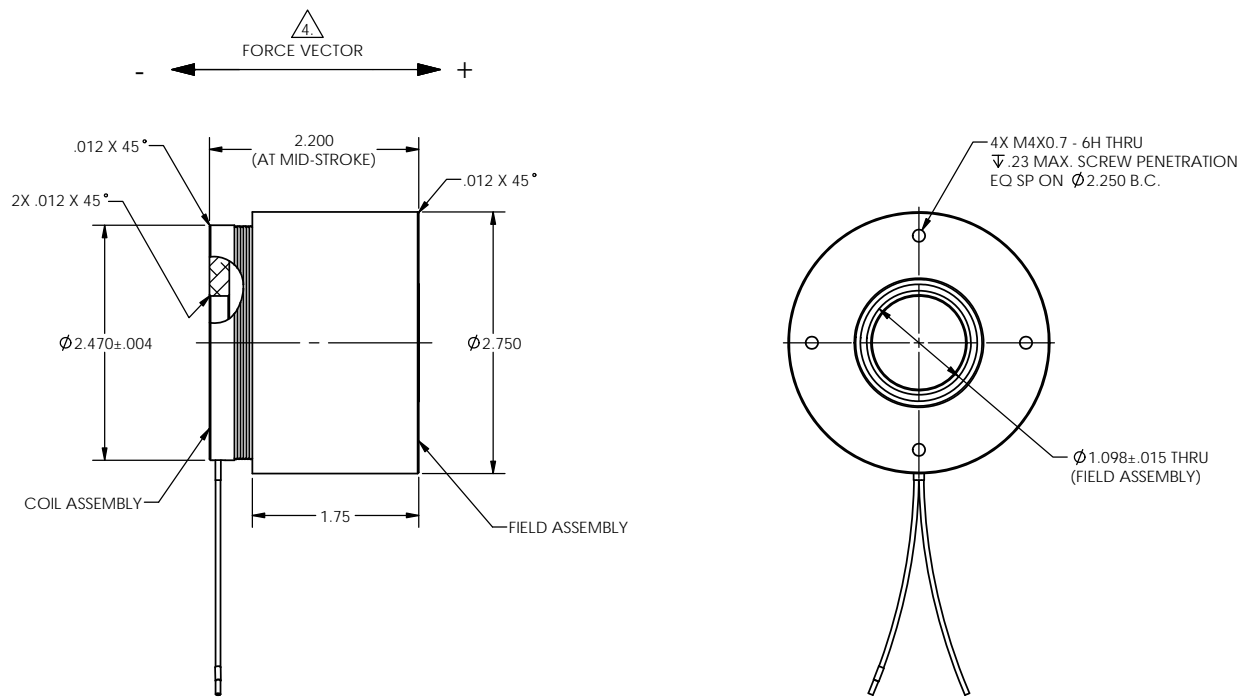
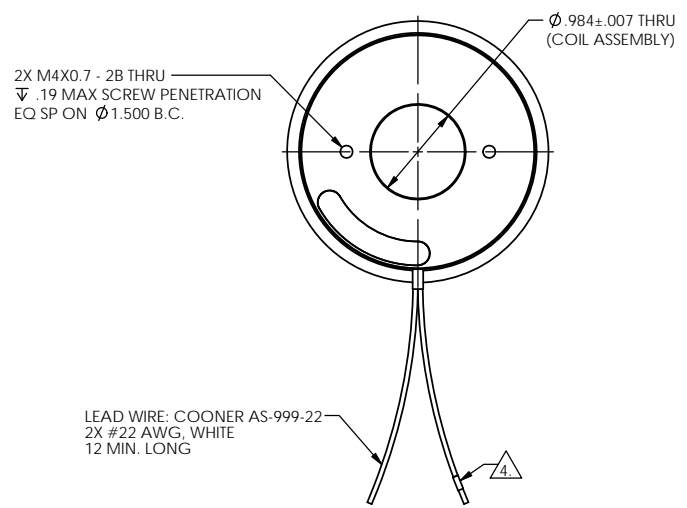
LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
X1	160054	INITIAL RELEASE	RG	MG	02/09/16

Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	4.8	
Voltage @ F _p	Volts	Nominal	V _p	42.4	
Current @ F _p	Amps	Nominal	I _p	8.82	
Force Sensitivity	LB/Amp	± 10%	K _F	5.13	
	N/Amp	± 10%		22.8	
Back EMF Constant	V/(ft/sec)	± 10%	K _B	6.95	
	V/(m/sec)	± 10%		22.8	
Inductance ****	milli-Henry	± 15%	L	3.4	

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	LB	F _p	45.2
	N		201.1
Continuous Stall Force ***	LB	F _{CS}	10.3
	N		45.7
Actuator Constant	LB/√Watt	K _A	2.34
	N/√Watt		10.41
Electrical Time Constant	milli-sec	τ _E	0.71
Mechanical Time Constant	milli-sec	τ _M	2.2
Theoretical Acceleration	ft/sec ²	α _T	3077.1
	m/sec ²		837.9
Max Theoretical Frequency @ Full Stroke and Sinusoidal/Triangular Motion	Hz	f _{max}	60.9/67.7
Power I ² R @ F _p	Watts	P _p	374.0
Stroke:	+ in		0.225
	± mm		5.72
Clearance on Each side of Coil in Still Air	in		0.015
	mm		0.38
Thermal Resistance of Coil	°C/Watt	θ _{TH}	4.5
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	LB	WT _C	0.53
	Kg		0.24
Weight of Field Assembly	LB	WT _T	1.61
	Kg		0.73



* 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.



- INSULATION RESISTANCE: 100 MEGOHMS MINIMUM AT 500 VDC.
 - MECHANICAL OVERTRAVEL IN THE POSITIVE (+) DIRECTION IS 0.015" MINIMUM.
 - A POSITIVE (+) VOLTAGE APPLIED TO THE MARKED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.
 - ALL ABBREVIATIONS IAW ASME Y14.38.
 - INTERPRET DRAWING IAW ASME Y14.100.
 - 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 ±0.03, .XX ±0.01, .XXX ±0.005
 ANGULAR: ±0°30'
 DO NOT SCALE DRAWING

BEI KIMCO MAGNETICS DIVISION
 VISTA, CA 92081

ROHS

DRAWN: GUERRERO	DATE: 02/05/16	TITLE: LINEAR ACTUATOR
MECH CHECK: MCGHEE	DATE: 02/08/16	
APPD: GODKIN	DATE: 02/19/16	
FILE NO.: L:\TOP LEVEL\LA\...	SIZE: D	FSCM NO.: 55789
	DWG NO.: LA28-22-001A	REV: X1
	SCALE: 1/1	SHEET: 1 OF 1

LA28-22-001A X1