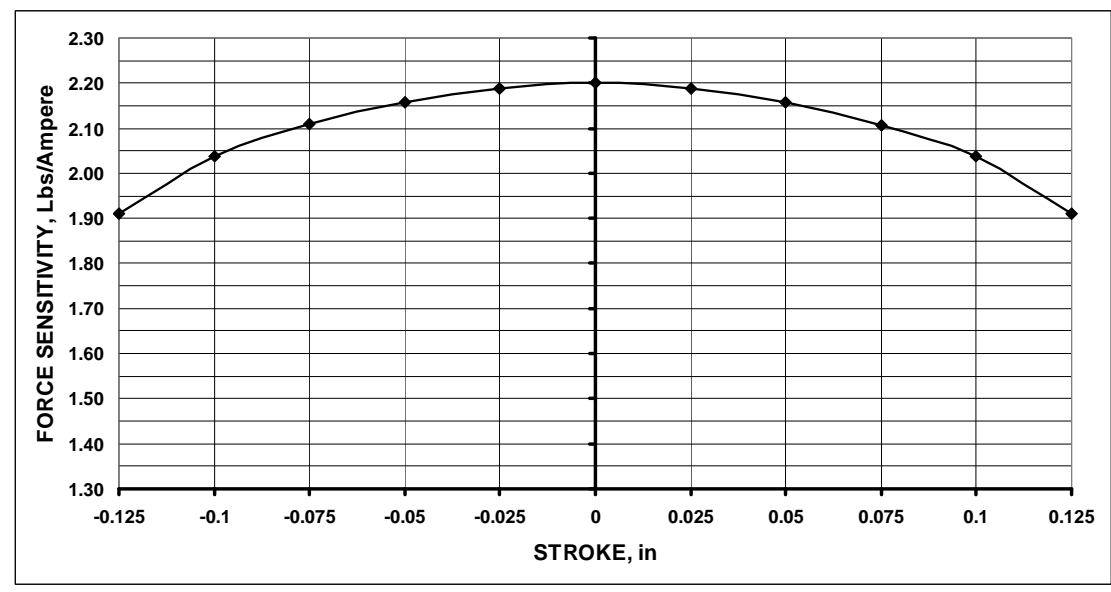
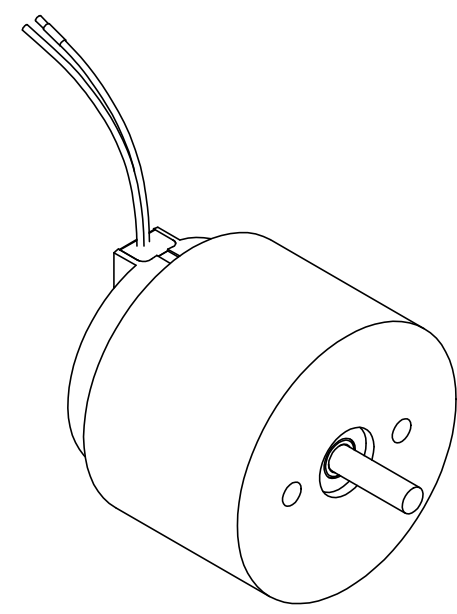


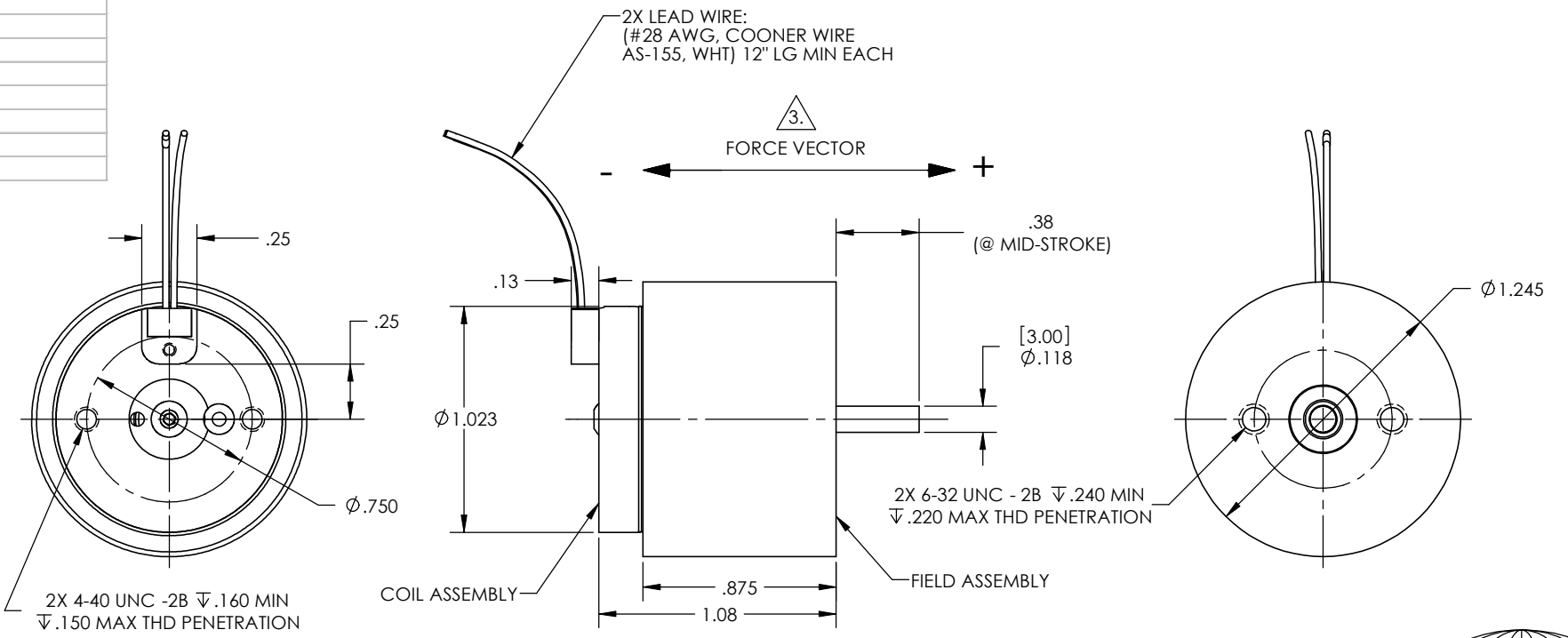
Winding Constants *	Units	Tol	Symbol	Wdg	Z
DC Resistance	Ohms	± 12.5%	R		17.1
Voltage @ F _P	Volts	Nominal	V _P		27.2
Current @ F _P	Amps	Nominal	I _P		1.59
Force Sensitivity	LB/Amp	± 10%	K _F		2.2
	N/Amp	± 10%		9.79	
Back EMF Constant	V/(ft/sec)	± 10%	K _B		2.98
	V/(m/sec)	± 10%		9.79	
Inductance ****	milli-Henry	± 15%	L		2.8

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	LB	F _P	3.5
	N		15.57
Continuous Stall Force ***	LB	F _{CS}	1.14
	N		5.07
Actuator Constant	LB/√Watt	K _A	0.53
	N/√Watt		2.36
Electrical Time Constant	micro-sec	τ _E	164
Mechanical Time Constant	milli-sec	τ _M	2.84
Theoretical Acceleration	ft/sec ²	α _T	3212.6
	m/sec ²		979.2
Max Theoretical Frequency @ Full Stroke and Sinusoidal / Triangular Motion	Hz	f _{max}	88.4/98.2
Power I ² R @ F _P	Watts	P _P	43.3
Stroke:	± in		0.125
	± mm		3.18
Clearance on Each side of Coil	in		0.015
	mm		0.38
Thermal Resistance of Coil in still air	°C/Watt	θ _{TH}	18.7
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	LB	WT _C	0.035
	g		15.9
Weight of Field Assembly	LB	WT _F	0.22
	g		99.8

LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
X1	090305	INITIAL RELEASE	RG	MG	01/21/10
X2	100205	UPDATE TO CURRENT CONFIG.	RG	MG	07/19/10



* 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.



4. MECHINAL OVERTRAVEL IN THE POSITIVE (+) DIRECTION IS .025 MINIMUM.
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

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 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	DATE	TITLE
GUERRERO	12/01/09	LINEAR ACTUATOR
CHECK	01/14/10	
APPD	01/21/10	SIZE
FILE NO.	L\TOP L\LA\	FSCM NO.
		DWG NO.
		REV
		X2
		SCALE: NONE
		SHEET: 1 OF 1