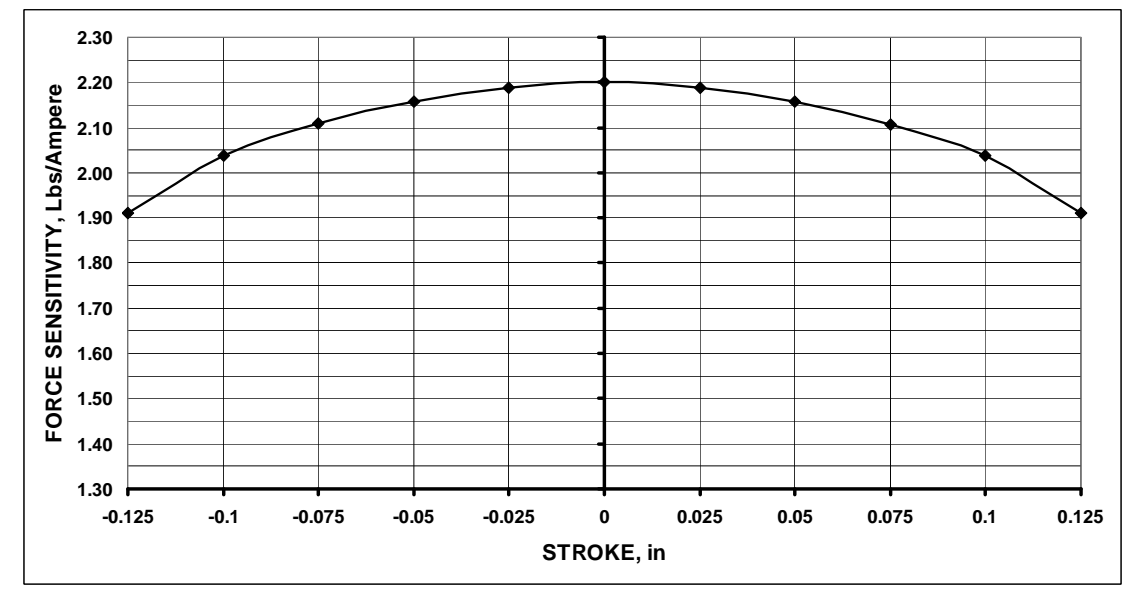
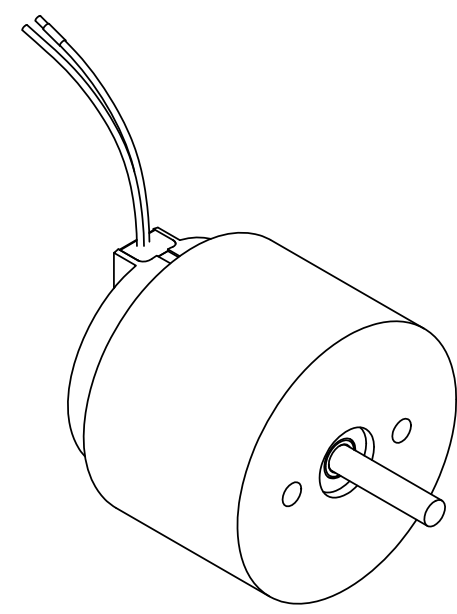


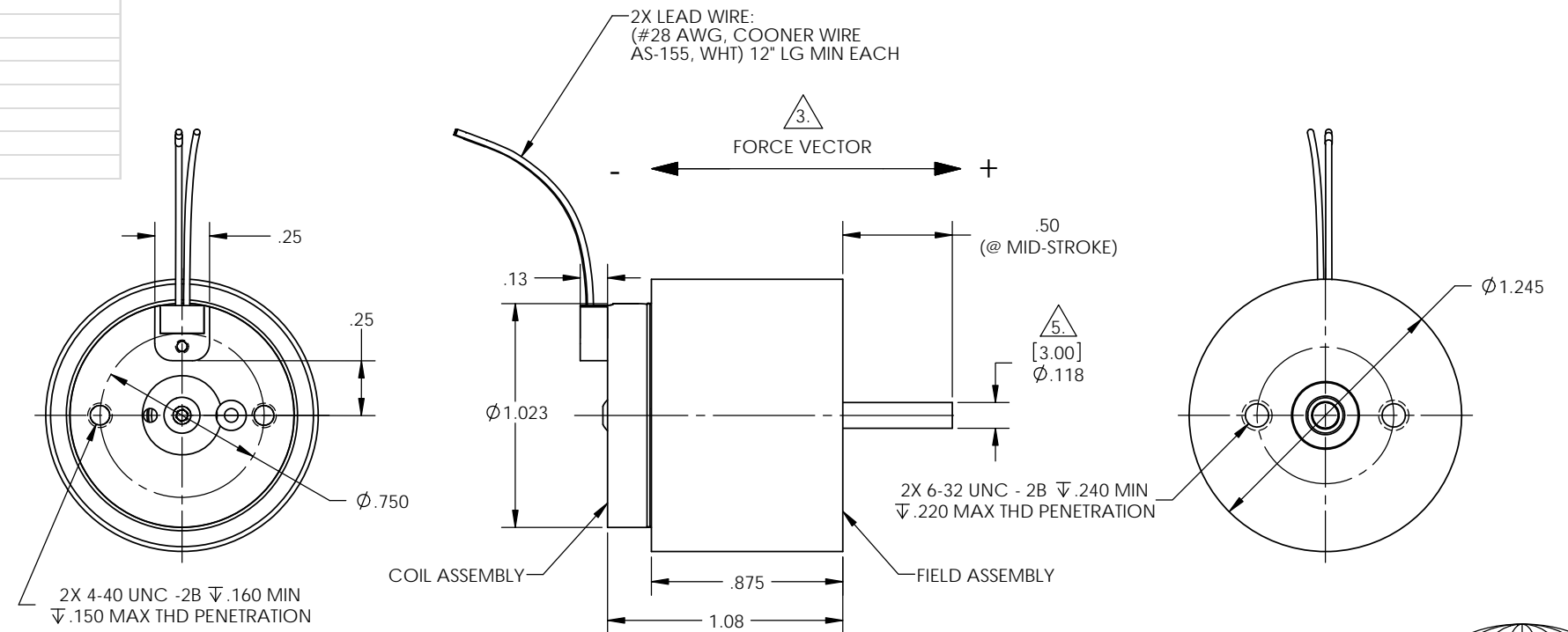
Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	17.1	
Voltage @ F _P	Volts	Nominal	V _P	27.2	
Current @ F _P	Amps	Nominal	I _P	1.59	
Force Sensitivity	LB/Amp	± 10%	K _F	2.2	
	N/Amp	± 10%		9.79	
Back EMF Constant	V/(ft/sec)	± 10%	K _B	2.98	
	V/(m/sec)	± 10%		9.79	
Inductance ****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



* 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.

(DASH)#	SHAFT END CONFIGURATION
-3S	3mm Diameter
-3E	3mm Diameter, External Thread M3x0.5 X .2 [5.08mm] Long



4. MECHANICAL 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

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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

RoHS

DRAWN McGHEE	DATE 01/25/12	TITLE LINEAR ACTUATOR	
CHECK GUERRERO	DATE 01/28/13	SIZE C	REV X1
APPD M. GODKIN	DATE 01/28/13	FSCM NO. 55789	DWG NO. LA13-11-001A-DASH
FILE NO. L:\TOP LEVEL\LA\...	SCALE: NONE	SHEET: 1 OF 1	