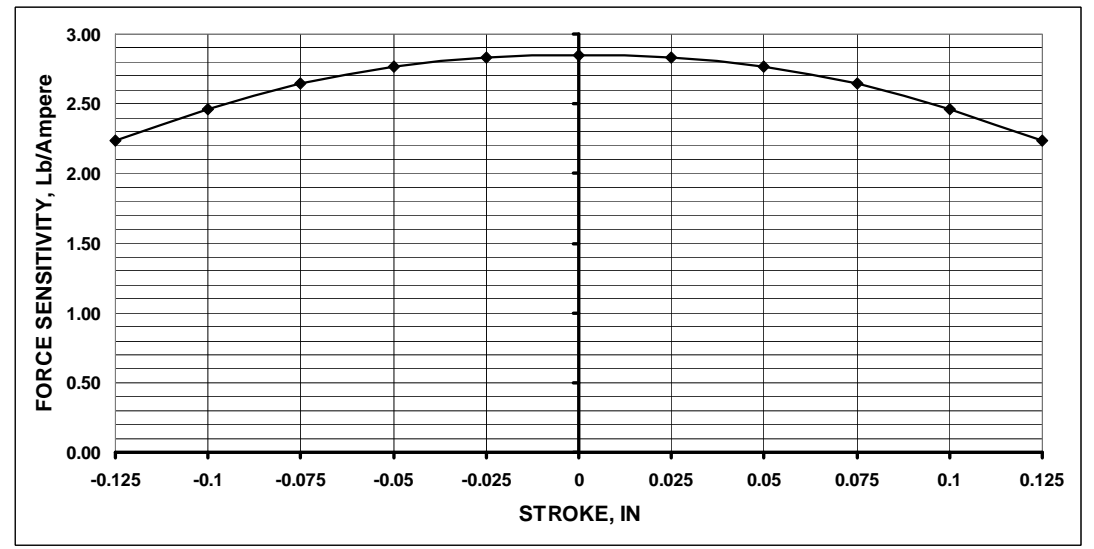
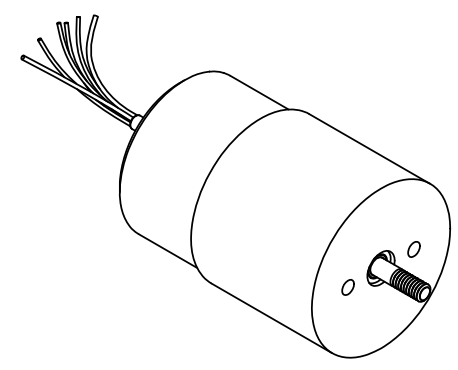
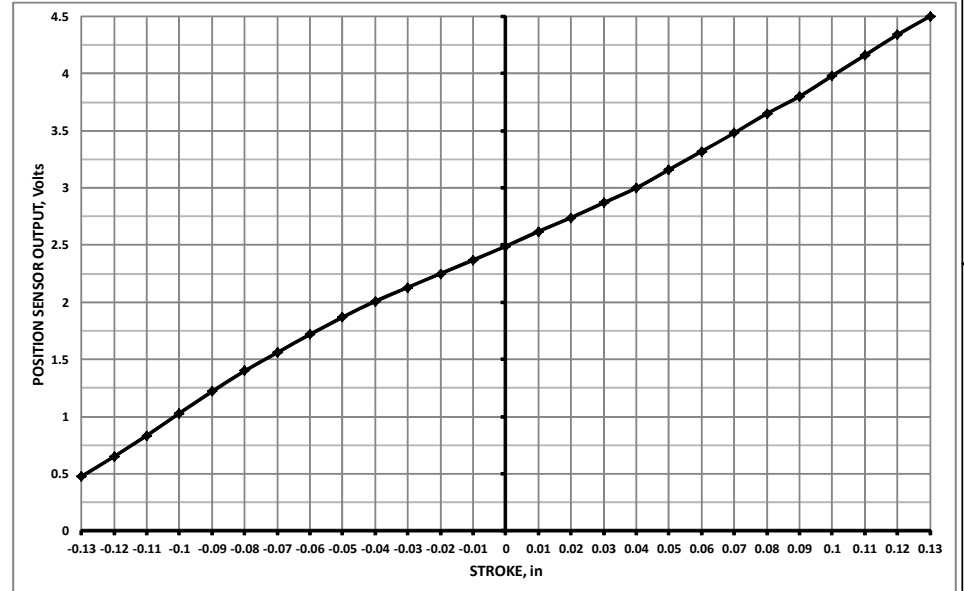


Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	4.7	
Voltage @ F <sub>p</sub>	Volts	Nominal	V <sub>p</sub>	33.0	
Current @ F <sub>p</sub>	Amps	Nominal	I <sub>p</sub>	7.02	
Force Sensitivity	LB/Amp	± 10%	K <sub>F</sub>	2.85	
	N/Amp	± 10%		12.68	
Back EMF Constant	V/(ft/sec)	± 10%	K <sub>B</sub>	3.86	
	V/(m/sec)	± 10%		12.68	
Inductance ****	milli-Henry	± 30%	L	1.25	

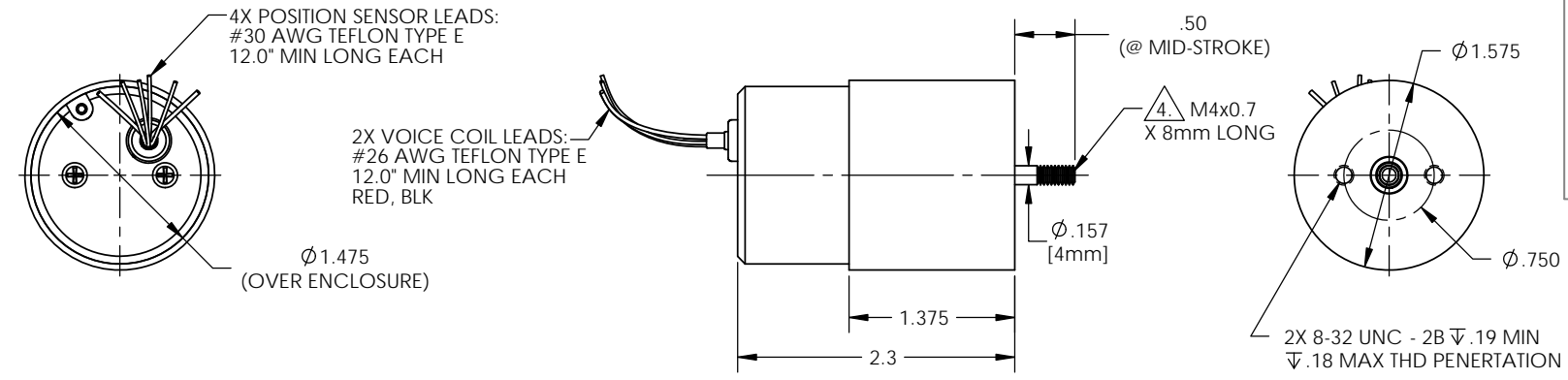
Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	LB	F <sub>p</sub>	20.0
	N		89.0
Continuous Stall Force ***	LB	F <sub>CS</sub>	3.82
	N		17.0
Actuator Constant	LB/√Watt	K <sub>A</sub>	1.31
	N/√Watt		5.83
Electrical Time Constant	milli-sec	τ <sub>E</sub>	270
Mechanical Time Constant	milli-sec	τ <sub>M</sub>	1.51
Theoretical Acceleration	ft/sec <sup>2</sup>	α <sub>T</sub>	5647.9
	m/sec <sup>2</sup>		1721.5
Max Theoretical Frequency @ Full Stroke and Sinusoidal / Triangular Motion	Hz	f <sub>max</sub>	117.2/130.2
Power I <sup>2</sup> R @ F <sub>p</sub>	Watts	P <sub>p</sub>	232
Stroke:	± in		0.12
	± mm		3.04
Clearance on Each side of Coil	in		0.018
	mm		0.46
Thermal Resistance of Coil	°C/Watt	θ <sub>TH</sub>	10.2
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	OZ	WT <sub>C</sub>	1.82
	g		51.7
Total Weight	OZ	WT <sub>T</sub>	10.5
	g		297



POSITION SENSOR		
LEAD WIRE	IDENTIFICATION	DESCRIPTION
YELLOW	V <sub>CC</sub>	INPUT VOLATAGE ( 5 VOLTS)
GRAY	GND	GROUND
BROWN	V <sub>O</sub>	OUTPUT VOLTAGE
WHITE	V <sub>PP</sub>	VOLTAGE FOR PROGRAMMING ONLY, NOT TO BE USED BY CUSTOMER



\* 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
-4S	4mm Diameter
-4E	4mm Diameter, External Thread M4x0.7 X 8mm Long

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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	GUERRERO	DATE	10/29/12	TITLE	LINEAR ACTUATOR SYSTEM		
CHECK	McGHEE	DATE	10/31/12	SIZE	C	FSCM NO.	55789
APPD	GODKIN	DATE	10/31/12	DWG NO.	LAS16-23-000A-P01-DASH		REV
FILE NO.	L:\TOP LEVEL\LAS...						X2
SCALE: NONE				SHEET: 1 OF 1			

4. -4E SHAFT CONFIGURATION SHOWN.
3. A POSITIVE (+) VOLTAGE APPLIED TO THE RED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY (SHAFT) IN THE POSITIVE (+) DIRECTION.
2. INTERPRET DRAWING IAW Y14.100.
1. INTERPRET DIMENSIONING AND TOLERANCING IAW ASME Y14.5M-1994.
- NOTES: UNLESS OTHERWISE SPECIFIED

