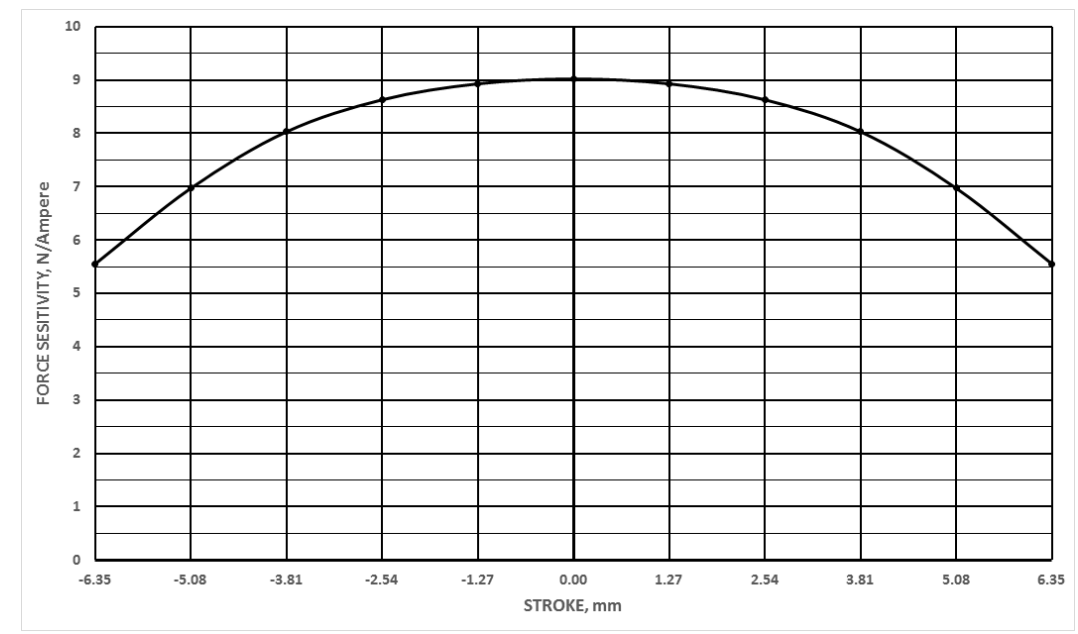
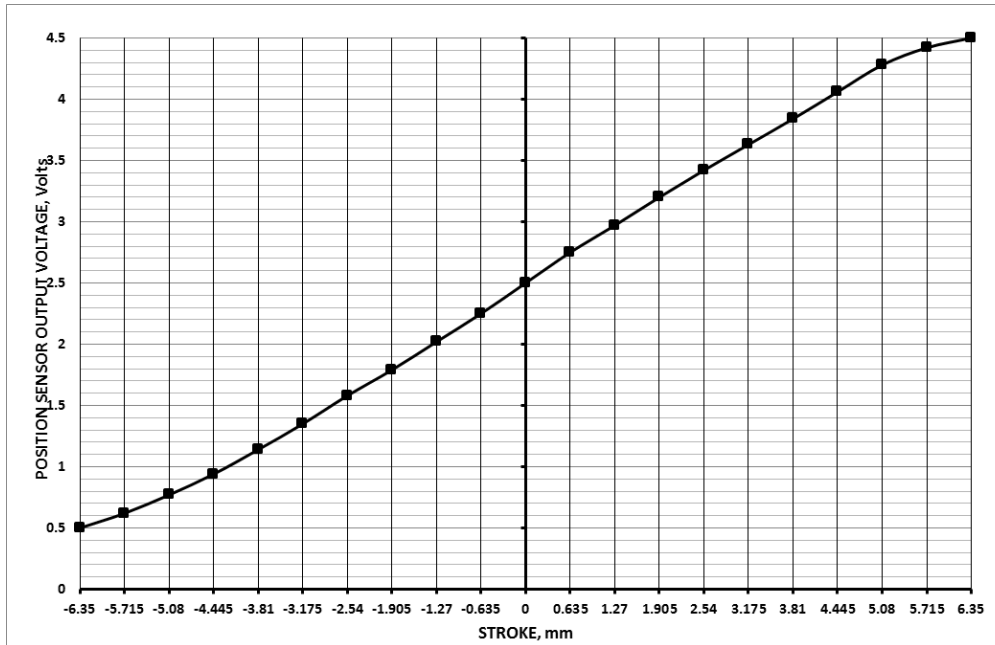


LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
X2	170059	UPDATE PARAMETERS & Fs v Stroke table	RG	MG	02/24/17

Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R		1.4
Voltage @ F _{PS}	Volts	Nominal	V _{PS}		15.1
Current @ F _{PS}	Amps	Nominal	I _{PS}		10.8
Current @ F _{CS}	Amps	Nominal	I _{CS}		2.63
Force Sensitivity @ F _{PS}	N/Amp	± 10%	K _{FFPS}		9.02
	lb/Amp	± 10%			2.03
Force Sensitivity @ No-Load	N/Amp	± 10%	K _{FNL}		9.02
	lb/Amp	± 10%			2.03
Back EMF Constant	V/(m/sec)	± 10%	K _B		9.02
	V/(ft/sec)	± 10%			2.75
Inductance ****	milli-Henry	± 30%	L		0.022 (EST)

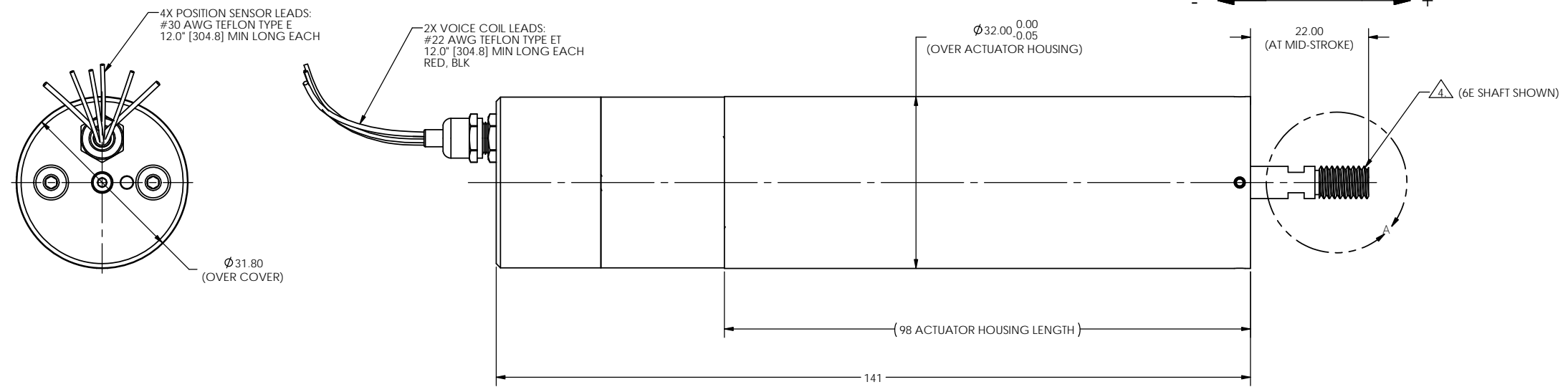


Linear Actuator Parameters *	Units	Symbol	Value
Peak Stall Force**	N	F _{PS}	97.36
	lb		21.9
Continuous Stall Force ***	N	F _{CS}	23.68 (EST)
	lb		5.32 (EST)
Actuator Constant	N/√Watt	K _A	7.63
	lb/√Watt		1.72 (EST)
Electrical Time Constant	milli-sec	τ _E	.016 (EST)
Mechanical Time Constant	milli-sec	τ _M	4.25
Theoretical Acceleration	m/s ²	a _T	394.2
	ft/s ²		1,293
Max Theoretical Frequency @ Full Stroke and Sinusoidal / Triangular Motion	Hz	f _{max}	39.7/44.1
Power I ² R @ F _{PS}	Watts	P _{PS}	163.3
Stroke	± mm	S _A	6.35
	± in		0.25
Moving Magnet Assembly Mass	kg	M _{CA}	0.247
	lb		0.545
Thermal Resistance of Coil in still air	°C/Watt	Θ _{TH}	9.0 (EST)
Maximum Allowable Coil Winding Temp	°C	T _W	155
Total Mass	kg	M _T	0.534
	lb		1.18

* 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.

POSITION SENSOR		
LEAD WIRE	IDENTIFICATION	DESCRIPTION
YELLOW	V _{CC}	INPUT VOLATAGE (5 VOLTS)
GRAY	GND	GROUND
BROWN	V _O	OUTPUT VOLTAGE
WHITE	V _{PP}	VOLTAGE FOR PROGRAMMING ONLY, NOT TO BE USED BY CUSTOMER

(DASH)	SHAFT END CONFIGURATION
6I	6mm Diameter, Internal Thread M4x0.7 X 10 mm Deep
6E	6mm Diameter, External Thread M6x1.0 X 10mm Long



- ⚠ A POSITIVE (+) VOLTAGE APPLIED TO THE RED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY (SHAFT) IN THE POSITIVE (+) DIRECTION.
 - ⚠ -6E SHAFT CONFIGURATION SHOWN.
 - 3. ALL ABBREVIATIONS IAW ASME Y14.38.
 - 2. INTERPRET DRAWING IAW ASME Y14.100.
 - 1. INTERPRET DIMENSIONING AND TOLERANCING IAW ASME Y14.5M-1994.
- NOTES: UNLESS OTHERWISE SPECIFIED

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METRIC DRAWING

BEI KIMCO MAGNETICS DIVISION
 VISTA, CA 92081

RoHS

DRAWN GUERRERO	DATE 02/03/17	TITLE LINEAR ACTUATOR SYSTEM
MECH CHECK MCGHEE	DATE 02/07/17	
APPD GODKIN	DATE 02/07/17	
FILE NO. L\TOP LEVEL\LAS\	SCALE: NONE	SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED:
 -ALL DIMENSIONS ARE IN MILLIMETERS
 -BREAK SHARP EDGES 0.4 MAX
 -SURFACE ROUGHNESS 1.6 ✓
 -DIMENSIONS APPLY AFTER FINISH
 -MAX FILLET R0.25
 -DIAMETERS SHALL NOT EXCEED A RUNOUT OF 0.13 FIM

TOLERANCES:
 DECIMALS ANGULAR
 X ±.2 ±0°30'
 XX ±.10

DO NOT SCALE DRAWING

LAS13-56-000A-P01-DASH X1