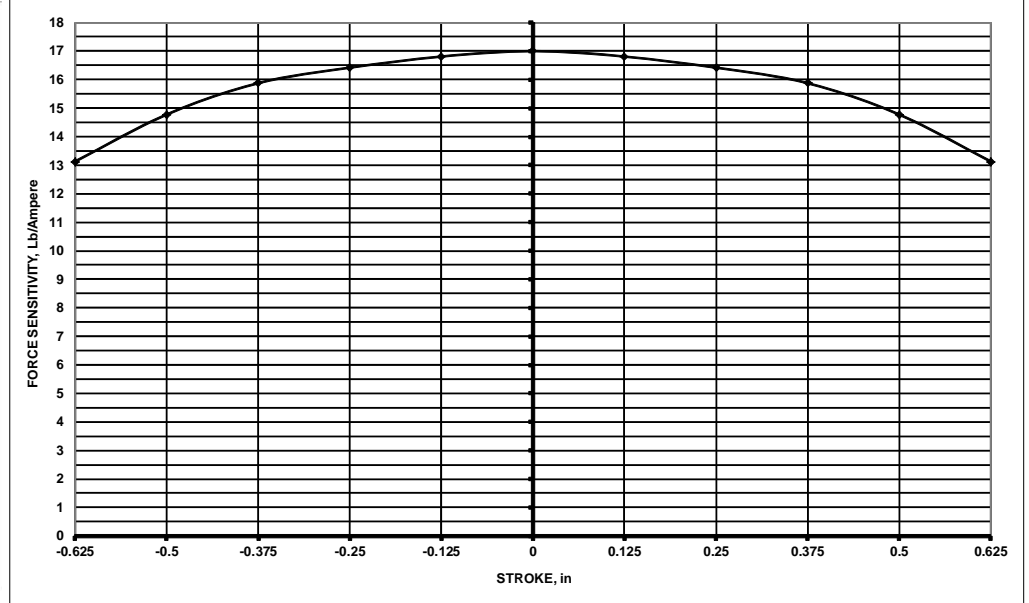
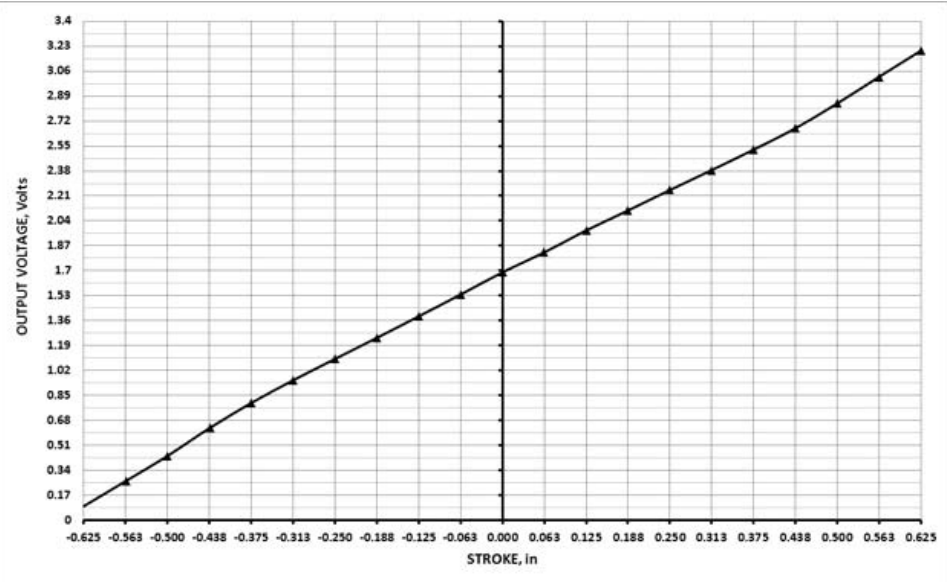


LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
X1	140124	INITIAL RELEASE	RG	MG	04/23/14

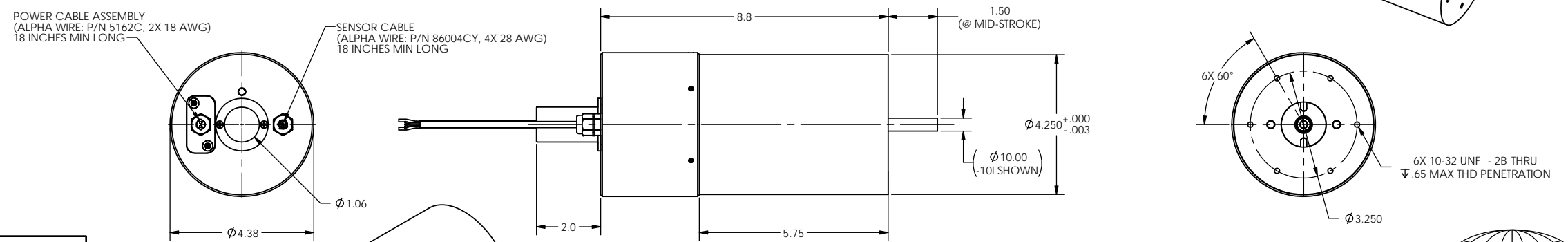
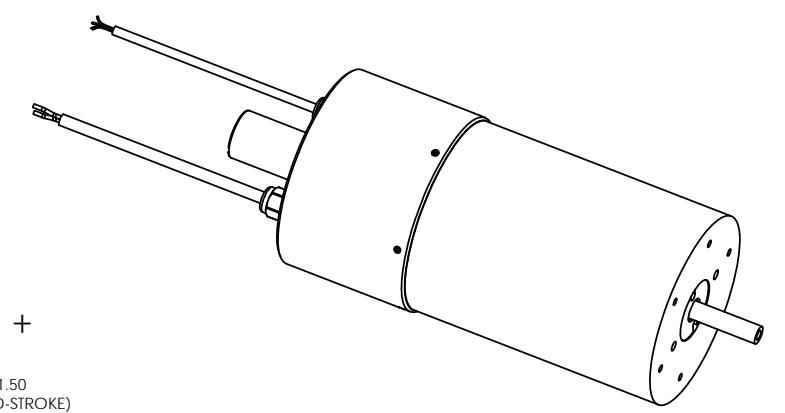
Winding Constants *	Units	Tol	Symbol	Wdg	Z
DC Resistance	Ohms	± 12.5%	R		3.9
Voltage @ F _p	Volts	Nominal	V _p		78
Current @ F _p	Amps	Nominal	I _p		20
Force Sensitivity	N/Amp	± 10%	K _F		75.62
	LB/Amp	± 10%			17.0
Back EMF Constant	V/(m/sec)	± 10%	K _B		75.62
	V/(ft/sec)	± 10%			23.05
Inductance ****	milli-Henry	± 15%	L		4.5

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	N	F _p	1512.4
	LB		340
Continuous Stall Force ***	N	F _{CS}	386.7
	LB		86.9
Actuator Constant	N/√Watt	K _A	38.3
	LB/√Watt		8.61
Electrical Time Constant	milli-sec	τ _E	1.15
Mechanical Time Constant	milli-sec	τ _M	0.93
Theoretical Acceleration	m/sec ²	α _T	1112.1
	ft/sec ²		3648.6
Max Theoretical Frequency @ Full Stroke & Sinusoidal/Triangular Motion	Hz	f _{max}	42.1/46.8
Power I ² R @ F _p	Watts	P _p	1560
Stroke	± mm		15.87
	± in		0.625
Clearance on Each side of Coil	mm		0.51
	in		0.02
Thermal Resistance of Coil in still air	°C/Watt	θ _{TH}	0.85
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	Kg	WT _C	1.36
	LB		3
Total Weight	Kg	WT _T	10.48
	LB		23.1

* AT MID-STROKE & 25 °C TEMPERATURE
 ** 10 SEC @ 25 °C AMBIENT & 155 °C WINDING TEMPERATURE
 *** AT 25 °C AMBIENT & 155 °C COIL TEMPERATURE
 **** MEASURED AT 1000 Hz.



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



(DASH)	SHAFT END CONFIGURATION
-10I	10mm Diameter, Internal Thread 1/4-28 UNF X 1/2" Deep
-10E	10mm Diameter, External Thread 3/8-24 UNF X 1/2" Long

- 1. INTERPRET DIMENSIONING AND TOLERANCING IAW ASME Y14.5M-1994.
 - 2. INTERPRET DRAWING IAW ASME Y14.100.
 - 3. ALL ABBREVIATIONS IAW ASME Y14.38.
 - 4. -10I SHAFT CONFIGURATION SHOWN.
- 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 FILET 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

DRAWN GUERRERO	DATE 11/20/13	TITLE LINEAR ACTUATOR SYSTEM
MECH CHECK MCGHEE	DATE 04/23/14	REV X1
APPD GODKIN	DATE 04/23/14	SIZE D
FILE NO. L\TOP\LAS\	FSCM NO. 55789	DWG NO. LAS43-88-000A-P02-DASH
SCALE 1/1	SHEET 1 OF 1	



LAS43-88-000A-P02-DASH X1