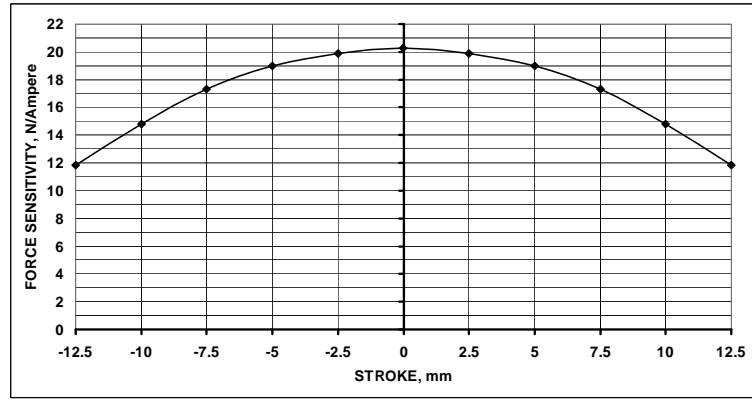


LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
X4	090107	UPDATE PARAMETERS (WEIGHT & MECH. TIME CONST.)	SLM	MG	04/23/09
X5	100329	FLIP DIRECTION TO MATCH STROKE CHART	SLM	MG	11/10/10

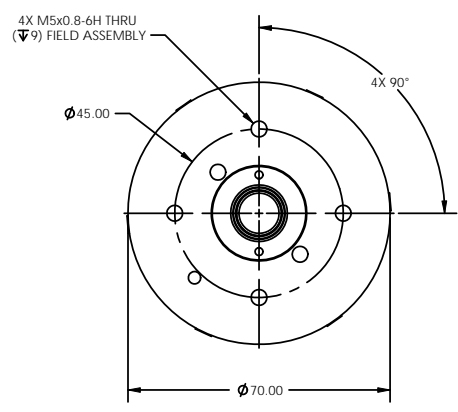
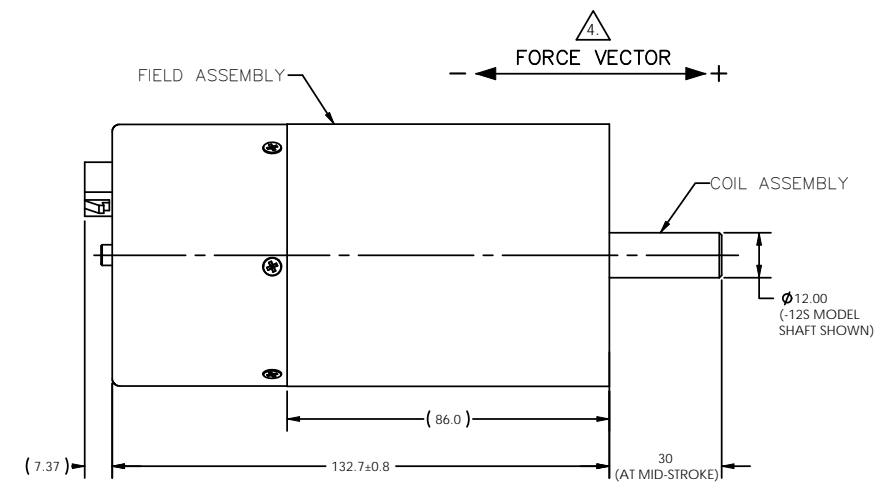
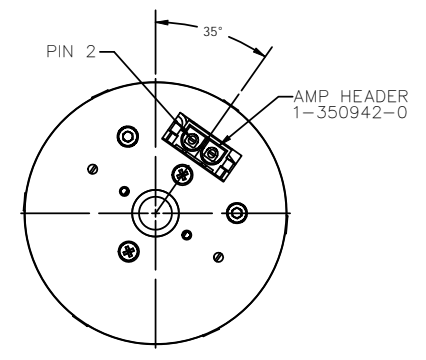
Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	2.4	
Voltage @ F _p	Volts	Nominal	V _p	31.6	
Current @ F _p	Amps	Nominal	I _p	13.16	
Force Sensitivity	N/Amp	± 10%	K _f	20.28	
	LB/Amp	± 10%		4.56	
Back EMF Constant	V/(m/sec)	± 10%	K _B	20.28	
	V/(ft/sec)	± 10%		6.18	
Inductance ****	milli-henry	± 30%	L	3.15	

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	N	F _p	266.9
	LB		60
Continuous Stall Force ***	N	F _{CS}	75.6
	LB		17
Actuator Constant	N/√Watt	K _A	13.09
	LB/√Watt		2.94
Electrical Time Constant	milli-sec	τ _E	1.31
Mechanical Time Constant	milli-sec	τ _M	4.3
Theoretical Acceleration	m/sec ²	a _T	360.7
	ft/sec ²		1183.4
Max Theoretical Frequency @ Full Stroke & Sinusoidal/Triangular Motion	Hz	f _{max}	26.8/29.8
Power I ² R @ F _p	Watts	P _p	416
Stroke:	± mm		12.5
	± in		0.492
Clearance on Each side of Coil	mm		1.51
	in		0.02
Thermal Resistance of Coil in still air	°C/Watt	θ _{TH}	2.6
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly *****	Kg	WT _C	0.74
	LB		1.63
Total Weight	Kg	WT _T	2.45
	LB		5.4



* 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
 ***** PARAMETERS ARE GIVEN FOR -12S MODEL

(DASH)#	DIA. OF SHAFT	SHAFT END CONFIGURATION
-12S	12mm	Standard (12mm)
-12E	12mm	External Thread M12x1.75 X 16mm Long
-12I	12mm	Internal Thread M8x1.0 X 16mm Deep



METRIC DRAWING

4. A POSITIVE (+) VOLTAGE APPLIED TO PIN NO. 2 WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.
- ALL ABBREVIATIONS IAW ASME Y14.38.
 - INTERPRET DRAWING IAW ASME Y14.100.
 - 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 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: X ±.2, XX ±.10
 ANGULAR: ±0.30°
 DO NOT SCALE DRAWING

BEI KIMCO MAGNETICS DIVISION
 VISTA, CA 92081

ROHS

DRAWN	DATE	TITLE			
GUERRERO	10/01/08	LINEAR ACTUATOR HOUSED			
MECH CHECK					
McGHEE	10/09/08				
APPD	DATE	SIZE	FSCM NO.	DWG NO.	REV
GODKIN	10/09/08	D	55789	LAH28-52-000A-(DASH)	X5
FILE NO.	SCALE		SHEET		
L:\TOP LEVEL\LAH\...	1/1		1 OF 1		