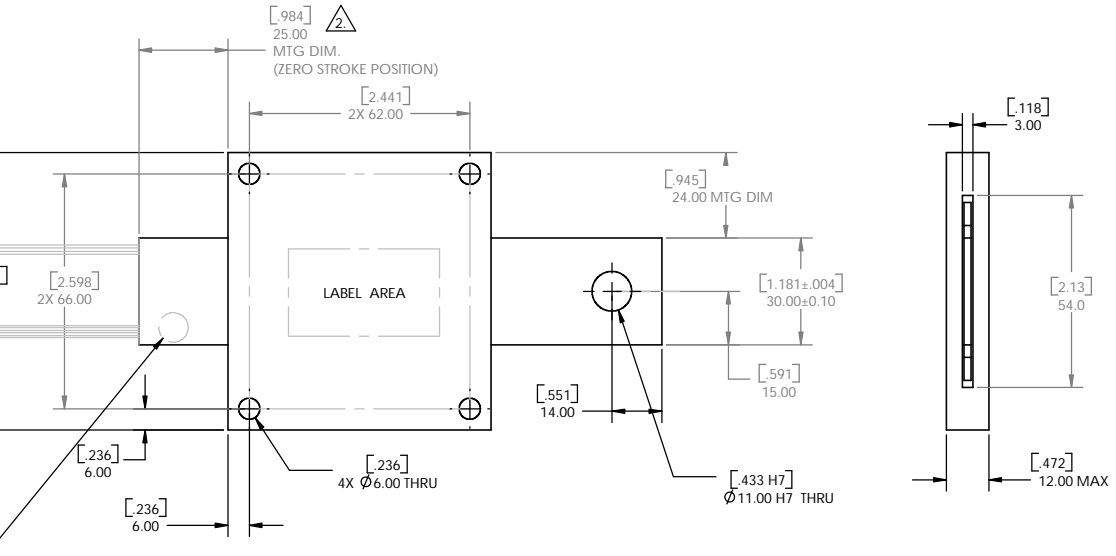
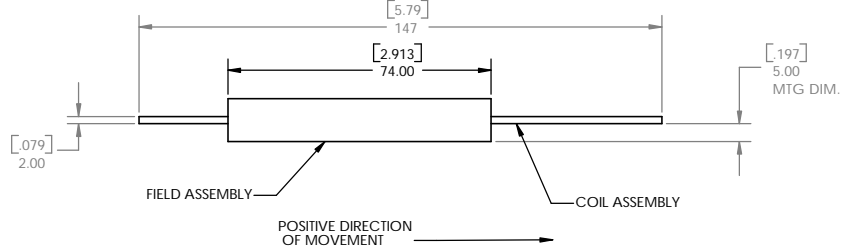
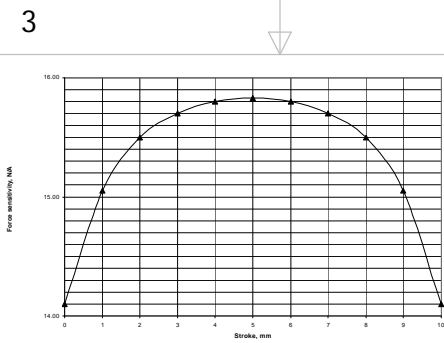
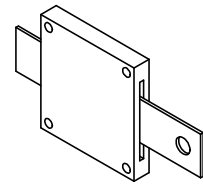


LTR	DCN NO.	DESCRIPTION	DRN	APPD	DATE
A	011308R	INITIAL RELEASE	RG	MG	02/07/02
B	030462	SPECIFY LABEL AREA	MJL	SH	04/14/03



COIL LEAD WIRES  
26 AWG, TFE INS  
RED, BLK  
LENGTH 250mm [10.0] LG

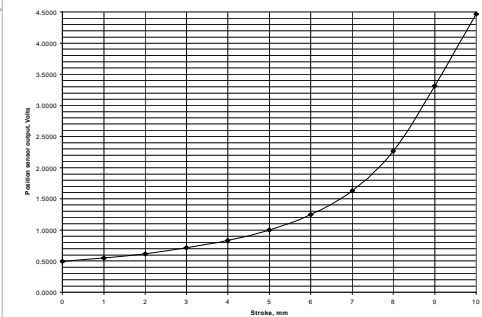
SENSOR LEAD WIRES  
28 AWG, TFE INS  
RED, BLK & WHT  
250mm [10.0] MIN. LG

POSITION SENSOR:  
MICRONAS HAL805  
(EMBEDDED IN COIL ASSEMBLY)

Winding Constants *	Units	Tol	Symbol	Wdg
DC Resistance	Ohms	± 12.5%	R	14.7
Voltage @ F <sub>p</sub>	Volts	Nominal	V <sub>p</sub>	35.2
Current @ F <sub>p</sub>	Amps	Nominal	I <sub>p</sub>	2.39
Force Sensitivity	N/Amp	± 10%	K <sub>F</sub>	15.83
	lb/Amp	± 10%		3.6
Back EMF Constant	V/(m/sec)	± 10%	K <sub>B</sub>	15.83
	V/(ft/sec)	± 10%		4.82
Inductance ****	millihenry	± 15%	L	2.75

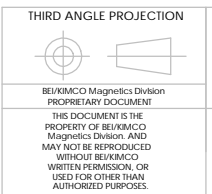
Actuator Parameters *	Units	Symbol	Value
Peak Force **	N	F <sub>p</sub>	37.8
	lb		8.5
Continuous Stall Force ***	N	F <sub>CS</sub>	15.1 (est)
	lb		3.39 (est)
Actuator Constant	N/√Watt	K <sub>A</sub>	4.13
	lb/√Watt		0.93
Electrical Time Constant	millisecond	t <sub>E</sub>	0.187
Mechanical Time Constant	millisecond	t <sub>M</sub>	2.0
Power F <sub>R</sub> @ F <sub>p</sub>	Watts	P <sub>p</sub>	84.0
Stroke, Total	mm		10
	in		0.394
Clearance on Each Side of Coil	mm		0.5
	in		0.02
Thermal Resistance of Coil	°C/Watt	Q <sub>TH</sub>	6.5 (est)
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	g	WT <sub>C</sub>	34
	oz		1.2
Weight of Field Assembly	g	WT <sub>F</sub>	396
	oz		14

\* @ 5mm STROKE POSITION AND 25 DEG C AMBIENT TEMPERATURE  
 \*\* 10 SEC @ 25 DEG C AMBIENT & 155 DEG COIL TEMPERATURE  
 \*\*\* @ 25 DEG C AMBIENT & 155 DEG C TEMPERATURE  
 \*\*\*\* @ ZERO STROKE POSITION MEASURED USING SENCORE LC102



Sensor Connections	
Lead wire Color	Function
Red	V <sub>DD</sub> +5 VDC
Black	Ground
White	Output

METRIC DRAWING



UNLESS OTHERWISE SPECIFIED:  
 -ALL DIMENSIONS ARE IN MILLIMETERS  
 -BREAK SHARP EDGES 0.4 MAX  
 -SURFACE ROUGHNESS 3.2  
 -DIMENSIONS APPLY AFTER FINISH  
 -MAX FILLET R0.4

TOLERANCES:

DECIMALS	ANGULAR
X ±0.8	±0°30'
X.X ±0.25	
X.XX ±0.13	

DO NOT SCALE DRAWING

DRAWN	DATE	TITLE	SIZE	FSCM NO.	DWG NO.	REV
R. GUERRERO	12/04/01	LINEAR ACTUATOR	C	55789	LA05-30-001Z	B
CHECK W. BUTTERFIELD	02/07/02					
APPD M. GODKIN	02/07/02	SCALE 1/1	SHEET 1 OF 1			
FILE NO. L/LA05-30-001Z						

2. A POSITIVE (+) VOLTAGE APPLIED TO THE BLACK COIL ASSEMBLY LEAD WIRE WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.

1. DIMENSION IN BRACKET ARE INCHES [ IN. ] AND ARE FOR REFERENCE ONLY

NOTES: UNLESS OTHERWISE SPECIFIED