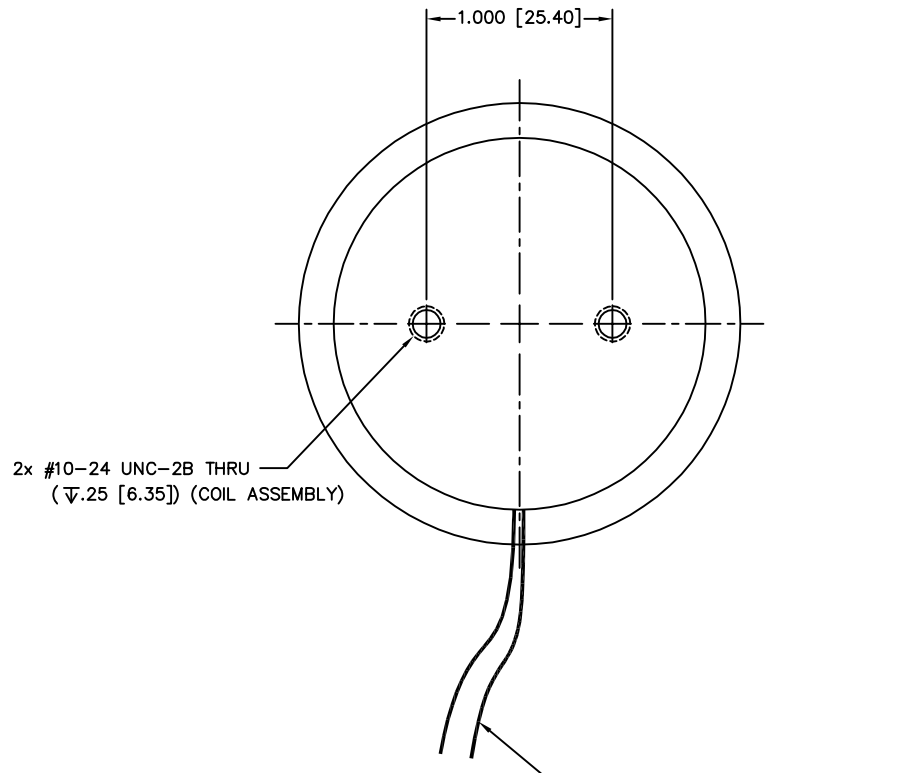
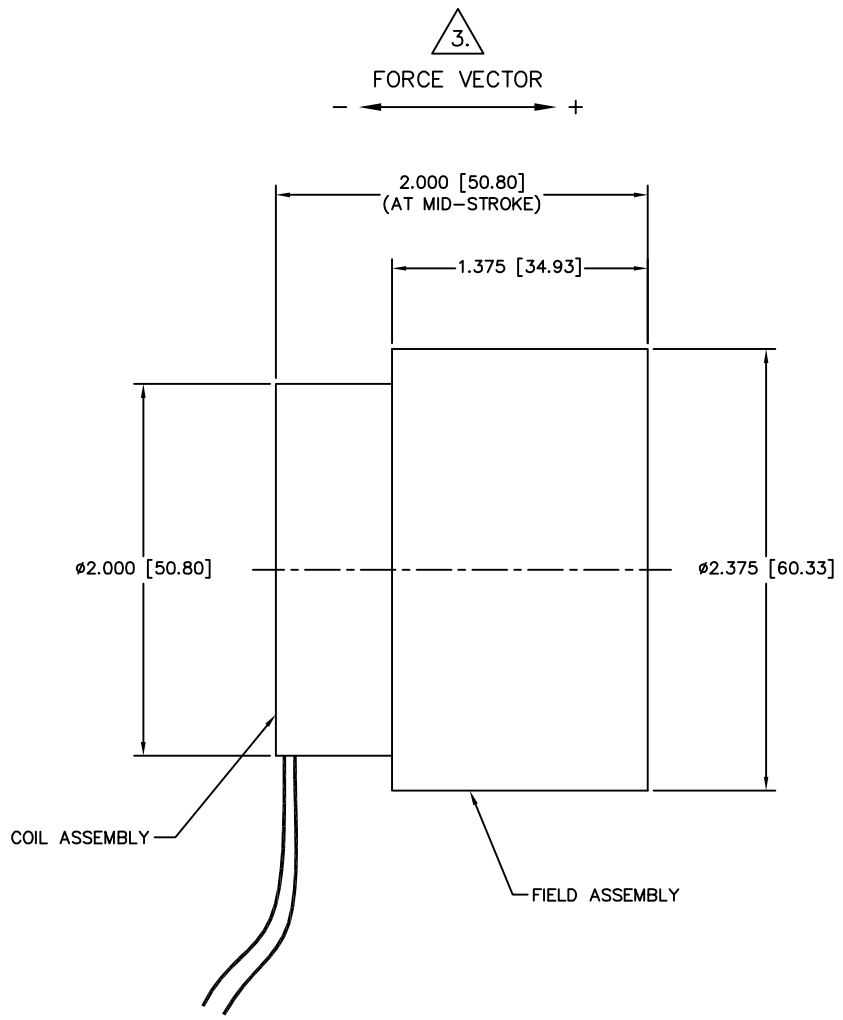
LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
C	044910	MATCHED REVISION TO AVANTE REV.	JJC	DH	12/03/04
D	050301	CHANGE MILL-SEC TO MICRO-SEC	JJC	MG	04/19/05
E	080046	ADDED RoHS LOGO	RG	MG	04/09/08

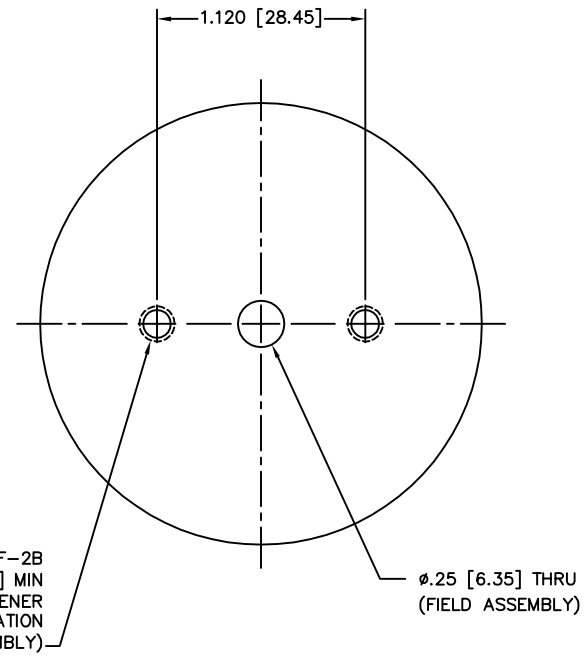
WINDING CONSTANTS	UNITS	TOL	SYMBOL	WDG A
DC RESISTANCE	OHMS	±12.5%	R	2.2
VOLTAGE @ F_P	VOLTS	NOMINAL	V_P	22.0
CURRENT @ F_P	AMPERES	NOMINAL	I_P	10.0
FORCE SENSITIVITY	LB/AMP	±10%	K_F	2.5
	N/AMP	±10%		11.12
BACK EMF CONSTANT	V/FT/SEC	±10%	K_B	3.4
	V/M/SEC	±10%		11.15
INDUCTANCE	MILLI-HENRY	±30%	L	2.05

ACTUATOR PARAMETERS	UNITS	SYMBOL	VALUE
PEAK FORCE *	LB	F_P	25
	N		111.21
CONTINUOUS STALL FORCE **	LB	F_{CS}	10.1
	N		44.93
ACTUATOR CONSTANT	LB/ $\sqrt{WATT}$	K_A	1.69
	N/ $\sqrt{WATT}$		7.52
ELECTRICAL TIME CONSTANT	MICRO-SEC	τ_E	932
MECHANICAL TIME CONSTANT	MILLI-SEC	τ_M	2.9
POWER I^2R @ F_P	WATTS	P_P	220
STROKE	± INCHES		0.325
	± MM		8.26
CLEARANCE ON EACH SIDE OF COIL	IN		0.015
	MM		0.38
THERMAL RESISTANCE OF COIL	°C/WATT	Θ_{TH}	2.4
MAX. ALLOWABLE COIL TEMP.	°C	TEMP	155
WEIGHT OF COIL ASSEMBLY	LB	WT_C	0.365
	KG		0.17
WEIGHT OF FIELD ASSEMBLY	LB	WT_F	1.25
	KG		0.57

* 10 SECONDS AT 25°C AMBIENT, 155°C COIL TEMP
** 25°C AMBIENT & 155°C WINDING TEMPERATURE







4. MECHANICAL OVERTRAVEL IN THE POSITIVE (+) DIRECTION IS .015 [.38] MIN.

3. A POSITIVE (+) VOLTAGE APPLIED TO THE RED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.

2. DIMENSION IN BRACKETS ARE MILLIMETERS [MM] AND ARE FOR REFERENCE ONLY.

1. INTERPRET DIMENSIONS & TOLERANCES IAW ASME Y14.5M-1994.

NOTES: UNLESS OTHERWISE SPECIFIED

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THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED
-ALL DIMENSIONS ARE IN UNITS
-BREAK SHARP EDGES .015 MAX.
-SURFACE ROUGHNESS √63
-DIMENSIONS APPLY AFTER FINISH
-MAX FILLET R FILLET

TOLERANCES:
DECIMALS ANGULAR
.X ± .03 ±0°30
.XX ± .01
.XXX ± .005
DO NOT SCALE DRAWING

BEI *KIMCO MAGNETICS DIVISION*
VISTA, CA 92081

DRAWN: N. FRENCH	DATE: 4/6/98	TITLE: LINEAR ACTUATOR
MECH CHECK: PHIL STAHL	12/3/04	
APPD: A. MARCOS	4/6/98	SIZE: D · FSCM NO.: 55789 · DWG NO.: LA24-20-000A · REV: E
FILE NO.: L:\TOP LEVEL\LA..		SCALE: 2/1 · SHEET 1 OF 1

LA24-20-000A | E