

WINDING CONSTANTS *	UNITS	TOL	SYMBOL	WDG A	WDG B
DC RESISTANCE	OHMS	±12.5%	R	17.1	4.1
VOLTAGE @ $F_p$	VOLTS	NOMINAL	$V_p$	27.2	13.0
CURRENT @ $F_p$	AMPERES	NOMINAL	$I_p$	1.59	3.18
FORCE SENSITIVITY	LB/AMP	±10%	$K_f$	2.20	1.10
	N/AMP	±10%		9.79	4.89
BACK EMF CONSTANT	V/FT/SEC	±10%	$K_B$	2.98	1.49
	V/M/SEC	±10%		9.78	4.89
INDUCTANCE ****	MILLI-HENRY	±30%	L	2.8	0.67

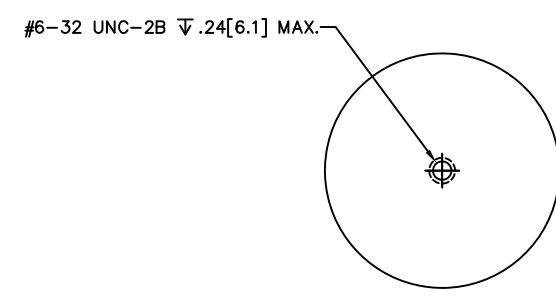
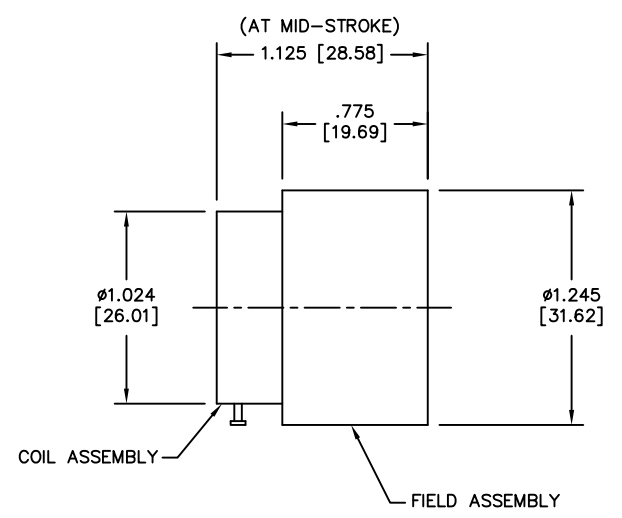
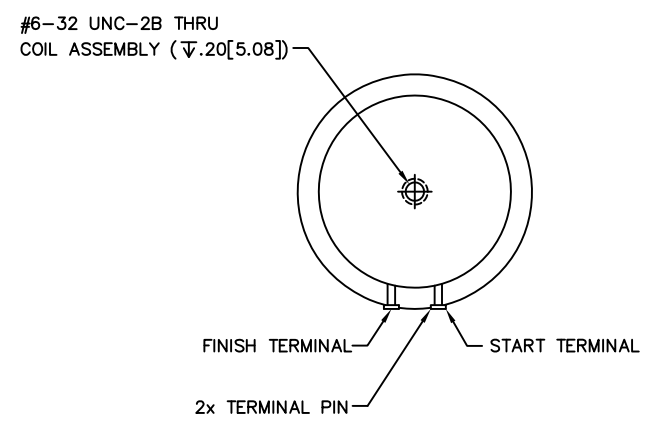
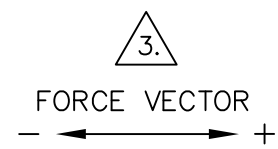
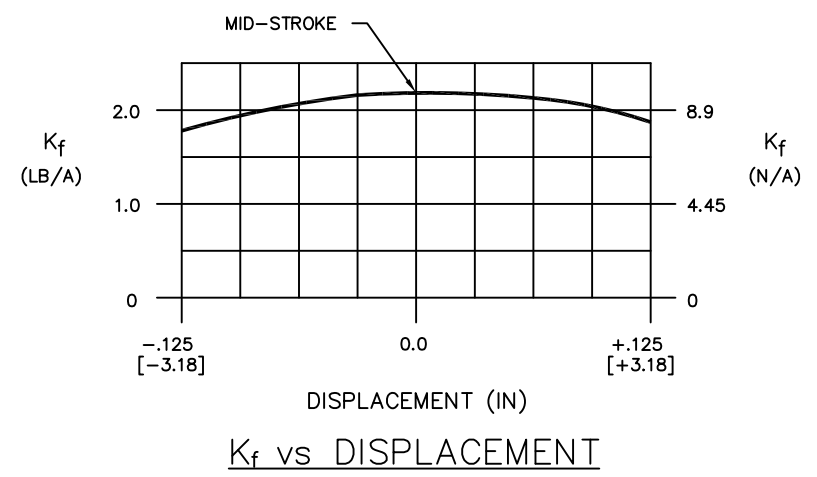
ACTUATOR PARAMETERS *	UNITS	SYMBOL	VALUE
PEAK FORCE **	LB	$F_p$	3.5
	N		15.6
CONTINUOUS STALL FORCE ***	LB	$F_{cs}$	1.6
	N		7.1
ACTUATOR CONSTANT	LB/√WATT	$K_A$	0.53
	N/√WATT		2.4
ELECTRICAL TIME CONSTANT	MILLI-SEC	$\tau_E$	.164
MECHANICAL TIME CONSTANT	MILLI-SEC	$\tau_M$	2.5
POWER I <sup>2</sup> R @ $F_p$	WATTS	$P_p$	43.3
STROKE	± INCHES		0.125
	± MM		3.18
CLEARANCE ON EACH SIDE OF COIL	IN		0.015
	MM		0.38
THERMAL RESISTANCE OF COIL	°C/WATT	$\theta_{TH}$	9.2
MAX. ALLOWABLE COIL TEMP.	°C	TEMP	155
WEIGHT OF COIL ASSEMBLY	OZ	$WT_C$	0.50
	G		14.2
WEIGHT OF FIELD ASSEMBLY	OZ	$WT_F$	3.6
	G		102

\* AT MID-STROKE & 25°C AMBIENT TEMPERATURE  
 \*\* 10 SECONDS AT 25°C AMBIENT & 155°C COIL TEMPERATURE  
 \*\*\* 25°C AMBIENT & 155°C COIL TEMPERATURE  
 \*\*\*\* MEASURED AT 1000 Hz

FSCM NO.		DRAWING NO.		SHEET		REV	
55789		LA13-12-000(LTR)		1		J	

REVISIONS						
ZONE	REV	DCN NO.	DESCRIPTION	INITIALS	DATE	APPROVED
	G	060116	UPDATE TEST PARAMETERS	SLM	02/16/06	M.G.
	H	060205	UPDATE BOM OF LA13-12-000B	SLM	03/24/06	M.G.
	J	070208	CORRECT VALUE FOR ELECT. CONST.	JWT	04/17/07	M.G.



- MECHANICAL OVERTRAVEL IN THE POSITIVE (+) DIRECTION IS .025 [.635] MINIMUM.
  - INSULATION RESISTANCE IS 100 MEGOHMS MINIMUM AT 250 VDC.
  - A POSITIVE (+) VOLTAGE APPLIED TO THE START TERMINAL WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.
  - DIMENSION IN BRACKETS ARE MILLIMETERS [MM] AND ARE FOR REFERENCE ONLY.
  - INTERPRET DIMENSIONS & TOLERANCES PER ASME Y14.5M-1994.
- NOTES: UNLESS OTHERWISE SPECIFIED

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THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:  
 -ALL DIMENSIONS ARE IN INCHES  
 -DIMENSIONS ARE AFTER FINISH  
 DO NOT SCALE DRAWING

TOLERANCES:  
 DECIMALS ANGULAR  
 .X ± 0.03 ± 0°30'  
 .XX ± 0.01  
 .XXX ± 0.005

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**BEI** KIMCO MAGNETICS DIVISION  
VISTA, CA 92081

LINEAR ACTUATOR

APPROVALS	DATE	TITLE
DRAWN McGHEE	8/1/94	LINEAR ACTUATOR
CHECKED GUERRERO	12/21/04	
APPROVED A. MORCOS	8/2/94	

SIZE	FSCM NO.	DRAWING NO.	REV
D	55789	LA13-12-000(LTR)	J
SCALE	SHEET		1 OF 1
2/1			