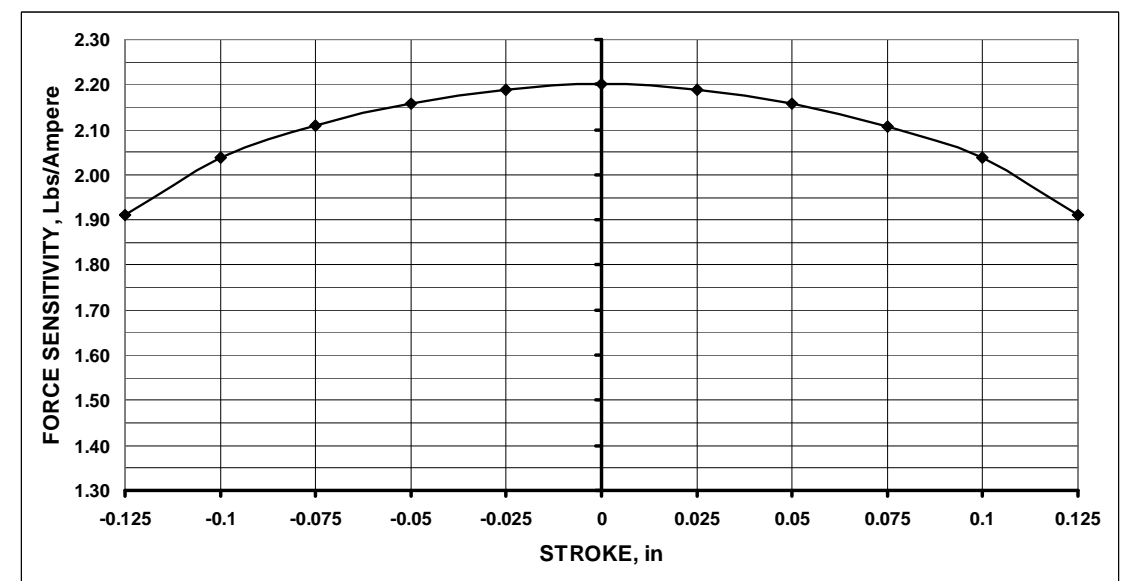
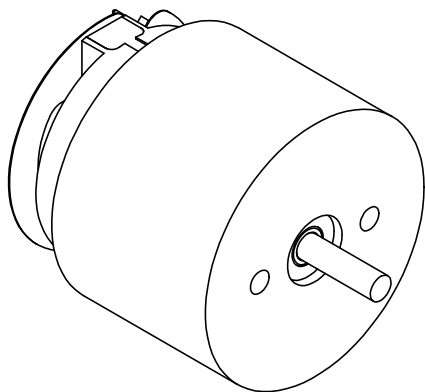
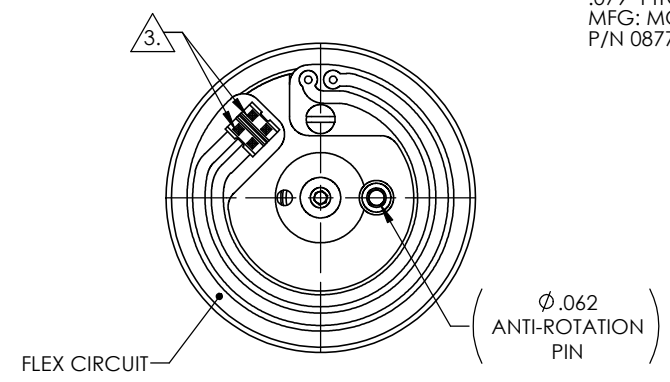
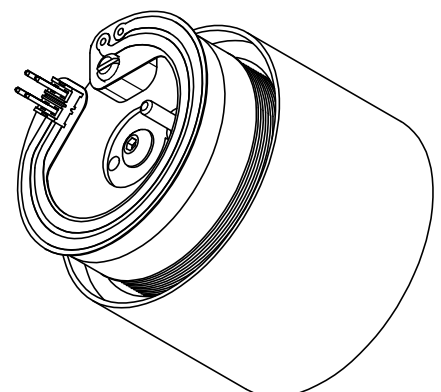


Winding Constants *	Units	Tol	Symbol	Wdg	Z
DC Resistance	Ohms	± 12.5%	R		17.1
Voltage @ F _P	Volts	Nominal	V _P		27.2
Current @ F _P	Amps	Nominal	I _P		1.59
Force Sensitivity	LB/Amp	± 10%	K _F		2.2
	N/Amp	± 10%			9.79
Back EMF Constant	V/(ft/sec)	± 10%	K _B		2.98
	V/(m/sec)	± 10%			9.79
Inductance ****	milli-Henry	± 15%	L		2.8

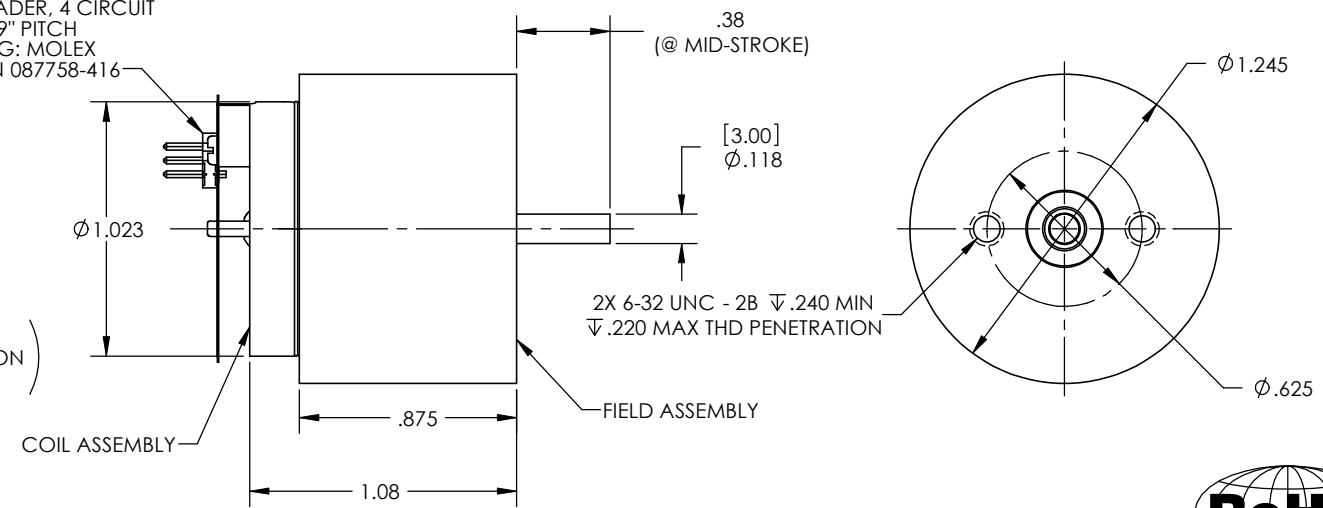
Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	LB	F _P	3.5
	N		15.57
Continuous Stall Force ***	LB	F _{CS}	1.14
	N		5.07
Actuator Constant	LB/√Watt	K _A	0.53
	N/√Watt		2.36
Electrical Time Constant	micro-sec	τ _E	164
Mechanical Time Constant	milli-sec	τ _M	2.84
Theoretical Acceleration	ft/sec ²	α _T	3212.6
	m/sec ²		979.2
Max Theoretical Frequency @ Full Stroke and Sinusoidal / Triangular Motion	Hz	f _{max}	88.4/98.2
Power I ² R @ F _P	Watts	P _P	43.3
Stroke:	± in		0.125
	± mm		3.18
Clearance on Each side of Coil	in		0.015
	mm		0.38
Thermal Resistance of Coil in still air	°C/Watt	θ _{TH}	18.7
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	LB	WT _C	0.035
	g		15.9
Weight of Field Assembly	LB	WT _F	0.22
	g		99.8



* 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.



HEADER, 4 CIRCUIT
 .079" PITCH
 MFG: MOLEX
 P/N 087758-416



4. MECHINAL OVERTRAVEL IN THE POSITIVE (+) DIRECTION IS .025 MINIMUM.
 3. A POSITIVE (+) VOLTAGE APPLIED TO THE INDICATED PINS WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.
 2. INTERPRET DRAWING IAW Y14.100.
 1. 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 INCHES
 -BREAK SHARP EDGES .015 MAX
 -SURFACE ROUGHNESS 63 ✓
 -DIMENSIONS APPLY AFTER FINISH
 -MAX FILLET R.010
 -DIAMETERS SHALL NOT EXCEED A RUNOUT OF .005 FIM

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

BEI KIMCO MAGNETICS DIVISION
 VISTA, CA 92081

DRAWN GUERRERO	DATE 12/01/09	TITLE LINEAR ACTUATOR	
CHECK MCGHEE	DATE 01/14/10	SIZE C	FSCM NO. 55789
APPD GODKIN	DATE 01/21/10	DWG NO. LA13-11-001A	REV X1
FILE NO. L\TOP L\LA\	SCALE: NONE	SHEET: 1 OF 1	