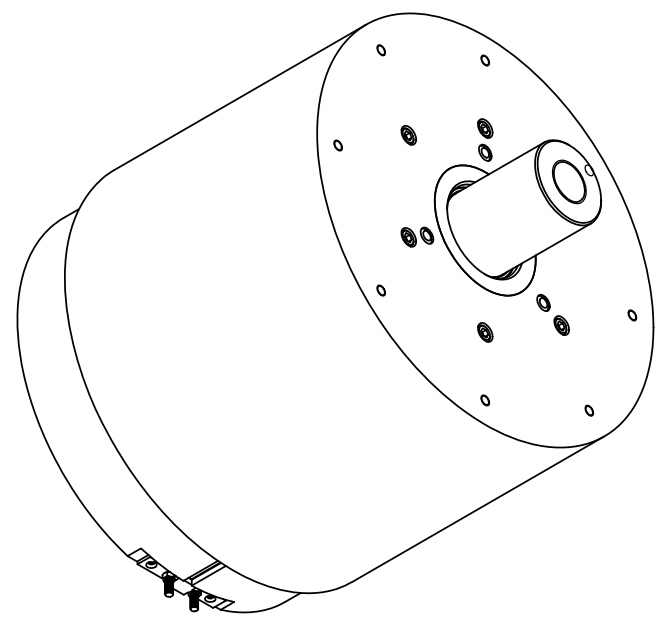


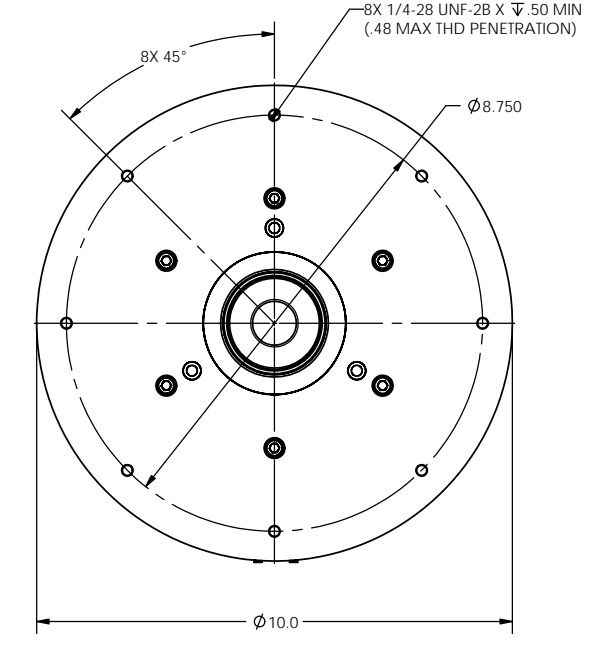
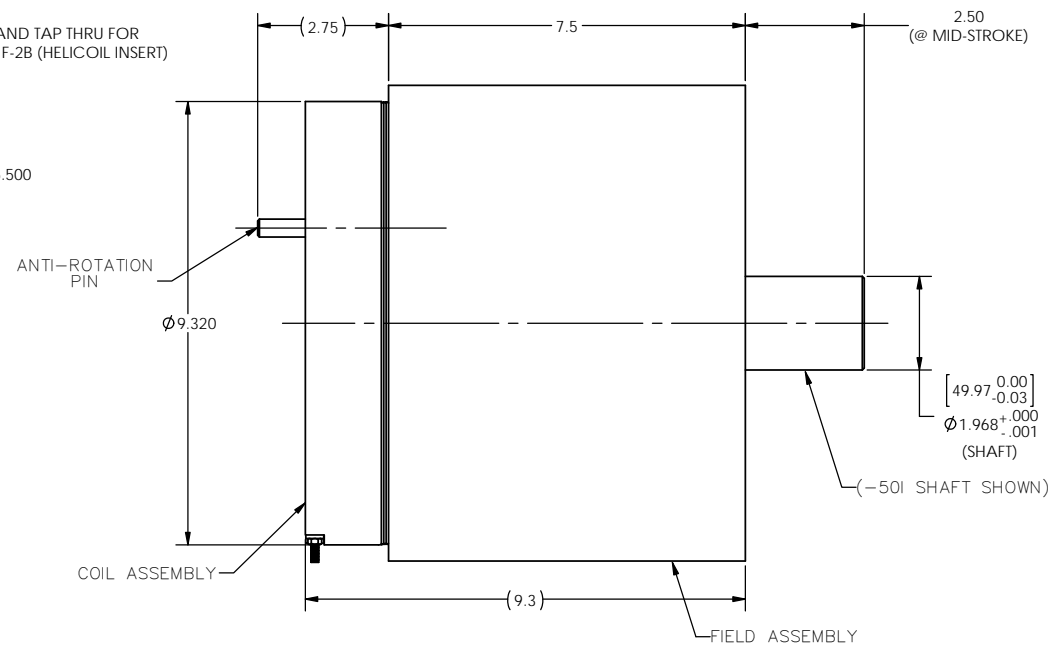
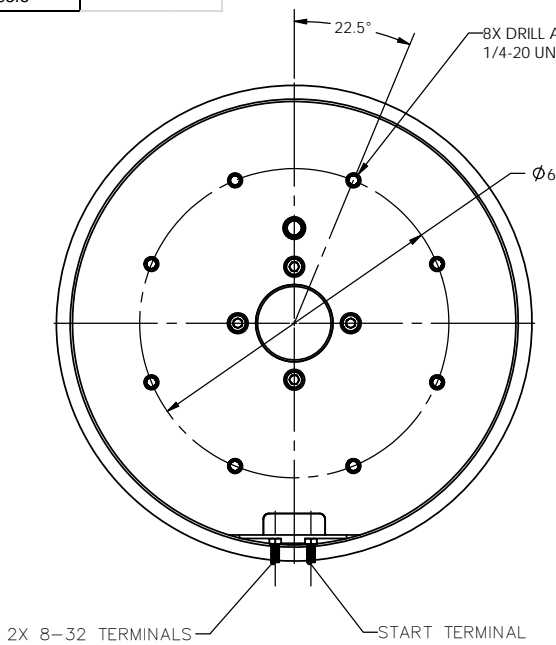
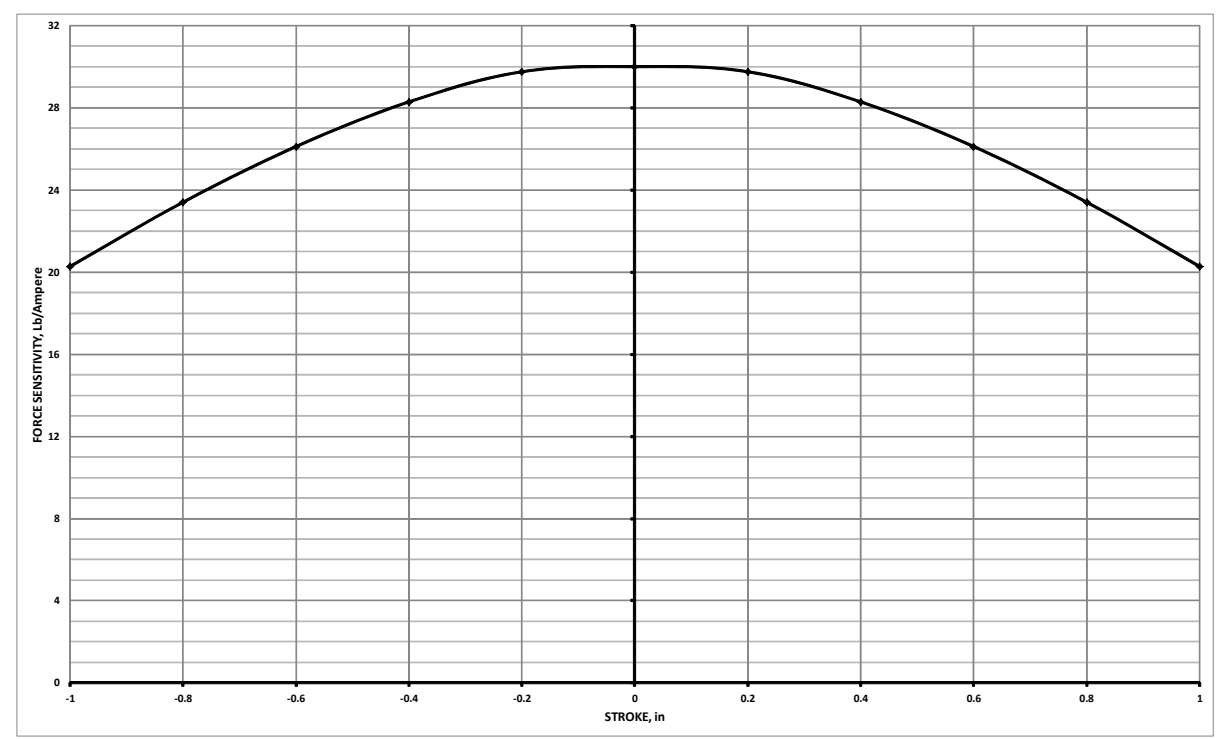
Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	2.4	
Voltage @ F <sub>P</sub>	Volts	Nominal	V <sub>P</sub>	44	
Current @ F <sub>P</sub>	Amps	Nominal	I <sub>P</sub>	18.33	
Force Sensitivity	N/Amp	± 10%	K <sub>F</sub>	133.4	
	LB/Amp	± 10%		30	
Back EMF Constant	V/(m/sec)	± 10%	K <sub>B</sub>	133.4	
	V/(ft/sec)	± 10%		40.66	
Inductance ****	milli-Henry	± 15%	L	5.6	

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	N	F <sub>P</sub>	2447
	LB		550
Continuous Stall Force ***	N	F <sub>CS</sub>	1443
	LB		324.4
Actuator Constant	N/√Watt	K <sub>A</sub>	86.3
	LB/√Watt		19.4
Electrical Time Constant	milli-sec	τ <sub>E</sub>	2.33
Mechanical Time Constant	milli-sec	τ <sub>M</sub>	2.15
Theoretical Acceleration	m/sec <sup>2</sup>	α <sub>T</sub>	153.7
	ft/sec <sup>2</sup>		504.3
Max Theoretical Frequency @ Full Stroke & Sinusoidal/Triangular Motion	Hz	f <sub>max</sub>	12.4/13.8
Power I <sup>2</sup> R @ F <sub>P</sub>	Watts	P <sub>P</sub>	804
Stroke	± mm		25.4
	± in		1.0
Clearance on Each side of Coil	mm		1.27
	in		.050
Thermal Resistance of Coil in still air	°C/Watt	θ <sub>TH</sub>	.31
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	Kg	WT <sub>C</sub>	15.92
	LB		35.1
Weight of Field Assembly	Kg	WT <sub>T</sub>	42.4
	LB		93.5

\* AT MID-STROKE & 25 °C TEMPERATURE  
 \*\* 10 SEC @ 25 °C AMBIENT & 155 °C WINDING TEMPERATURE  
 \*\*\* AT 25 °C AMBIENT & 155 °C COIL TEMPERATURE  
 \*\*\*\* MEASURED AT 1000 Hz.



(DASH)#	DIA. OF SHAFT	SHAFT END CONFIGURATION
-50S	50mm	Standard (50mm)
-50I	50mm	Internal Thread 1-12 UNF-2B X 1.00 Deep MIN



⚠ A NEGATIVE (-) VOLTAGE APPLIED TO THE START TERMINAL 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 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: X ±0.03, XX ±0.01, XXX ±0.005  
 ANGULAR: ±0°30'  
 DO NOT SCALE DRAWING

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

DRAWN GUERRERO	DATE 09/06/12	TITLE LINEAR ACTUATOR
MECH CHECK MCGHEE	09/07/12	
APPD GODKIN	09/07/12	
FILE NO. L\TOP LEVEL\LA\	SIZE D	FSCM NO. 55789
	DWG NO. LA100-93-001A-(DASH)	REV X2
	SCALE 1/1	SHEET 1 OF 1

LA100-93-001A-(DASH) X2