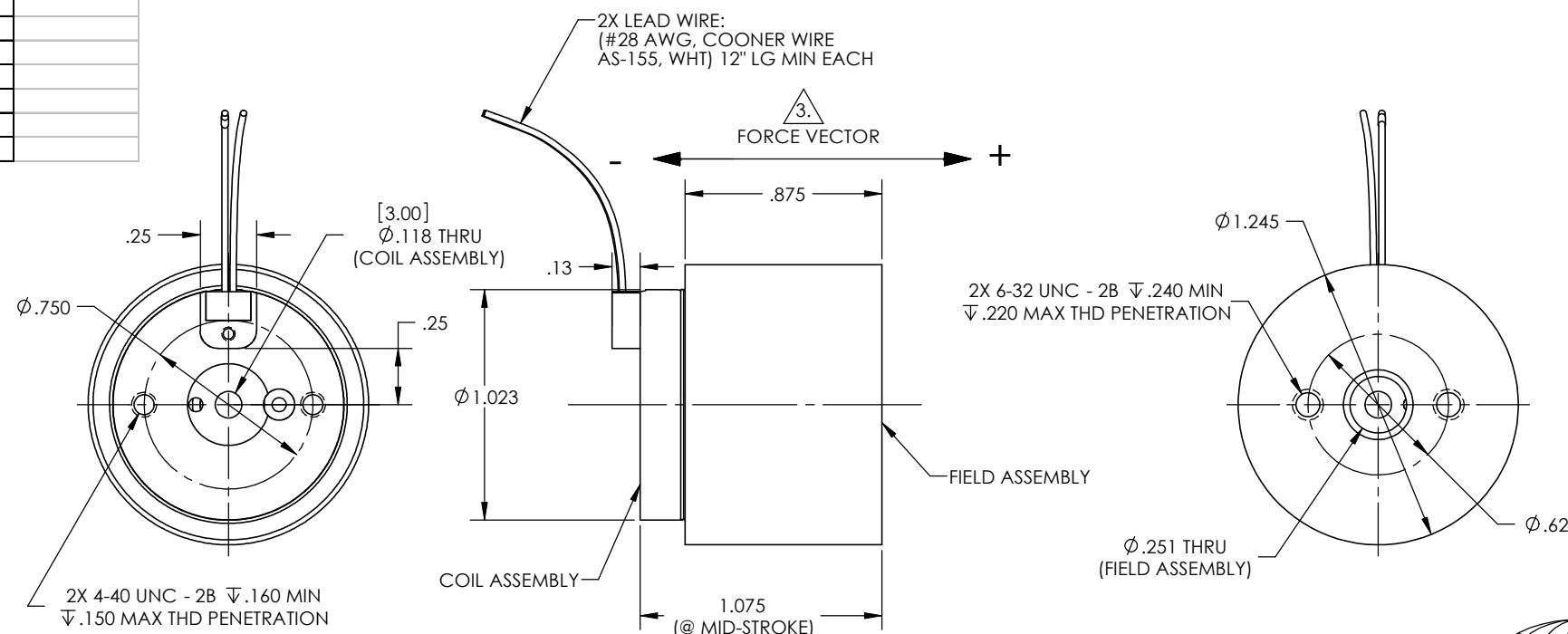
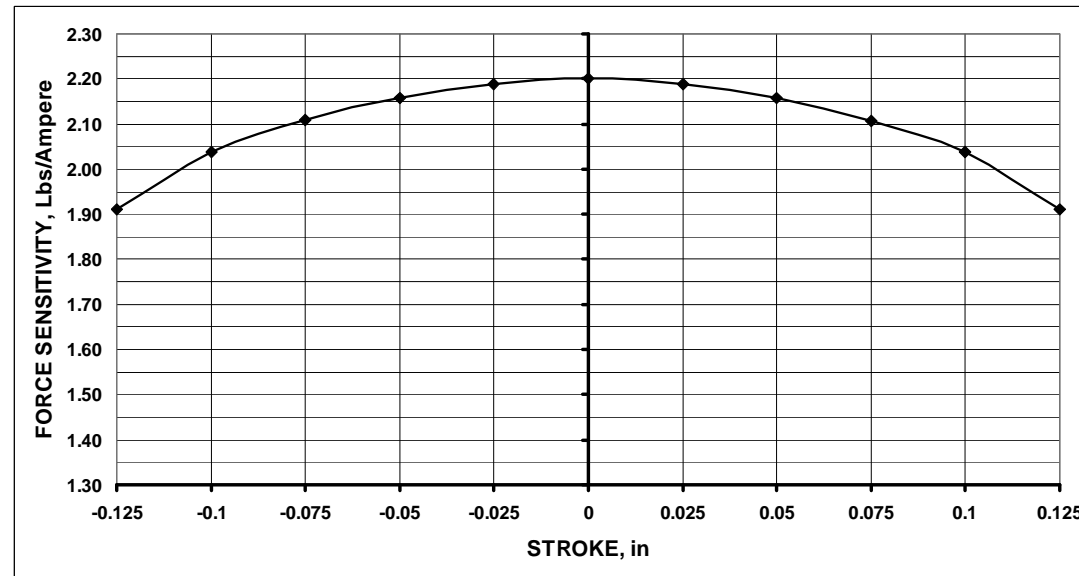
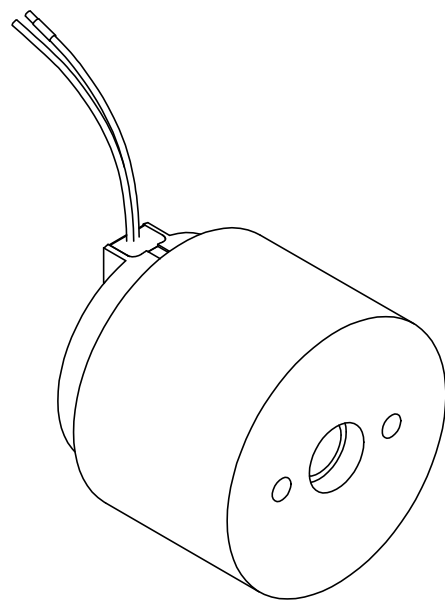


| Winding Constants * | Units | Tol | Symbol | Wdg | Z |
|--------------------------|-------------|---------|----------------|-----|------|
| DC Resistance | Ohms | ± 12.5% | R | | 17.1 |
| Voltage @ F _P | Volts | Nominal | V _P | | 27.2 |
| Current @ F _P | Amps | Nominal | I _P | | 1.59 |
| Force 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 | 2.43 |
| Theoretical Acceleration | ft/sec ² | α _T | 3756.2 |
| | m/sec ² | | 1144.9 |
| Max Theoretical Frequency @ Full Stroke and Sinusoidal / Triangular Motion | Hz | f _{max} | 95.6/106.2 |
| 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 | 0.03 |
| | g | | 13.6 |
| Weight of Field Assembly | LB | WT _F | 0.21 |
| | g | | 95.3 |

* 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.



4. MECHINAL OVERTRAVEL IN THE POSITIVE (+) DIRECTION IS .025 MINIMUM.
3. A POSITIVE (+) VOLTAGE APPLIED TO THE MARKED LEAD 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 01/14/10 | DWG NO. LA13-11-000A | REV X2 |
| FILE NO. L\TOP L\LA\ | SCALE: NONE | SHEET: 1 OF 1 | |