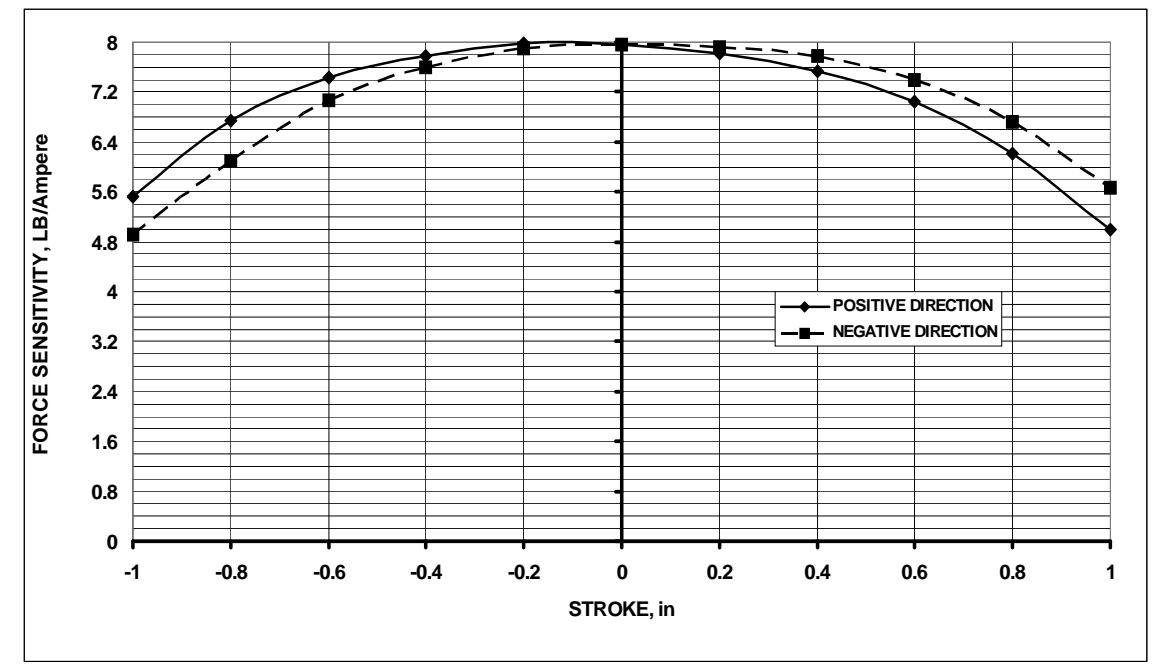
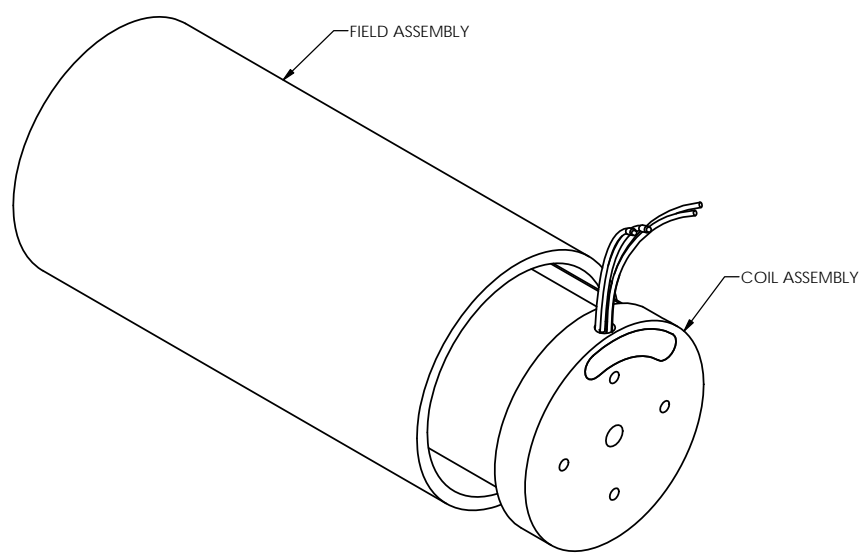
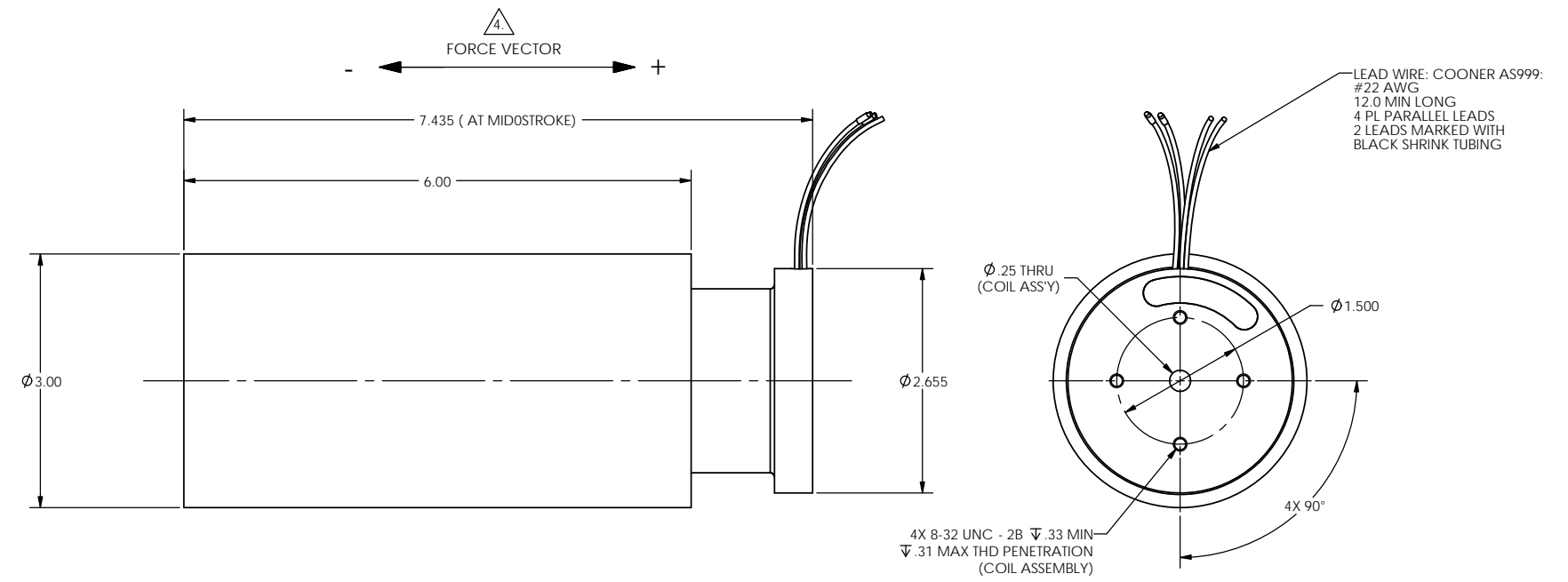
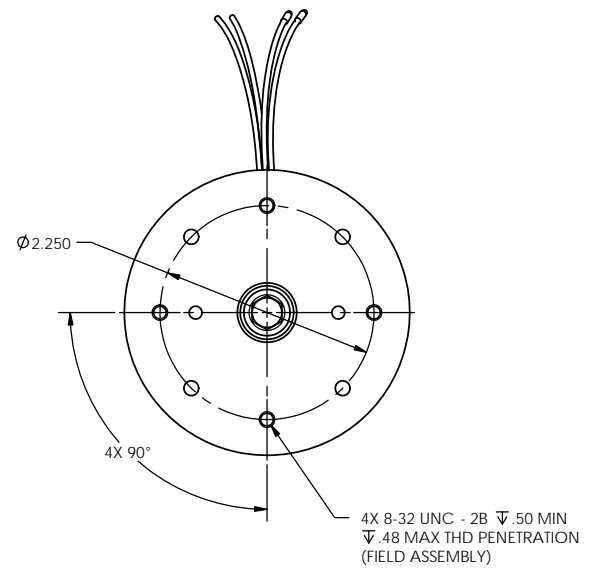


| Winding Constants * | Units | Tol | Symbol | Wdg | A |
|--------------------------|-------------|---------|----------------|-------|---|
| DC Resistance | Ohms | ± 12.5% | R | 4.5 | |
| Voltage @ F _P | Volts | Nominal | V _P | 56.7 | |
| Current @ F _P | Amps | Nominal | I _P | 12.6 | |
| Force Sensitivity | LB/Amp | ± 10% | K _F | 7.95 | |
| | N/Amp | ± 10% | | 35.36 | |
| Back EMF Constant | V/(ft/sec) | ± 10% | K _B | 10.78 | |
| | V/(m/sec) | ± 10% | | 35.36 | |
| Inductance **** | milli-henry | ± 15% | L | 4.3 | |

| Linear Actuator Parameters * | Units | Symbol | Value |
|--|---------------------|------------------|-----------|
| Peak Force ** | LB | F _P | 100 |
| | N | | 444.8 |
| Continous Stall Force *** | LB | F _{CS} | 21.7 |
| | N | | 96.24 |
| Actuator Constant | LB/√Watt | K _A | 3.75 |
| | N/√Watt | | 16.67 |
| Electrical Time Constant | milli-sec | τ _E | 0.96 |
| Mechanical Time Constant | milli-sec | τ _M | 2.45 |
| Theoretical Acceleration | ft/sec ² | α _T | 2146 |
| | m/sec ² | | 654.1 |
| Max Theoretical Frequency @ Full Stroke & Sinusoidal/Triangular Motion | Hz | f _{max} | 25.5/28.4 |
| Power I ² R @ F _P | Watts | P _P | 714 |
| Stroke: | ± in | | 1 |
| | ± mm | | 25.4 |
| Clearance on Each side of Coil | in | | 0.02 |
| | mm | | 0.508 |
| Thermal Resistance of Coil in still air | °C/Watt | θ _{TH} | 2.6 |
| Maximum Allowable Coil Winding Temp | °C | Temp | 155 |
| Weight of Coil Assembly | LB | WT _C | 1.5 |
| | Kg | | 0.68 |
| Weight of Field Assembly | LB | WT _T | 7.7 |
| | Kg | | 3.49 |



* 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.



LEAD WIRE: COONER AS999:
 #22 AWG
 12.0 MIN LONG
 4 PL PARALLEL LEADS
 2 LEADS MARKED WITH
 BLACK SHRINK TUBING

▲ POSITIVE (+) VOLTAGE APPLIED TO THE MARKED LEADS WILL PRODUCE A FORCE ON THE COIL IN THE POSITIVE (+) DIRECTION.

3. ALL ABBREVIATIONS IAW ASME Y14.38.
 2. INTERPRET DRAWING IAW ASME 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: 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 01/12/10 | TITLE LINEAR ACTUATOR |
| MECH CHECK McGHEE | DATE 02/02/10 | |
| APPD GODKIN | DATE 02/04/10 | |
| FILE NO. L\TOP LEVEL\LA\ | SCALE 1/1 | SHEET 1 OF 1 |



LA30-75-001A X2