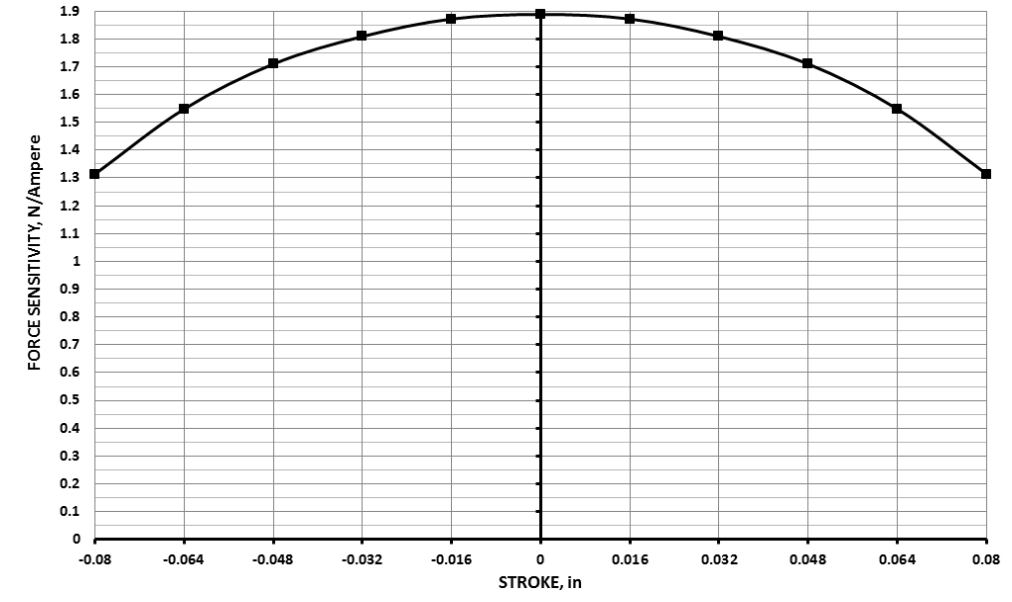


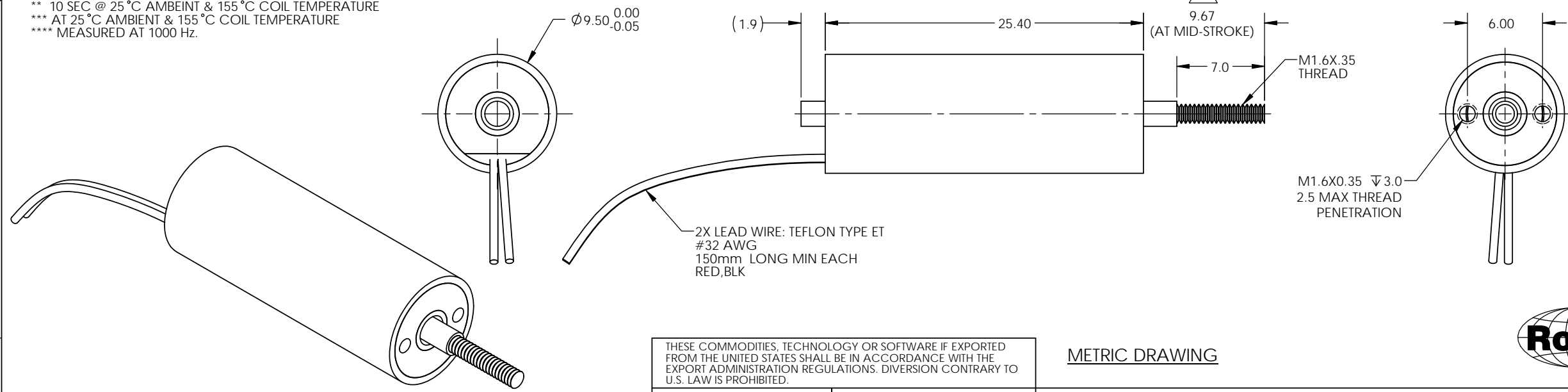
| Winding Constants * | Units | Tol | Symbol | Wdg | A |
|--------------------------|-------------|---------|----------------|-------|---|
| DC Resistance | Ohms | ± 12.5% | R | 5.1 | |
| Voltage @ F _P | Volts | NOMINAL | V _P | 5.1 | |
| Current @ F _P | Amps | NOMINAL | I _P | 1.0 | |
| Force Sensitivity | OZ/Amp | + 10% | K _F | 6.8 | |
| | N/Amp | + 10% | | 1.89 | |
| Back EMF Constant | V/(ft/sec) | + 10% | K _B | 0.576 | |
| | V/(m/sec) | + 10% | | 1.89 | |
| Inductance **** | micro-Henry | ± 15% | L | 220 | |

| Linear Actuator Parameters * | Units | Symbol | Value |
|--|---------------------|-------------------|------------|
| Peak Force ** | OZ | F _P | 6.8 |
| | N | | 1.89 |
| Continuous Stall Force *** | OZ | F _{CS} | 3.98 (EST) |
| | N | | 1.11 (EST) |
| Actuator Constant **** | OZ/√Watt | K _A | 3.01 |
| | N/√Watt | | 0.84 |
| Electrical Time Constant | micro-sec | τ _E | 43.1 |
| Mechanical Time Constant | milli-sec | τ _M | 4.98 |
| Theoretical Acceleration @ F _P | ft/sec ² | α _T | 1776.9 |
| | m/sec ² | | 541.6 |
| Max Theoretical Frequency @ F _P , Full Stroke and Triangular Motion | Hz | f _{max} | 92 |
| Power I ² R @ F _P | Watts | P _P | 5.1 |
| Stroke: | ± in | | 0.079 |
| | ± mm | | 2 |
| Thermal Resistance of Coil | °C/Watt | θ _{TH} | 50 (EST) |
| Maximum Allowable Coil Winding Temp | °C | Temp | 155 |
| Weight of Moving Field Assembly | OZ | WT _{F.A} | 0.123 |
| | g | | 3.49 |
| Total Weight | OZ | WT _T | 0.353 |
| | g | | 10 |

| LTR | ECO NO. | DESCRIPTION | DRN | APP'D | DATE |
|-----|---------|---------------------------------------|-----|-------|----------|
| X1 | 140274 | INITIAL RELEASE | RG | MG | 10/07/14 |
| X2 | 140332 | UPDATE WINDING CONSTANTS & PARAMETERS | SLM | MG | 11/13/14 |



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



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METRIC DRAWING

- 4. A POSITIVE (+) VOLTAGE APPLIED TO THE RED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.
 - 3. SHAFT SHOWN AT MID-STROKE POSITION. SYSTEM ALLOWS FOR 0.5 MECHANICAL OVER TRAVEL IN BOTH DIRECTIONS.
 - 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 MILLIMETERS
 -BREAK SHARP EDGES 0.4 MAX
 -SURFACE ROUGHNESS 1.6 ✓
 -DIMENSIONS APPLY AFTER FINISH
 -MAX FILLET R0.25
 -DIAMETERS SHALL NOT EXCEED A RUNOUT OF 0.13 FIM

TOLERANCES:
 DECIMALS ANGULAR
 X ±0.8 ±0°30'
 .X ±0.25
 .XX ±0.13
 DO NOT SCALE DRAWING

BEI KIMCO MAGNETICS DIVISION
 VISTA, CA 92081

| | | | |
|------------------------------|------------------|---------------------------------|-------------------|
| DRAWN GUERRERO | DATE 10/01/14 | TITLE LINEAR ACTUATOR HOUSED | |
| CHECK MCGHEE | DATE 10/03/14 | SIZE C | FSCM NO. 55789 |
| APPD GODKIN | DATE 10/07/14 | DWG NO. LAH04-10-000A | REV X2 |
| FILE NO. L\TOP LEVEL\LAH\ | SCALE: NONE | SHEET: 1 OF 1 | |