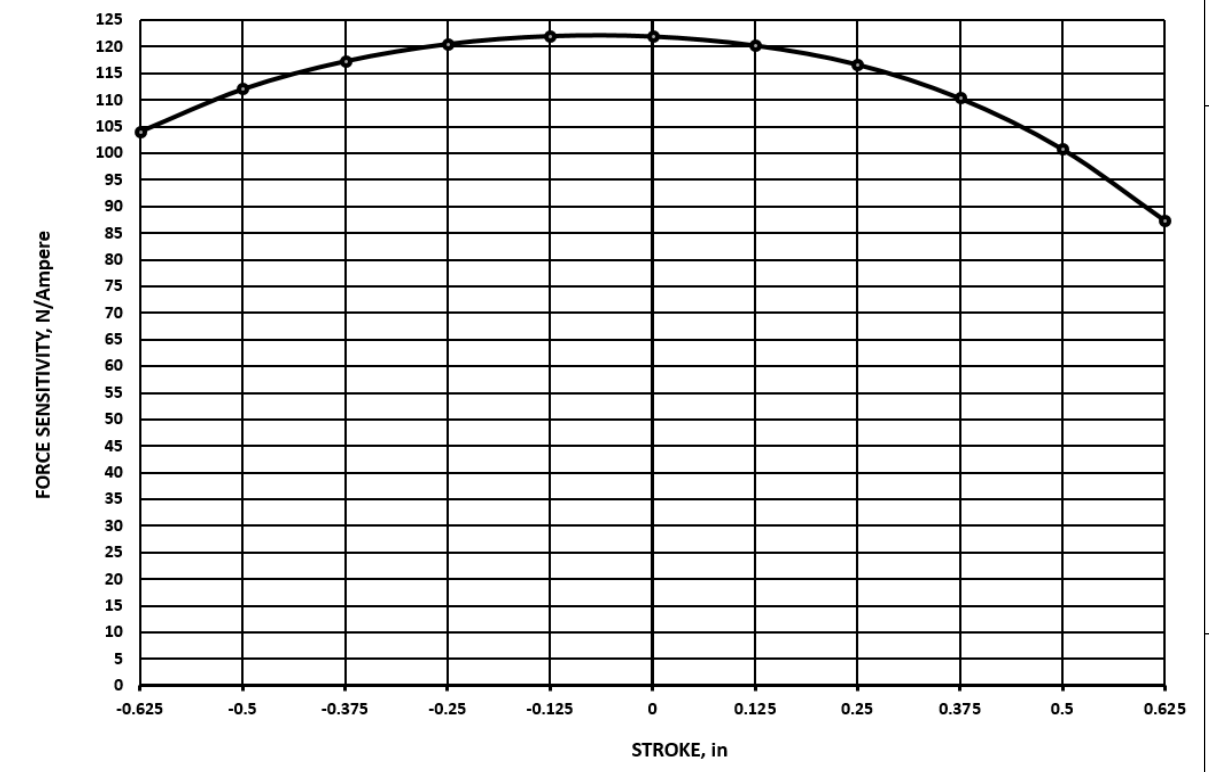
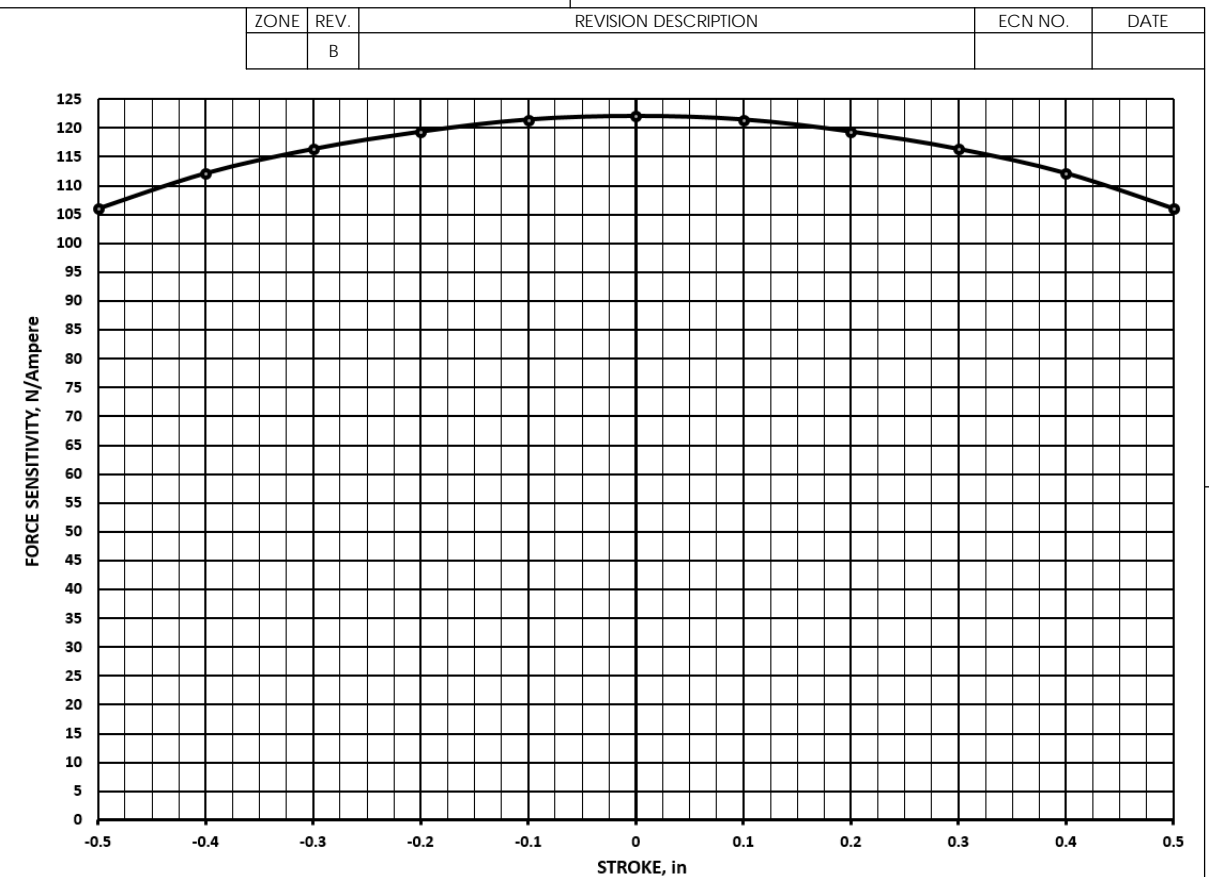
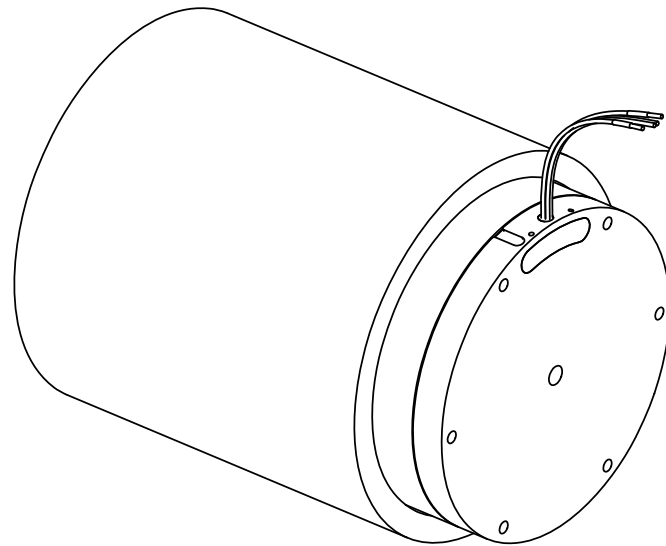


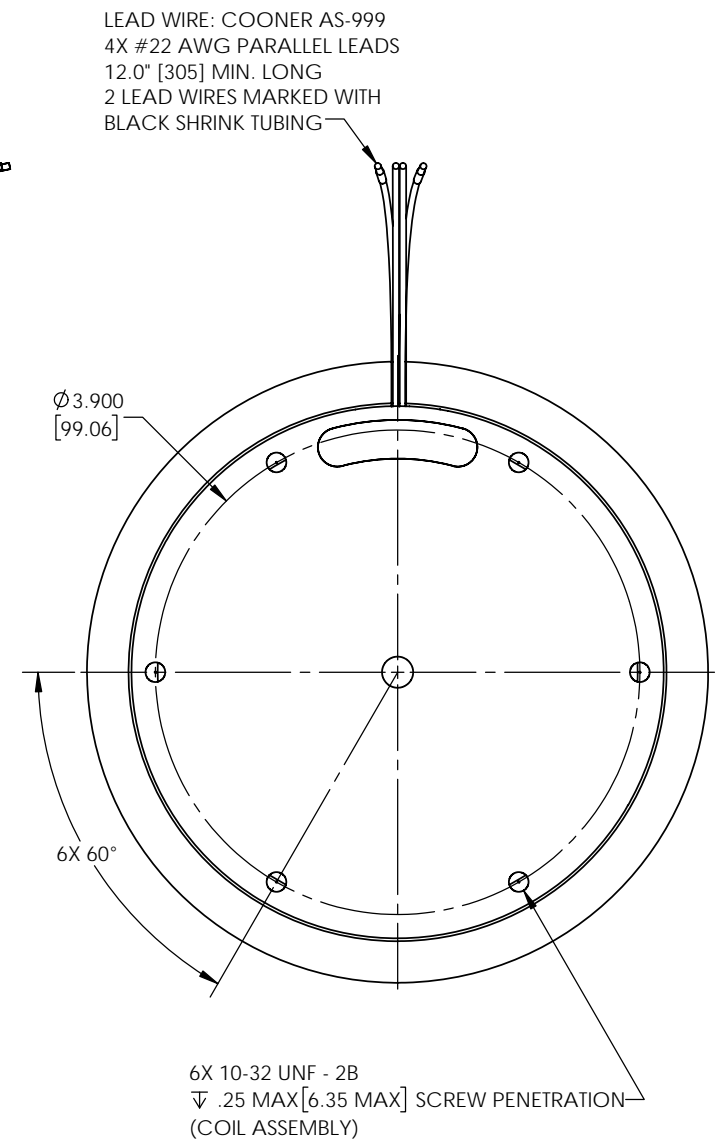
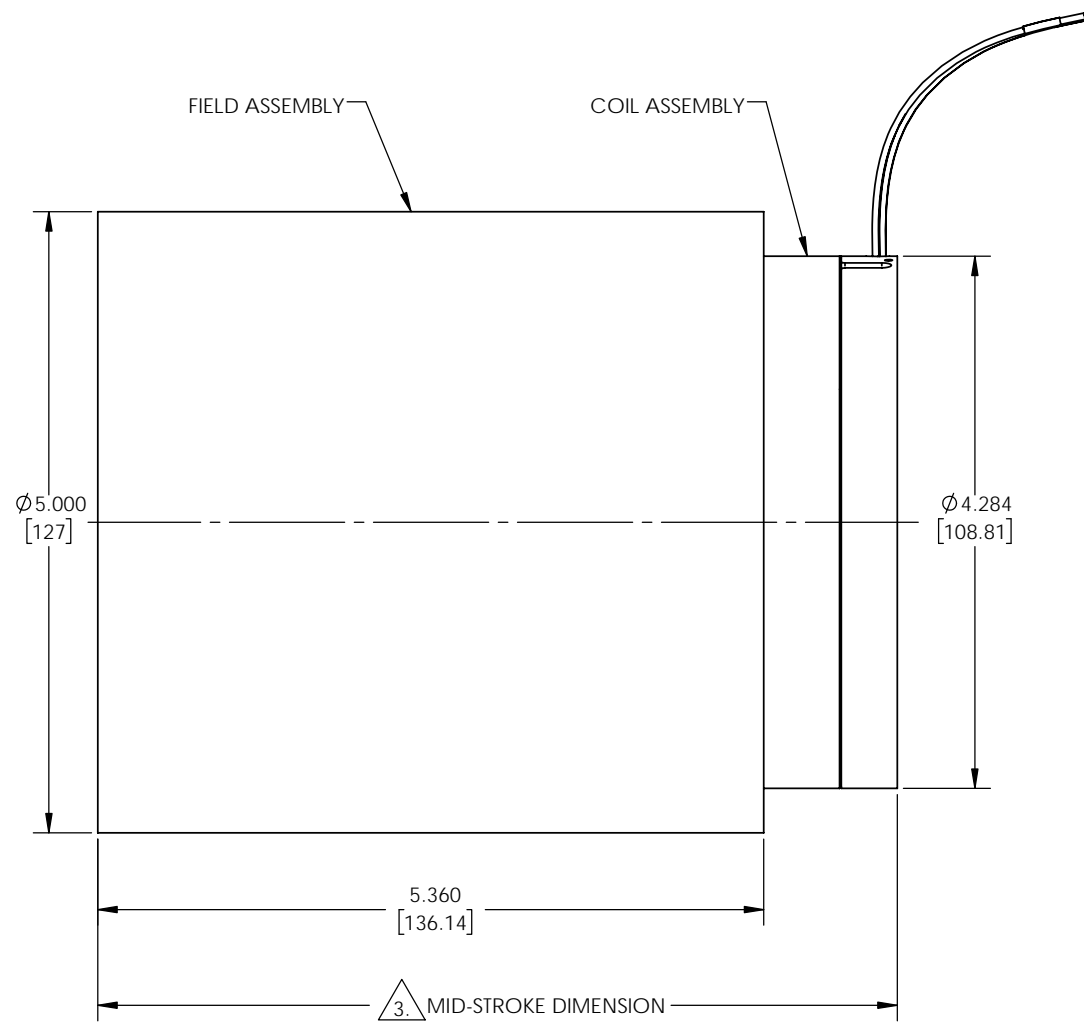
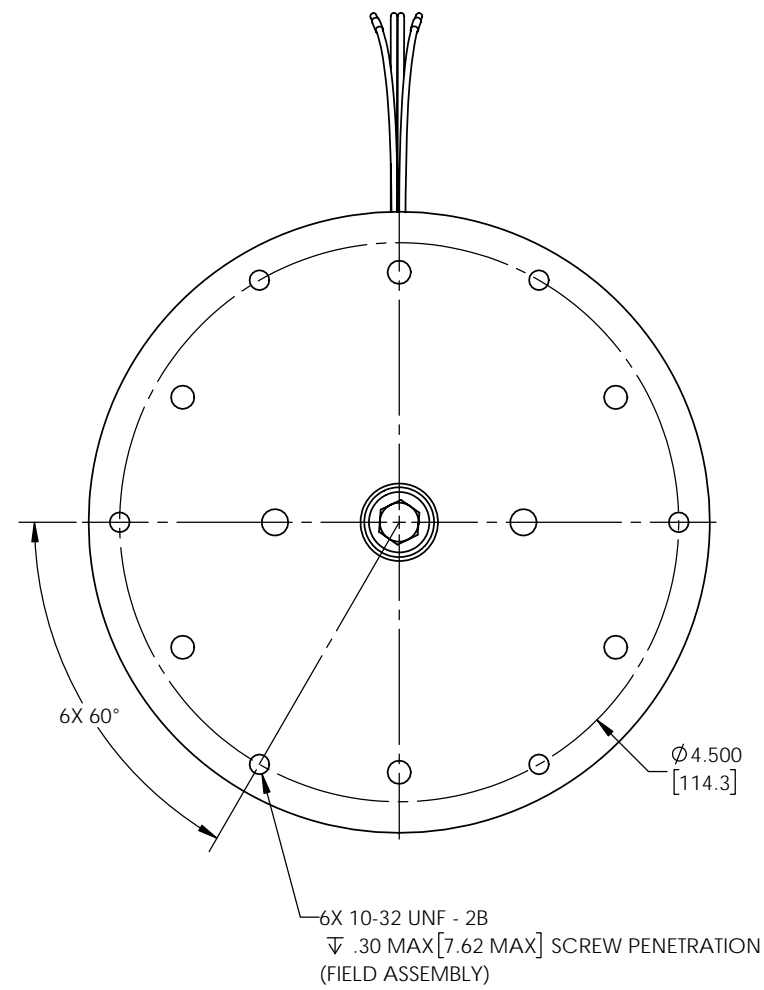
| Winding Constants * | Units | Tol | Symbol | Wdg | A |
|-------------------------------------|-------------|---------|------------------|-------|---|
| DC Resistance | Ohms | ± 12.5% | R | 4.6 | |
| Voltage @ F _{PS} | Volts | Nominal | V _{PS} | 69 | |
| Current @ F _{PS} | Amps | Nominal | I _{PS} | 15 | |
| Current @ F _{CS} | Amps | Nominal | I _{CS} | 4.03 | |
| Force Sensitivity @ F _{PS} | N/Amp | ± 10% | K _{FPS} | 122 | |
| | lb/Amp | ± 10% | | 27.4 | |
| Force Sensitivity @ No-Load | N/Amp | ± 10% | K _{FNL} | 122 | |
| | lb/Amp | ± 10% | | 27.4 | |
| Back EMF Constant | V/(m/sec) | ± 10% | K _B | 122 | |
| | V/(ft/sec) | ± 10% | | 37.19 | |
| Inductance **** | milli-Henry | ± 15% | L | 5.3 | |

| Linear Actuator Parameters * | Units | Symbol | Value |
|---------------------------------------------------------------------------------------|-------------------|-------------------|-----------|
| Peak Stall Force** | N | F _{PS} | 1830 |
| | lb | | 414.4 |
| Continuous Stall Force *** | N | F _{CS} | 491.7 |
| | lb | | 110.5 |
| Actuator Constant | N/√Watt | K _A | 56.88 |
| | lb/√Watt | | 12.79 |
| Electrical Time Constant | milli-sec | τ _E | 1.15 |
| Mechanical Time Constant | milli-sec | τ _M | 0.45 |
| Theoretical Acceleration | m/s ² | a _T | 1262.1 |
| | ft/s ² | | 4,141 |
| Maximum Theoretical Frequency @ 1" Total Stroke and Sinusoidal / Triangular Motion | Hz | f _{max} | 50.6/56.2 |
| Maximum Theoretical Frequency @ 1.25" Total Stroke and Sinusoidal / Triangular Motion | Hz | f _{max} | 44.8/49.8 |
| Power I ² R @ F _{PS} | Watts | P _{PS} | 1035 |
| Stroke, Maximum | ± mm | S _{Amax} | 15.88 |
| | ± in | | 0.625 |
| Clearance on Each Side of Coil | mm | Dc | 0.508 |
| | in | | 0.02 |
| Mass, Moving Coil Assembly | kg | M _{CA} | 1.45 |
| | lb | | 3.2 |
| Thermal Resistance of Coil in still air | °C/Watt | Θ _{TH} | 1.16 |
| Maximum Allowable Coil Winding Temp | °C | T _W | 155 |
| Mass, Field Assembly | kg | M _{FA} | 11 |
| | lb | | 24.3 |

* 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.



| | | | |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------|
| FOR REFERENCE ONLY, CHECK LATEST REVISION BEFORE USE. | | 529 PLEASANT STREET P.O. BOX 2964 ATTLEBORO, MA 02703 | |
| DRAWN DATE ENGINEER DATE APPROVED DATE APPROVED DATE | SENSATA TECHNOLOGIES PROPRIETARY AND CONFIDENTIAL. NEITHER THIS PRINT NOR THE INFORMATION CONTAINED HEREON IS TO BE USED AGAINST THE INTERESTS OF SENSATA TECHNOLOGIES OR AGAINST THE INTERESTS OF ANY OF ITS AFFILIATED COMPANIES OR WHOLLY OWNED SUBSIDIARIES. INTERPRET DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES DECIMALS ANGLES X.X ± 0.03 X.X° ± 0°30' X.XX ± 0.01 X.XXX ± 0.005 | TITLE LINEAR ACTUATOR | |
| DO NOT SCALE DRAWING | THIRD ANGLE PROJECTION | SIZE DWG NO. C LA50-65-000A | REV. B |
| SCALE 2:3 | | SHEET 1 OF 2 | |



NOTES: UNLESS OTHERWISE SPECIFIED

1. INCH DRAWING, DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY.

2. A POSITIVE (+) VOLTAGE APPLIED TO THE MARKED LEAD WIRES WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.

3.

| STROKE, INCH [mm] | MID-STROKE DIMENSION, INCH [mm] |
|-------------------|---------------------------------|
| +/- .50 [12.7] | 6.435 [163.45] |
| +/- .625 [15.87] | 6.535 [166.0] |

Sensata Technologies
 529 PLEASANT STREET
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 ATTLEBORO, MA 02703

| | | |
|-------|--------------|-------------------------|
| SIZE | DWG NO. | REV. |
| C | LA50-65-000A | B |
| SCALE | 2:1 | SOLIDWORKS SHEET 2 OF 2 |

