

PROPRIETARY AND CONFIDENTIAL

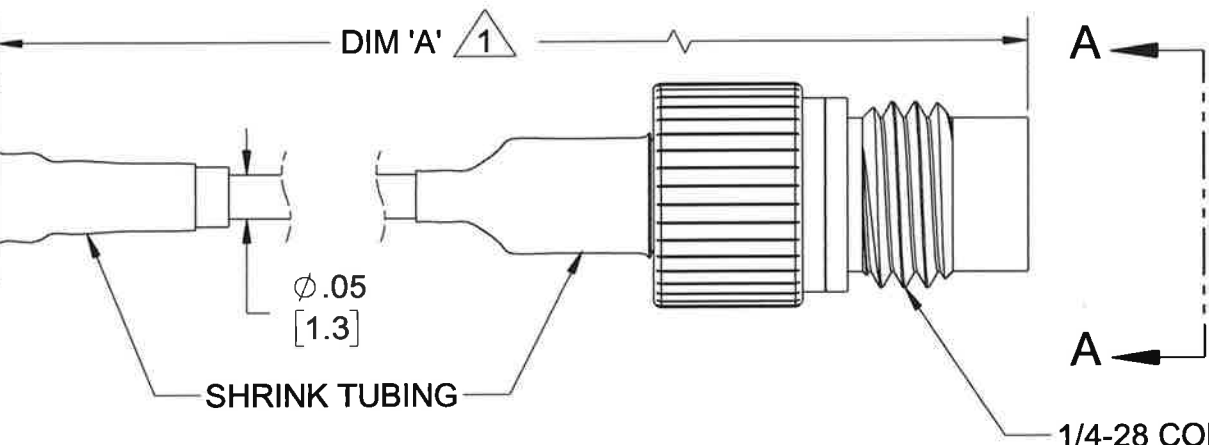
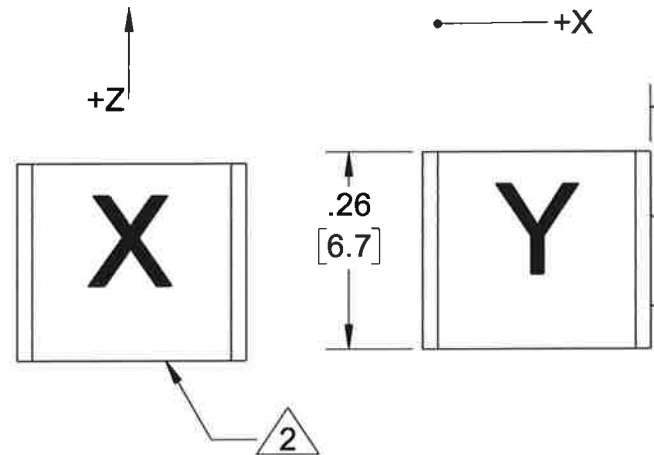
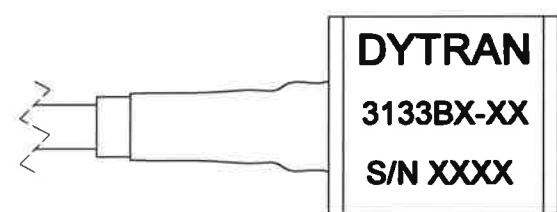
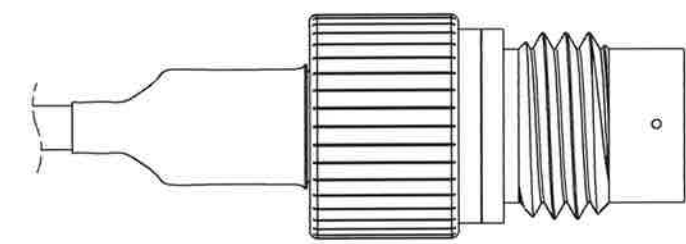
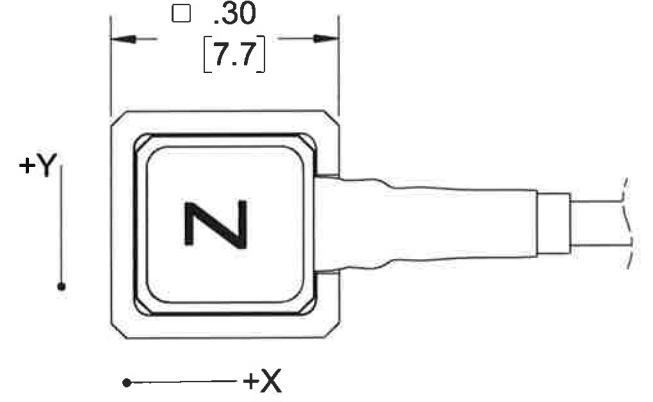
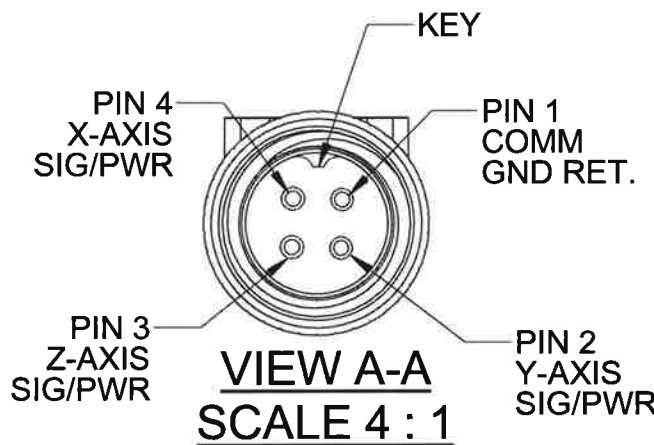
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| MODEL | SENSITIVITY | DIM 'A' |
|-----------|-------------|---------|
| 3133B1 | 9-24 mV/g | 36.0 IN |
| 3133B2 | 2-5 mV/g | 36.0 IN |
| 3133B3 | 5-10 mV/g | 36.0 IN |
| 3133B1-05 | 9- 14 mV/g | 5.0 FT |
| 3133B2-05 | 2-5 mV/g | 5.0 FT |
| 3133B3-05 | 5-10 mV/g | 5.0 FT |

| 8 4-WIRE CABLE | |
|-----------------|--|
| WIRE | 36 AWG, 7/44 SILVER PLATED COPPER |
| WIRE INSULATION | PFA, .006 NOMINAL WALL |
| SHIELD | 44 AWG SILVER PLATED SOFT COPPER BRAID |
| JACKET | PFA, WHITE, .006 INCH NOMINAL WALL |
| DIAMETER | ∅.045 NOMINAL |
| TEMP | -196 TO +200 DEG C |
| VOLTAGE | 150 VOLTS AC |

| REVISIONS | | | | | |
|-----------|-------|--|--------------|-----|------|
| REV. | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
| C | 13832 | REDRAWN IN SOLIDWORKS WITH CHANGES, SAME AS REV B1 | RA, 11/06/17 | MH | LN |

| 1 CABLE LENGTH TOLERANCE | | | |
|--------------------------|------------|--------------|-------------|
| ENGLISH | | [METRIC] | |
| ≤1FT | +1/ -0 IN | ≤0.3m | +25mm -0mm |
| >1 FT - 5 FT | +2/ -0 IN | >.0.3 m-1.5m | +50mm -0mm |
| > 5 FT - 10 FT | +4/ -0 IN | >1.5m-3m | +100mm -0mm |
| >10 FT - 25FT | +6 / -0 IN | >3m-7.5m | +150mm -0mm |
| >25 FT | +5% / -0% | >7.5m | +5%/-0% |



- 8 CABLE, 4-CONDUCTOR, SHIELDED. SEE TABLE FOR SPECIFICATIONS.
 - 7. WEIGHT: LESS CABLE: 0.9 GRAMS
 - 6. MODEL 6298 PETRO MOUNTING WAX, SUPPLIED
 - 5. MATING CABLES ARE MODELS 6824AXX (SANTOPRENE), OR 6811AXX, (TEFLON) 4-PIN CONNECTOR TO 3 BNC's "XX" IS THE CABLE LENGTH IN FEET.
 - 4. HOISING MATERIAL: TITANIUM. GND. ISO BASE: ANODIZED ALUMINUM.
 - 3. LETTERS 'X', 'Y', 'Z' INDICATE DIRECTION OF ACCELERATION OF EACH AXIS FOR POSITIVE GOING OUTPUT VOLTAGE (AS MARKED SURFACE ACCELERATES TOWARD VIEWER.) SEE DIRECTIONAL ARROWS ON DRAWING FACE.
 - 2 FOR BEST FREQUENCY RESPONCE, PREPARE FLAT MOUNTING SURFACE OF AT LEAST ∅.45, FLAT TO .001 TIR. APPLY ONE OR TWO DROPS OF CYANACRYLATE ADHESIVE TO MOUNT ACCELEROMETER.
 - 1 LENGTH OF CABLE ASSEMBLY IS DESIGNATED BY DIM 'A' (SEE VARIATION CHART)
- NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER ASME Y14.5M - 1994. REMOVE BURRS. COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA. THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS. DIMENSIONS APPLY AFTER FINISHING.

| DECIMALS | METRIC | ANGLES |
|------------|-----------|--------|
| .XX ±.01 | X ± 0.8 | ±1° |
| .XXX ±.005 | .XX ±0.25 | |

| APPROVALS | | DATE |
|-----------|----|----------|
| ORIG | RA | 10/27/17 |
| CHK | MH | 11/4/17 |
| APP | LN | 11/8/17 |

ALL MACHINED SURFACES 63/ TOTAL RUNOUT WITHIN .005. BREAK SHARP EDGES .005 TO .010. MACHINED FILLET RADII .005 TO .015. WELDING SYMBOLS PER AWS A2.4. ABBREVIATIONS PER MIL-STD-12.

DO NOT SCALE DRAWING

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DYTRAN INSTRUMENTS, INC. Chatsworth, CA

TITLE: **OUTLINE/INSTALLATION DRAWING, MODEL 3133BX-X GROUND-ISOLATED TRIAXIAL ACCELEROMETER**

| | | | |
|---------------|------------------------|-------------------------|--------------|
| SIZE B | CAGE CODE 2W033 | DWG NO 127-3133B | REV C |
|---------------|------------------------|-------------------------|--------------|

SCALE: 2:1 SHEET 1 OF 1

| | | | | | |
|------------------------|--------------------------------------|--|--|----------------------------|--|
| Model Number 3133B2 | PERFORMANCE SPECIFICATION | | | DOC NO PS3133B2 | |
| | Accelerometer, Triaxial, IEPE | | | REV E, ECN 14811, 01/09/19 | |



- **ULTRA MINIATURE SIZE**
- **IDEAL LOW FREQUENCY RESPONSE**
- **GROUND ISOLATED**

| | ENGLISH | | SI | |
|-----------------|----------|-------------|----------|-------------|
| PHYSICAL | | | | |
| Weight | 0.03 | oz | 0.8 | grams |
| Mounting | Adhesive | | Adhesive | |
| Integral Cable | Length | 3 | ft | 914 |
| | Type | TFE | | TFE |
| Connector | Type | 4-pin | | 4-pin |
| Housing | Material | Titanium | | Titanium |
| Isolation Cup | Material | Anodized Al | | Anodized Al |
| Sensing Element | Material | Quartz | | Quartz |
| | Mode | Shear | | Shear |

| | ENGLISH | | SI | |
|-----------------------------|--------------|-------|---------------|-----------------------|
| PERFORMANCE | | | | |
| Sensitivity [1], [2], ± 25% | 2 | mV/g | 0.20 | mV/m/s ² |
| Acceleration Range | 2500 | Gpeak | 24525 | m/s ² peak |
| Frequency Range, ±5% | 0.7 to 6000 | Hz | 0.7 to 6000 | Hz |
| Frequency Range, ±10% | 0.7 to 10000 | Hz | 0.7 to 10000 | Hz |
| Resonance Frequency | >35 | kHz | >35 | kHz |
| Transverse Sensitivity | 6 | % | 6 | % |
| Noise floor | 0.15 | Grms | 1.47 | m/s ² rms |
| Spectral Noise | 1Hz | 4000 | μGrms/sqr(Hz) | 39240 |
| | 10Hz | 2000 | μGrms/sqr(Hz) | 19620 |
| | 100Hz | 500 | μGrms/sqr(Hz) | 4905 |
| | 1000Hz | 200 | μGrms/sqr(Hz) | 1962 |
| | 10000Hz | 90 | μGrms/sqr(Hz) | 883 |

| | ENGLISH | | SI | |
|-----------------------------------|-------------|---------|------------|-------------------------|
| ENVIRONMENTAL | | | | |
| Shock | 5000 | Gpeak | 49050 | m/s ² |
| Vibration | 2500 | Gpeak | 24525 | m/s ² |
| Operating Temperature | -60 to +300 | °F | -51 to 148 | °C |
| Seal | Epoxy | | Epoxy | |
| Magnetic Sensitivity at 100 Gauss | 0.00004 | g/Gauss | 0.00039 | m/s ² /Gauss |
| Base Strain Sensitivity | 0.15 | g/με | 1.47 | m/s ² /με |

| | ENGLISH | | SI | |
|-------------------------|------------|---------|------------|---------|
| ELECTRICAL | | | | |
| Compliance Voltage | +18 to +30 | VDC | +18 to +30 | VDC |
| Current Range | 2 to 20 | mA | 2 to 20 | mA |
| Discharge Time Constant | 0.3 to 2.5 | seconds | 0.3 to 2.5 | seconds |
| Case Isolation, Min | 10 | GΩ | 10.000 | GΩ |
| Bias Voltage | +7 to +9 | VDC | +7 to +9 | VDC |
| Output Impedance | 100 | Ω | 100 | Ω |

This family also includes:

| Model | Sensitivity (mV/g) | Range (Gpeak) | Resolution (Grms) | Oper. Temp(°F) | TC |
|--------|--------------------|---------------|-------------------|----------------|------------|
| 3133B1 | 10 | 500 | 0.02 | -60 to 250 | 1.0 to 2.5 |
| 3133B3 | 5 | 1000 | 0.06 | -60 to 250 | 1.0 to 2.5 |

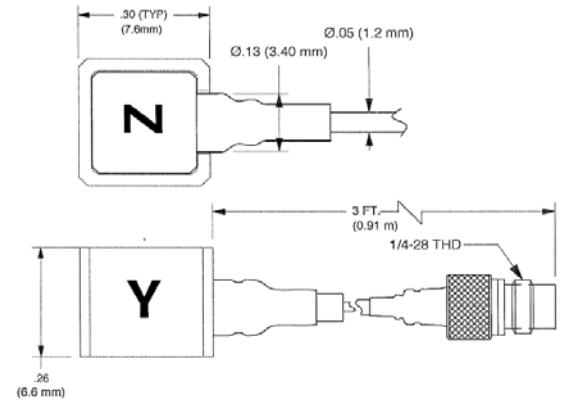
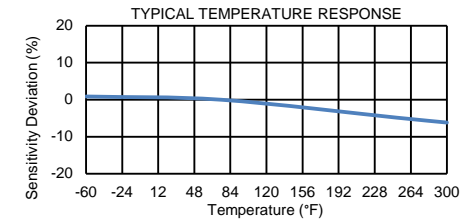
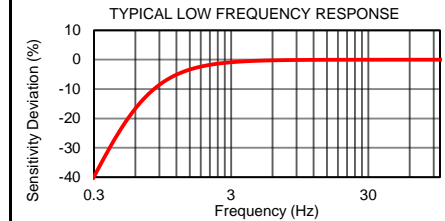
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Model 6298 small petro wax
- 2) Model 6741 removal tool
- 3) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measured at 100 Hz, 10 Grms
- [2] Actual sensitivity is given on a calibration certificate
- [3] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3133B for more information.



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