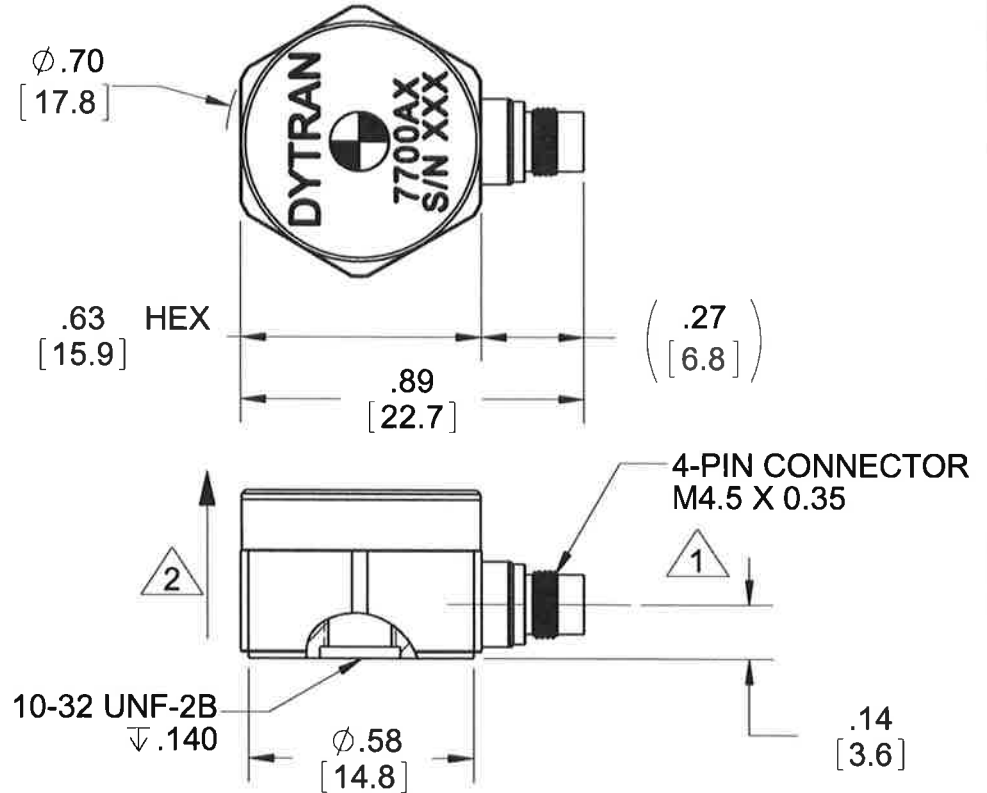
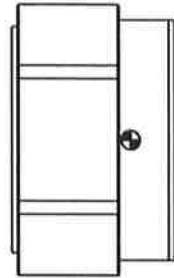


**PROPRIETARY AND CONFIDENTIAL**

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| MODEL  | RANGE |
|--------|-------|
| 7700A1 | ±5G   |
| 7700A2 | ±10G  |
| 7700A3 | ±25G  |
| 7700A4 | ±50G  |
| 7700A5 | ±100G |
| 7700A6 | ±200G |



| REVISIONS |       |  |             |     |                    |
|-----------|-------|--|-------------|-----|--------------------|
| REV       | ECN   | DESCRIPTION  | BY/DATE     | CHK | APPR               |
| C         | 9942  | SHT 2 - .44 [11] WAS: .50 [12.7]   | LN 05/20/13 | JS  | DV                 |
| D         | 11120 | NOTE 5: TEMPERATURE RANGE -40 TO 248 °F [-40 TO 120 °C] WAS -40 TO 176 °F [-40 TO 80 °C] | EC 07/07/14 | 91  | <i>[Signature]</i> |

- 6. WEIGHT: 8 GRAMS MAX
- 5. OPERATING TEMPERATURE RANGE: -40 TO 248 °F [-40 TO 120°C]
- 4. HOUSING/CONNECTOR MATERIAL: TITANIUM ALLOY
- 3 MOUNT USING DYTRAN 6200 MODEL (SUPPLIED)
- 2 ARROW INDICATES DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT
- 1 MATES WITH DYTRAN 6895AXX CABLE (XX = LENGTH IN FEET)

**NOTES: UNLESS OTHERWISE SPECIFIED**

|  |   |
|--|---|
| UNLESS OTHERWISE SPECIFIED:<br>INTERPRET DIM & TOL PER<br>ASME Y14.5M - 1994.<br>REMOVE BURRS.<br>COUNTERSINK INTERNAL THDS<br>90° TO MAJOR DIA.<br>CHAM EXT THDS 45° TO MINOR DIA.<br>THD LENGTHS AND DEPTHS ARE FOR<br>MIN FULL THDS.<br>THDS PER MIL-S-7742.<br>DIMENSIONS APPLY AFTER FINISHING. | UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES.<br>DIMENSIONS IN BRACKETS [ ]<br>ARE IN MILLIMETERS<br>TOLERANCES ARE:<br>INCHES    METRIC    ANGLES<br>.XX ± .03    .X ± 0.8    ± 1°<br>.XXX ± .010    .XX ± 0.25 |
| USED ON  | NEXT ASSY   |
| APPLICATION  |   |
| THIRD ANGLE PROJECTION<br>USA  |   |
|  |   |
| ALL MACHINED SURFACES. <sup>63</sup> ✓<br>TOTAL RUNOUT WITHIN .005.<br>BREAK SHARP EDGES .005 TO .010.<br>MACHINED FILLET RADII .005 TO .015.<br>WELDING SYMBOLS PER AWS A2.4.<br>ABBREVIATIONS PER MIL-STD-12.  |   |

|          |                      |
|----------|----------------------|
| MATERIAL | DO NOT SCALE DRAWING |
| FINISH   |                      |

|              |                            |
|--------------|----------------------------|
| CONTRACT NO. |                            |
| APPROVALS    |                            |
| ORIG         | DATE                       |
| CHK          | LN                         |
| APP          | DV                         |
| APP          | <i>[Signature]</i> 3/30/14 |

**MASTER COPY ONLY IF IN RED**

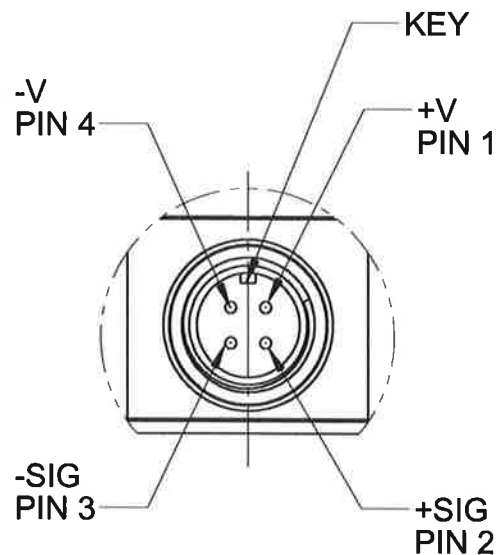
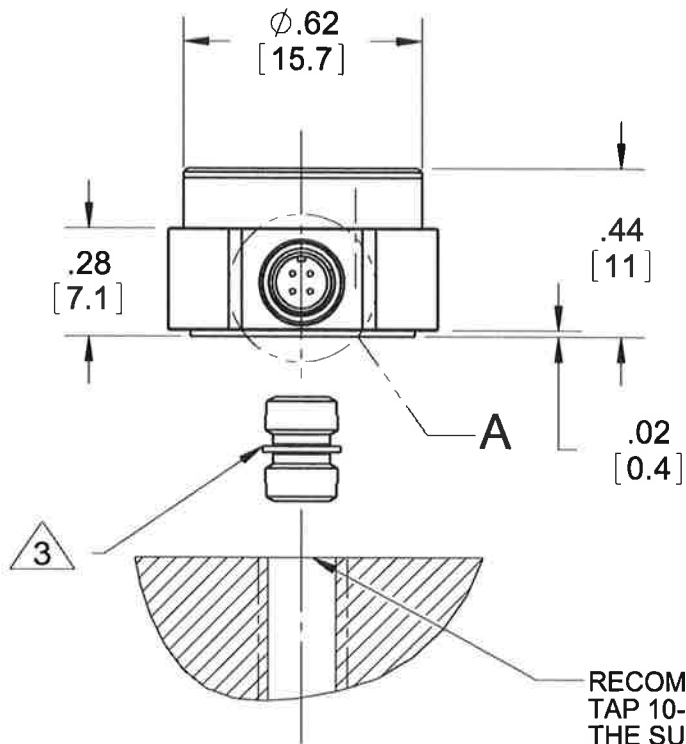
TITLE: **OUTLINE/INSTALLATION DRAWING, 7700 SERIES**

|          |              |                  |          |
|----------|--------------|------------------|----------|
| SIZE     | CAGE CODE    | DWG. NO.         | REV      |
| <b>A</b> | <b>2W033</b> | <b>127-7700A</b> | <b>D</b> |

SCALE: NONE      SOLIDWORKS      SHEET 1 OF 2

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**DETAIL A**  
**SCALE 4 : 1**

**RECOMMENDED MOUNTING PREPARATION:**  
TAP 10-32 UNF-2B X .160 MIN DEEP. ASSURE THE SURFACE FLATNESS BETTER THAN .001 TIR. MOUNTING TORQUE: 6-8 LB-IN.

|                               |           |
|-------------------------------|-----------|
| USED ON                       | NEXT ASSY |
| APPLICATION                   |           |
| THIRD ANGLE PROJECTION<br>USA |           |

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.  
THDS PER MIL-S-7742.  
DIMENSIONS APPLY AFTER FINISHING.

ALL MACHINED SURFACES. 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.

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES.  
DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS  
TOLERANCES ARE:  
INCHES METRIC ANGLES  
.XX ± .03 .X ± 0.8 ± 1°  
.XXX ± .010 .XX ± 0.25

MATERIAL

FINISH

**DO NOT SCALE DRAWING**

|              |    |          |
|--------------|----|----------|
| CONTRACT NO. |    |          |
| APPROVALS    |    | DATE     |
| ORIG         | DV | 02/23/11 |
| CHK          | LN | 08/14/12 |
| APP          | DV | 08/21/12 |
| APP          |    |          |

**DYTRAN** **MASTER**  
INSTRUMENTS, INC. Chatsworth, CA **ONLY IF IN RED**

TITLE: **OUTLINE/INSTALLATION DRAWING, 7700 SERIES**

|             |              |                  |              |
|-------------|--------------|------------------|--------------|
| SIZE        | CAGE CODE    | DWG. NO.         | REV          |
| <b>A</b>    | <b>2W033</b> | <b>127-7700A</b> | <b>D</b>     |
| SCALE: NONE |              | SOLIDWORKS       | SHEET 2 OF 2 |



- POWER SUPPLY IDENTICAL TO STRAIN GAGE SENSORS
- VARIABLE CAPACITANCE ACCELEROMETER
- DIFFERENTIAL MODE
- HERMETICALLY SEALED
- DC RESPONSE

|   | ENGLISH                |                  | SI                     |                        |
|---|------------------------|------------------|------------------------|------------------------|
| <b>PHYSICAL</b>   |                        |                  |                        |                        |
| Weight, Max   | 0.28                   | oz               | 8.0                    | grams                  |
| Connector   | 4-PIN, M4.5 x 0.35 THD |                  | 4-PIN, M4.5 x 0.35 THD |                        |
| Mounting  | 10-32 UNF-2B           |                  | 10-32 UNF-2B           |                        |
| Material  | Ti-6Al-4V              |                  | Ti-6Al-4V              |                        |
| <b>PERFORMANCE</b>                                      |                        |                  |                        |                        |
| Input Range   | ±5                     | g                | ±49                    | m/s <sup>2</sup>       |
| Frequency Response (±3dB)                               | 0-600                  | Hz               | 0-600                  | Hz                     |
| Sensitivity Differential, ±5% [1]                       | 100                    | mV/g             | 10.2                   | mV/m/s <sup>2</sup>    |
| Output Noise, Differential Typ                          | 12                     | μg rms/√Hz       | 118                    | μm/s <sup>2</sup> /√Hz |
| Non-Linearity, Max [2]                                  | 0.5                    | % F.S            | 0.5                    | % F.S                  |
| Sensitivity Change with Excitation Voltage (6-22 Volts) | 0.3                    | %                | 0.3                    | %                      |
| Cross Axis Sensitivity                                  | < 3                    | %                | < 3                    | %                      |
| <b>ENVIRONMENTAL</b>                                    |                        |                  |                        |                        |
| Maximum Mechanical Shock (0.1 ms)                       | ±2000                  | gpk              | ±19620                 | m/s <sup>2</sup> peak  |
| Bias Temperature Shift ,Max [3]                         | 111                    | (ppm of span)/°F | 200                    | (ppm of span)/°C       |
| Sensitivity Temperature Shift                           | -139 to +139           | ppm/°F           | -250 to +250           | ppm/°C                 |
| Operating Temperature Range                             | -40 to +176            | °F               | -40 to +80             | °C                     |
| Seal  | Hermetic               |                  | Hermetic               |                        |
| <b>ELECTRICAL</b>                                       |                        |                  |                        |                        |
| Output Common Mode Voltage ± VDC                        | [4]                    |                  | [4]                    |                        |
| Output Impedence,Nom                                    | 1225                   | Ω                | 1225                   | Ω                      |
| Operating Voltage                                       | ±3 to ±11              | VDC              | ±3 to ±11              | VDC                    |
| Operating Current, Max                                  | 13                     | mA Dc            | 13                     | mA Dc                  |
| Change in Operating Current to Excitation Voltage       | 0.25                   | mAV              | 0.25                   | mAV                    |

**This family also includes:**

| Model  | Input Range (g) | Frequency response (Hz) | Sensitivity Differential, ±5% (mV/g) | Max.Shock (0.1ms) | Noise Differential (μg/√Hz) |
|--------|-----------------|-------------------------|--------------------------------------|-------------------|-----------------------------|
| 7700A2 | ±10             | 0-1000                  | 50                                   | 5000              | 18                          |
| 7700A3 | ±25             | 0-1500                  | 20                                   | 5000              | 25                          |
| 7700A4 | ±50             | 0-2000                  | 10                                   | 5000              | 50                          |
| 7700A5 | ±100            | 0-2500                  | 5                                    | 5000              | 100                         |
| 7700A6 | ±200            | 0-1750                  | 2.5                                  | 5000              | 200                         |

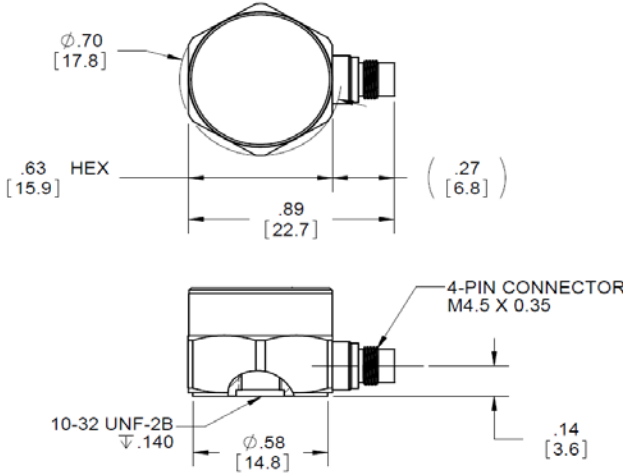
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting stud model # 6200

**Notes:**

- [1] Single ended sensitivity is half of values shown
- [2] -90% to +90% of Full Scale
- [3] Over the rated temperature range
- [4] Bias voltage equal to (+ v - (-v) ) / 2
- [5] Mating cable 6895A
- [6] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches. Refer to 127-7700A for more information.

