

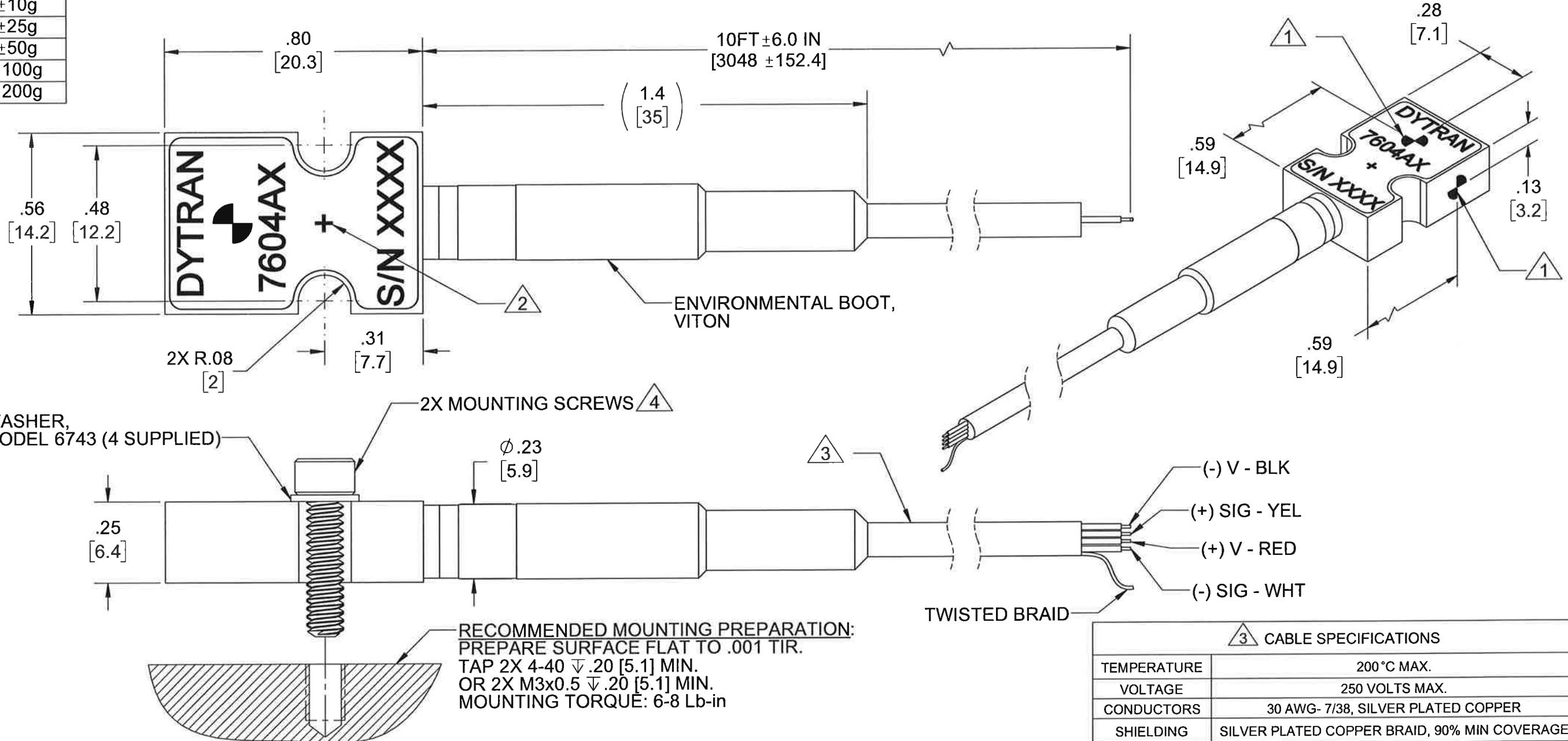
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REVISIONS

| REV. | ECN   | DESCRIPTION       | BY/DATE     | CHK | APPR |
|------|-------|-------------------|-------------|-----|------|
| B    | 12548 | CLARIFIED MARKING | EM 03/17/16 | PA  | LN   |

| MODEL  | RANGE |
|--------|-------|
| 7604A1 | ±5g   |
| 7604A2 | ±10g  |
| 7604A3 | ±25g  |
| 7604A4 | ±50g  |
| 7604A5 | ±100g |
| 7604A6 | ±200g |



RECOMMENDED MOUNTING PREPARATION:  
 PREPARE SURFACE FLAT TO .001 TIR.  
 TAP 2X 4-40  $\nabla$  .20 [5.1] MIN.  
 OR 2X M3x0.5  $\nabla$  .20 [5.1] MIN.  
 MOUNTING TORQUE: 6-8 Lb-in

3 CABLE SPECIFICATIONS

|              |   |
|--------------|---|
| TEMPERATURE  | 200 °C MAX.   |
| VOLTAGE      | 250 VOLTS MAX.  |
| CONDUCTORS   | 30 AWG- 7/38, SILVER PLATED COPPER                              |
| SHIELDING    | SILVER PLATED COPPER BRAID, 90% MIN COVERAGE                    |
| OUTER JACKET | FEP, $\phi$ .105 IN. [2.7mm] MAX., $\phi$ .095 IN. [2.4mm] MIN. |

- 4 MOUNTING SCREW, MODEL 6746, 4-40 X .438, QTY. 2, SUPPLIED. MOUNTING SCREW, MODEL 6688, M3x0.5 X 12mm, QTY. 2, SUPPLIED.
- 3 CABLE, 4 CONDUCTORS, FEP JACKET. SEE TABLE FOR SPECIFICATIONS.
- 2 ARROW AND "+" SIGN INDICATES DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.
- 1 MARKING DENOTES LOCATION OF SENSING ELEMENT.

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.

ALL MACHINED SURFACES  $\sqrt{63}$   
 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.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE:

| DECIMALS   | METRIC    | ANGLES |
|------------|-----------|--------|
| .XX ±.03   | .X ± 0.8  | ±1°    |
| .XXX ±.010 | .XX ±0.25 |        |

| APPROVALS |    | DATE     |
|-----------|----|----------|
| ORIG      | LN | 12/02/13 |
| CHK       | EP | 12/10/15 |
| APP       | DV | 12/12/15 |

THIRD ANGLE PROJECTION USA

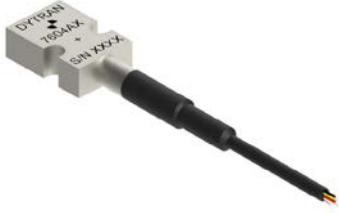
DO NOT SCALE DRAWING

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

TITLE: **OUTLINE/INSTALLATION DRAWING, 7604A SERIES**

|               |                        |                         |              |
|---------------|------------------------|-------------------------|--------------|
| SIZE <b>B</b> | CAGE CODE <b>2W033</b> | DWG NO <b>127-7604A</b> | REV <b>B</b> |
|---------------|------------------------|-------------------------|--------------|

SCALE: 4:1 SHEET 1 OF 1



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

**PHYSICAL**

Weight, Max (less cable)  
Integral Cable  
Material

| ENGLISH        |    | SI             |       |
|----------------|----|----------------|-------|
| 0.1            | oz | 3.6            | grams |
| Flying Leads   |    | Flying Leads   |       |
| Titanium Alloy |    | Titanium Alloy |       |

**PERFORMANCE**

Input Range  
Frequency Response (±3dB)  
Resonant Frequency  
Sensitivity Differential, ±5% [1]  
Output Noise, Differential ,Typ  
Non-Linearity, Max [2]  
Sensitivity Change with Excitation Voltage (6-22 Volts)  
Cross Axis Sensitivity  
Zero Measurand Output

|       |              |       |                          |
|-------|--------------|-------|--------------------------|
| ±10   | g            | ±98   | m/s <sup>2</sup>         |
| 0-600 | Hz           | 0-600 | Hz                       |
| 3.5   | kHz          | 3.5   | kHz                      |
| 50    | mV/g         | 5.1   | mV/m/s <sup>2</sup>      |
| 18    | μ g rms/v Hz | 177   | μ m/s <sup>2</sup> /V Hz |
| 0.5   | % F.S        | 0.5   | % F.S                    |
| 0.3   | %            | 0.3   | %                        |
| < 3   | %            | < 3   | %                        |
| ±50   | mV           | ±50   | mV                       |

**ENVIRONMENTAL**

Maximum Mechanical Shock (0.1 ms)  
Bias Temperature Shift ,Max [3]  
Sensitivity Temperature Shift  
Operating Temperature Range  
Seal

|             |                  |             |                       |
|-------------|------------------|-------------|-----------------------|
| 5000        | gpk              | 49050       | m/s <sup>2</sup> peak |
| 111         | (ppm of span)/°F | 200         | (ppm of span)/°C      |
| 277         | ppm/°F           | 500         | ppm/°C                |
| -40 to +248 | °F               | -40 to +120 | °C                    |
| Hermetic    |                  | Hermetic    |                       |

**ELECTRICAL**

Output Common Mode Voltage ± VDC  
Output Impedance,Nom  
Operating Voltage  
Operating Current, Max  
Change in Operating Current to Excitation Voltage

|           |       |           |       |
|-----------|-------|-----------|-------|
| [4]       |       | [4]       |       |
| 1225      | Ω     | 1225      | Ω     |
| ±3 to ±11 | VDC   | ±3 to ±11 | VDC   |
| 13        | mA Dc | 13        | mA Dc |
| 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) (gpk) | Noise Differential (μg/√Hz) |
|--------|-----------------|-------------------------|--------------------------------------|-------------------------|-----------------------------|
| 7604A1 | ±5              | 0-400                   | 100                                  | 2000                    | 12                          |
| 7604A3 | ±25             | 0-900                   | 20                                   | 5000                    | 25                          |
| 7604A4 | ±50             | 0-1200                  | 10                                   | 5000                    | 50                          |
| 7604A5 | ±100            | 0-1400                  | 5                                    | 5000                    | 100                         |
| 7604A6 | ±200            | 0-1750                  | 2.5                                  | 5000                    | 200                         |

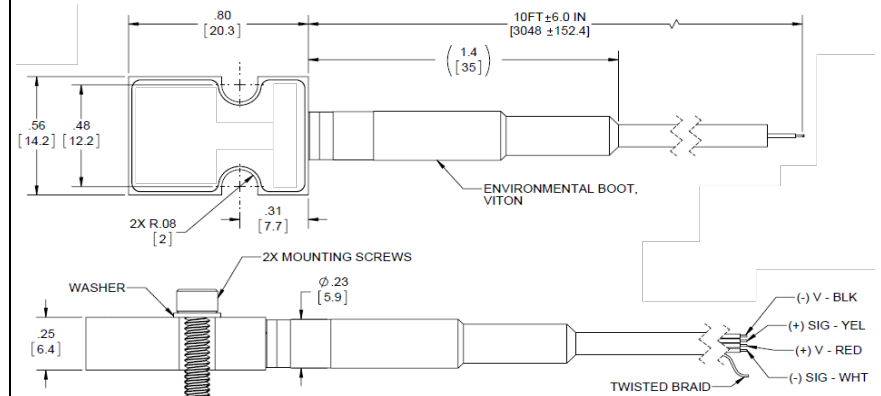
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screws, model 6746, 4-40, Qty. 2
- 3) Mounting screws, model # 6688, M3x0.5, Qty. 2
- 4) Mounting washers model # 6743, Qty. 4

**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] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-7604A for more information.

