PROPRIETARY AND CONFIDENTIAL

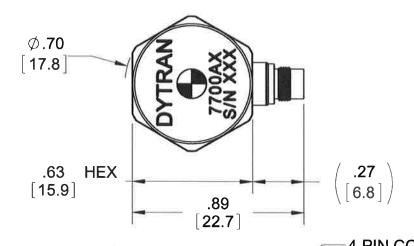
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| MODEL | RANGE |
|--------|-------|
| 7700A1 | ±5G |
| 7700A2 | ±10G |
| 7700A3 | ±25G |
| 7700A4 | ±50G |
| 7700A5 | ±100G |
| 7700A6 | ±200G |
| | |

| | REVISIONS | | | | |
|-----|-----------|--|-------------|-----|------|
| REV | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
| С | 9942 | SHT 244 [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 | * |







WEIGHT: 8 GRAMS MAX

OPERATING TEMPERATURE RANGE: -40 TO 248 °F [-40 TO 120°C]

HOUSING/CONNECTOR MATERIAL: TITANIUM ALLOY

MOUNT USING DYTRAN 6200 MODEL (SUPPLIED)



ARROW INDICATES DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT

UNLESS OTHERWISE SPECIFIED:

COUNTERSINK INTERNAL THDS

CHAM EXT THDS 45° TO MINOR DIA.

THD LENGTHS AND DEPTHS ARE FOR

INTERPRET DIM & TOL PER

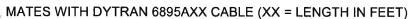
ASME Y14.5M - 1994

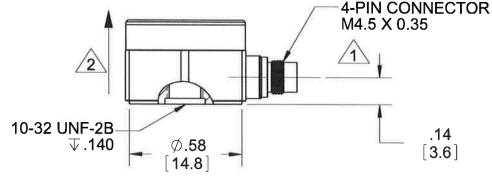
REMOVE BURRS.

MIN FULL THDS.

THDS PER MIL-S-7742

90° TO MAJOR DIA.





NOTES: UNLESS OTHERWISE SPECIFIED

USED ON NEXT ASSY **APPLICATION**

THIRD ANGLE PROJECTION

DIMENSIONS APPLY AFTER FINISHING. ALL MACHINED SURFACES. V 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:**

METRIC ANGLES INCHES .XX ± ..03 X ± 0.8 ± 1° XXX ± .010 XX ±0.25

APPROVALS DATE MATERIAL ORIG DV 02/23/11 FINISH CHK LN 08/14/12 APP 08/21/12 DV DO NOT SCALE DRAWING APP

CONTRACT NO.

Chatsworth, CA

TITLE:

OUTLINE/INSTALLATION DRAWING, 7700 SERIES

SIZE CAGE CODE 2W033

DWG. NO. 127-7700A

REV D

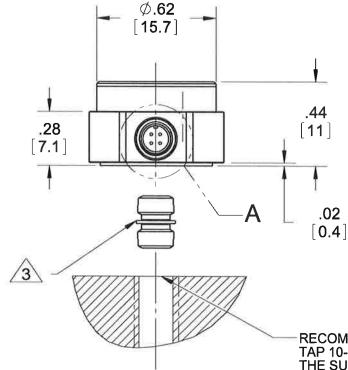
SCALE: NONE

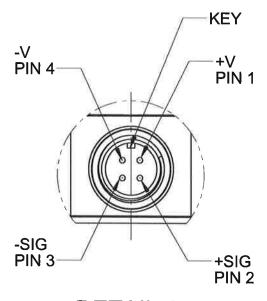
SOLIDWORKS

SHEET 1 OF 2

PROPRIETARY AND CONFIDENTIAL

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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.

CONTRACT NO.

USED ON NEXT ASSY
APPLICATION
THIRD ANGLE PROJECTION

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.
63
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:

INTERPRET DIM & TOL PER

ASME Y14.5M - 1994.

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
 APPROVALS
 DATE

 ORIG
 DV
 02/23/11

 FINISH
 CHK
 LN
 08/14/12

 APP
 DV
 08/21/12

 DO NOT SCALE DRAWING
 APP
 V



MASTER

Chatsworth CW IF IN RED

TITLE:

SCALE: NONE

OUTLINE/INSTALLATION DRAWING, 7700 SERIES

SOLIDWORKS

SIZE CAGE CODE DWG. NO. A 2W033

127-7700A

SHEET 2 OF 2

REV

D

Model Number
7700A3
PERFORMANCE SPECIFICATION
PS7700A3

VARIABLE CAPACITANCE ACCELEROMETER
DOC NO
PS7700A3

REV D, ECN 14673, 11/06/18



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

| | | ENGLISH | | SI | |
|---|--------------------------|------------------------|------------------|------------------------|---------------------|
| PHYSICAL | | | - | | |
| Weight, Max | | 0.28 | oz | 8.0 | grams |
| Connector | Туре | 4-PIN, M4.5 x 0.35 THD | | 4-PIN, M4.5 x 0.35 THD | |
| Mounting | Tapped Hole | 10-32 UNF-2B | | 10-32 UNF-2B | |
| Material | | Ti-6AI-4V | | Ti-6AI-4V | |
| PERFORMANCE | | | | | |
| Input Range | | ±25 | g | ±245 | m/s ² |
| Frequency Response | (±5%) | 0-500 | Hz | 0-500 | Hz |
| | (±3dB) | 0-1400 | Hz | 0-1400 | Hz |
| Sensitivity Differential, ±5% | [1] | 20 | mV/g | 2.0 | mV/m/s ² |
| Output Noise, Differential ,T | ур | 25 | μ g rms/v Hz | 245 | μ m/s²/v 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 | % |
| ENVIRONMENTAL | | | | | |
| Maximum Mechanical Shoc | k (0.1 ms) | ±5000 | gpk | ±49050 | m/s² peak |
| Bias Temperature Shift ,Max [3] | | 111 | (ppm of span)/°F | 200 | (ppm of span)/°C |
| Sensitivity Temperature Shi | ft | -139 to +139 | ppm/°F | -250 to +250 | ppm/°C |
| Operating Temperature Ran | nge | -67 to 257 | °F | -55 to 125 | °C |
| Seal | | Hermetic | | Hermetic | |
| ELECTRICAL | | | | | |
| Output Common Mode Volta | age ± 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 Currer | nt to Excitation Voltage | 0.25 | mA/V | 0.25 | mA/V |
| 1 | | | | | |

| This family also includes: | | | | | |
|----------------------------|-----------------|-------------------------|-----------------------------------|-------------------|--------------------|
| | | Frequency response (Hz) | Sensitivity Differential, ± 5% | | Noise Differential |
| Model | Input Range (g) | +/-3dB | (mV/g) | Max.Shock (0.1ms) | (μg/√Hz) |
| 7700A1 | ±5 | 0-500 | 100 | 2000 | 12 |
| 7700A2 | ±10 | 0-1000 | 50 | 5000 | 18 |
| 7700A4 | ±50 | 0-2000 | 10 | 5000 | 50 |
| 7700A5 | ±100 | 0-2500 | 5 | 5000 | 100 |
| 7700A6 | ±200 | 0-3000 | 2.5 | 5000 | 200 |

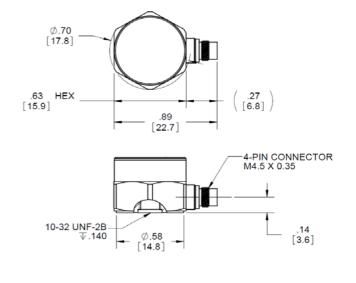
Refer to the performance specifications of the products in this family for detailed description

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.

