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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	5839	.31 WAS: .24	JS 03/12/09	RA	DV
C	8563	ADDED "MADE IN USA" MARKING	JS 04/27/12	LN	DV
D	9573	ADDED MOUNTING SCREW DYTRAN MODEL 6868 (2 PROVIDED)	RA, 02/08/13	LN	DV
E	11218	ADDED NOTE \triangle 2 & 2X 6688 M3 SCREW	EC 08/08/14	JS	EP
F	13122	ADDED: NOTE 3; AND ZONE B4 DRAWING REFERENCE	LA 12/02/16	RA	LN
G	13283	ZONE C4 ADDED: .22 [5.6], ZONE B4 ADDED: .44 [11.2] & .15 [3.8]	LA 02/20/17	RA	LN

MODEL NO.	REV	ECN	DATE	RANGE
7500A1	G	13283	02/20/17	2g
7500A2	G	13283	02/20/17	5g
7500A3	G	13283	02/20/17	10g
7500A4	G	13283	02/20/17	25g
7500A5	G	13283	02/20/17	50g
7500A6	G	13283	02/20/17	100g
7500A7	G	13283	02/20/17	200g
7500A8	G	13283	02/20/17	400g

DYTRAN
7500AX
S/N XXXX

MADE IN USA

1/4-28 4 PIN CONNECTOR

2X ϕ .127 THRU
[3.23]MOUNTING SCREW
DYTRAN MODEL 6868 (4-40 UNC-2A)
& 6688 (M3X.5 ISO 6H COARSE)
(2 EACH PROVIDED)

.23
[5.7]

KEYWAY

POS OUT

DC POWER

NEG OUT

GND

.16
[4.06]

\triangle 3 ARROW INDICATES DIRECTION FOR POSITIVE OUTPUT.

\triangle 2 MOUNTING RECOMMENDATIONS:
PREPARE A SURFACE TO A FLATNESS EQUAL OR
BETTER THAN .0001 TIR. TAP 4-40 UNC-2B ∇ .200 MIN.
OR TAP M3X.5 ISO 6H COARSE ∇ 5.1 MIN.
RECOMMENDED TORQUE 10-12 LB-IN.

1. DIMENSIONS IN BRACKETS [X.XX] ARE
IN MILLIMETERS.

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.
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 \pm .03	.X \pm 0.8	\pm 1°
.XXX \pm .010	.XX \pm 0.25	

APPROVALS		DATE
ORIG	TMD	8/16/06
CHK	CES	05/23/07
APP	CES	05/23/07

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION
USA




TITLE: OUTLINE/INSTALLATION DRAWING,
VARIABLE CAPACITANCE
ACCELEROMETER

SIZE B	CAGE CODE 2W033	DWG NO 127-7500A	REV G
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SCALE: 4:1

SHEET 1 OF 1

Model Number 7500A7		PERFORMANCE SPECIFICATION			DOC NO PS7500A7
		VARIABLE CAPACITANCE ACCELEROMETER			REV E, ECN 14006, 02/02/18



- VARIABLE CAPACITANCE ACCELEROMETER
- DIFFERENTIAL MODE
- HERMETICALLY SEALED
- DC RESPONSE

ENGLISH		SI	
PHYSICAL			
Weight, Max	0.46 oz	13 grams	
Connector	4-PIN, 1/4-28 UNF-2A	4-PIN, 1/4-28 UNF-2A	
Mounting	2 X Ø.13	2 X Ø.13	
Material	Titanium Alloy	Titanium Alloy	
Type	Thru Holes		
PERFORMANCE			
Input Range	±200 g	±1962 m/s ²	
Frequency Response (±3dB)	0 - 1750 Hz	0 - 1750 Hz	
Resonant Frequency	>5000 Hz	>5000 Hz	
Sensitivity Differential, ±10% [1]	10 mV/g	1.0 mV/m/s ²	
Output Noise, Differential, Typ.	200 µg rms/√ Hz	1,962 µ m/s ² /√ Hz	
Non-Linearity, Max. [3]	0.5 % Span	0.5 % Span	
Transverse Sensitivity, Max.	3 %	3 %	
Scale Factor Calibration Error, Max.	1 %	1 %	
ENVIRONMENTAL			
Maximum Mechanical Shock	5000 gpk	49050 m/s ² peak	
Bias Temperature Shift, Max. [2]	111 (ppm of span)/°F	200 (ppm of span)/°C	
Bias Calibration Error	0.5 % of span	0.5 % of span	
Operating Temperature Range	-67 to +257 °F	-55 to +125 °C	
Scale Factor Temperature Shift [2]	-111 to +111 ppm/°F	-200 to +200 ppm/°C	
Seal	Hermetic	Hermetic	
ELECTRICAL			
Output Common Mode Voltage, Typ.	2.45 VDC	2.45 VDC	
Output Impedence, Nom.	1 Ω	1 Ω	
Operating Voltage	+9 to +32 VDC	+9 to +32 VDC	
Operating Current (AOP & AON open)	12 to 14 mA DC	12 to 14 mA DC	
Power Supply Rejection Ratio	>65 dB	>65 dB	
Ground Isolation	>30 MΩ	>30 MΩ	

This family also includes:

Model	Input Range (g)	Frequency response (Hz)	Sensitivity Differential, ±10% (mV/g)	Max.Shock (gpk)	Noise Differential (µg rms/√Hz)
7500A1	± 2	0-300	1,000	2000	7
7500A2	± 5	0-400	400	2000	12
7500A3	± 10	0-600	200	5000	18
7500A4	± 25	0-900	80	5000	25
7500A5	± 50	0-1200	40	5000	50
7500A6	± 100	0-1400	20	5000	100
7500A8	± 400	0-2000	5	5000	400

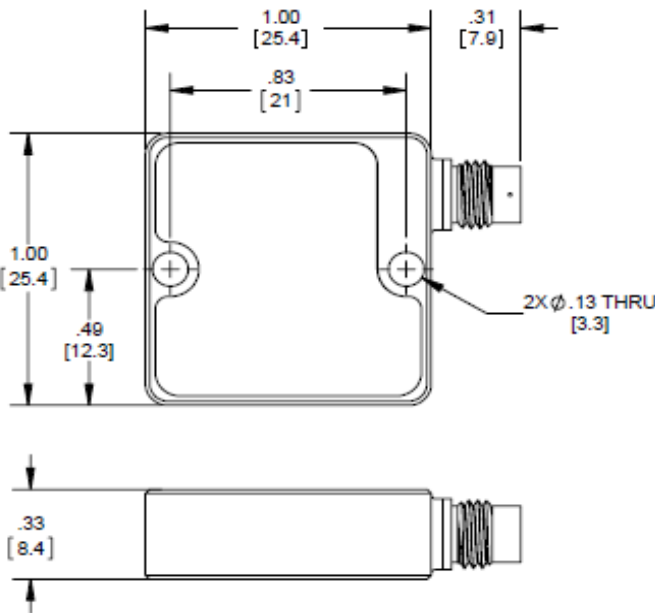
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Two mounting screws model # 6868 (SHCS, 4-40 X .50)
- 3) Two mounting screws model # 6688 (SHCS, M3 X 0.5 MM)

Notes:

- [1] Single ended sensitivity is half of values shown.
- [2] Over the rated temperature range.
- [3] -90% to +90% of Full Scale.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, dimensions in brackets [] are in millimeters. Refer to 127-7500A for more information.