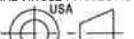


UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER ASME Y14.5M - 1994. REMOVE BURRS. COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA. THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS. DIMENSIONS APPLY AFTER FINISHING. ALL MACHINED SURFACES. TOTAL RUNOUT WITHIN .005. BREAK SHARP 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: <table><tr><td>DECIMALS</td><td>METRIC</td><td></td></tr><tr><td>.XX ±.03</td><td>X ± 0.8</td><td>ANGLES</td></tr><tr><td>.XXX ±.010</td><td>.XX ±0.25</td><td>±1°</td></tr></table>			DECIMALS	METRIC		.XX ±.03	X ± 0.8	ANGLES	.XXX ±.010	.XX ±0.25	±1°	 MASTER ONLY IF IN RED Chatsworth, CA		
	DECIMALS	METRIC													
	.XX ±.03	X ± 0.8	ANGLES												
	.XXX ±.010	.XX ±0.25	±1°												
	APPROVALS		DATE	TITLE: OUTLINE/INSTALLATION DRAWING VARIABLE CAPACITANCE ACCELEROMETER											
ORIG	TMD	8/16/06													
CHK	CES	05/23/07													
APP	CES	05/23/07	SIZE	CAGE CODE	DWG NO	REV									
DO NOT SCALE DRAWING			B	2W033	127-7500A	G									
			SCALE: 4:1		SHEET 1 OF 1										
THIRD ANGLE PROJECTION USA 															

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Model Number 7500A1		PERFORMANCE SPECIFICATION				DOC NO PS7500A1
		VARIABLE CAPACITANCE ACCELEROMETER			REV F, ECN 14693, 11/09/18	



- 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	±2 g	±19.62 m/s ²	
Frequency Response (±5%)	0 - 200 Hz	0 - 200 Hz	
Frequency Response (±3dB)	0 - 400 Hz	0 - 400 Hz	
Resonant Frequency	>1100 Hz	>1100 Hz	
Sensitivity Differential, ±10% [1]	1,000 mV/g	101.9 mV/m/s ²	
Output Noise, Differential, Typ.	7 µg rms/√ Hz	69 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	2000 gpk	19620 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	4 % 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 Impedance, 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, ±3dB (Hz)	Sensitivity Differential, ±10% (mV/g)	Max.Shock (gpk)	Noise Differential (µg rms/√Hz)
7500A2	± 5	0-500	400	2000	12
7500A3	± 10	0-1000	200	5000	18
7500A4	± 25	0-1400	80	5000	25
7500A5	± 50	0-2000	40	5000	50
7500A6	± 100	0-2500	20	5000	100
7500A7	± 200	0-3000	10	5000	200
7500A8	± 400	0-4000	5	5000	400

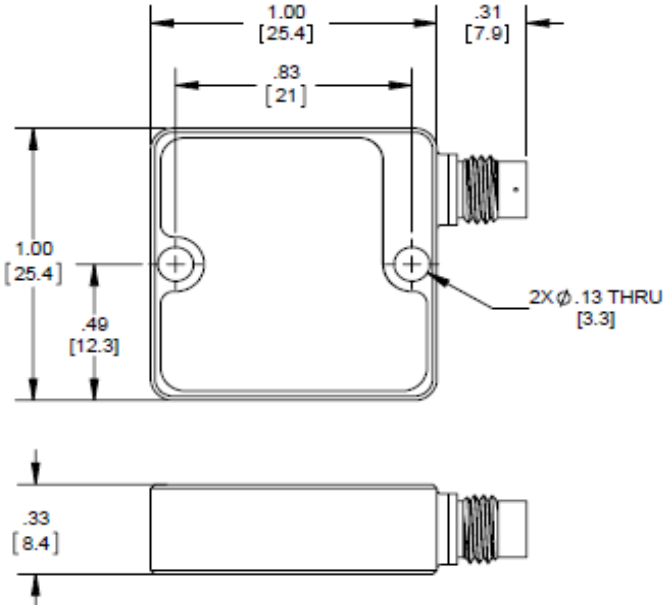
Refer to the performance specifications of the products in this family for detailed description.

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.