

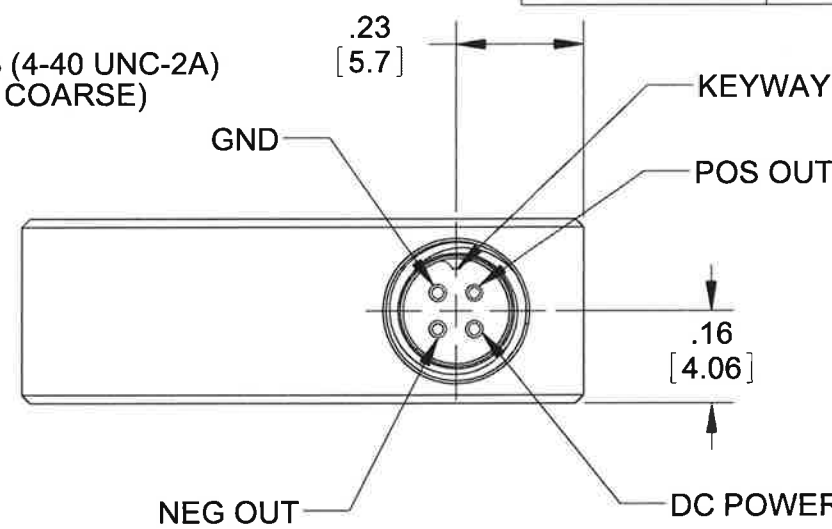
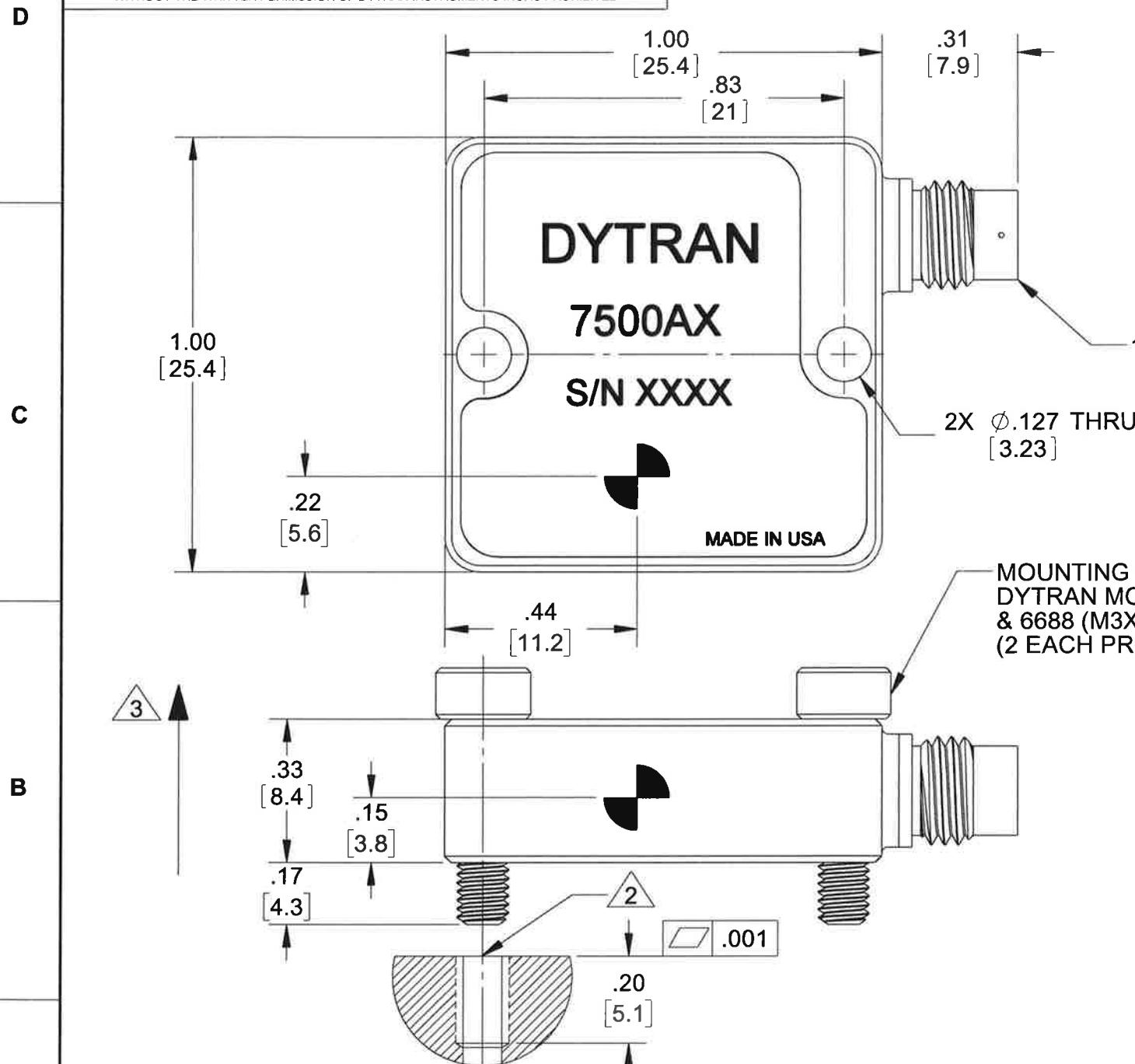
PROPRIETARY AND CONFIDENTIAL

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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 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



3 ARROW INDICATES DIRECTION FOR POSITIVE OUTPUT.

2 MOUNTING RECOMMENDATIONS:  
PREPARE A SURFACE TO A FLATNESS EQUAL OR BETTER THAN .0001 TIR. TAP 4-40 UNC-2B  $\nabla$  .200 MIN. OR TAP M3X.5 ISO 6H COARSE  $\nabla$  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.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE:			
DECIMALS .XX ±.03 .XXX ±.010	METRIC .X ± 0.8 .XX ±0.25	ANGLES ±1°			
APPROVALS		DATE		TITLE: OUTLINE/INSTALLATION DRAWING, VARIABLE CAPACITANCE ACCELEROMETER	
ORIG	TMD	8/16/06		SIZE	
CHK	CES	05/23/07		CAGE CODE	
APP	CES	05/23/07		DWG NO	
DO NOT SCALE DRAWING		THIRD ANGLE PROJECTION USA		REV	
				B	
				2W033	
				127-7500A	
				G	
		SCALE: 4:1		SHEET 1 OF 1	



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

	ENGLISH		SI	
<b>PHYSICAL</b>				
Weight, Max	0.46	oz	13	grams
Connector	4-PIN, 1/4-28 UNF-2A	Type	4-PIN, 1/4-28 UNF-2A	
Mounting	2 X Ø.13	Thru Holes	2 X Ø.13	
Material	Titanium Alloy		Titanium Alloy	
<b>PERFORMANCE</b>				
Input Range	±100	g	±981	m/s <sup>2</sup>
Frequency Response (±5%)	0 - 1300	Hz	0 - 1300	Hz
Frequency Response (±3dB)	0 - 2500	Hz	0 - 2500	Hz
Resonant Frequency	>4100	Hz	>4100	Hz
Sensitivity Differential, ±10% [1]	20	mV/g	2.0	mV/m/s <sup>2</sup>
Output Noise, Differential, Typ.	100	µg rms/√ Hz	981	µ m/s <sup>2</sup> /√ Hz
Non-Linearity, Max. [3]	0.5	% Span	0.5	% Span
Transverse Sensitivity, Max.	3	%	3	%
Scale Factor Calibration Error, Max.	1	%	1	%
<b>ENVIRONMENTAL</b>				
Maximum Mechanical Shock	5000	gpk	49050	m/s <sup>2</sup> 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	
<b>ELECTRICAL</b>				
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)
7500A1	± 2	0-400	1,000	2000	7
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
7500A7	± 200	0-3000	10	5000	200
7500A8	± 400	0-4000	5	5000	400

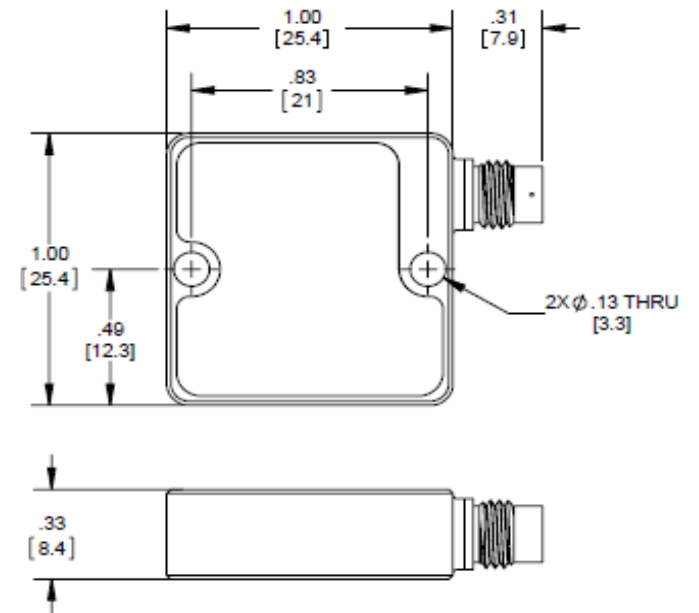
Refer to the performance specifications of the products in this family for detailed description.

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Two mounting screws model # 6868 (SHCS, 4-40 X .50)
- 3) Two mounting screws model # 6888 (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.

