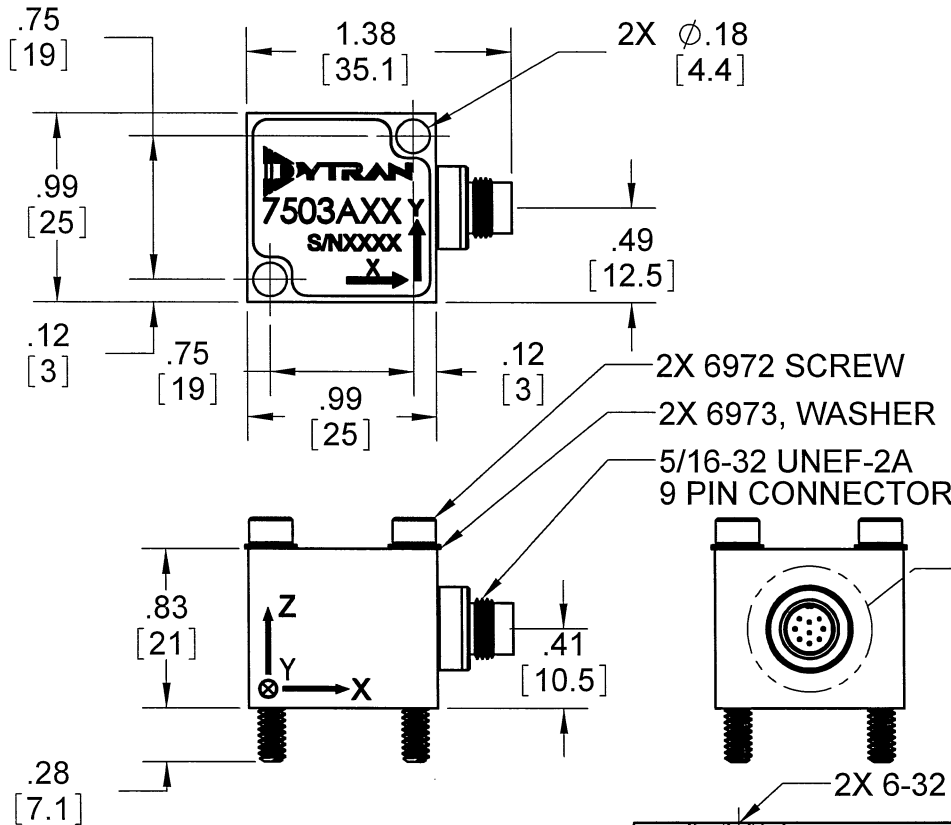


**PROPRIETARY AND CONFIDENTIAL**

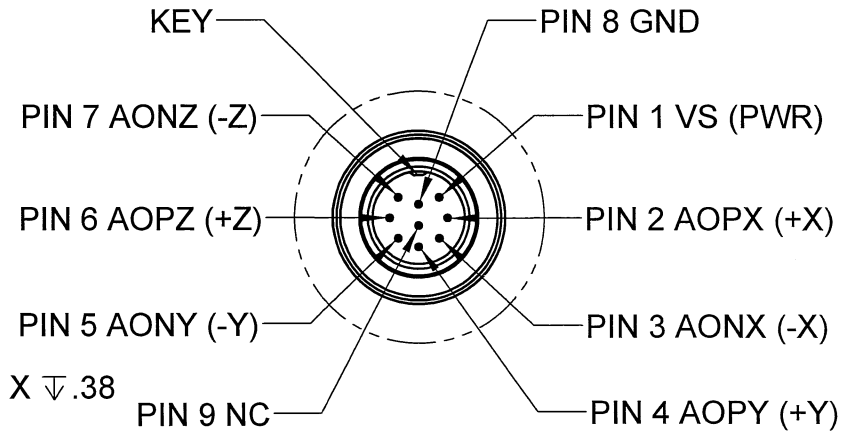
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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6510	INITIAL RELEASE	RA 08/25/11	<i>[Signature]</i>	AWS



MODEL	RANGE
7503A1	±2G
7503A2	±5G
7503A3	±10G
7503A4	±25G
7503A5	±50G
7503A6	±100G
7503A7	±200G
7503A8	±400G



**DETAIL A**

1. WEIGHT: 25 MAX GRAMS

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. THDS PER MIL-S-7742. DIMENSIONS APPLY AFTER FINISHING.	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
USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	
ALL MACHINED SURFACES. <i>63</i> 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.	

CONTRACT NO.	
APPROVALS	
ORIG	RA
CHK	<i>[Signature]</i>
APP	AWS
DATE	05/03/11
DATE	9/12/11
DATE	9/10/11
MATERIAL	
FINISH	
DO NOT SCALE DRAWING	

<b>DYTRAN</b> INSTRUMENTS, INC. Chatsworth, CA		<b>MASTER ONLY IF IN RED</b>	
TITLE: <b>OUTLINE/INSTALLATION DRAWING, TRIAXIAL ACCELEROMETER, 7503A SERIES</b>			
SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-7503A</b>	<b>A</b>
SCALE: NONE		SOLIDWORKS	SHEET 1 OF 1

Model Number 7503A4	<b>PERFORMANCE SPECIFICATION</b>	DOC NO PS7503A4
	<b>TRIAxIAL VARIABLE CAPACITANCE ACCELEROMETER</b>	REV A, ECN 6510, 09/01/11



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

**PHYSICAL**

	ENGLISH		SI	
Weight, Max	1.1	oz	30	grams
Connector	5/16-32 UNEF-2A		5/16-32 UNEF-2A	
Material	Ti-6Al-4V		Ti-6Al-4V	

**PERFORMANCE**

	ENGLISH		SI	
Input Range	± 25	g	± 245.2	m/s <sup>2</sup>
Frequency Response (3dB), Nom	0-1500	Hz	0-1500	Hz
Sensitivity Differential, ±5% [1]	80	mV/g	8	mV/m/s <sup>2</sup>
Output Noise, Differential, Typ	38	µg rms/√Hz	373	µm/s <sup>2</sup> /√Hz
Non-Linearity, Max [2]	0.5	% F.S	0.5	% F.S
Cross Axis Sensitivity, Max	3	%	3	%

**ENVIRONMENTAL**

	ENGLISH		SI	
Maximum Mechanical Shock (0.1 ms)	±5000	gpk	±49050	m/s <sup>2</sup> peak
Bias Temperature Shift, Max [3]	56	(ppm of span)/°F	100	(ppm of span)/°C
Bias Calibration Error, Max	1.5	% of span	1.5	% of span
Operating Temperature Range	-67 to +221	°F	-55 to +105	°C
Scale Factor Temperature Shift [3]	-83 to +83	ppm/°F	-150 to +150	ppm/°C
Seal	Hermetic		Hermetic	

**ELECTRICAL**

	ENGLISH		SI	
Output Common Mode Voltage, Typ	2.5	VDC	2.5	VDC
Output Impedance, Nom	1	Ω	1	Ω
Operating Voltage	9 to 26	VDC	9 to 26	VDC
Operating Current (AOP & AON open), Max	30	mA Dc	30	mA Dc
Power Supply Rejection Ratio	>65	dB	>65	dB

**This family also includes:**

Model	Input Range (g)	Frequency response (Hz)	Sensitivity Differential, ±15% (mV/g)	Max.Shock (0.1ms)	Noise Differential (µg/√Hz)
7503A1	±2	0-400	1,000	5000	12
7503A2	±5	0-600	400	5000	14
7503A3	±10	0-1000	200	5000	15
7503A5	±50	0-2000	40	5000	75
7503A6	±100	0-2500	20	5000	150
7503A7	±200	0-3000	10	5000	300

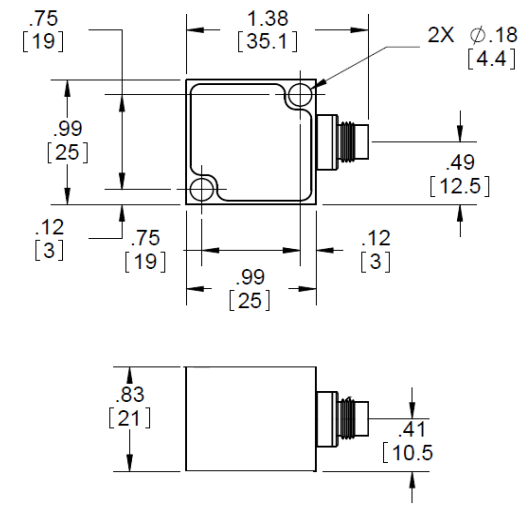
Refer to the performance specifications of the products in this family for detailed description.

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screw model 6972, qty 2
- 3) Mounting washer model 6973, qty 2

**Notes:**

- [1] Single ended sensitivity is half of values shown.
- [2] -90% to +90% of Full Scale.
- [3] Over the rated temperature range.
- [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. Refer to 127-7503A for more information.



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