

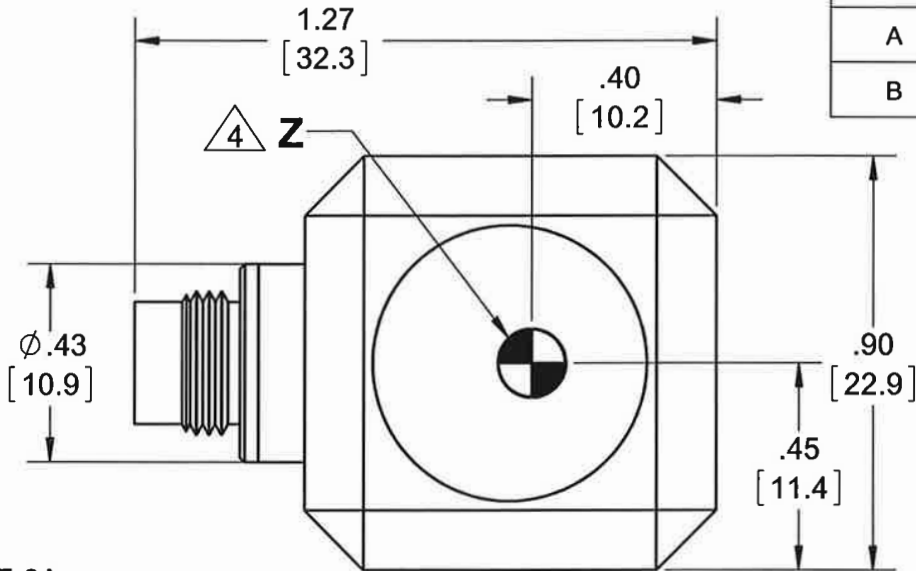
PROPRIETARY AND CONFIDENTIAL

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REVISIONS

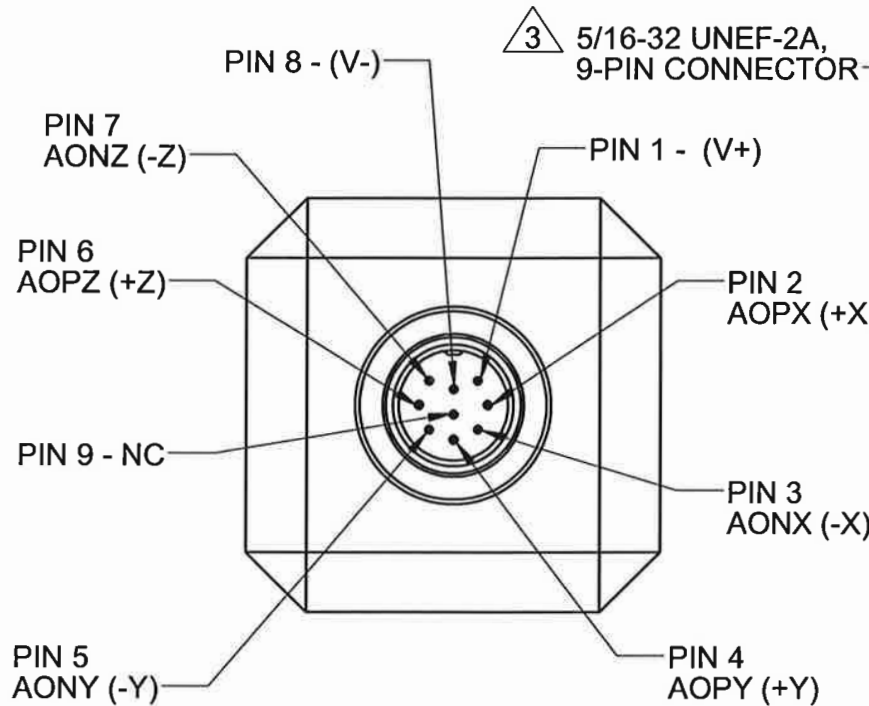
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	10316	INITIAL RELEASE	JS 08/29/13	EM	RT
B	11499	ADDED: 6691, SHEET 2	RA, 11/07/14	EM	RT

MODEL	REV	ECN	DATE	INPUT RANGE
7503B1	B	11499	11/07/14	±2g
7503B2	B	11499	11/07/14	±5g
7503B3	B	11499	11/07/14	±10g
7503B4	B	11499	11/07/14	±25g
7503B5	B	11499	11/07/14	±50g
7503B6	B	11499	11/07/14	±100g
7503B7	B	11499	11/07/14	±200g
7503B8	B	11499	11/07/14	±400g



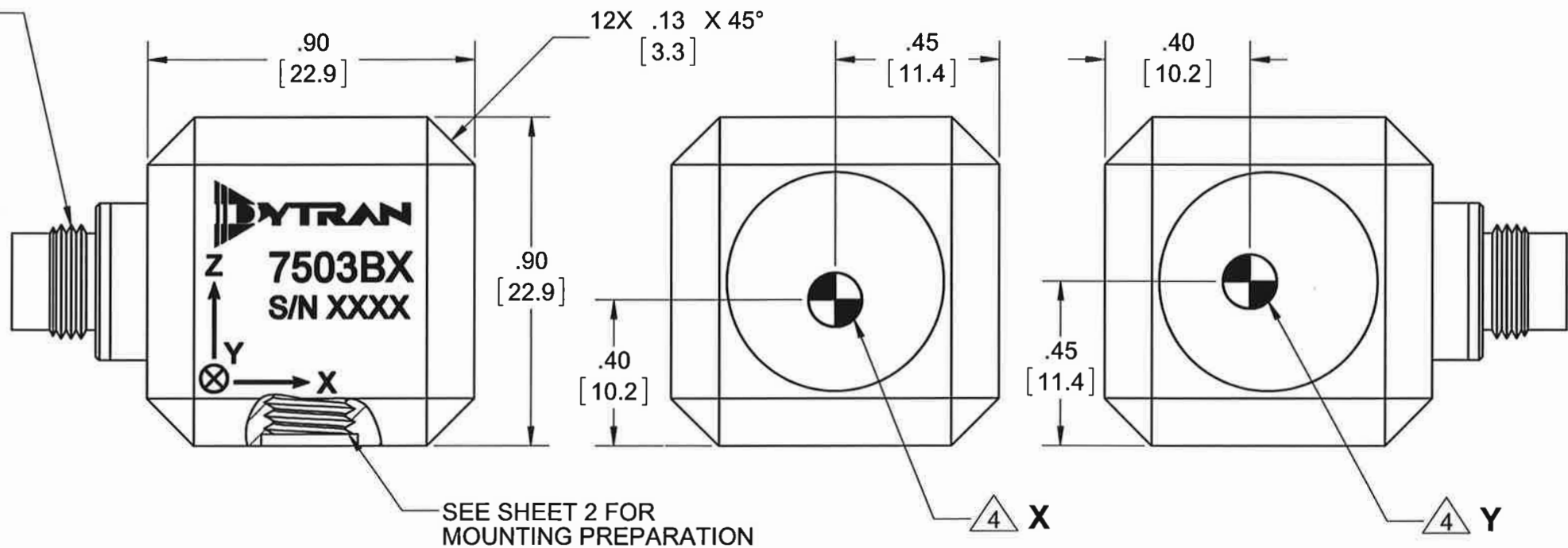
C

C



B

B



SEE SHEET 2 FOR MOUNTING PREPARATION

4 MARKING DENOTES LOCATION OF SENSING ELEMENT'S CENTER OF MASS

3 MATES WITH DYTRAN 6964AXX CABLE (XX DENOTES LENGTH IN FT)

2. WEIGHT: 35 GRAMS, MAX.

1. MATERIAL: TITANIUM ALLOY.

NOTES: UNLESS OTHERWISE SPECIFIED

A

A

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.

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

APPROVALS		DATE
ORIG	JS	08/29/13
CHK	EM	12/03/13
APP	RT	12/03/13

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES.
 DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE:

DYTRAN INSTRUMENTS, INC. Chatsworth, CA **MASTER ONLY IF IN RED**

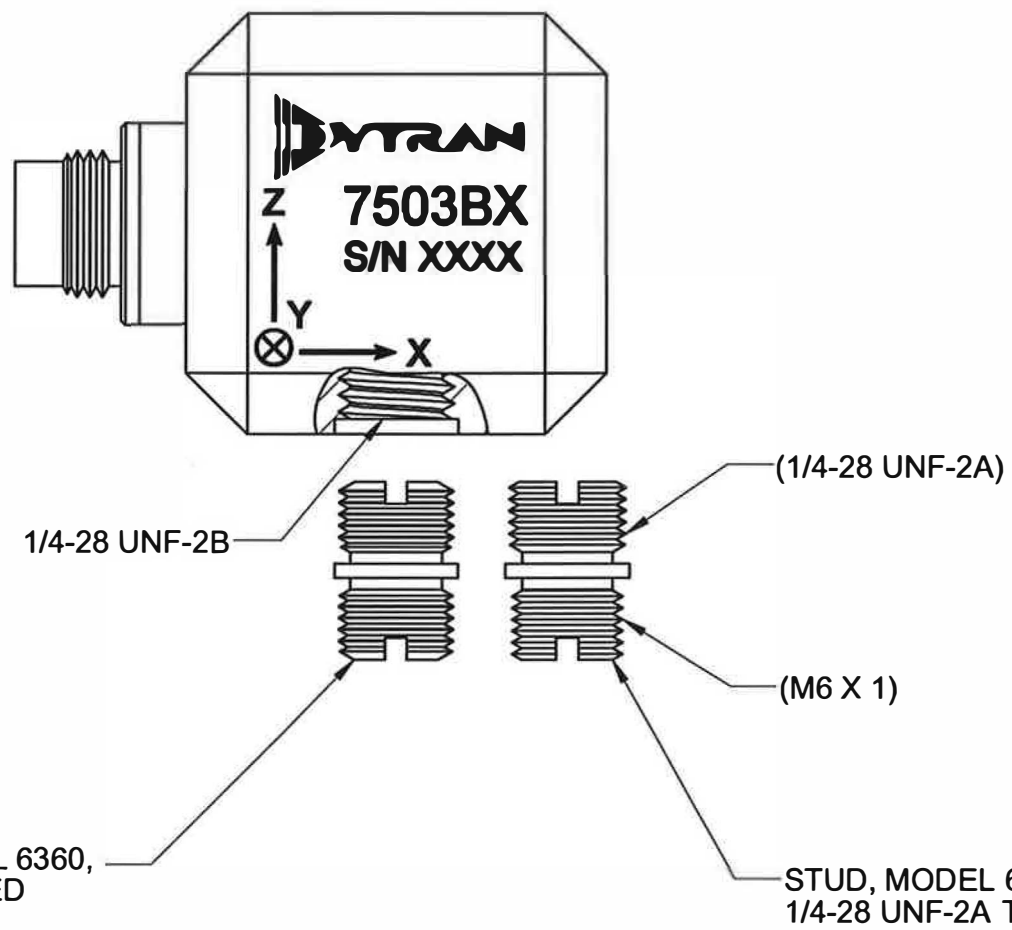
TITLE: **OUTLINE/INSTALLATION DWG, TRIAXIAL DC ACCELEROMETER, 7503B SERIES**

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-7503B	B

SCALE: 2:1 SHEET 1 OF 2

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MOUNTING STUD, MODEL 6360,
1/4-28 TO 1/4-28, SUPPLIED

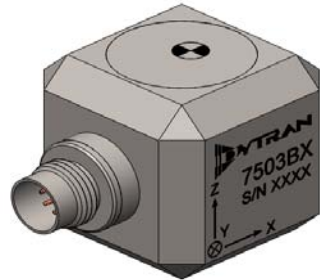
STUD, MODEL 6691,
1/4-28 UNF-2A TO M6 X 1, SUPPLIED

RECOMMENDED MOUNTING PREPARATION:
PREPARE FLAT MOUNTING SURFACE, ϕ 1.25 [31.2] MIN, FLAT TO .001 TIR.
TAP 1/4-28 UNF-2B ∇ .200 [5.1] MIN. TORQUE TO 10-12 Lb-in.

RECOMMENDED MOUNTING PREPARATION:
PREPARE FLAT MOUNTING SURFACE, ϕ 1.25 [31.2] MIN, FLAT TO .001 TIR.
TAP M6 X 1 ∇ .200 [5.1] MIN. TORQUE TO 10-12 Lb-in.

		MASTER ONLY IF IN RED Chatsworth, CA	
TITLE: OUTLINE/INSTALLATION DWG, TRIAXIAL DC ACCELEROMETER, 7503B SERIES			
SIZE B	CAGE CODE 2W033	DWG NO 127-7503B	REV B
SCALE: 2:1	PART NO:	SHEET 2 OF 2	

Model Number 7503B7	PERFORMANCE SPECIFICATION	DOC NO PS7503B7
	TRIAxIAL VARIABLE CAPACITANCE ACCELEROMETER	REV E, ECN 11630, 12/30/14



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

	ENGLISH		SI	
PHYSICAL				
Weight, Max	1.2	oz	35	grams
Connector	9-pin, 5/16-32 UNEF-2A	Type	9-pin, 5/16-32 UNEF-2A	
Material	Titanium Alloy		Titanium Alloy	
Sensing Technology	MEMS		MEMS	
PERFORMANCE				
Input Range	±200	g	±1962	m/s ²
Frequency Response (3dB), Nom	0 - 3000	Hz	0 - 3000	Hz
Sensitivity Differential, ±5% [1]	20	mV/g	2.04	mV/m/s ²
Output Noise, Differential, Typ	200	µg rms/√Hz	1,962	µ m/s ² /√Hz
Non-Linearity, Max [2]	0.5	% F.S	0.5	% F.S
Cross Axis Sensitivity, Max	3	%	3	%
ENVIRONMENTAL				
Maximum Mechanical Shock (0.1 ms)	±5000	gpk	±49050	m/s ² peak
Bias Temperature Shift ,Max [3]	167	(ppm of span)/°F	300	(ppm of span)/°C
Bias Calibration Error, Max	4	% of span	4	% of span
Operating Temperature Range	-40 to +250	°F	-40 to +121	°C
Seal	Hermetic		Hermetic	
ELECTRICAL				
Output Common Mode Voltage, Typ	2.5	VDC	2.5	VDC
Output Impedance	<100	Ω	<100	Ω
Operating Voltage	+9 to +36	VDC	+9 to +36	VDC
Operating Current (AOP & AON open), Max	35	mA Dc	35	mA Dc
Power Supply Rejection Ratio	>65	dB	>65	dB

This family also includes:

Model	Input Range (g)	Frequency response (Hz)	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms) g (peak)	Noise Differential (µg/√Hz)
7503B1	±2	0-400	2,000	2000	5
7503B2	±5	0-600	800	2000	7
7503B3	±10	0-1000	400	5000	10
7503B4	±25	0-1500	160	5000	25
7503B5	±50	0-2000	80	5000	50
7503B6	±100	0-2500	40	5000	100
7503B8	±400	0-4000	10	5000	400

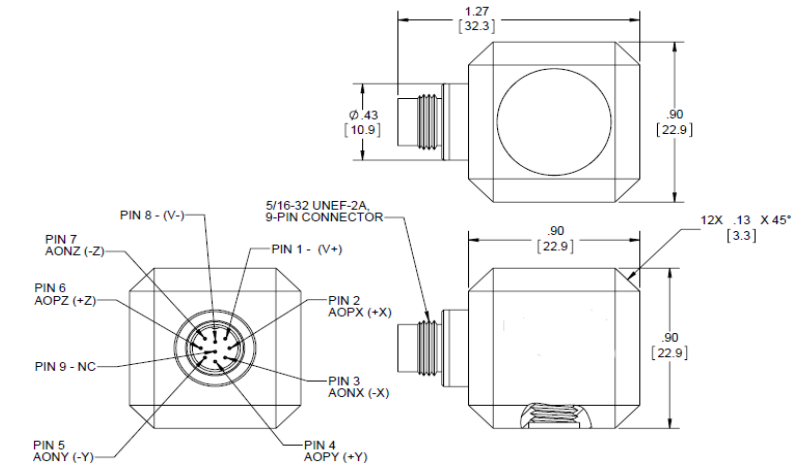
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1
- 3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1

Notes:

- [1] Single ended sensitivity is half of values shown. (Ref. at 100 Hz)
- [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 127-7503B for more information.



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