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MODEL	INPUT RANGE
7603D1	±2g
7603D2	±5g
7603D3	±10g
7603D4	±25g
7603D5	±50g
7603D6	±100g
7603D7	±200g
7603D8	±400g

DWG NO: 127-7603D SH 1 REV B

REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	13625	INITIAL RELEASE. REVISED PIN OUT.	NDC 08/03/17	LN	AS
B	13709	69034A16 WAS: 6753A1	RA, 09/07/17	MJ	LW

C

B

A

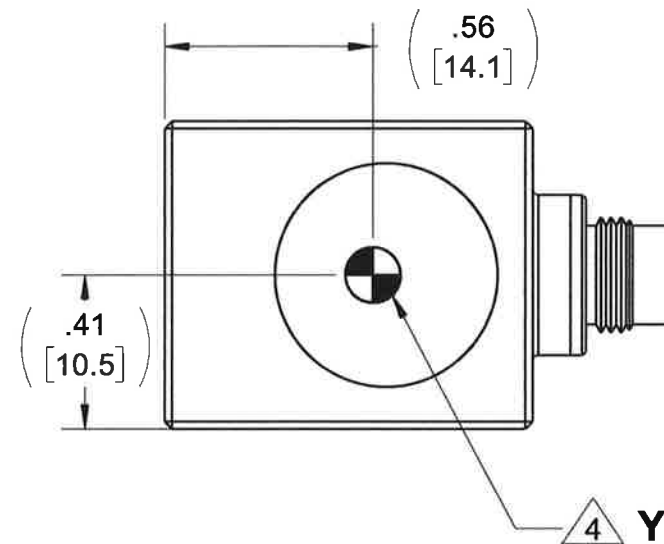
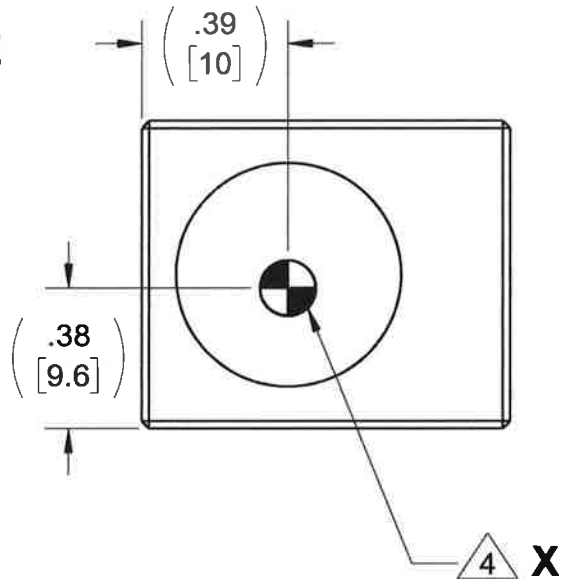
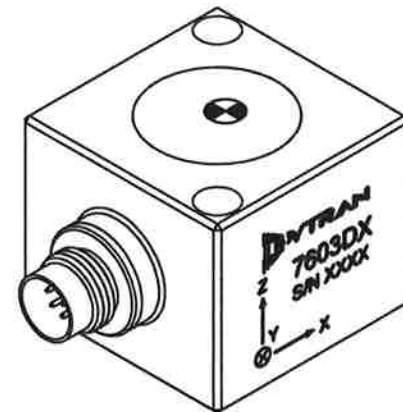
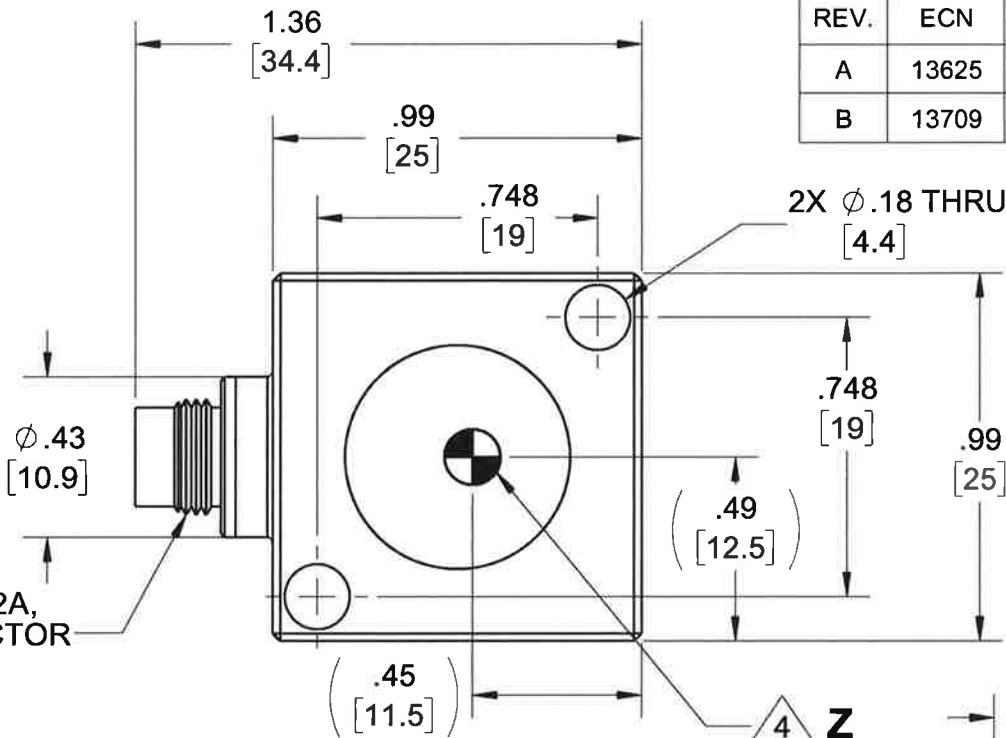
D

C

B

A

5. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR PROCESSING. THESE APPEAR AS INDICATORS THAT DO NOT AFFECT FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION
- 4 MARKING DENOTES LOCATION OF SENSING ELEMENT'S CENTER OF MASS
- 3 MATES WITH DYTRAN 6964AXX CABLE (XX DENOTES LENGTH IN FT)
2. WEIGHT: 38 GRAMS, MAX.
1. MATERIAL: TITANIUM ALLOY.
- 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.

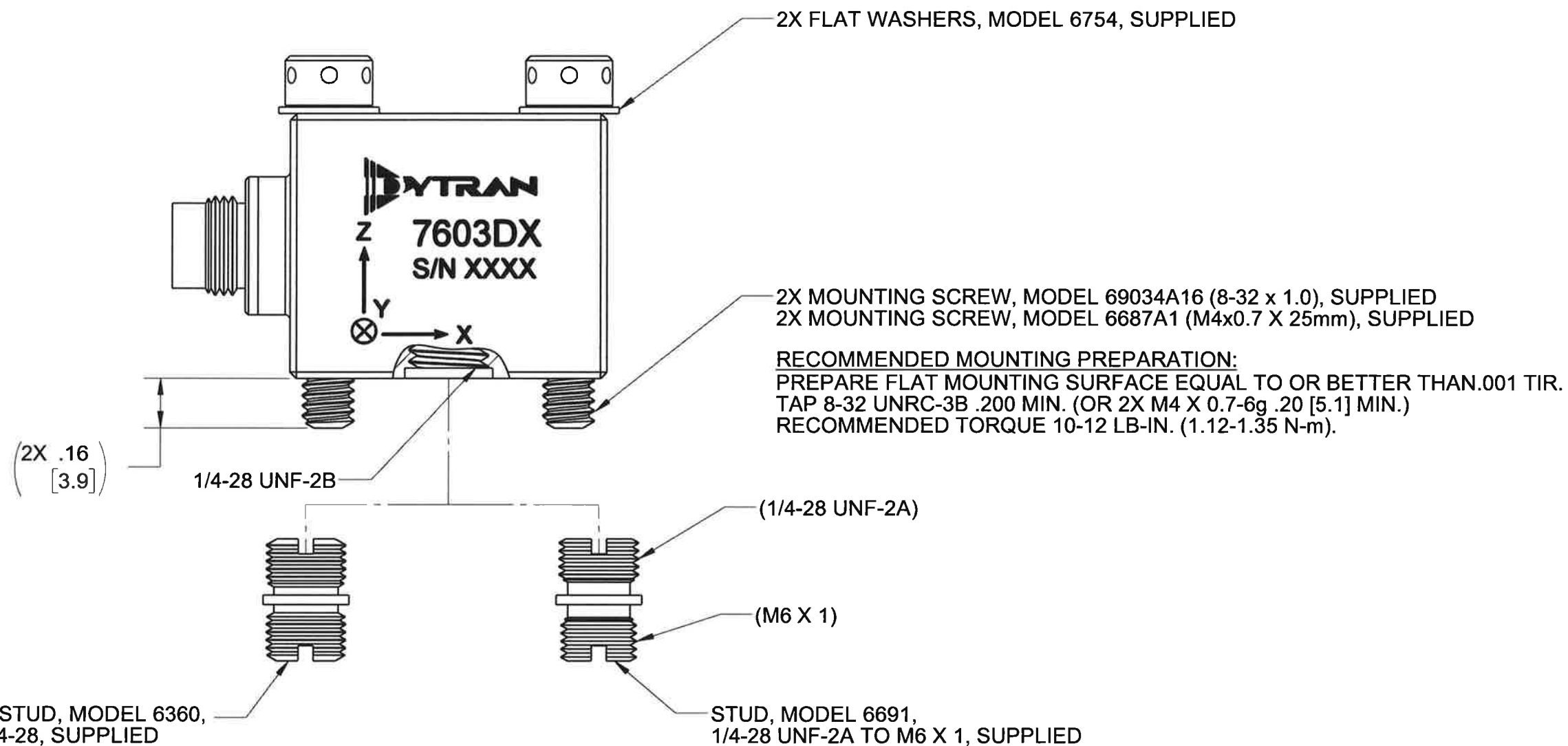
DECIMALS			METRIC			ANGLES		
.XX ±.03	.X ±.08		.XXX ±.010	.XX ±0.25		±1°		
APPROVALS			DATE					
ORIG	NDC		08/03/17					
CHK	LN		08/16/17					
APP	AS		08/16/17					
DO NOT SCALE DRAWING			THIRD ANGLE PROJECTION USA					



TITLE: OUTLINE/INSTALLATION DWG,
TRIAxIAL DC ACCELEROMETER,
7603D SERIES

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-7603D	B
SCALE: 1:1		SHEET 1 OF 2	

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RECOMMENDED MOUNTING PREPARATION: MODEL 6366
PREPARE MOUNTING SURFACE, $\phi 1.25$ [31.2] MIN, FLAT TO .001 TIR.
TAP 1/4-28 UNF-2B ∇ .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.


RECOMMENDED MOUNTING PREPARATION: MODEL 6691
PREPARE MOUNTING SURFACE, $\phi 1.25$ [31.2] MIN, FLAT TO .001 TIR.
TAP M6 X 1 ∇ .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.



TITLE: **OUTLINE/INSTALLATION DWG,
TRIAxIAL DC ACCELEROMETER,
7603D SERIES**

SIZE B	CAGE CODE 2W033	DWG NO 127-7603D	REV B
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SCALE: 2:1	SHEET 2 OF 2
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Model Number 7603D7		PERFORMANCE SPECIFICATION				DOC NO PS7603D7	
		TRIAXIAL VARIABLE CAPACITANCE ACCELEROMETER				REV E, ECN 14848, 02/05/19	
		<ul style="list-style-type: none">• VARIABLE CAPACITANCE TECHNOLOGY• DIFFERENTIAL MODE• HERMETICALLY SEALED• DC RESPONSE					
		ENGLISH		SI			
Type							
PHYSICAL							
Weight, Max		1.3 oz		38 grams			
Connector		9-pin, 5/16-32 UNEF-2A		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 (±5%)		0 - 1500 Hz		0 - 1500 Hz			
Frequency Response (±3dB)		0 - 3000 Hz		0 - 3000 Hz			
Resonant Frequency		>3000 Hz		>3000 Hz			
Sensitivity Differential, ±5% [1]		2.5 mV/g		0.25 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]		111 (ppm of span)/°F		200 (ppm of span)/°C			
Bias Calibration Error, Max		0.5 % of span		0.5 % of span			
Operating Temperature Range		-67 to +257 °F		-55 to +125 °C			
Seal		Hermetic		Hermetic			
ELECTRICAL							
Output Common Mode Voltage, ± VDC		[4]		[4]			
Output Impedance,Nom		1225 Ω		1225 Ω			
Operating Voltage [6]		±3 to ±11 VDC		±3 to ±11 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, ±3dB (Hz)	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms)	Noise Differential (μg/√Hz)
7603D1	±2	0-400	250	2000	7
7603D2	±5	0-500	100	2000	12
7603D3	±10	0-1000	50	5000	18
7603D4	±25	0-1400	20	5000	25
7603D5	±50	0-2000	10	5000	50
7603D6	±100	0-2500	5	5000	100
7603D8	±400	0-4000	1.25	5000	400

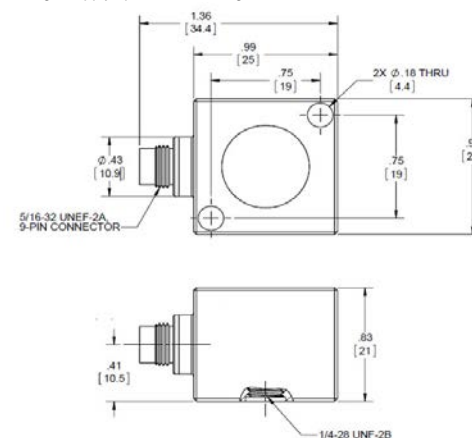
Refer to the performance specifications of the products in this family for detailed description.

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
- 4) Mounting screws, Model 69034A16, 8-32 x 1.0, Qty. 2
- 5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2
- 6) Flat washers, Model 6754, Qty. 2

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] Bias voltage equal to (+v - (-v)) / 2
- [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.
- [6] +6.0 to +22.0 VDC in single supply operation with V- grounded.



Units on the line drawing are in inches. Refer to 127-7603D for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.700.7880 www.dytran.com
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