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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

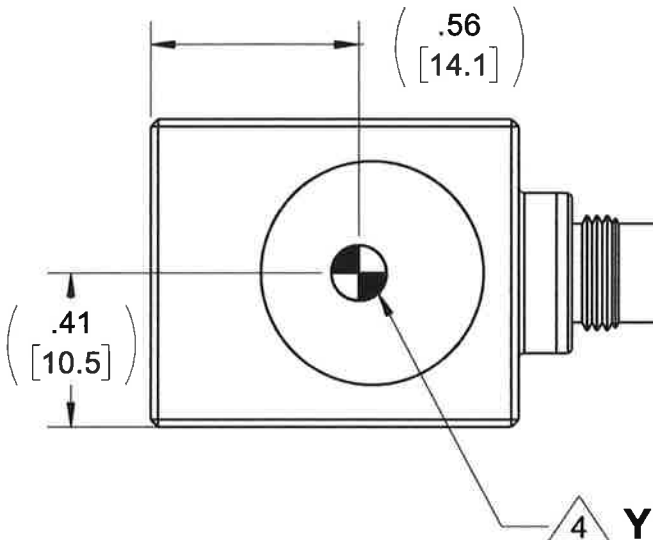
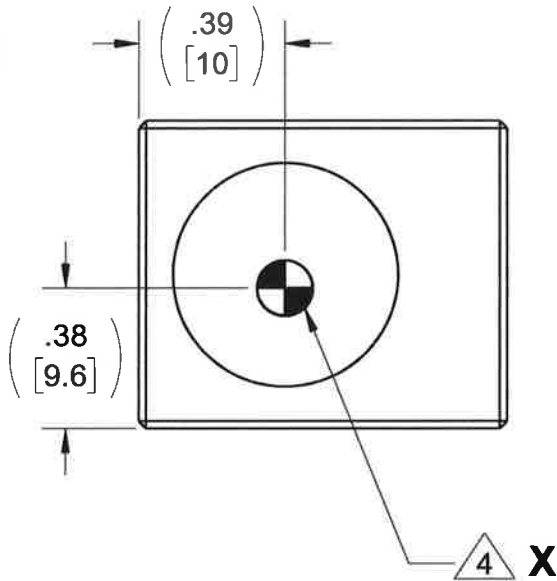
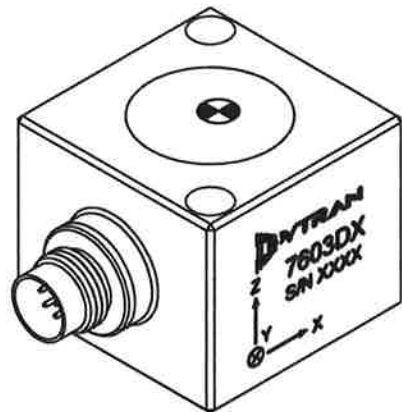
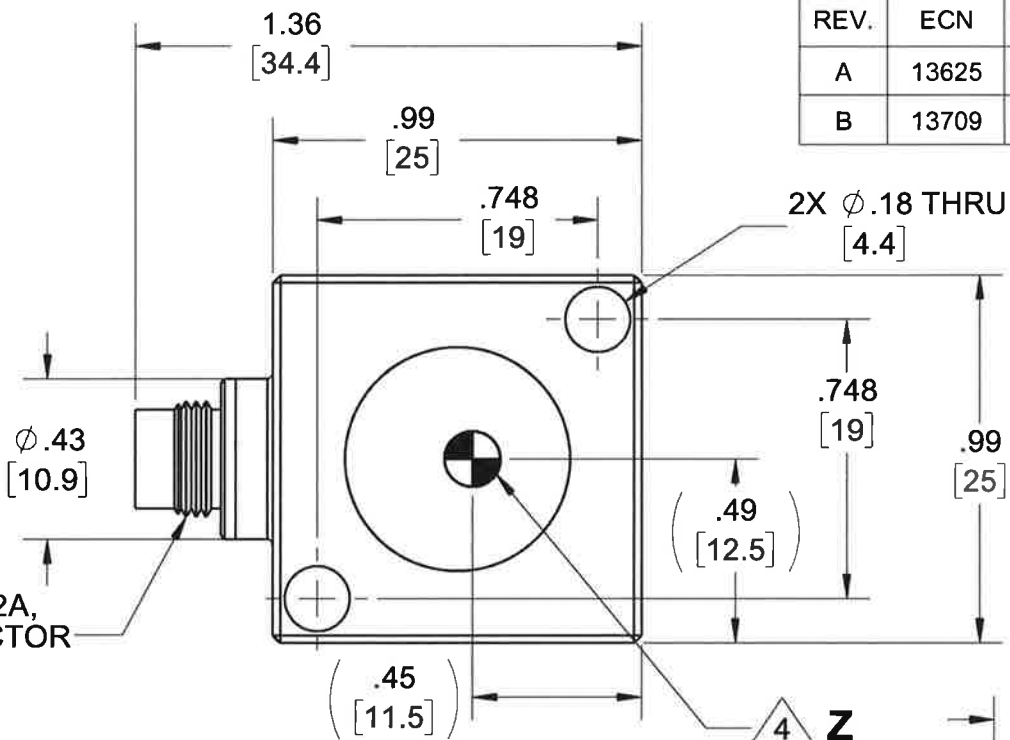
D

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 ±1°
.XX ±.03	.X ±0.8	.XXX ±.010	.XX ±0.25	
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		

DYTRAN
INSTRUMENTS, INC.
Chatsworth, CA

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: 1:1 SHEET 1 OF 2

4

3

DWG NO

127-7603D

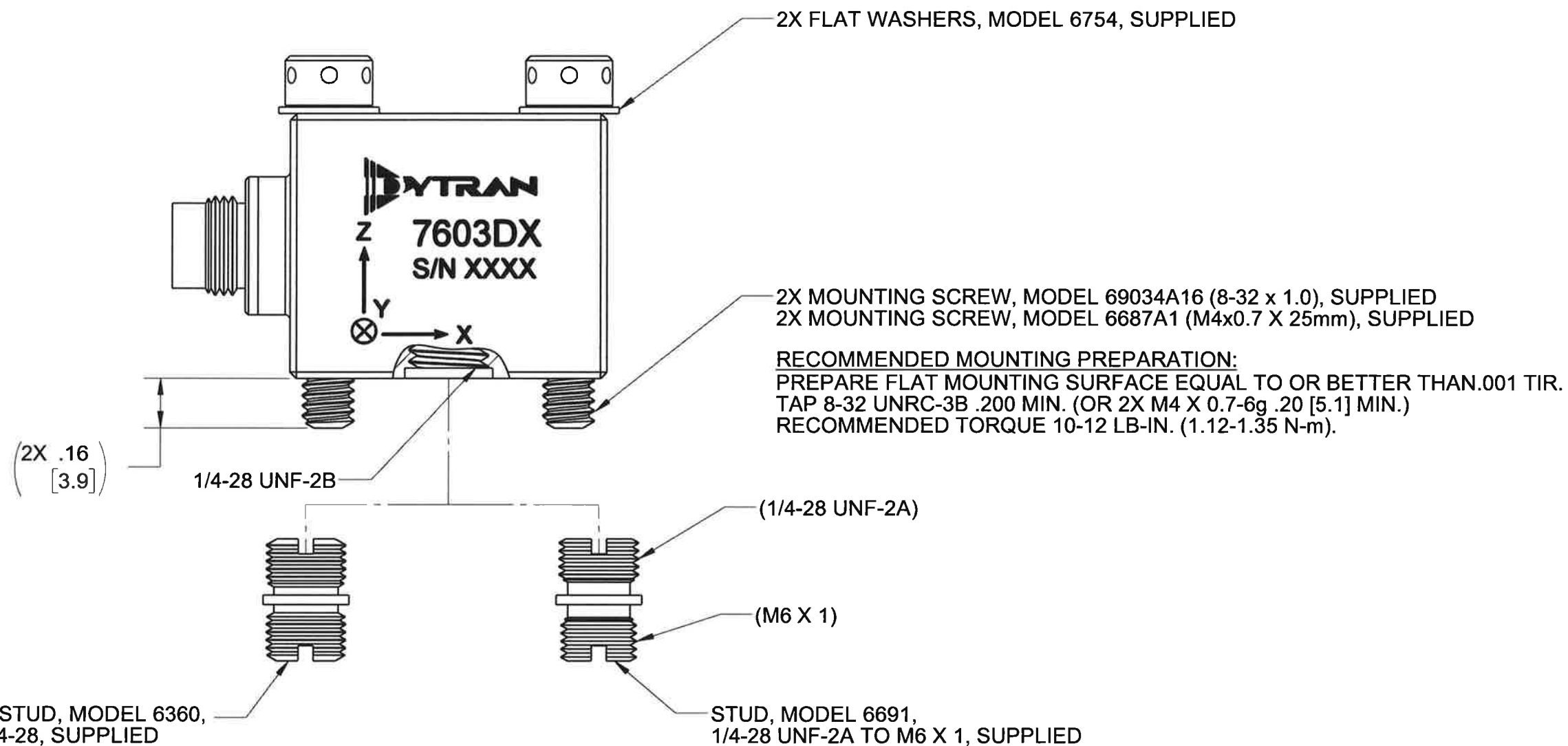
SH 2

REV B

2

1

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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,
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SIZE B	CAGE CODE 2W033	DWG NO 127-7603D	REV B
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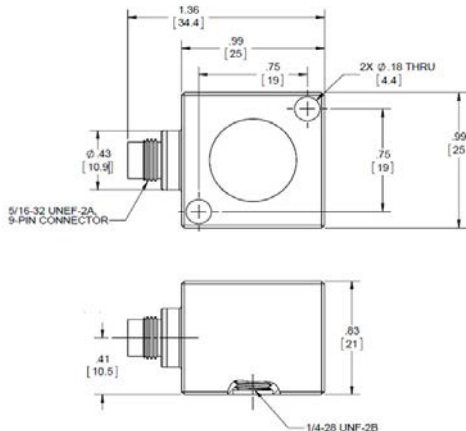
SCALE: 2:1	SHEET 2 OF 2
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4

3

2

1

Model Number 7603D8		PERFORMANCE SPECIFICATION				DOC NO PS7603D8	
		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			
PHYSICAL							
Weight, Max	Type	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		±400	g	±3924	m/s ²		
Frequency Response (±5%)		0 - 1600	Hz	0 - 1600	Hz		
Frequency Response (±3dB)		0 - 4000	Hz	0 - 4000	Hz		
Resonant Frequency		>3000	Hz	>3000	Hz		
Sensitivity Differential, ±5% [1]		1.25	mV/g	0.127	mV/m/s ²		
Output Noise, Differential ,Typ		400	μ g rms/√ Hz	3,924	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)	
		7603D1		±2		0-400	
		7603D2		±5		0-500	
		7603D3		±10		0-1000	
		7603D4		±25		0-1400	
		7603D5		±50		0-2000	
		7603D6		±100		0-2500	
		7603D7		±200		0-3000	
						Sensitivity Differential, ±5% (mV/g)	
						Max.Shock (0.1ms)	
						Noise Differential (μg/√Hz)	
						7	
						12	
						18	
						25	
						50	
						100	
						200	
		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.					
		[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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