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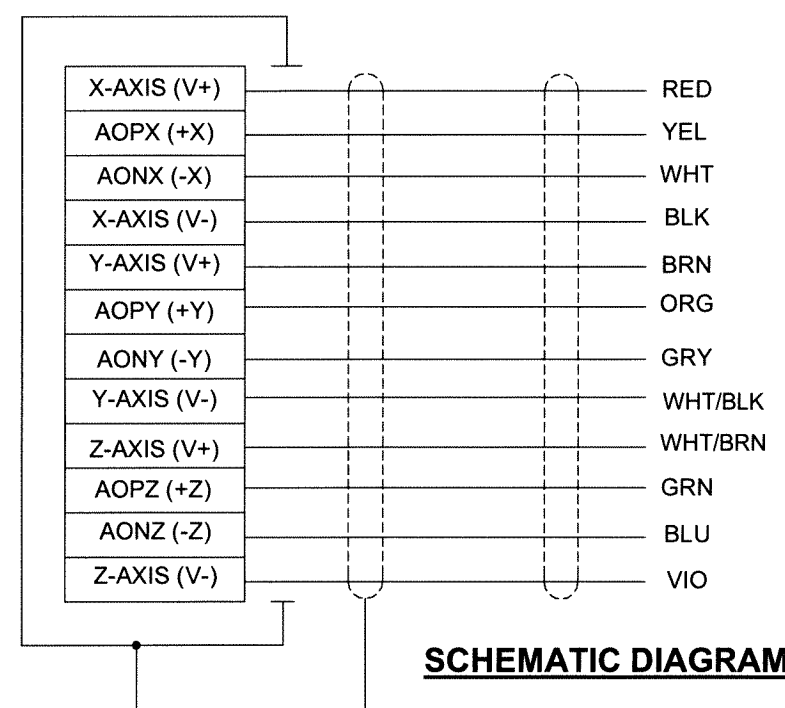
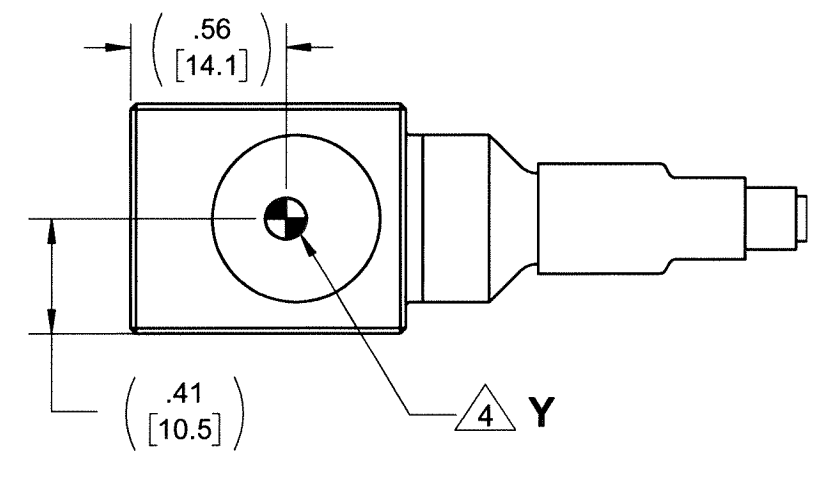
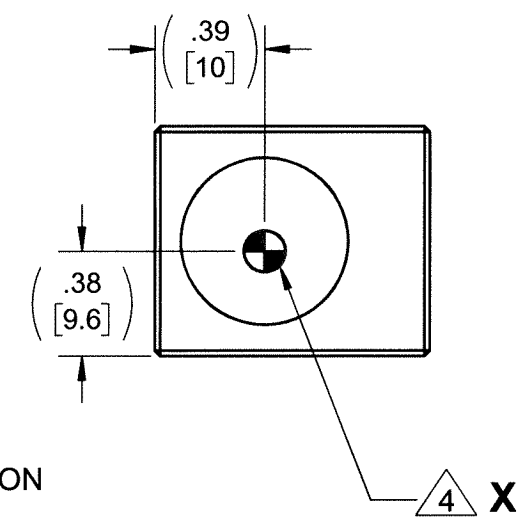
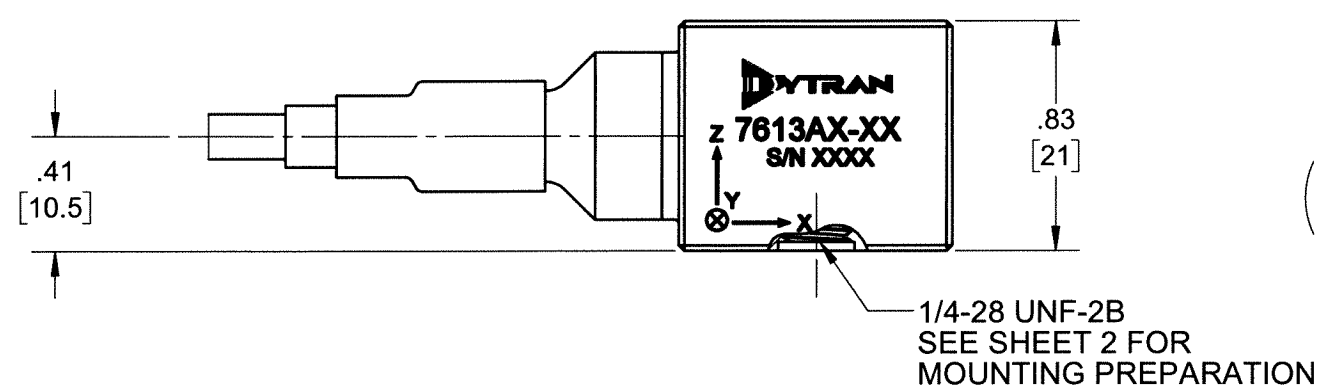
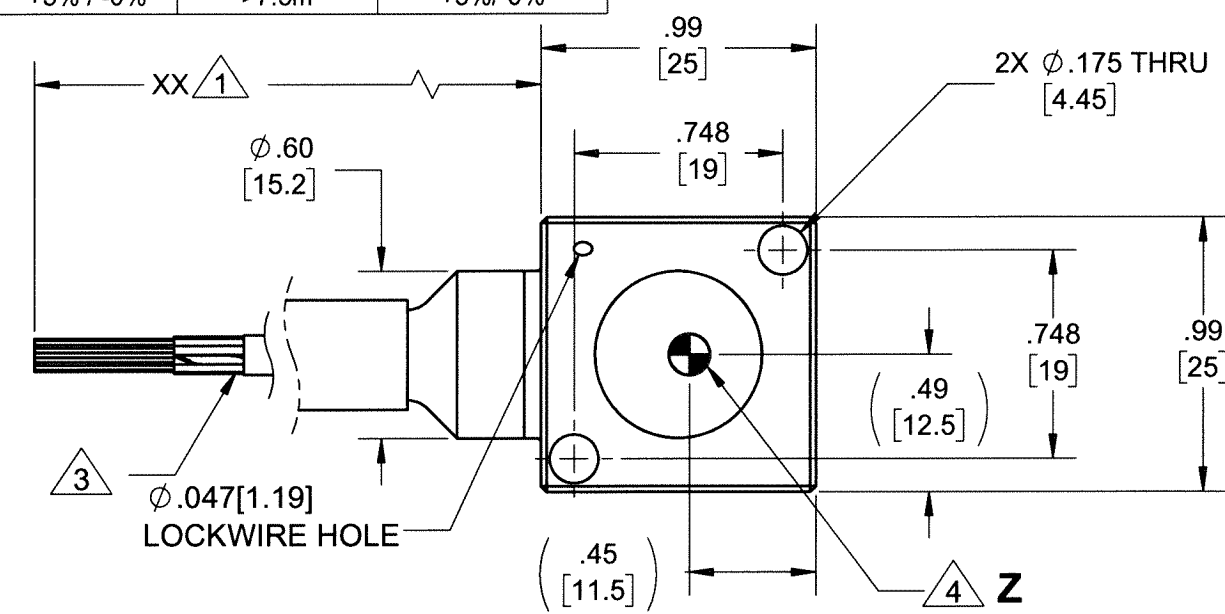
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DWG NO 127-7613AX-XX SH 1 REV A

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1 CABLE LENGTH TOLERANCE			
ENGLISH		[METRIC]	
≤1FT	+1/-0 IN	≤0.3m	+25mm -0mm
>1 FT - 5 FT	+2/-0 IN	.0.3 m-1.5m	+50mm -0mm
> 5 FT - 10 FT	+4/-0 IN	>1.5m-3m	+100mm -0mm
>10 FT - 25FT	+6 / -0 IN	>3m-7.5m	+150mm -0mm
>25 FT	+5% / -0%	>7.5m	+5%/-0%

MODEL	INPUT RANGE
7613A1-XX	±2g
7613A2-XX	±5g
7613A3-XX	±10g
7613A4-XX	±25g
7613A5-XX	±50g
7613A6-XX	±100g
7613A7-XX	±200g
7613A8-XX	±400g

REVISIONS					
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	14343	INITIAL RELEASE. SAME AS REV X4.	KG 07/12/18	LS	AS



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 SEE SHEET 2 TABLE FOR CABLE SPECIFICATIONS.
2. MATERIAL: TITANIUM ALLOY. WEIGHT: 45 GRAMS MAX, LESS CABLE.
- 1 PART NUMBER 7613AX-XX. "XX" DENOTES LENGTH IN FEET. SEE TABLE FOR LENGTH TOLERANCE
- 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 ± 0.8	±1°
.XXX ±.010	.XX ±0.25	

APPROVALS		DATE
ORIG	LN	09/13/17
CHK	LS	8/1/18
APP	AS	8/14/19

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION  
USA

**DYTRAN**  
INSTRUMENTS, INC.  
Chatsworth, CA

**MASTER**  
ONLY IN RED

TITLE: **OUTLINE/INSTALLATION DWG,  
TRIAxIAL DC ACCELEROMETER,  
7613AX-XX SERIES**

SIZE <b>B</b>	CAGE CODE <b>2W033</b>	DWG NO <b>127-7613AX-XX</b>	REV <b>A</b>
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SCALE: 3:2

SHEET 1 OF 2

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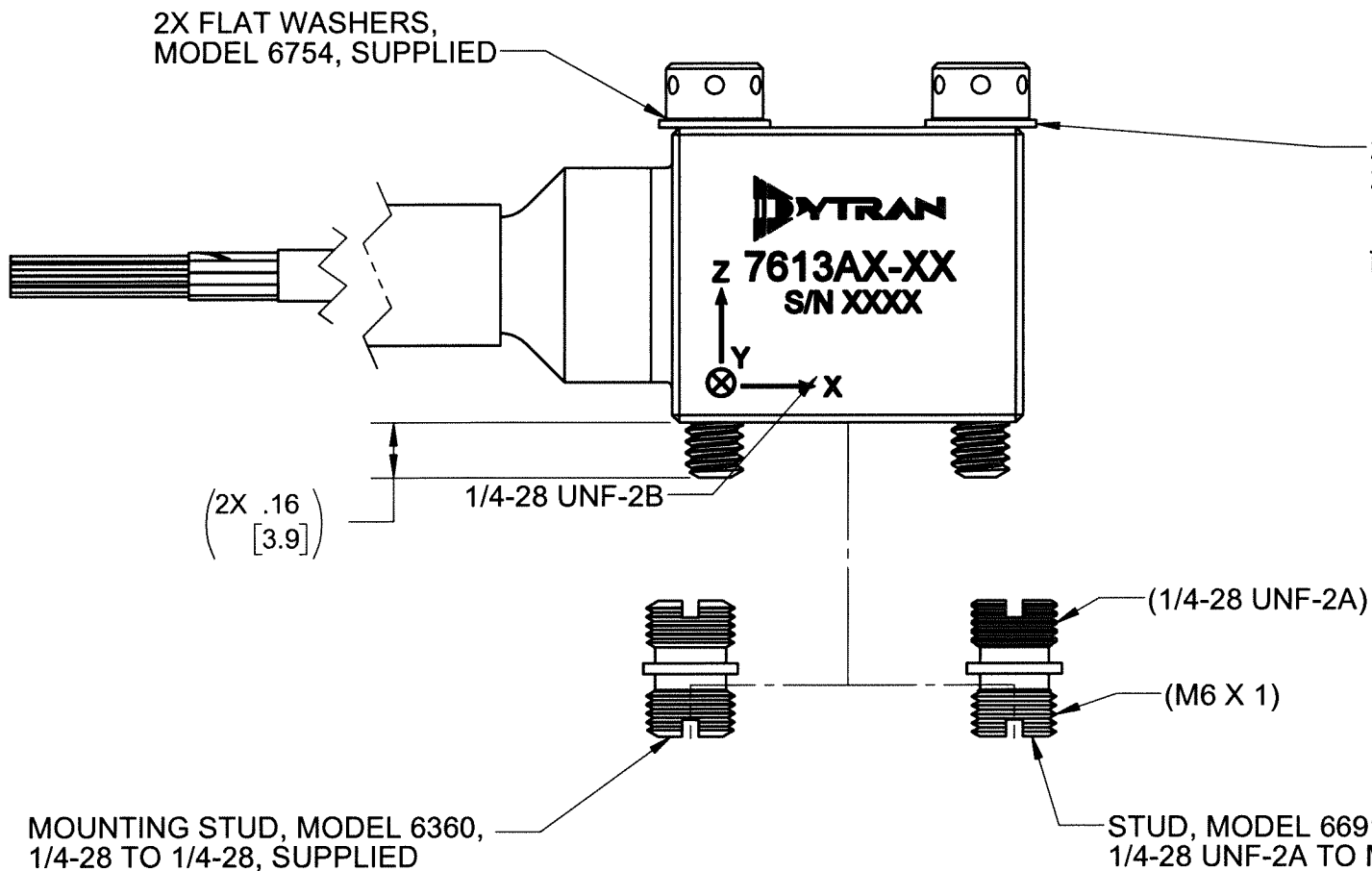
3 12 CONDUCTOR CABLE

WIRE TYPE	EXTRUDED FEP INSULATION .006 WALL THICKNESS
TEMPERATURE	200°C
VOLTAGE	600 VOLTS
WIRE DIAMETER	.032 NOMINAL
SHIELD	38 AWG SILVER PLATED COPPER BRAIDED 95% COVERAGE 7E-16C36F/30B
JACKET	EXTRUDED WHITE FEP .010 WALL THICKNESS
CABLE DIA.	Ø .171, NOM
12 CONDUCTOR AWG	26-7/34 SILVER PLATED COPPER

2X FLAT WASHERS,  
MODEL 6754, SUPPLIED

2X MOUNTING SCREW, MODEL 69034A16 (8-32 x 1.0), SUPPLIED  
2X MOUNTING SCREW, MODEL 6687A1 (M4x0.7 X 25mm), SUPPLIED

RECOMMENDED MOUNTING PREPARATION:  
PREPARE FLAT MOUNTING SURFACE EQUAL TO OR BETTER THAN  
.001 TIR. TAP 8-32 UNRC-3B .200 MIN. (OR 2X M4 X 0.7-6g .20 [5.1] MIN.)  
RECOMMENDED TORQUE 10-12 LB-IN. (1.12-1.35 N-m).



RECOMMENDED MOUNTING PREPARATION: MODEL 6360  
PREPARE MOUNTING SURFACE, Ø 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.


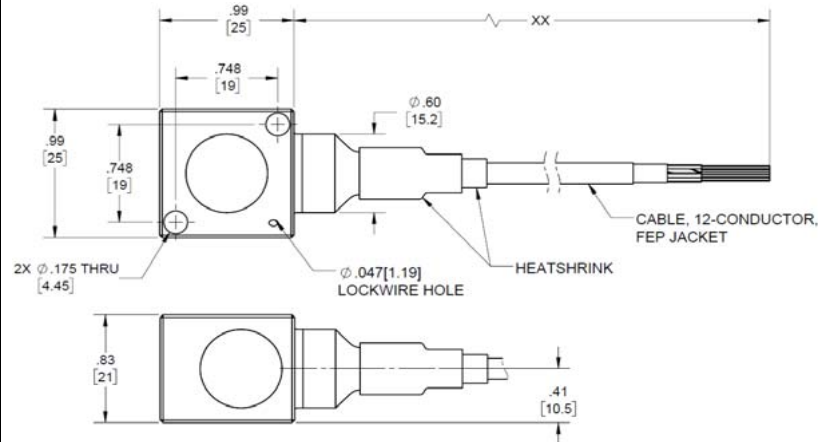
RECOMMENDED MOUNTING PREPARATION: MODEL 6691  
PREPARE MOUNTING SURFACE, Ø 1.25 [31.2] MIN, FLAT TO  
.001 TIR. TAP M6 X 1 .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.




TITLE: OUTLINE/INSTALLATION DWG,  
TRIAxIAL DC ACCELEROMETER,  
7613AX-XX SERIES

SIZE B	CAGE CODE 2W033	DWG NO 127-7613AX-XX	REV A
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SCALE: 2:1 SHEET 2 OF 2

Model Number 7613A7-XX		PERFORMANCE SPECIFICATION				DOC NO PS7613A7-XX																																																	
		TRIAxIAL VARIABLE CAPACITANCE ACCELEROMETER				REV B, ECN 14672, 11/30/18																																																	
		<ul style="list-style-type: none"><li>• VARIABLE CAPACITANCE TECHNOLOGY</li><li>• DIFFERENTIAL MODE</li><li>• HERMETICALLY SEALED</li><li>• DC RESPONSE</li></ul>																																																					
		ENGLISH		SI																																																			
PHYSICAL																																																							
Weight, Max (Less Cable)		1.6	oz	45	grams																																																		
Integral Cable [1]		Flying leads		Flying leads																																																			
Material		Titanium Alloy		Titanium Alloy																																																			
Sensing Technology		MEMS		MEMS																																																			
PERFORMANCE																																																							
Input Range		±200	g	±1962	m/s <sup>2</sup>																																																		
Frequency Response, (±5%)		0-1500	Hz	0-1500	Hz																																																		
(±3dB)		0-3000	Hz	0-3000	Hz																																																		
Resonant Frequency		>3000	Hz	>3000	Hz																																																		
Sensitivity Differential, ±5% [2]		2.5	mV/g	0.25	mV/m/s <sup>2</sup>																																																		
Output Noise, Differential ,Typ		200	µg rms/√ Hz	1,962	µm/s <sup>2</sup> /√ Hz																																																		
Non-Linearity, Max [3]		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 <sup>2</sup> peak																																																		
Bias Temperature Shift ,Max [4]		111	(ppm of span)/°F	200	(ppm of span)/°C																																																		
Bias Calibration Error, Max		4	% of span	4	% of span																																																		
Operating Temperature Range		-67 to +257	°F	-55 to +125	°C																																																		
Seal		Hermetic		Hermetic																																																			
ELECTRICAL																																																							
Output Common Mode Voltage, Typ		2.5	VDC	2.5	VDC																																																		
Output Impedance,Nom		1225	Ω	1225	Ω																																																		
Operating Voltage		±3 to ±11	VDC	±3 to ±11	VDC																																																		
Operating Current, Max. (Each Axis)		13	mA DC	13	mA DC																																																		
Power Supply Rejection Ratio		>65	dB	>65	dB																																																		
		<p><b>This family also includes:</b></p> <table><tr><th>Model</th><th>Input Range (g)</th><th>Frequency Response (Hz) +/-3dB</th><th>Sensitivity Differential, ±5% (mV/g)</th><th>Max.Shock (0.1ms)</th><th>Noise Differential (µg/√Hz)</th></tr><tr><td>7613A1-XX</td><td>±2</td><td>0-400</td><td>250</td><td>2000</td><td>7</td></tr><tr><td>7613A2-XX</td><td>±5</td><td>0-500</td><td>100</td><td>2000</td><td>12</td></tr><tr><td>7613A3-XX</td><td>±10</td><td>0-1000</td><td>50</td><td>5000</td><td>18</td></tr><tr><td>7613A4-XX</td><td>±25</td><td>0-1400</td><td>20</td><td>5000</td><td>25</td></tr><tr><td>7613A5-XX</td><td>±50</td><td>0-2000</td><td>10</td><td>5000</td><td>50</td></tr><tr><td>7613A6-XX</td><td>±100</td><td>0-2500</td><td>5</td><td>5000</td><td>100</td></tr><tr><td>7613A8-XX</td><td>±400</td><td>0-4000</td><td>1.25</td><td>5000</td><td>400</td></tr></table> <p>Refer to the performance specifications of the products in this family for detailed description.</p> <p><b>Supplied Accessories:</b></p> <ol style="list-style-type: none"><li>1) Accredited calibration certificate (ISO 17025)</li><li>2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1</li><li>3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1</li><li>4) Mounting screws, Model 69034A16, 8-32 x 1.0, Qty. 2</li><li>5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2</li><li>6) Flat washers, Model 6754, Qty. 2</li></ol> <p><b>Notes:</b></p> <ol style="list-style-type: none"><li>[1] 12-conductor, 26AWG, White FEP Jacket</li><li>[2] Single ended sensitivity is half of values shown. (Ref. at 100 Hz)</li><li>[3] -90% to +90% of Full Scale.</li><li>[4] Over the rated temperature range.</li><li>[5] In the interest of constant product improvement, we reserve the right to change specifications without notice.</li></ol>  <p>Units on the line drawing are in inches. Refer to 127-7613AX-XX for more information.</p>						Model	Input Range (g)	Frequency Response (Hz) +/-3dB	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms)	Noise Differential (µg/√Hz)	7613A1-XX	±2	0-400	250	2000	7	7613A2-XX	±5	0-500	100	2000	12	7613A3-XX	±10	0-1000	50	5000	18	7613A4-XX	±25	0-1400	20	5000	25	7613A5-XX	±50	0-2000	10	5000	50	7613A6-XX	±100	0-2500	5	5000	100	7613A8-XX	±400	0-4000	1.25	5000	400
Model	Input Range (g)	Frequency Response (Hz) +/-3dB	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms)	Noise Differential (µg/√Hz)																																																		
7613A1-XX	±2	0-400	250	2000	7																																																		
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7613A4-XX	±25	0-1400	20	5000	25																																																		
7613A5-XX	±50	0-2000	10	5000	50																																																		
7613A6-XX	±100	0-2500	5	5000	100																																																		
7613A8-XX	±400	0-4000	1.25	5000	400																																																		



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