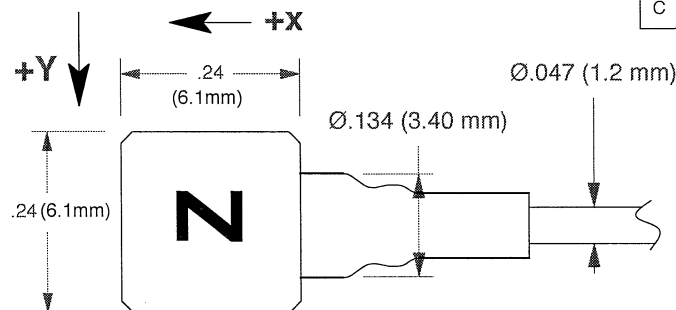
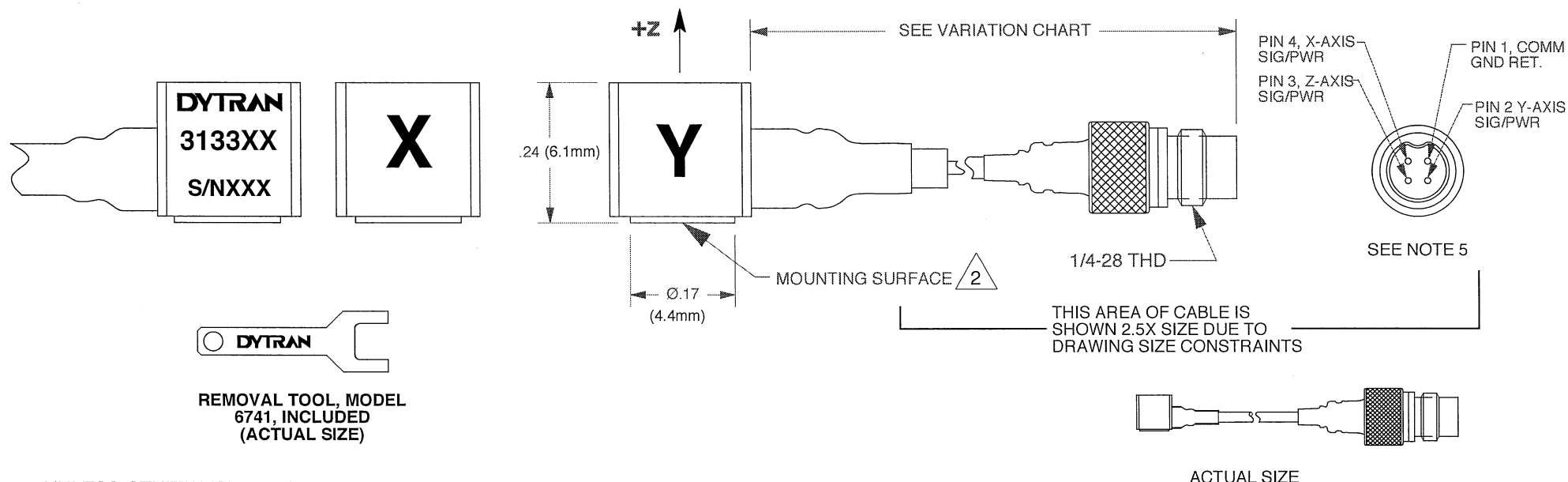


REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	5992	INITIAL RELEASE	NC/5-14-09	DV	ANS
B	6368	UPDATED DRAWING WITH SMALLER CABLE DIAMETER	NC/10-13-09	DV	ANS
C	6531	3133A1 SENSITIVITY IS: 9-14 mV/g WAS: 10-15 mV/g	RA/01-26-10	jj	DV


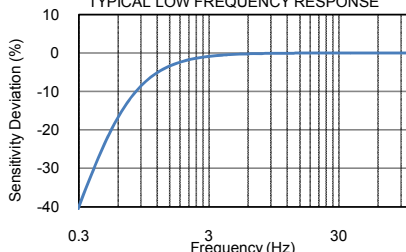
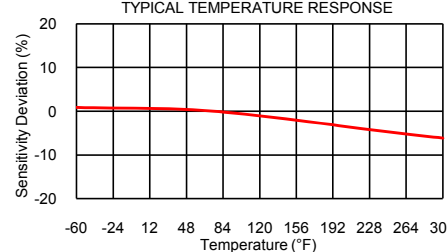
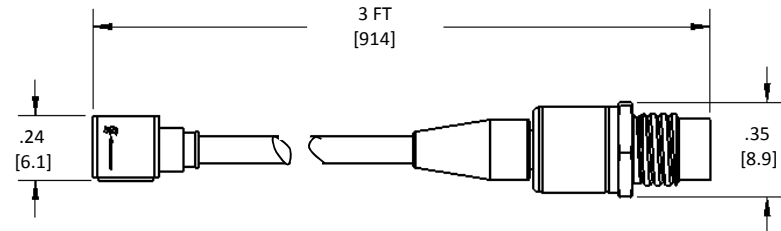



VARIATION CHART	
MODEL	SENSITIVITY
3133A1	9-14 mV/g
3133A2	2-5 mV/g
3133A3	5-10 mV/g



- UNLESS OTHERWISE INDICATED, ALL DIMENSIONS ARE IN INCHES. mm DIMENSIONS ARE INDICATED BY PARENTHESES.
- MODEL 6298 PETRO MOUNTING WAX IS INCLUDED.
- MATING CABLES ARE MODELS 6824AXX (SANOPRENE), OR 6811AXX, (TEFLON) 4-PIN CONNECTOR TO 3 BNC's. "XX" IS THE CABLE LENGTH IN FEET.
- HOUSING MATERIAL: TITANIUM.
- THE LETTERS "X", "Y", & "Z" INDICATE THE DIRECTION OF ACCELERATION OF EACH AXIS FOR POSITIVE GOING OUTPUT VOLTAGE (AS THE MARKED SURFACE ACCELERATES TOWARD THE VIEWER.) SEE DIRECTIONAL ARROWS ON FACE OF DRAWING.
- FOR BEST FREQUENCY RESPONSE, PREPARE FLAT MOUNTING SURFACE OF AT LEAST .20 DIAMETER, FLAT TO .0001 TIR. APPLY ONE DROP OF CYANOACRYLATE ADHESIVE TO MOUNT THE ACCELEROMETER.
- WEIGHT, LESS CABLE: 0.8 GRAMS.

		<b>MASTER ONLY IF IN RED</b>		CHATSWORTH, CA.	
SCALE 4X	DESIGN N.C.	DATE 11-10-08			
DRAWN N.C.	DATE 11-10-08	PART NO.	SEE CHART		
CHECKED D.V.	DATE 05-18-09	MAT'L			
APPROVED ANS	DATE 05-26-09	NEXT ASSEMBLY	USED ON	3133A1, 3133A2, 3133A3	
TITLE <b>OUTLINE/INSTALLATION DRAWING, MODEL SERIES 3133A TRIAXIAL ACCELEROMETERS</b>			DWG NO. <b>127-3133A</b>		
SHEET 1 OF 1					

Model Number	PERFORMANCE SPECIFICATION					DOC NO PS3133A2																																																																																							
3133A2	Accelerometer, Triaxial, IEPE					REV F,ECN # 7210, 11/15/10																																																																																							
	<ul style="list-style-type: none"><li>• ULTRA MINIATURE SIZE</li><li>• IDEAL LOW FREQUENCY RESPONSE</li></ul>					<b>This family also includes:</b>																																																																																							
Actual Size	<table><tr><th colspan="3">ENGLISH</th><th colspan="3">SI</th></tr><tr><td>Weight</td><td>oz</td><td>0.03</td><td>grams</td><td></td><td>0.8</td></tr><tr><td rowspan="2">Size</td><td>Width</td><td>inch</td><td>0.24</td><td>mm</td><td>6.1</td></tr><tr><td>Height</td><td>inch</td><td>0.24</td><td>mm</td><td>6.1</td></tr><tr><td>Mounting</td><td></td><td></td><td>Adhesive</td><td></td><td>Adhesive</td></tr><tr><td rowspan="2">Integral Cable</td><td>Length</td><td>ft</td><td>3</td><td>mm</td><td>914</td></tr><tr><td>Type</td><td></td><td>TFE</td><td></td><td>TFE</td></tr><tr><td>Connector</td><td>Type</td><td></td><td>4-pin</td><td></td><td>4-pin</td></tr><tr><td>Housing</td><td>Material</td><td></td><td>Titanium</td><td></td><td>Titanium</td></tr><tr><td rowspan="2">Sensing Element</td><td>Isolation</td><td></td><td>Case Ground</td><td></td><td>Case Ground</td></tr><tr><td>Material</td><td></td><td>Quartz</td><td></td><td>Quartz</td></tr><tr><td></td><td>Mode</td><td></td><td>Shear</td><td></td><td>Shear</td></tr></table>					ENGLISH			SI			Weight	oz	0.03	grams		0.8	Size	Width	inch	0.24	mm	6.1	Height	inch	0.24	mm	6.1	Mounting			Adhesive		Adhesive	Integral Cable	Length	ft	3	mm	914	Type		TFE		TFE	Connector	Type		4-pin		4-pin	Housing	Material		Titanium		Titanium	Sensing Element	Isolation		Case Ground		Case Ground	Material		Quartz		Quartz		Mode		Shear		Shear	<table><tr><th>Model</th><th>Sensitivity (mV/g)</th><th>Range (Gpeak)</th><th>Resolution (Grms)</th><th>Oper. Temp(°F)</th><th>TC</th></tr><tr><td>3133A1</td><td>10</td><td>500</td><td>0.02</td><td>-60 to 250</td><td>1.1 to 1.5</td></tr><tr><td>3133A3</td><td>5</td><td>1000</td><td>0.06</td><td>-60 to 250</td><td>1.1 to 1.5</td></tr></table>	Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC	3133A1	10	500	0.02	-60 to 250	1.1 to 1.5	3133A3	5	1000	0.06	-60 to 250	1.1 to 1.5
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Sensitivity [1], [2], ± 25%		mV/g	2	mV/m/s^2	0.20																																																																																								
Acceleration Range		Gpeak	2500	m/s^2 peak	24525																																																																																								
Frequency Range Axis 1 & 2, ±10%		Hz	0.7 to 7000	Hz	0.7 to 7000																																																																																								
Frequency Range Axis 3, ±10%		Hz	0.7 to 10,000	Hz	0.7 to 10,000																																																																																								
Resonance Frequency		kHz	>35	kHz	>35																																																																																								
Transverse Sensitivity		%	6	%	6																																																																																								
Bias Voltage		VDC	+7 to +9	VDC	+7 to +9																																																																																								
Output Impedance		Ω	100	Ω	100																																																																																								
Noise floor		Grms	0.15	m/s^2 rms	1.47																																																																																								
Discharge Time Constant		seconds	0.3 to 0.5	seconds	0.3 to 0.5																																																																																								
Spectral Noise	1Hz	μGrms/sqr(Hz)	4000	μm/s^2 rms/sqr(Hz)	39240																																																																																								
	10Hz	μGrms/sqr(Hz)	2000	μm/s^2 rms/sqr(Hz)	19620																																																																																								
	100Hz	μGrms/sqr(Hz)	500	μm/s^2 rms/sqr(Hz)	4905																																																																																								
	1000Hz	μGrms/sqr(Hz)	200	μm/s^2 rms/sqr(Hz)	1962																																																																																								
	10000Hz	μGrms/sqr(Hz)	90	μm/s^2 rms/sqr(Hz)	883																																																																																								
<b>ENVIRONMENTAL</b>																																																																																													
Shock		Gpeak	3000	m/s^2	29430																																																																																								
Vibration		Gpeak	2500	m/s^2	24525																																																																																								
Operating Temperature		°F	-60 to +300	°C	-51 to 148																																																																																								
Seal			Epoxy		Epoxy																																																																																								
Magnetic Sensitivity at 100 Gauss		g/Gauss	0.00004	m/s^2/Gauss	0.00039																																																																																								
Base Strain Sensitivity		g/με	0.15	m/s^2/με	1.47																																																																																								
<b>POWER</b>																																																																																													
Compliance Voltage		VDC	+18 to +30	VDC	+18 to +30																																																																																								
Current Range		mA	2 to 20	mA	2 to 20																																																																																								
<p>Please, 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) Model 6298 small petro wax</li><li>2) Model 6741 removal tool</li><li>3) Accredited calibration certificate (ISO 17025)</li></ol> <p><b>Notes:</b></p> <ol style="list-style-type: none"><li>[1] Measured at 100 Hz, 10 Grms</li><li>[2] Actual sensitivity is given on a calibration certificate</li><li>[3] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier</li></ol> <div><div><p>TYPICAL LOW FREQUENCY RESPONSE</p></div><div><p>TYPICAL TEMPERATURE RESPONSE</p></div><div></div></div> <p>Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3133A for more information.</p>																																																																																													
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