



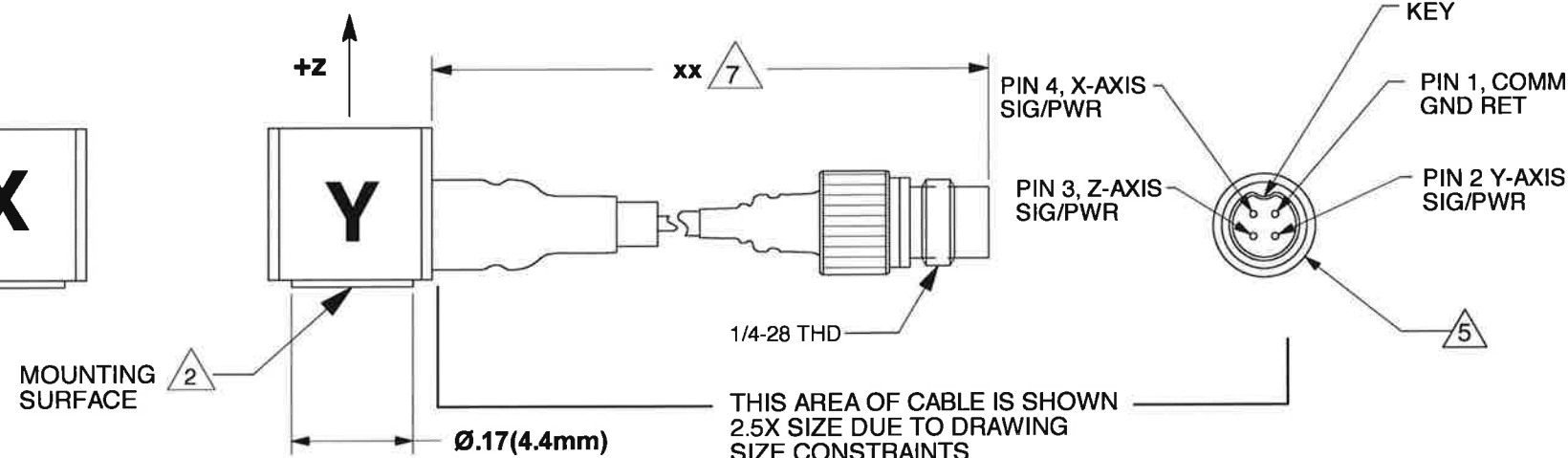
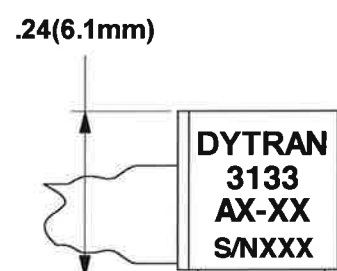
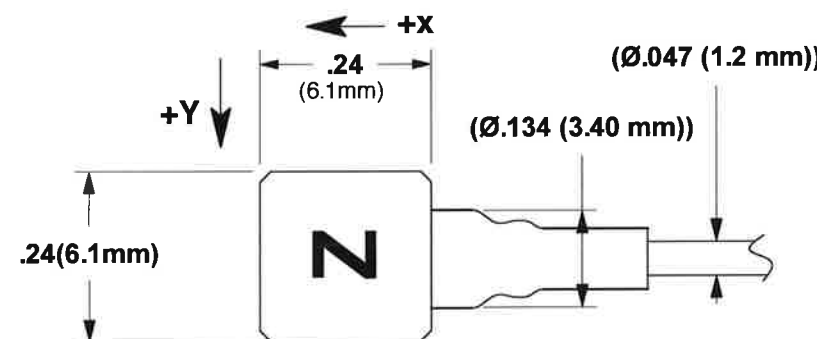
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
H	12409	UPDATED VIEW OF CONNECTOR (KNURLING)	JS 12/15/15	LA	LN
J	12992	3133A5 SENSITIVITY WAS: 0.25 Mv/g (+/-25%)	JS 10/07/16	LA	LN
K	13061	REVISED "DYTRAN" TO REFLECT MARKING, AS SHIPPED	JS 10/07/16	RA	LN
L	13832	SEE ECN	RA 11/13/17	Sp	RT

<div style="text-align: center;"> PROPRIETARY AND CONFIDENTIAL </div>			
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<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> 7 </div> CABLE TOLERANCES </div>			
<div style="text-align: center;"> ENGLISH </div>		<div style="text-align: center;"> [METRIC] </div>	
≥ 1FT	+1/-0 IN	≥ 0.3 m	+25 mm -0 mm
>1 FT - 5 FT	+2/-0 IN	> 0.3 m- 1.5 m	+50 mm -0 mm
>5 FT - 10 FT	+4/-0 IN	>1.5 m -3 m	+100 mm -0 mm
>10 FT - 25 FT	+6/-0 IN	> 3 m -7.5 m	+150 mm -0 mm
>25 FT	+5%/-0%	> 7.5 m	+5%/-0%

 4-WIRE CABLE	
WIRE	36 AWG, 7/44 SILVER PLATED COPPER
WIRE INSULATION	PFA, .006 NOMINAL WALL
SHIELD	44 AWG DILVER PLATED SOFT COPPER BRAID
JACKET	PFA, WHITE, .006 INCH NOMINAL WALL
DIAMETER	Ø.045 NOMINAL
TEMP	-196°C TO +200° C
VOLTAGE	150 VOLTS AC



VARIATION CHART		
MODEL	SENSITIVITY	LENGTH 
3133A1	10 mV/g ($\pm 15\%$)	36 IN
3133A2	2 mV/g ($\pm 25\%$)	36 IN
3133A3	5 mV/g ($\pm 20\%$)	36 IN
3133A4	0.7 mV/g ($\pm 25\%$)	36 IN
3133A5	0.2 mV/g ($\pm 25\%$)	36 IN
3133A1-05	10 mV/g ($\pm 15\%$)	5 FT
3133A2-05	2 mV/g ($\pm 25\%$)	5 FT
3133A3-05	5 mV/g ($\pm 20\%$)	5 FT



7 LENGTH OF CABLE ASSEMBLY IS DESIGNATED BY XX
IN NUMBER (3133AX-XX). XX EQUALS CABLE LENGTH (SEE CHART)
(I.E. 3133A1-05 IS A 5 FT LENGTH CABLE ASSEMBLY)

6. MODEL 6298 PETRO MOUNTING WAX IS INCLUDED.

5 MATING CABLES ARE MODELS 6824AXX (SANTOPRENE), OR 6811AXX, (TEFLON) 4-PIN CONNECTOR TO 3 BNC's. "XX" IS THE CABLE LENGTH IN FEET. EX. :CABLE MOD. 6811A3 (3 FT. NOM.).

4. HOUSING MATERIAL: TITANIUM.

3. 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.

2. 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 ACCELFROMETER

1. WEIGHT, LESS CABLE: 0.8 GRAMS.

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.

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

DECIMALS	METRIC
XX ± .03	X ± 0.8
YYY ± .010	XX ± 0.25


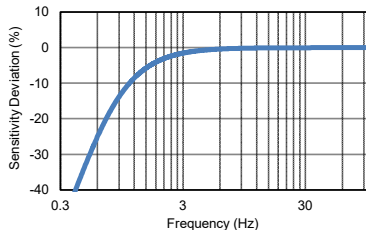
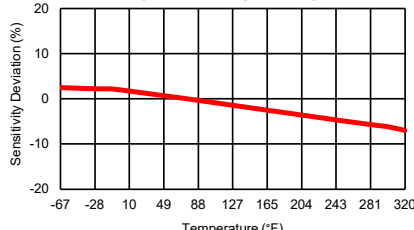
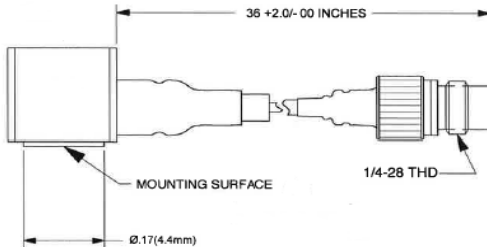
APPROVALS		DATE
DRAWN	N.C.	11-10-08
DESIGN	N.C.	11-10-08
CHK	D.V.	05-18-09
APP	ANS	05-26-09


DO NOT SCALE DRAWING

**TITLE:**

OUTLINE/INSTALLATION DRAWING, MODEL SERIES 3133A TRIAXIAL ACCELEROMETERS

SIZE B	CAGE CODE 2W033	DWG NO 127-3133A	REV L
SCALE: NONE		ASHLAR GRAPHITE	SHEET 1 OF 1

Model Number		PERFORMANCE SPECIFICATION				DOC NO PS3133A2																															
3133A2		Accelerometer, Triaxial, IEPE				REV U, ECN 16236, 06/23/21																															
		<ul style="list-style-type: none">• ULTRA MINIATURE SIZE• IDEAL LOW FREQUENCY RESPONSE																																			
		ENGLISH		SI																																	
PHYSICAL																																					
Weight	oz	0.03	grams	0.8																																	
Size	Width	0.24	mm	6.1																																	
	Height	0.24	mm	6.1																																	
Mounting		Adhesive		Adhesive																																	
Integral Cable	Length	3	mm	914																																	
	Type	TFE		TFE																																	
Connector	Type	4-pin		4-pin																																	
Housing	Material	Titanium		Titanium																																	
	Isolation	Case Ground		Case Ground																																	
Sensing Element	Material	Quartz		Quartz																																	
	Mode	Shear		Shear																																	
PERFORMANCE																																					
Sensitivity [2], [3], ± 25%	mV/g	2	mV / m/s ²	0.20																																	
Acceleration Range	g pk	2500	m/s ² pk	24525																																	
Frequency Range, ±5%	Hz	1.62 to 6000	Hz	1.62 to 6000																																	
Frequency Range, ±10%	Hz	1.10 to 10000	Hz	1.10 to 10000																																	
Linearity [5]	% F.S.	± 1	% F.S.	± 1																																	
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	g RMS	0.15	m/s ² RMS	1.47																																	
Discharge Time Constant	seconds	0.3 to 2.5	seconds	0.3 to 2.5																																	
Spectral Noise	1Hz	µg RMS/√(Hz)	µm/s ² RMS/√(Hz)	39240																																	
	10Hz	µg RMS/√(Hz)	µm/s ² RMS/√(Hz)	19620																																	
	100Hz	µg RMS/√(Hz)	µm/s ² RMS/√(Hz)	4905																																	
	1000Hz	µg RMS/√(Hz)	µm/s ² RMS/√(Hz)	1962																																	
	10000Hz	µg RMS/√(Hz)	µm/s ² RMS/√(Hz)	883																																	
ENVIRONMENTAL																																					
Shock	g pk	3000	m/s ² pk	29430																																	
Operating Temperature	°F	-67 to +320	°C	-55 to +160																																	
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																																	
POWER																																					
Compliance Voltage	VDC	+18 to +30	VDC	+18 to +30																																	
Current Range	mA	2 to 20	mA	2 to 20																																	
		<p>This family also includes:</p> <table><tr><th>Model</th><th>Sensitivity (mV/g)</th><th>Range (g pk)</th><th>Resolution (g RMS)</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>-67 to 320</td><td>1.0 to 2.5</td></tr><tr><td>3133A3</td><td>5</td><td>1000</td><td>0.06</td><td>-67 to 320</td><td>1.0 to 2.5</td></tr><tr><td>3133A4</td><td>1</td><td>5000</td><td>0.015</td><td>-67 to 320</td><td>0.5 to 2.5</td></tr><tr><td>3133A5</td><td>0.2</td><td>20000</td><td>0.35</td><td>-67 to 320</td><td>0.5 to 4.0</td></tr></table> <p>Please, refer to the performance specifications of the products in this family for detailed description</p> <p>Supplied Accessories:</p> <ol style="list-style-type: none">1) Model 6298 small petro wax2) Model 6741 removal tool3) Accredited calibration certificate (ISO 17025) <p>Notes:</p> <ol style="list-style-type: none">[1] All specifications are at room temperature unless otherwise specified.[2] Measured at 100 Hz, 1 Grms[3] Actual sensitivity is given on a calibration certificate[4] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier[5] Measured using zero-based straight line method, % of F.S. or any lesser range.[6] In the interest of constant product improvement, we reserve the right to change specifications without notice <p>It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.</p> <div><p>TYPICAL LOW FREQUENCY RESPONSE</p><p>TYPICAL TEMPERATURE RESPONSE</p></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></div>						Model	Sensitivity (mV/g)	Range (g pk)	Resolution (g RMS)	Oper. Temp(°F)	TC	3133A1	10	500	0.02	-67 to 320	1.0 to 2.5	3133A3	5	1000	0.06	-67 to 320	1.0 to 2.5	3133A4	1	5000	0.015	-67 to 320	0.5 to 2.5	3133A5	0.2	20000	0.35	-67 to 320	0.5 to 4.0
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