

PROPRIETARY AND CONFIDENTIAL

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7 CABLE TOLERANCES

ENGLISH		[METRIC]	
≥ 1 FT	+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%

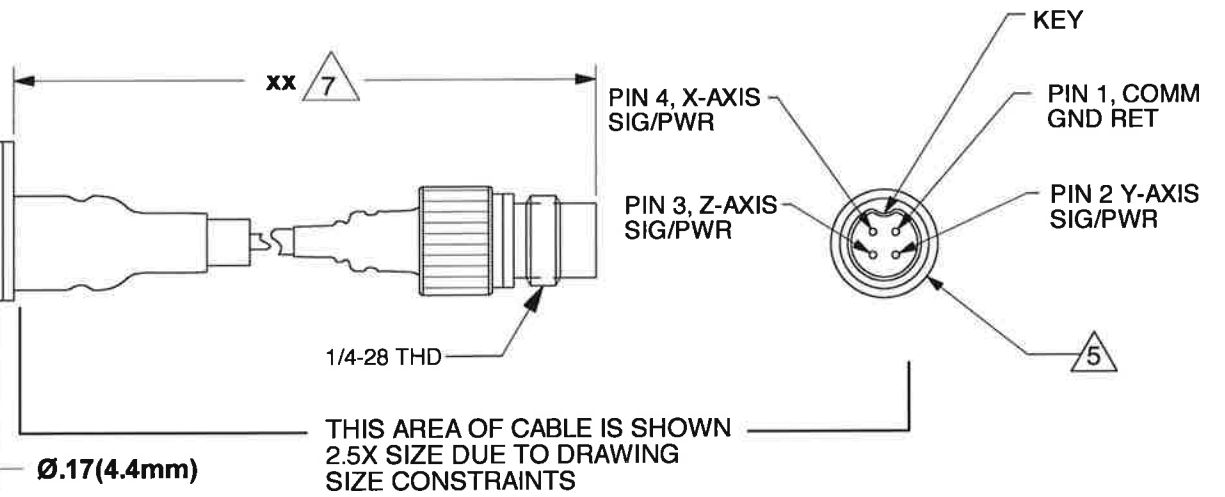
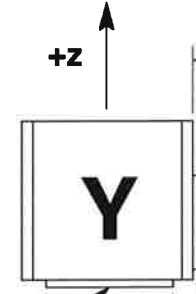
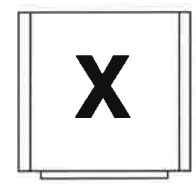
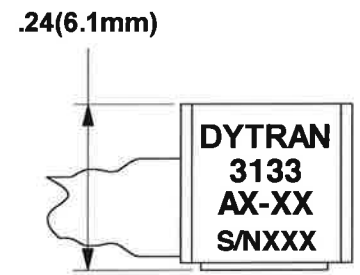
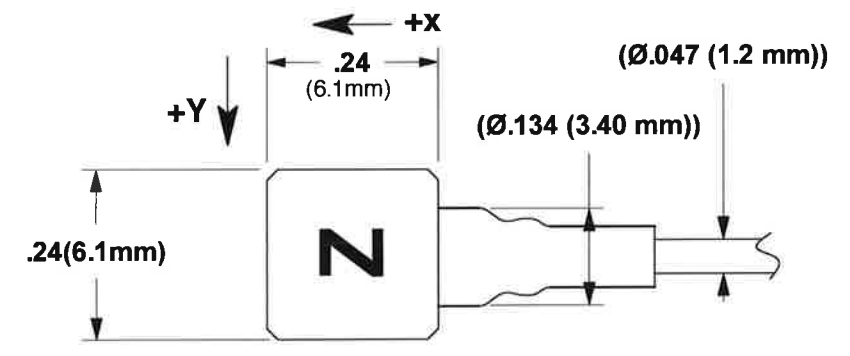
7 4-WIRE CABLE

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

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	LN

VARIATION CHART

MODEL	SENSITIVITY	LENGTH 7
3133A1	10 mV/g (±15%)	36 IN
3133A2	2 mV/g (±25%)	36 IN
3133A3	5 mV/g (±20%)	36 IN
3133A4	0.7 mV/g (±25%)	36 IN
3133A5	0.2 mV/g (±25%)	36 IN
3133A1-05	10 mV/g (±15%)	5 FT
3133A2-05	2 mV/g (±25%)	5 FT
3133A3-05	5 mV/g (±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 ACCELEROMETER.

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 RADI .005 TO .015. WELDING SYMBOLS PER AWS A2.4. ABBREVIATIONS PER MIL-STD- 12.

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

DYTRAN INSTRUMENTS, INC. CHATSWORTH, CA

MASTER ONLY IF IN RED

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 3133A1	PERFORMANCE SPECIFICATION	DOC NO PS3133A1
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	Accelerometer, Triaxial, IEPE	REV V, ECN 16769, 07/05/22
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- **ULTRA MINIATURE SIZE**
- **HIGH SENSITIVITY**
- **IDEAL LOW FREQUENCY RESPONSE**

		ENGLISH	SI
PHYSICAL	Weight	oz	grams
	Size	inch	mm
	Height	inch	mm
Mounting	Integral Cable	Adhesive	Adhesive
	Type	3	mm
Connector	Type	TFE	TFE
	Housing	4-pin	4-pin
Sensing Element	Material	Titanium	Titanium
	Isolation	Case Ground	Case Ground
	Material Mode	Ceramic	Ceramic
		Shear	Shear

		ENGLISH	SI	
PERFORMANCE	Sensitivity [2], [3], ±15%	mV/g	mV / m/s2	
	Acceleration Range	g pk	m/s2 pk	
	Frequency Range, ±5%	Hz	Hz	
	Frequency Range, ±10%	Hz	Hz	
	Linearity [5]	% F.S.	% F.S.	
	Resonance Frequency	kHz	kHz	
	Transverse Sensitivity	%	%	
	Bias Voltage	VDC	VDC	
	Output Impedance	Ω	Ω	
	Noise floor	g RMS	m/s2 RMS	
	Discharge Time Constant	seconds	seconds	
	Spectral Noise	1Hz	µg RMS/√(Hz)	µm/s2 RMS/√(Hz)
		10Hz	µg RMS/√(Hz)	µm/s2 RMS/√(Hz)
		100Hz	µg RMS/√(Hz)	µm/s2 RMS/√(Hz)
		1000Hz	µg RMS/√(Hz)	µm/s2 RMS/√(Hz)
10000Hz		µg RMS/√(Hz)	µm/s2 RMS/√(Hz)	

		ENGLISH	SI
ENVIRONMENTAL	Shock	g pk	m/s2 pk
	Operating Temperature	°F	°C
	Seal	Epoxy	Epoxy
	Magnetic Sensitivity at 100 Gauss	g/Gauss	m/s2 / Gauss
	Base Strain Sensitivity	g/µε	m/s2/µε

		ENGLISH	SI
POWER	Compliance Voltage	VDC	VDC
	Current Range	mA	mA

This family also includes:

Model	Sensitivity (mV/g)	Range (g pk)	Resolution (g RMS)	Oper. Temp (°F)	TC
3133A2	2	2500	0.15	-67 to 320	0.3 to 2.5
3133A3	5	1000	0.06	-67 to 320	1.0 to 2.5
3133A4	1	5000	0.15	-67 to 320	0.5 to 2.5
3133A5	0.2	20000	0.35	-67 to 320	0.5 to 4.0

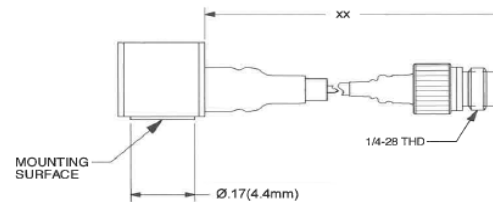
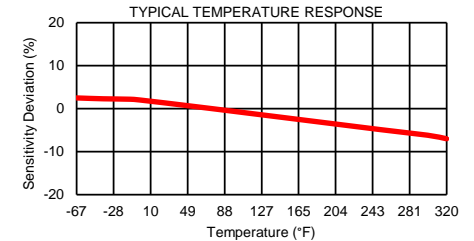
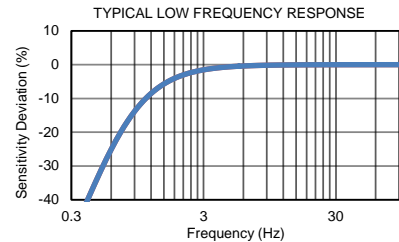
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Model 6298 small petro wax
- 2) Model 6741 removal tool
- 3) Accredited calibration certificate (ISO 17025)

Notes:

- [1] All specifications are at room temperature unless otherwise specified.
- [2] Measured at 100 Hz, 1 g RMS
- [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. 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.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3133A for more information.

