

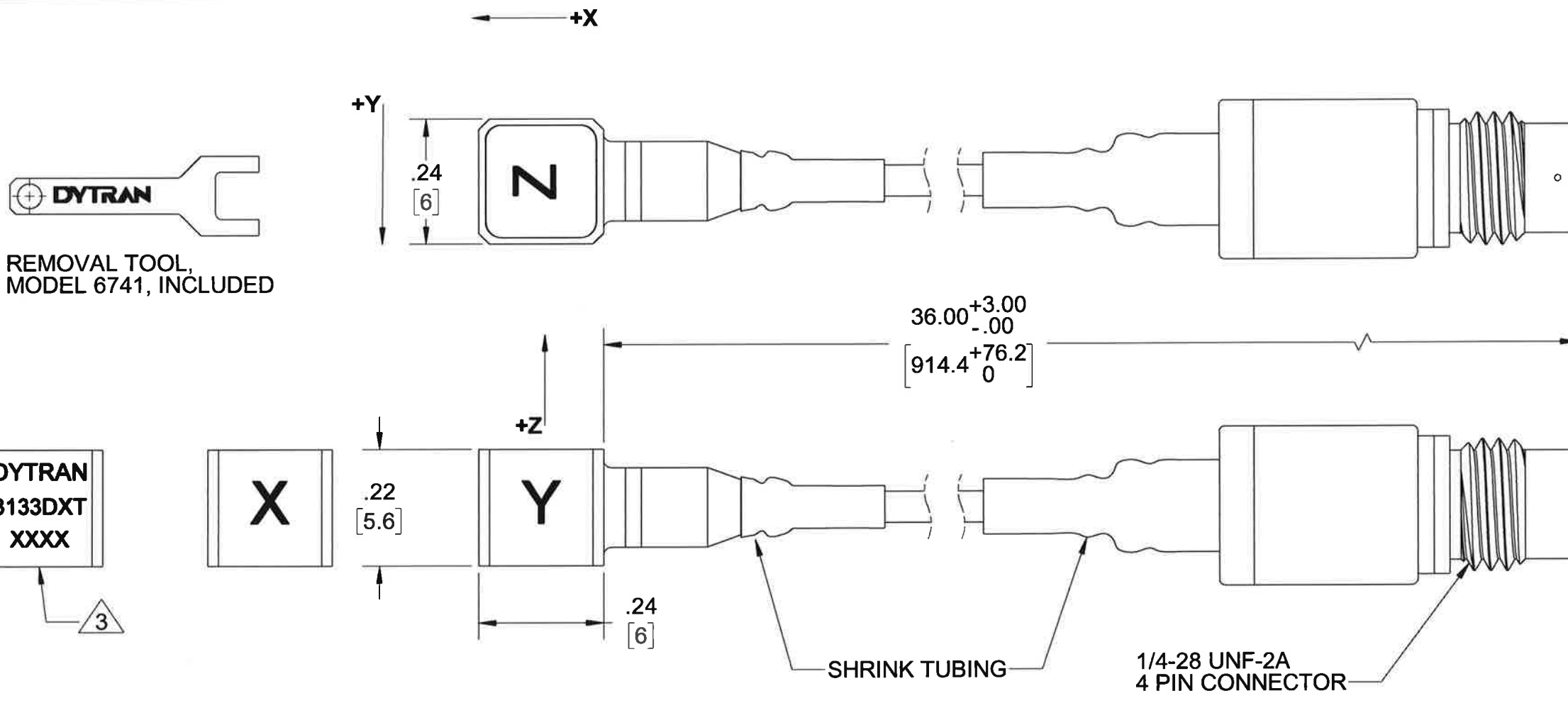
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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	13002	ZONE 4B .22 [5.6] WAS" .23 [5.8], ZONE 3B .24 [6] WAS: ϕ .18 [4.6], NOTE 3 ϕ .39 WAS: ϕ .20	JS 10/02/16	LA	LN

MODEL	SENSITIVITY
3133D1T	10 mV/g ($\pm 15\%$)
3133D2T	2 mV/g ($\pm 25\%$)
3133D3T	5 mV/g ($\pm 20\%$)
3133D4T	0.7 mV/g ($\pm 25\%$)
3133D5T	0.25 mV/g ($\pm 25\%$)



5. DYTRAN MODEL 6298 PETRO MOUNTING WAX AND MODEL 6741 REMOVAL TOOL, SUPPLIED.

4. ARROWS INDICATE DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.

3. FOR BEST FREQUENCY RESPONSE, PREPARE A FLAT MOUNTING SURFACE OF AT LEAST ϕ .39, FLAT TO .0001 TIR. APPLY ONE DROP OF CYANOACRYLATE ADHESIVE TO MOUNT THE ACCELEROMETER.

2. HOUSING MATERIAL: TITANIUM ALLOY.

1. WEIGHT: 1.3 GRAMS MAX, LESS CABLE.

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 .XX \pm .03 .XXX \pm .010 METRIC .X \pm 0.8 .XX \pm 0.25 ANGLES \pm 1°

APPROVALS		DATE
ORIG	AB	11/15/13
CHK	LN	12/22/15
APP	AS	12/23/15
DO NOT SCALE DRAWING		

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DYTRAN INSTRUMENTS, INC. Chatsworth, CA

TITLE: OUTLINE/INSTALLATION DWG, TRIAXIAL ACCEL WITH TEDS, 3133DT SERIES			
SIZE B	CAGE CODE 2W033	DWG NO 127-3133DT	REV C
SCALE: 1:1		SHEET 1 OF 1	

Model Number	PERFORMANCE SPECIFICATION			DOC NO PS3133D5T
3133D5T	Accelerometer, Triaxial, IEPE			REV E, ECN 13002, 10/05/16



- **ULTRA MINIATURE SIZE**
- **IDEAL LOW FREQUENCY RESPONSE**
- **LOW BASE STRAIN SENSITIVITY**
- **TEDS FEATURE**

	ENGLISH		SI	
PHYSICAL				
Weight	0.03	oz	0.8	grams
Mounting	Adhesive		Adhesive	
Integral Cable	Length	3	ft	914
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 [1], [2], ± 25%	0.25	mV/g	0.025	mV/m/s ²
Acceleration Range	20,000	Gpeak	196200	m/s ² peak
Frequency Range, ±5%	0.7 to 6000	Hz	0.7 to 6000	Hz
Frequency Range, ±10%	0.7 to 10000	Hz	0.7 to 10000	Hz
Linearity [4]	± 1	% F.S.	± 1	% F.S.
Resonance Frequency	>27	kHz	>27	kHz
Transverse Sensitivity	6	%	6	%
Output Impedance	100	Ω	100	Ω
Noise floor, Max.	0.50	Grms	4.91	m/s ² rms
ENVIRONMENTAL				
Maximum Shock	25,000	Gpeak	245250	m/s ²
Maximum Vibration	22,000	Gpeak	215820	m/s ²
Operating Temperature	-67 to +320	°F	-55 to 160	°C
Seal	Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss	0.0002	g/Gauss	0.002	m/s ² /Gauss
Base Strain Sensitivity	0.001	g/με	0.01	m/s ² /με
ELECTRICAL				
Compliance Voltage	+18 to +30	VDC	+18 to +30	VDC
Current Range [4]	2 to 20	mA	2 to 20	mA
Bias Voltage	+7 to +9	VDC	+7 to +9	VDC
Discharge Time Constant	0.5 to 4.0	seconds	0.5 to 4.0	seconds
Output Impedance	100	Ω	100	Ω
TEDS Feature [5]	IEEE 1451.4		IEEE 1451.4	

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3133D1T	10	500	0.02	-67 to 320	1.1 to 1.7
3133D2T	2	2500	0.15	-67 to 320	0.5 to 2.5
3133D3T	5	1000	0.06	-67 to 320	1.1 to 1.7
3133D4T	0.7	5000	0.30	-67 to 320	0.5 to 2.5

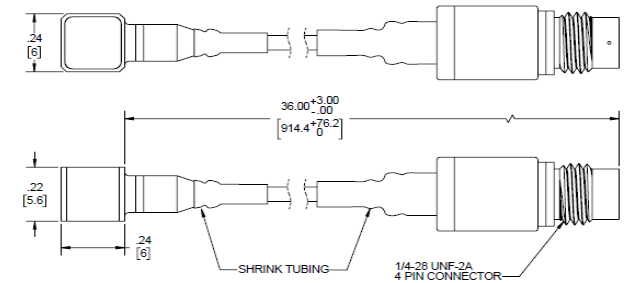
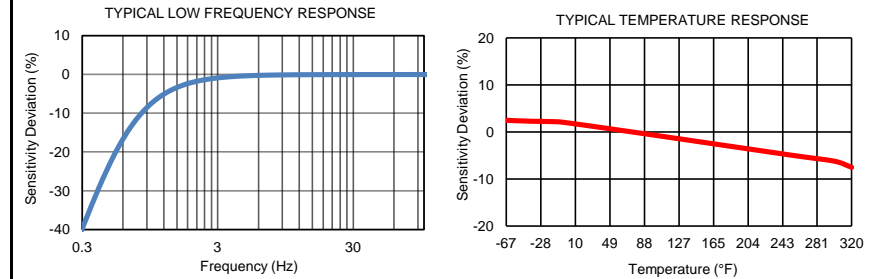
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

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

Notes:

- [1] Measured at 100 Hz, 10 Grms
- [2] Actual sensitivity is given on a calibration certificate
- [3] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [4] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier
- [5] TEDS operational temperature: -40° F to +185° F [-40° C to +85° C]



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



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