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6 4-WIRE CABLE

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

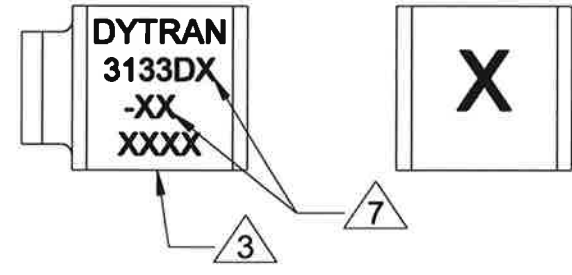
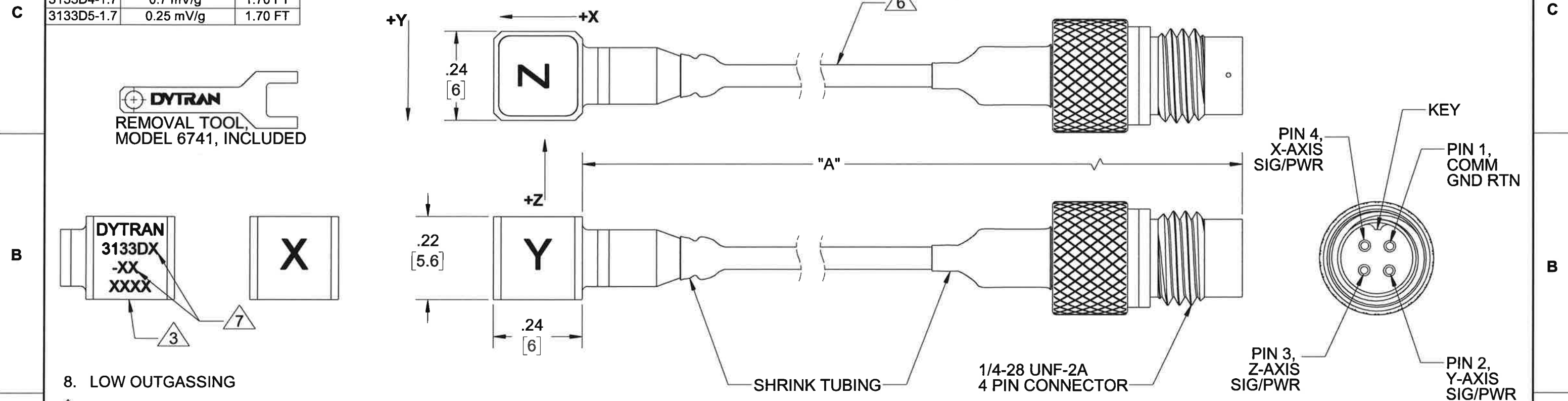
REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
E	13437	ADDED "LOW OUTGASSING" NOTE	JB 5/9/2017	MH	LN
F	13902	INITIAL RELEASE OF D1-17, D2-17, D3-17, D4-01, D5-17	RA, 12/08/17	MH	LN
G	14107	SEE ECN	RA, 03/22/18	MH	<i>[Signature]</i>

MODEL	SENSITIVITY	DIM "A"
3133D1	10 mV/g	36.00 IN
3133D2	2 mV/g	36.00 IN
3133D3	5 mV/g	36.00 IN
3133D4	0.7 mV/g	36.00 IN
3133D5	0.25 mV/g	36.00 IN
3133D1-17	10 mV/g	17.00 FT
3133D2-17	2 mV/g	17.00 FT
3133D3-17	5 mV/g	17.00 FT
3133D4-17	0.7 mV/g	17.00 FT
3133D5-17	0.25 mV/g	17.00 FT
3133D1-1.7	10 mV/g	1.70 FT
3133D2-1.7	2 mV/g	1.70 FT
3133D3-1.7	5 mV/g	1.70 FT
3133D4-1.7	0.7 mV/g	1.70 FT
3133D5-1.7	0.25 mV/g	1.70 FT

7 CABLE LENGTH TOLERANCE

ENGLISH		[METRIC]	
≤1 FT	+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%



- 8. LOW OUTGASSING
 - 7 PART NO: 3133DX-XX (WHERE APPLICABLE, -XX DENOTES LENGTH IN FEET). SEE TABLE FOR LENGTH TOLERANCE.
 - 6 SEE TABLE FOR 4 WIRE CABLE SPECIFICATIONS.
 - 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 Ø .39, FLAT TO .0001 TIR. APPLY ONE DROP OF CYANOACRYLATE ADHESIVE TO MOUNT THE ACCELEROMETER.
 - 2. HOUSING MATERIAL: TITANIUM ALLOY.
 - 1. WEIGHT: 0.8 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.

63/ 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	ANGLES
.XX ± .03	.X ± 0.8	± 1°
.XXX ± .010	.XX ± 0.25	

APPROVALS		DATE
ORIG	LN	05/26/15
CHK	LN	12/22/15
APP	AS	12/23/15

DO NOT SCALE DRAWING

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

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TITLE: **OUTLINE/INSTALLATION DWG, MINIATURE TRIAXIAL ACCEL, 3133D SERIES**

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-3133D	G

SCALE: 1:1 SHEET 1 OF 1

Model Number	PERFORMANCE SPECIFICATION		DOC NO
			PS3133D5
3133D5	Accelerometer, Triaxial, IEPE		REV H, ECN 14744, 12/10/18



- ULTRA MINIATURE SIZE
- IDEAL LOW FREQUENCY RESPONSE
- LOW BASE STRAIN SENSITIVITY
- HERMETICALLY SEALED
- LOW OUTGASSING

ENGLISH		SI	
Weight	0.03 oz	0.8	grams
Mounting	Adhesive	Adhesive	
Integral Cable Length	3 ft	914	mm
Connector Type	4-pin	4-pin	
Housing Material	Titanium	Titanium	
Isolation	Case Ground	Case Ground	
Sensing Element Material	Quartz	Quartz	
Mode	Shear	Shear	

PHYSICAL

Weight
Mounting
Integral Cable Length
Connector Type
Housing Material
Isolation
Sensing Element Material
Mode

PERFORMANCE

Sensitivity [1], [2], ± 25%
Acceleration Range
Frequency Range, ±5%
Frequency Range, ±10%
Linearity [4]
Resonance Frequency
Transverse Sensitivity
Output Impedance
Noise floor, Max.

ENVIRONMENTAL

Maximum Shock
Maximum Vibration
Operating Temperature
Seal
Magnetic Sensitivity at 100 Gauss
Base Strain Sensitivity

ELECTRICAL

Compliance Voltage
Current Range [4]
Bias Voltage
Discharge Time Constant
Output Impedance

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
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
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

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3133D1	10	500	0.02	-67 to 320	1.1 to 2.5
3133D2	2	2500	0.15	-67 to 320	0.3 to 2.5
3133D3	5	1000	0.06	-67 to 320	1.1 to 2.5
3133D4	0.7	5000	0.30	-67 to 320	0.5 to 2.5

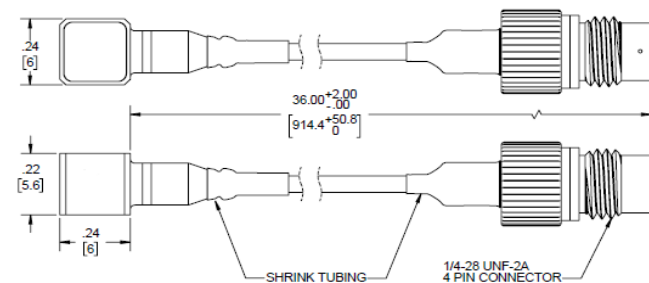
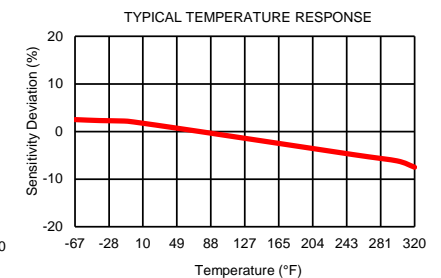
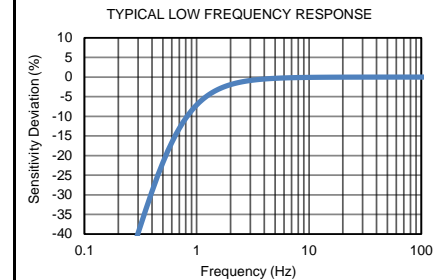
Refer to the performance specifications of the products in this family for detailed description

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



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



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