

PROPRIETARY AND CONFIDENTIAL

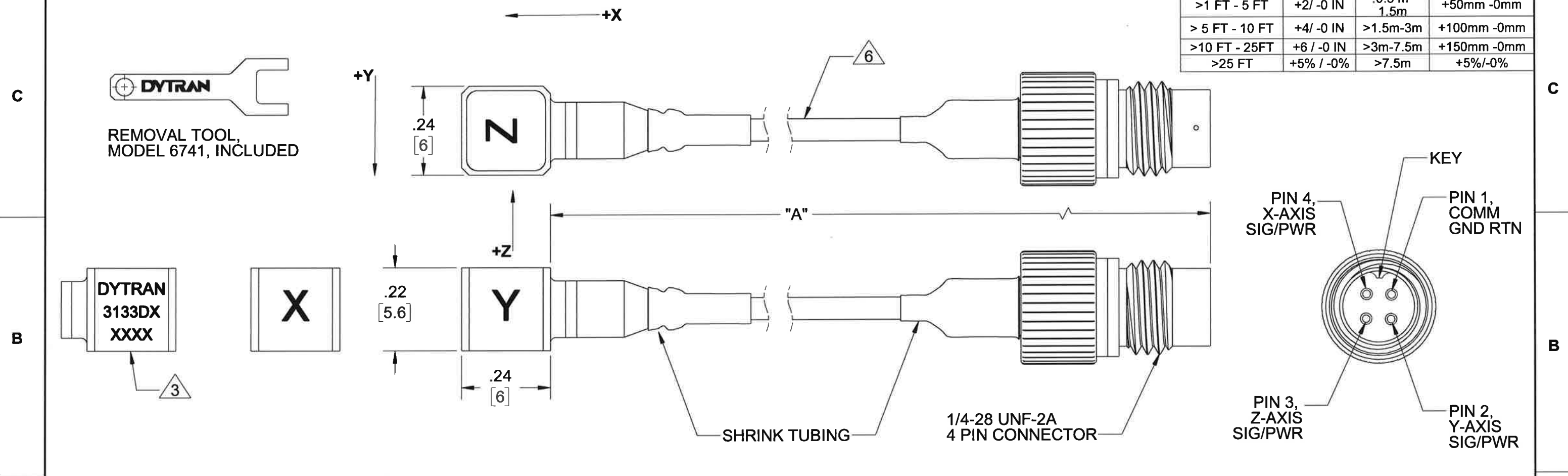
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MODEL	SENSITIVITY	DIM "A"
3133D1	10 mV/g (±15%)	36.00
3133D2	2 mV/g (±25%)	36.00
3133D3	5 mV/g (±20%)	36.00
3133D4	0.7 mV/g (±25%)	36.00
3133D5	0.25 mV/g (±25%)	36.00

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
C	13002	ZONE 4B .22 [5.6] WAS" .23 [5.8], ZONE 3B .24 [6] WAS: Ø .18 [4.6], NOTE 3 Ø .39 WAS: Ø .20	JS 10/02/16	LA	W

CABLE LENGTH TOLERANCE			
ENGLISH		[METRIC]	
≤1FT	+1/ -0 IN	≤0.3m	+25mm -0mm
>1 FT - 5 FT	+2/ -0 IN	.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%



- 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: 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: ORG LN 05/26/15, CHK LN 12/22/15, APP AS 12/23/15

DATE: 05/26/15, 12/22/15, 12/23/15

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

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.

63/

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

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

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

SCALE: 1:1, SHEET 1 OF 1



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

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

PHYSICAL

Weight	0.03	oz	0.8	grams
Mounting	Adhesive		Adhesive	
Integral Cable	3	ft	914	mm
Connector	4-pin		4-pin	
Housing	Titanium		Titanium	
Isolation	Case Ground		Case Ground	
Sensing Element	Ceramic		Ceramic	
Mode	Shear		Shear	

PERFORMANCE

Sensitivity [1], [2], ± 25%	5	mV/g	0.5	mV/m/s ²
Acceleration Range	1,000	Gpeak	9810	m/s ² peak
Frequency Range, ±5%	0.3 to 6000	Hz	0.3 to 6000	Hz
Frequency Range, ±10%	0.25 to 10000	Hz	0.25 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.	0.06	Grms	0.59	m/s ² rms

ENVIRONMENTAL

Maximum Shock	3,000	Gpeak	29430	m/s ²
Maximum Vibration	1,500	Gpeak	14715	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	+8 to +10	VDC	+8 to +10	VDC
Discharge Time Constant	1.1 to 1.7	seconds	1.1 to 1.7	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 1.7
3133D2	2	2,500	0.15	-67 to 320	0.3 to 2.5
3133D4	0.7	5,000	0.3	-67 to 320	0.5 to 2.5
3133D5	0.25	20,000	0.5	-67 to 320	0.5 to 4.0

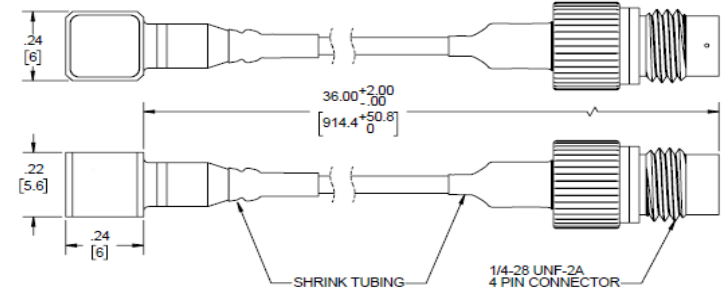
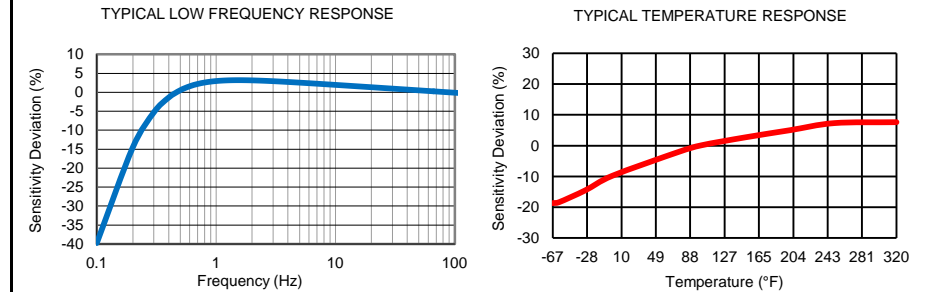
Refer to the performance specifications of the products in this family for detailed description

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] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier
- [4] Measured using zero-based straight line method, % of F.S. or any lesser range.



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

