

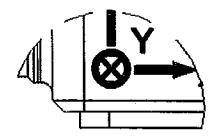
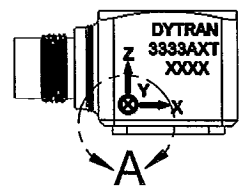
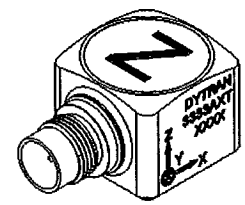
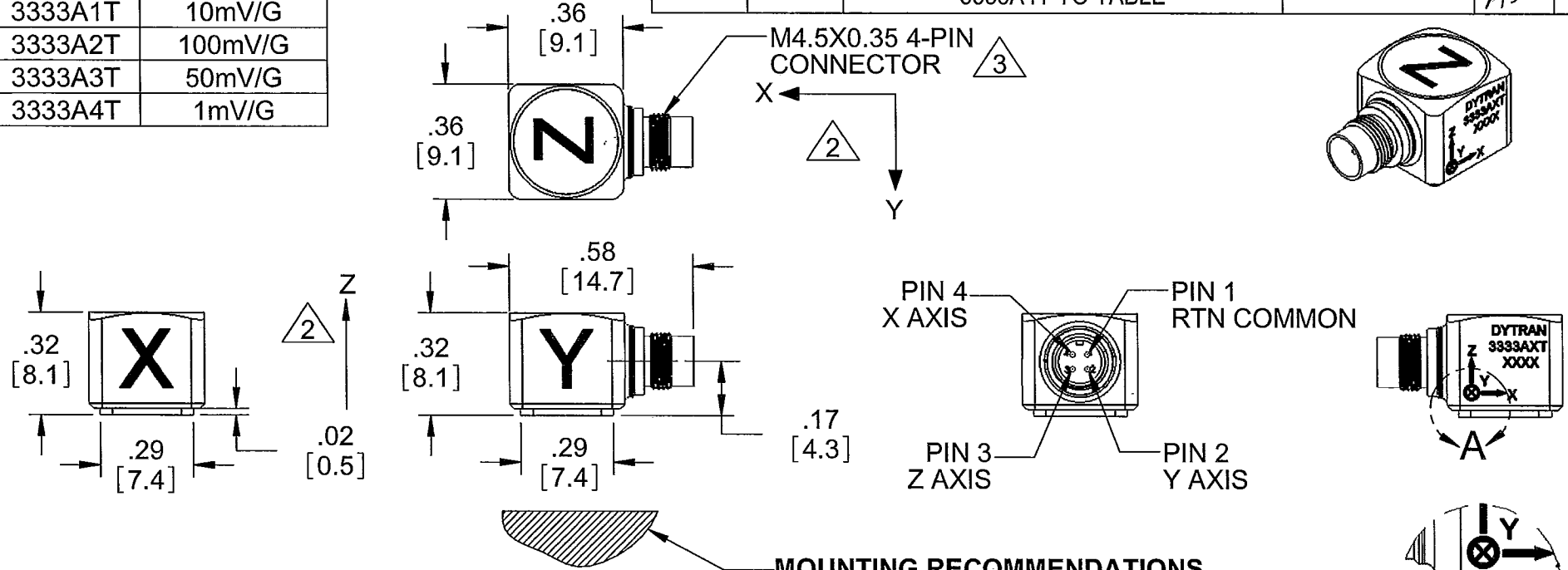
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	8849	INITIAL RELEASE	AB 08/16/12	JS	DV
B	9718	ADDED 6649AXX CABLE TO NOTE 3, 3333A4T TO TABLE	JS 04/05/13	AS	RT

MODEL	SENSITIVITY
3333A1T	10mV/G
3333A2T	100mV/G
3333A3T	50mV/G
3333A4T	1mV/G



MOUNTING RECOMMENDATIONS
 PREPARE A SURFACE AT LEAST .50 BY .50. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .001 TIR. USE ONE DROP OF CYANOACRYLATE TO MOUNT THE ACCELEROMETER.

DETAIL A
SCALE 4 : 1

4. HOUSING/CONNECTOR MATERIAL: TITANIUM

3 MATES WITH 6893AXX CABLE OR LOW OUTGASSING 6649AXX CABLE

2 ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT

1. WEIGHT: 2.4 GRAMS APPROX

NOTES: UNLESS OTHERWISE SPECIFIED

USED ON	NEXT ASSY	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. THDS PER MIL-S-7742. DIMENSIONS APPLY AFTER FINISHING.
APPLICATION		
THIRD ANGLE PROJECTION USA		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE: INCHES METRIC ANGLES .XX ± .03 .X ± 0.8 ± 1° .XXX ± .010 .XX ± 0.25
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.		

MATERIAL	APPROVALS	DATE
FINISH	ORIG	AB
	CHK	JS
	APP	DV
	APP	

CONTRACT NO.	
APPROVALS	
ORIG	DATE
AB	07/10/12
CHK	08/21/12
APP	09/04/12
APP	

DYTRAN INSTRUMENTS INC. CHATSWORTH, CA

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TITLE: **OUTLINE/INSTALLATION DRAWING, 3333AT**

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3333AT	B

SCALE: 2:1 SOLIDWORKS SHEET 1 OF 1

MODEL NUMBER 3333A3T	PERFORMANCE SPECIFICATION		DOC NO PS3333A3T
	Accelerometer, Triaxial, IEPE		REV C, ECN 12879 08/12/16



- **ULTRA LOW FREQUENCY RESPONSE**
- **ULTRA LOW NOISE LEVEL**

PHYSICAL

Weight, Max
Mounting
Connector [1]

Housing
Sensing Element

Type
Material
Material
Material
Mode

ENGLISH		SI	
0.08	oz	2.4	grams
Adhesive		Adhesive	
4-pin		4-pin	
Ti-6 AL-4V		Ti-6 AL-4V	
Ti-6 AL-4V		Ti-6 AL-4V	
Ceramic		Ceramic	
Shear		Shear	

PERFORMANCE

Sensitivity, +15-10% [2]
Acceleration Range,
Frequency Range, +15/-10%
Resonance Frequency
Linearity [3]
Transverse Sensitivity Max
Noise floor, Max
Spectral Noise

	ENGLISH	SI
Sensitivity, +15-10% [2]	50 mV/g	5.10 mV/m/s ²
Acceleration Range, Gpeak	100	+/- 491
Frequency Range, +15/-10% Hz	.65-10,000	.65-10,000
Resonance Frequency kHz	>24	>24
Linearity [3] %F.S.	1	1
Transverse Sensitivity Max %	5	5
Noise floor, Max Grms	0.002	0.020
Spectral Noise	1Hz 525 μGrms/sqr(Hz)	5150 μm/s ² rms/sqr(Hz)
	10Hz 101 μGrms/sqr(Hz)	991 μm/s ² rms/sqr(Hz)
	100Hz 50 μGrms/sqr(Hz)	491 μm/s ² rms/sqr(Hz)
	1000Hz 16 μGrms/sqr(Hz)	157 μm/s ² rms/sqr(Hz)
	10000Hz 10 μGrms/sqr(Hz)	98 μm/s ² rms/sqr(Hz)

ENVIRONMENTAL

Shock Max
Vibration Max
Operating Temperature
TEDS Operating Temperature
Seal
Base Strain Sensitivity
TEDS Feature [5]

	ENGLISH	SI
Shock Max g pk	5000	49050 m/s ²
Vibration Max g pk	3000	29430 m/s ²
Operating Temperature °F	-60 to +225	-51 to +107 °C
TEDS Operating Temperature °F	-40 to +185	-40 to +85 °C
Seal	Hermetic	Hermetic
Base Strain Sensitivity g/με	0.06	0.59 m/s ² /με
TEDS Feature [5]	IEEE 1451.4	IEEE 1451.4

ELECTRICAL

Supply Current Range [4]
Compliance Voltage Range
Output Impedance, Typ.
Output Bias Voltage
Discharge Time Constant

	ENGLISH	SI
Supply Current Range [4] mA	2 to 20	2 to 20
Compliance Voltage Range VDC	+18 to +30	+18 to +30
Output Impedance, Typ. Ω	100	100
Output Bias Voltage VDC	11 to 13	11 to 13
Discharge Time Constant sec	0.5 - 1.5	0.5 - 1.5

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3333A1T	10	500	0.003	-60 to +225	0.5 - 1.5
3333A2T	100	50	0.00095	-60 to +180	0.5 - 1.5

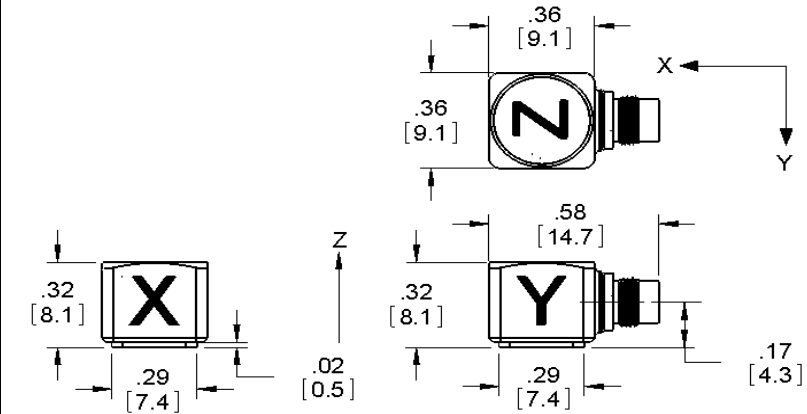
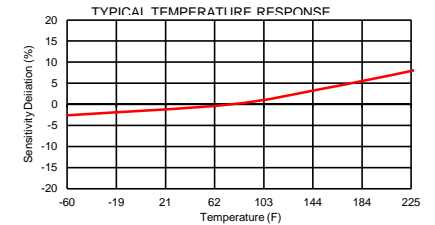
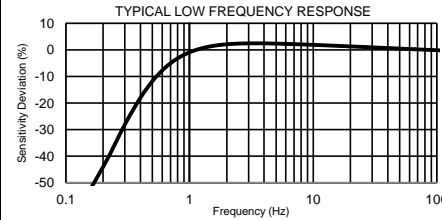
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] M4.5 X 0.35 Connector. Mates with Dytran cable Model 6893AXX.
- [2] Measured at 100Hz, 5 Grms per ISA RP 37.2.
- [3] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [5] TEDS operational temperature -40°C to + 85°C



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3333AT for more information.



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