

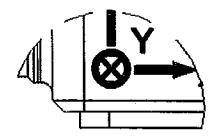
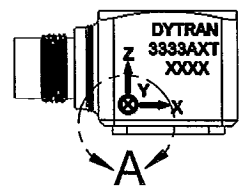
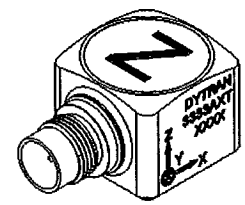
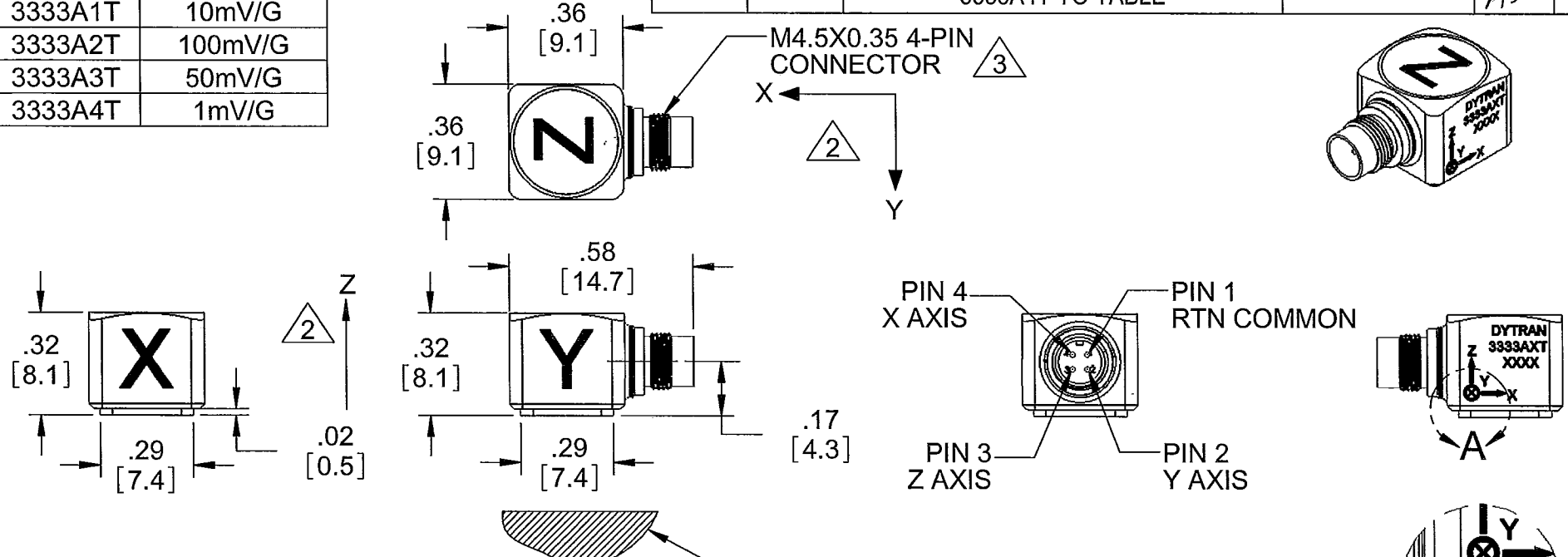
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REVISIONS

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	07/10/12
DO NOT SCALE DRAWING	CHK JS	08/21/12
	APP DV	09/04/12
	APP	

CONTRACT NO.	
APPROVALS	
ORIG	AB
CHK	JS
APP	DV
APP	

OUTLINE/INSTALLATION DRAWING, 3333AT

SIZE A	CAGE CODE 2W033	DWG. NO. 127-3333AT	REV B
SCALE: 2:1	SOLIDWORKS	SHEET 1 OF 1	

MODEL NUMBER 3333A4T	PERFORMANCE SPECIFICATION		DOC NO PS3333A4T
	Accelerometer, Triaxial, IEPE		REV C, ECN 12879 08/12/16



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

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, +/-5V
Frequency Range, +15/-10%
Resonance Frequency
Linearity [3]
Transverse Sensitivity Max
Noise floor, Max
Spectral Noise

	ENGLISH	SI
Sensitivity, +15-10% [2]	1 mV/g	0.10 mV/m/s ²
Acceleration Range, +/-5V	5000 Gpeak	49050.00 m/s ² peak
Frequency Range, +15/-10%	.65-10,000 Hz	.65-10,000 Hz
Resonance Frequency	>24 kHz	>24 kHz
Linearity [3]	1 %F.S.	1 %F.S.
Transverse Sensitivity Max	5 %	5 %
Noise floor, Max	0.03 Grms	0.294 m/s ² rms
Spectral Noise	1Hz	62900 μGrms/sqr(Hz)
	10Hz	1100 μGrms/sqr(Hz)
	100Hz	670 μGrms/sqr(Hz)
	1000Hz	310 μGrms/sqr(Hz)
	10000Hz	160 μGrms/sqr(Hz)
617049	μm/s ² rms/sqr(Hz)	617049 μm/s ² rms/sqr(Hz)
10791	μm/s ² rms/sqr(Hz)	10791 μm/s ² rms/sqr(Hz)
6573	μm/s ² rms/sqr(Hz)	6573 μm/s ² rms/sqr(Hz)
3041	μm/s ² rms/sqr(Hz)	3041 μm/s ² rms/sqr(Hz)
1570	μm/s ² rms/sqr(Hz)	1570 μm/s ² rms/sqr(Hz)

ENVIRONMENTAL

Shock Max
Vibration Max
Operating Temperature
TEDS Operating Temperature
Seal
Base Strain Sensitivity

	ENGLISH	SI
Shock Max	7000 g pk	68670 m/s ²
Vibration Max	6000 g pk	58860 m/s ²
Operating Temperature	-60 to +250 °F	-51 to +121 °C
TEDS Operating Temperature	-40 to +185 °F	-40 to +85 °C
Seal	Hermetic	Hermetic
Base Strain Sensitivity	0.06 g/με	0.59 m/s ² /με

ELECTRICAL

Supply Current Range [4]
Compliance Voltage Range
Output Impedance, Typ.
Output Bias Voltage
Discharge Time Constant
TEDS Feature [5]

	ENGLISH	SI
Supply Current Range [4]	2 to 20 mA	2 to 20 mA
Compliance Voltage Range	+18 to +30 VDC	+18 to +30 VDC
Output Impedance, Typ.	100 Ω	100 Ω
Output Bias Voltage	11 to 13 VDC	11 to 13 VDC
Discharge Time Constant	0.5 - 1.5 sec	0.5 - 1.5 sec
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
3333A1T	10	500	0.003	-60 to +225	0.5 - 1.5
3333A2T	100	50	0.00095	-60 to +180	0.5 - 1.5
3333A3T	50	100	0.002	-60 to +225	0.5 - 1.5

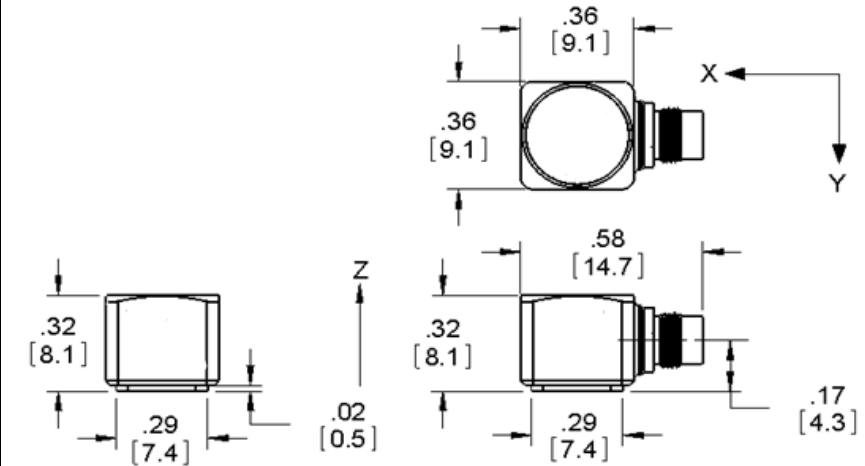
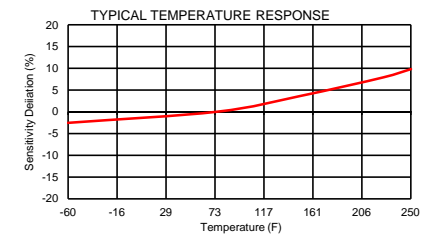
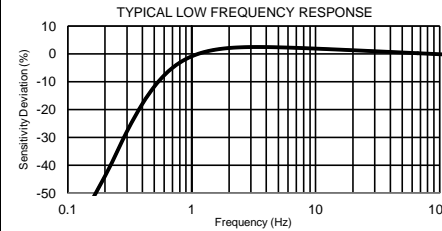
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] M4.5 X 0.35 Connector. Mates with 6893AXX or Dytran Low Outgassing cable model 6649AXX.
- [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
- [6] In the interest of constant product improvement, we reserve the right to change specifications without notice.



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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