

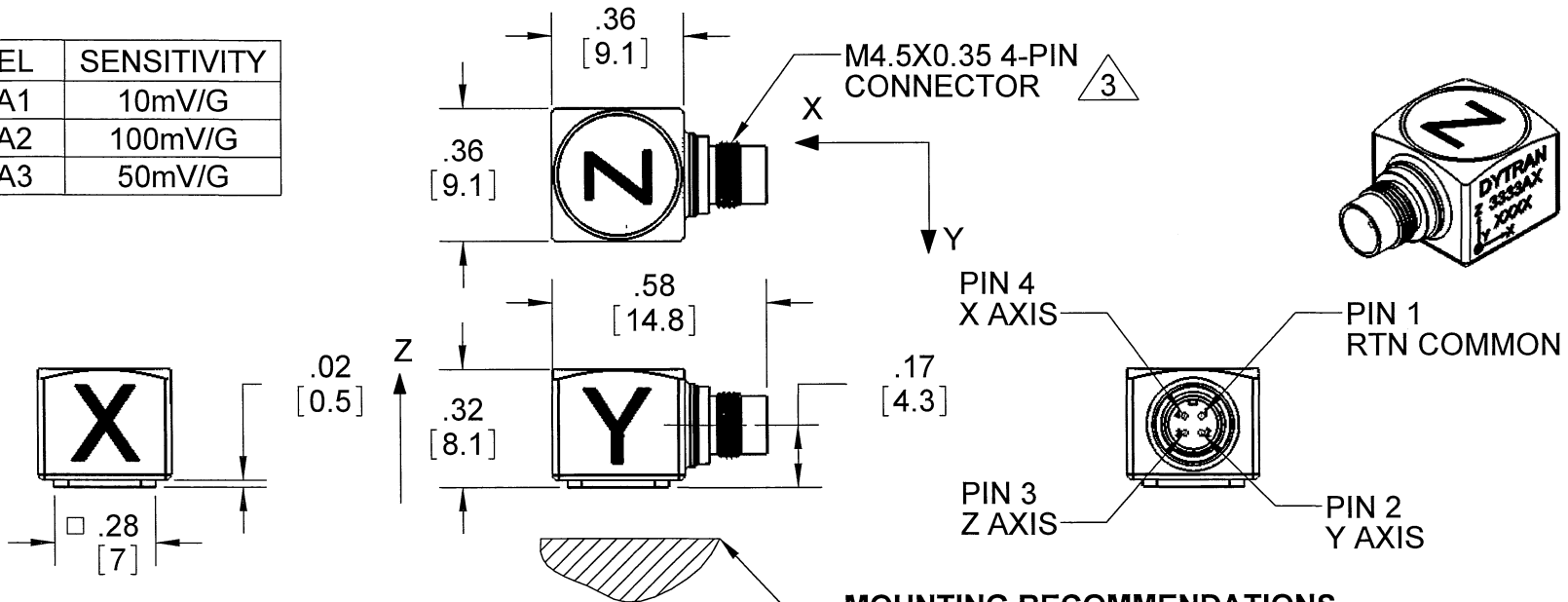
PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6289	INITIAL RELEASE	DV 09/28/09	<i>EV</i>	<i>DV</i>

MODEL	SENSITIVITY
3333A1	10mV/G
3333A2	100mV/G
3333A3	50mV/G



MOUNTING RECOMMENDATIONS
 PREPARE A SURFACE AT LEAST .300 BY .300. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .0001 TIR. USE ONE DROP OF CYANOACRYLATE TO MOUNT THE ACCELEROMETER.

4. HOUSING/CONNECTOR MATERIAL: TITANIUM
3. MATES WITH 6893AXX CABLE
2. ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT
1. WEIGHT: 2.8 GRAMS

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. THDS PER MIL-S-7742. DIMENSIONS APPLY AFTER FINISHING.		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		CONTRACT NO.		MASTER ONLY IF IN RED Chatsworth, CA	
3333A USED ON NEXT ASSY		MATERIAL		APPROVALS			
APPLICATION		FINISH		ORIG DV 09/28/09		SIZE CAGE CODE DWG. NO.	
THIRD ANGLE PROJECTION USA		DO NOT SCALE DRAWING		CHK <i>EV</i> 10/26/09		A 2W033 127-3333A	
ALL MACHINED SURFACES \checkmark 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.				APP <i>DV</i> 10/26/09		REV A	
				APP		SCALE: 2:1 SOLIDWORKS SHEET 1 OF 1	

172-0081, REV C



Presented by: Absolute Gauge Technologies
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MODEL NUMBER 3333A3	PERFORMANCE SPECIFICATION	DOC NO PS3333A3
	Accelerometer, Triaxial, IEPE	REV E, ECN 11192, 07/25/14



Actual Size

- **ULTRA LOW FREQUENCY RESPONSE**
- **ULTRA LOW NOISE LEVEL**
- **WEIGHT ONLY 2.3 GRAMS**

	ENGLISH		SI	
PHYSICAL				
Weight	0.08	oz	2.3	grams
Mounting	Adhesive		Adhesive	
Connector [1]	4-pin		4-pin	
Housing	Ti-6 AL-4V		Ti-6 AL-4V	
	Ti-6 AL-4V		Ti-6 AL-4V	
Sensing Element	Case ground		Case ground	
	Ceramic		Ceramic	
Mode	Shear		Shear	

PERFORMANCE

	ENGLISH		SI	
Sensitivity, +15-10% [2]	50	mV/g	5.10	mV/m/s ²
Acceleration Range,	+/-100	Gpeak	+/- 981	m/s ² peak
Frequency Range, +15/-10%	.31-10,000	Hz	.31-10,000	Hz
Resonance Frequency	>24	kHz	>24	kHz
Linearity [3]	1	%F.S.	1	%F.S.
Transverse Sensitivity Max	6	%	6	%
Noise floor	0.0009	Grms	0.009	m/s ² rms
Spectral Noise	1Hz	311	3051	μm/s ² rms/sqr(Hz)
	10Hz	60	589	μm/s ² rms/sqr(Hz)
	100Hz	30	294	μm/s ² rms/sqr(Hz)
	1000Hz	10	98	μm/s ² rms/sqr(Hz)
	10000Hz	6	59	μm/s ² rms/sqr(Hz)

ELECTRICAL

	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

ENVIRONMENTAL

	ENGLISH		SI	
Shock Max	5000	g pk	49050	m/s ²
Vibration Max	3000	g pk	29430	m/s ²
Operating Temperature	-60 to +185	°F	-51 to +85	°C
Seal	Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss	0.00007	g/Gauss	0.00069	m/s ² /Gauss
Base Strain Sensitivity	0.02	g/με	0.20	m/s ² /με

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3333A1	10	500	0.0015	-60 to +225	0.5 - 1.5
3333A2	100	50	0.00095	-60 to +165	0.5 - 1.5

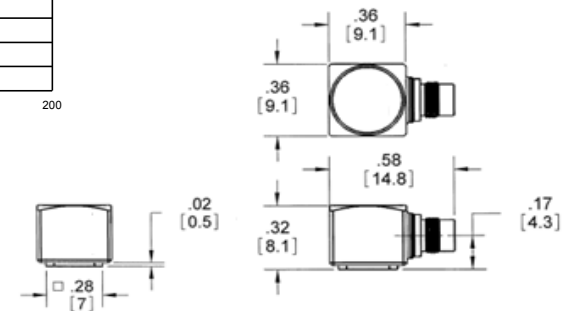
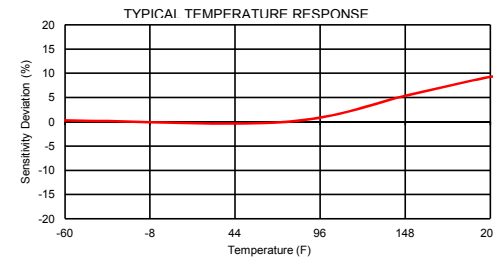
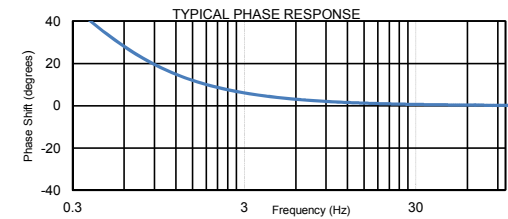
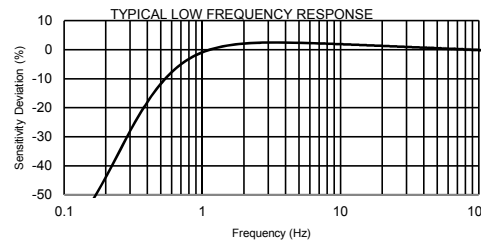
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Coaxial, 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] 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 127-3333A for more information.



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