

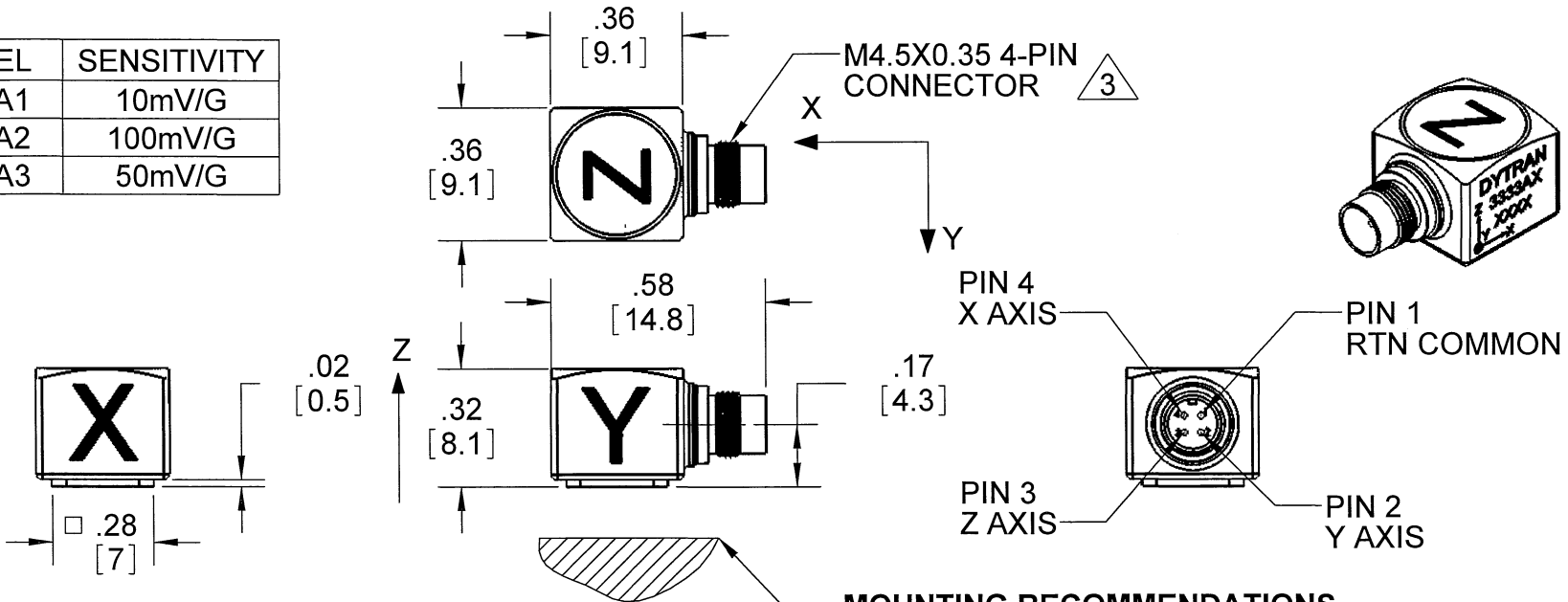
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6289	INITIAL RELEASE	DV 09/28/09	<i>sv</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	
3333A	USED ON	NEXT ASSY	APPLICATION
THIRD ANGLE PROJECTION USA			
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.			

CONTRACT NO.



TITLE: **OUTLINE/INSTALLATION DRAWING, 3333A SERIES**

APPROVALS		DATE
ORIG	DV	09/28/09
CHK	<i>sv</i>	10/26/09
APP	<i>DV</i>	10/26/09
APP		

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

MODEL NUMBER 3333A3	PERFORMANCE SPECIFICATION	DOC NO PS3333A3
	Accelerometer, Triaxial, IEPE	REV F, ECN 12879, 08/12/16



Actual Size

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

PHYSICAL

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

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

PERFORMANCE

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	μGrms/sqr(Hz)	3051	μm/s ² rms/sqr(Hz)
	10Hz	60	μGrms/sqr(Hz)	589	μm/s ² rms/sqr(Hz)
	100Hz	30	μGrms/sqr(Hz)	294	μm/s ² rms/sqr(Hz)
	1000Hz	10	μGrms/sqr(Hz)	98	μm/s ² rms/sqr(Hz)
	10000Hz	6	μGrms/sqr(Hz)	59	μm/s ² rms/sqr(Hz)

ELECTRICAL

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

Shock Max	5000	g pk	49050	m/s ²
Vibration Max	3000	g pk	29430	m/s ²
Operating Temperature	-60 to +225	°F	-51 to +107	°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 +180	0.5 - 1.5

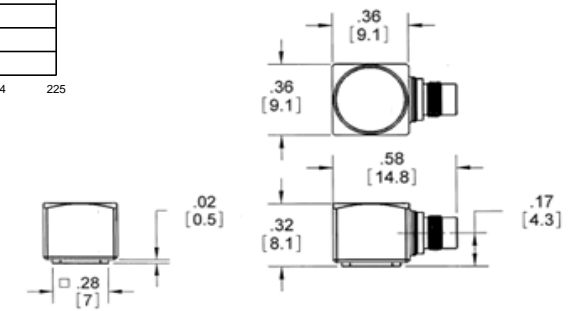
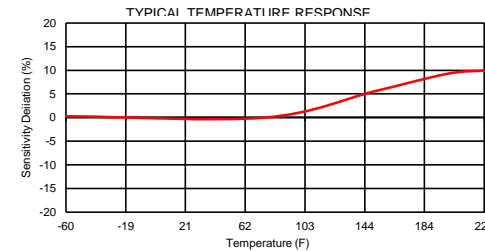
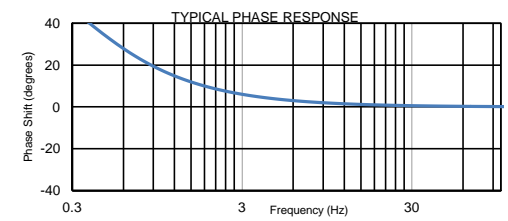
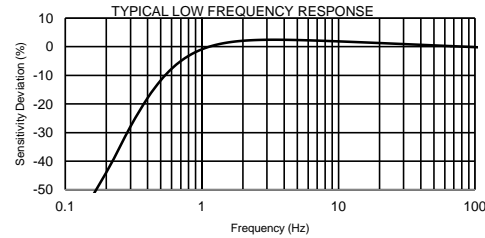
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] 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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