

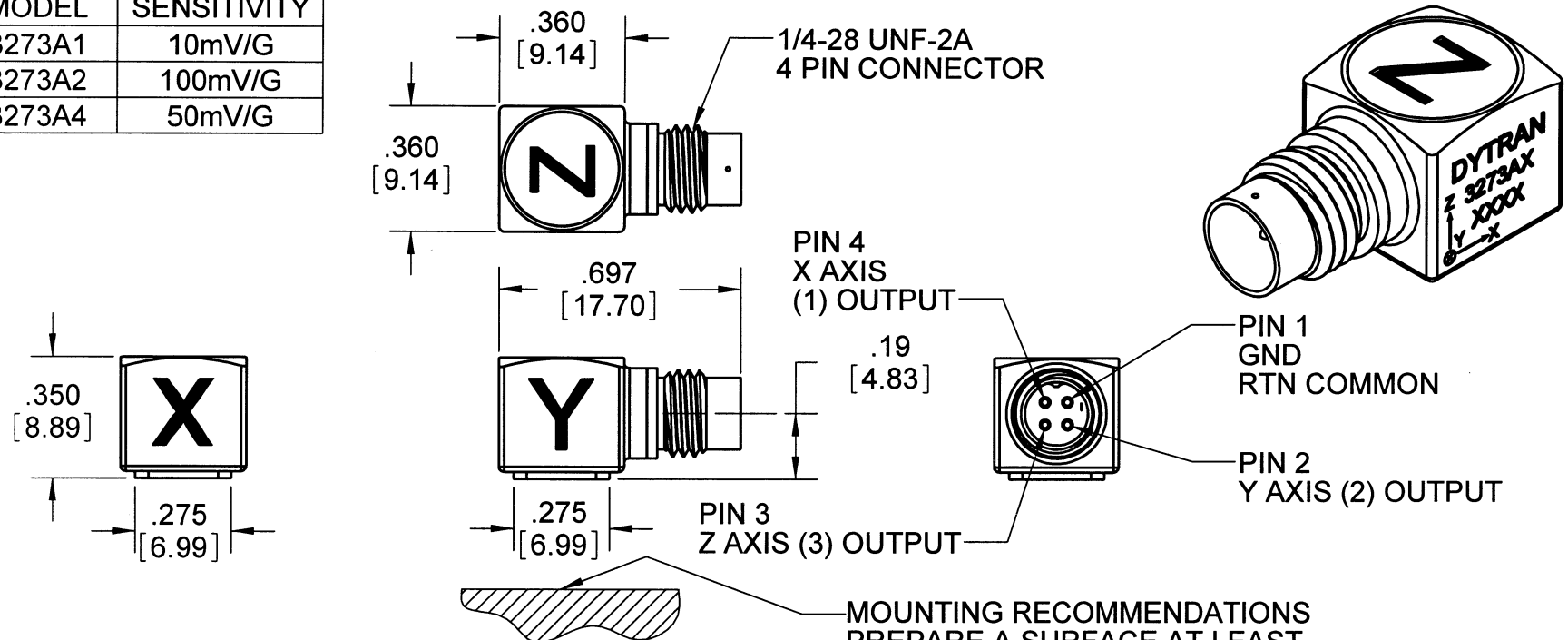
PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	5959	SEE ECN	RA, 05/01/09	fl	Dr

MODEL	SENSITIVITY
3273A1	10mV/G
3273A2	100mV/G
3273A4	50mV/G



3. HOUSING/CONNECTOR MATERIAL: TITANIUM
2. ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT.
1. WEIGHT: 3.0 GRAMS

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.

NOTES: UNLESS OTHERWISE SPECIFIED.

3273A SERIES	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
USED ON	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
NEXT ASSY		FINISH
APPLICATION		DO NOT SCALE DRAWING
THIRD ANGLE PROJECTION USA		

CONTRACT NO.		
APPROVALS		DATE
ORIG	R.A.	9/30/08
CHK	DV	10/17/08
APP	ANS	10/17/08
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: **OUTLINE/INSTALLATION DRAWING, 3273A SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3273A	C
SCALE: 4:1	SOLIDWORKS	SHEET 1 OF 1	

3273A2 PERFORMANCE SPECIFICATION

REV B, ECN 5960 05/01/09

Accelerometer, Triaxial, IEPE



Actual Size

- **ULTRA LOW FREQUENCY RESPONSE**
- **ULTRA LOW NOISE LEVEL**
- **WEIGHT ONLY 2.7 GRAMS**

ENGLISH	SI
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PHYSICAL

Property	English	SI
Weight	0.096 oz	2.7 grams
Mounting	Adhesive	Adhesive
Connector [1]	4-pin	4-pin
	Ti-6 AL-4V	Ti-6 AL-4V
Housing	Ti-6 AL-4V	Ti-6 AL-4V
	Case ground	Case ground
Sensing Element	Ceramic	Ceramic
	Shear	Shear

PERFORMANCE

Property	English	SI
Sensitivity, +15-10% [2]	100 mV/g	10.19 mV/m/s ²
Acceleration Range	+/-50 Gpeak	+/-491 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 %
Transverse Sensitivity Max	6 %	6 %
Noise floor	0.0007 Grms	0.007 m/s ² rms
Spectral Noise		
1Hz	175 μGrms/sqr(Hz)	1717 μm/s ² rms/sqr(Hz)
10Hz	44 μGrms/sqr(Hz)	432 μm/s ² rms/sqr(Hz)
100Hz	27 μGrms/sqr(Hz)	265 μm/s ² rms/sqr(Hz)
1000Hz	9 μGrms/sqr(Hz)	88 μm/s ² rms/sqr(Hz)
10000Hz	7 μGrms/sqr(Hz)	69 μm/s ² rms/sqr(Hz)

ELECTRICAL

Property	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	0.8 - 1.2 sec	0.8 - 1.2 sec

ENVIRONMENTAL

Property	English	SI
Shock Max	5000 g pk	49050 m/s ²
Vibration Max	3000 g pk	29430 m/s ²
Operating Temperature	-60 to +180 °F	-51 to +82 °C
Seal	Hermetic	Hermetic
Magnetic Sensitivity at 100 Gauss	0.00007 g/Gauss	0.0006867 m/s ² /Gauss
Base Strain Sensitivity	0.02 g/με	0.1962 m/s ² /με

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3273A1	10	500	0.0012	-60 to +250	0.8 - 1.2
3273A4	50	100	0.0009	-60 to +200	0.8 - 1.2

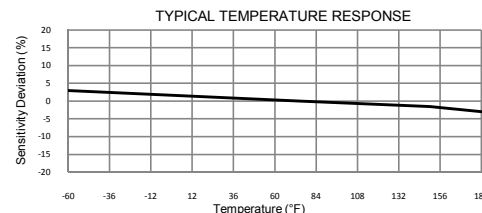
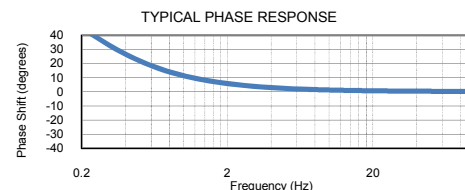
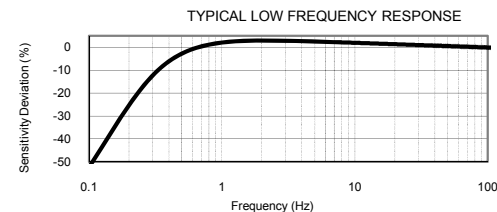
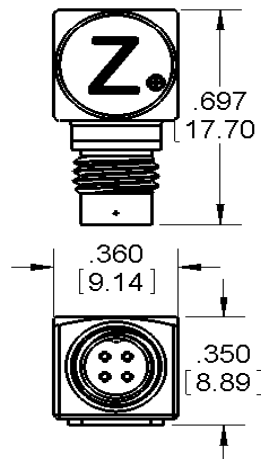
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Glass to metal Seal connector. Mates with Dytran cable model 6811AXX or 6824AXX (XX=length in feet)
- [2] Measured at 100 Hz, 5 Grms per ISA RP 37.2
- [3] Linearity is % of specified full scale (or any less full-scale range), zero-based best fit straight line method.
- [4] Do not apply power to this device without current limiting, 20mA Max, to do so will destroy the integral IC amplifier



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3273A for more information.



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