

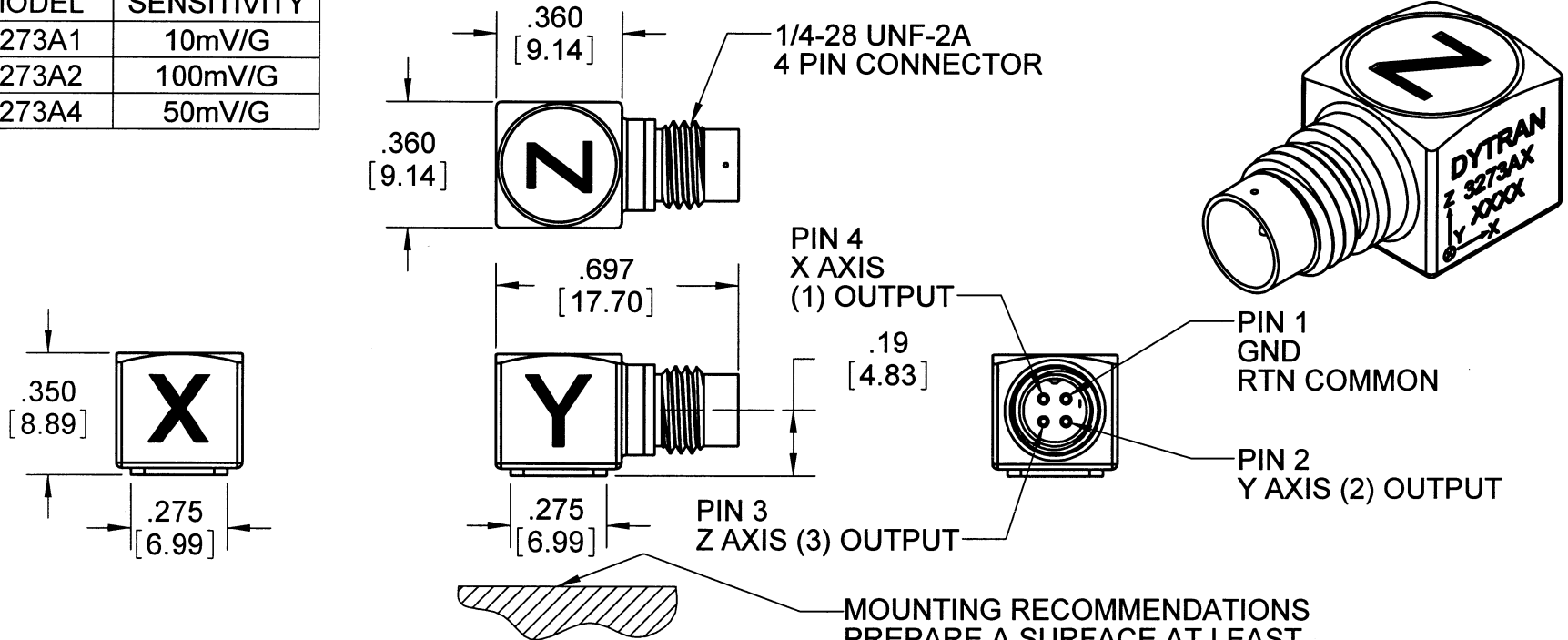
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REVISIONS

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	USED ON	NEXT ASSY
APPLICATION		
THIRD ANGLE PROJECTION USA		

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.

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.

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

MATERIAL

FINISH

DO NOT SCALE DRAWING

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

3273A1

PERFORMANCE SPECIFICATION

REV B, ECN5960, 05/01/09

Accelerometer, Triaxial, IEPE



Actual Size

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

PHYSICAL

Weight	0.096	oz	2.7	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	

ENGLISH		SI	
Weight	0.096	oz	2.7
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	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]	10 mV/g	1.02 mV/m/s ²
Acceleration Range,	+/-500 Gpeak	+/- 4905 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	0.0012 Grms	0.012 m/s ² rms
Spectral Noise	1Hz 335 μGrms/sqr(Hz)	3286.35 μm/s ² rms/sqr(Hz)
	10Hz 58 μGrms/sqr(Hz)	566.037 μm/s ² rms/sqr(Hz)
	100Hz 36 μGrms/sqr(Hz)	348.255 μm/s ² rms/sqr(Hz)
	1000Hz 17 μGrms/sqr(Hz)	163.827 μm/s ² rms/sqr(Hz)
	10000Hz 9 μGrms/sqr(Hz)	83.385 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	11.0 to 13.0 VDC	11.0 to 13.0 VDC
Discharge Time Constant	0.8 - 1.2 sec	0.8 - 1.2 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 +250 °F	-51 to +121 °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
3273A2	100	50	0.0007	-60 to +180	0.8 - 1.2
3273A4	50	100	0.0009	-60 to +200	0.8 - 1.2

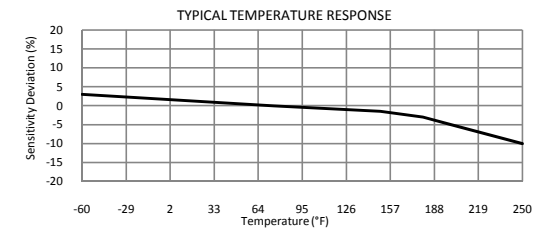
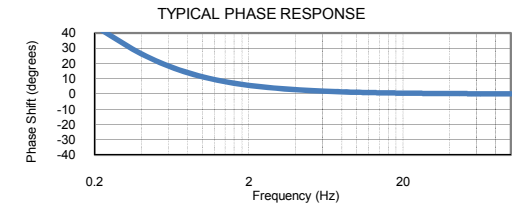
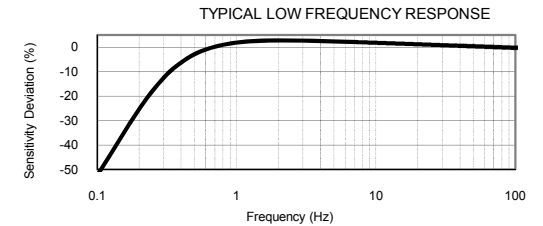
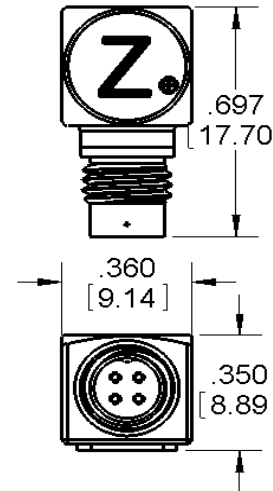
Please, refer to the performance specifications of the products in this family for detailed description

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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