

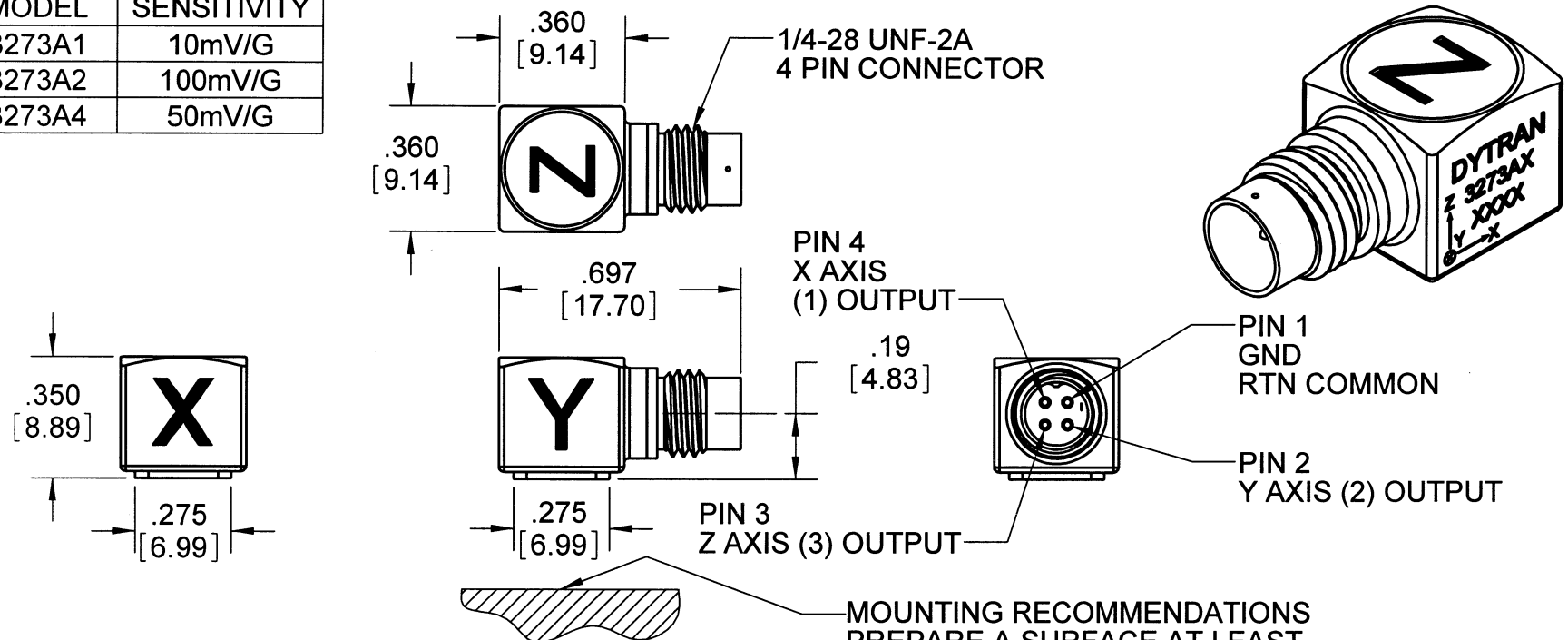
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	5959	SEE ECN	RA, 05/01/09	<i>fl</i>	<i>DR</i>

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

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

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

3273A4

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

PHYSICAL

Weight
Mounting
Connector [1]
Housing
Sensing Element

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	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

	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

	ENGLISH		SI	
Shock Max	5000	g pk	49050	m/s ²
Vibration Max	3000	g pk	29430	m/s ²
Operating Temperature	-60 to +200	°F	-51 to +93	°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
3273A2	100	50	0.0007	-60 to +180	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:

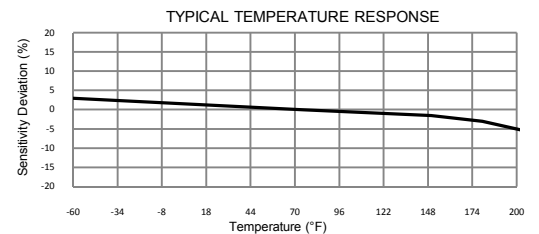
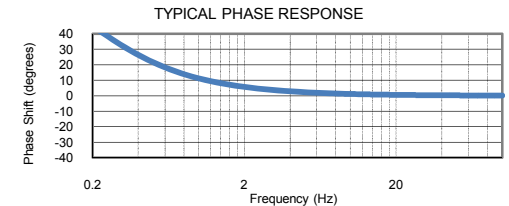
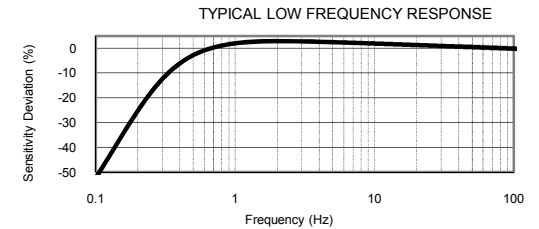
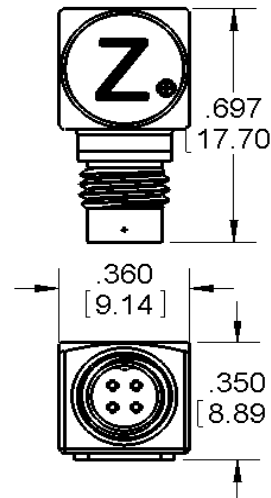
[1] Glass to metal Seal connector. Mates with Dytran cable model 6811AXX or 6824AXX

(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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