

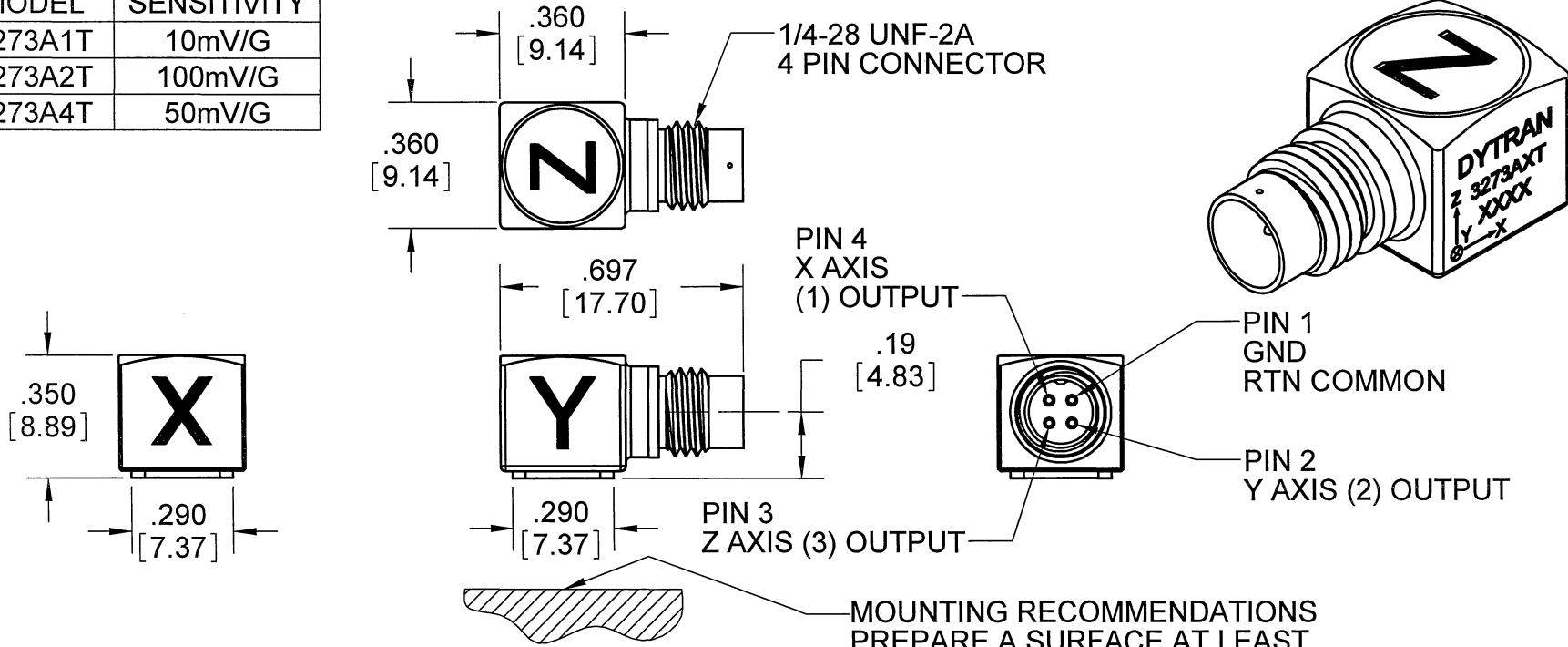
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	7027	ADDED NOTE 4	JS 08/18/10		

MODEL	SENSITIVITY
3273A1T	10mV/G
3273A2T	100mV/G
3273A4T	50mV/G



4. TO MATE CABLE TO CONNECTOR INSERT PLUG AND ENGAGE KEYWAY BEFORE TURNING COUPLING NUT.
 3. HOUSING/CONNECTOR MATERIAL: TITANIUM
 2. ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT.
 1. WEIGHT: 3.0 GRAMS APPROXIMATELY
- NOTES: UNLESS OTHERWISE SPECIFIED.

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.

3273AT 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.	05/05/09
CHK	EP	05/11/09
APP	DV	05/12/09
APP		

DYTRAN
 INSTRUMENTS, INC.
 Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: **OUTLINE/INSTALLATION
 DRAWING, MODEL 3273AT
 SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3273AT	B

SCALE: 4:1 SOLIDWORKS SHEET 1 OF 1

3273A2T

REV F, ECN 7336, 01/26/11

PERFORMANCE SPECIFICATION

Accelerometer, Triaxial, IEPE



Actual Size

- ULTRA LOW FREQUENCY RESPONSE
- ULTRA LOW NOISE LEVEL
- WEIGHT ONLY 3 GRAMS

PHYSICAL

		ENGLISH		SI	
Weight		0.1	oz	3.0	grams
Mounting		Adhesive		Adhesive	
Connector [1]	Type	4-pin		4-pin	
	Material	Ti-6 AL-4V		Ti-6 AL-4V	
Housing	Material	Ti-6 AL-4V		Ti-6 AL-4V	
	Isolation	Case ground		Case ground	
Sensing Element	Material	Ceramic		Ceramic	
	Mode	Shear		Shear	

PERFORMANCE

		ENGLISH		SI	
Sensitivity, ±10% [2]		100	mV/g	10.19	mV/m/s ²
Acceleration Range		50	Gpeak	491	m/s ² peak
Frequency Range, ± 5%		.7 - 3000	Hz	.7 - 3000	Hz
Frequency Range, +15/-10%		.42 - 10,000	Hz	.42 - 10,000	Hz
Resonance Frequency		>24	kHz	>24	kHz
Phase Response, ± 5°		4.0 to 3000	Hz	4.0 to 3000	Hz
Linearity [3]		1	%F.S.	1	%F.S.
Transverse Sensitivity Max		6	%	6	%
Noise floor, Max		0.00095	Grms	0.009	m/s ² rms
Spectral Noise	1Hz	207	μGrms/sqr(Hz)	2031	μm/s ² rms/sqr(Hz)
	10Hz	52	μGrms/sqr(Hz)	510	μm/s ² rms/sqr(Hz)
	100Hz	32	μGrms/sqr(Hz)	314	μm/s ² rms/sqr(Hz)
	1000Hz	11	μGrms/sqr(Hz)	108	μm/s ² rms/sqr(Hz)
	10000Hz	8	μGrms/sqr(Hz)	78	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 - 13	VDC	11 - 13	VDC
Discharge Time Constant.		0.5 to 1.5	sec	0.5 to 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 +165	°F	-51 to +82	°C
TEDs Operation Temperature		-40 to +185	°F	-40 to +85	°C
Seal		Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss		0.000013	g/Gauss	0.00013	m/s ² /Gauss
Base Strain Sensitivity		0.06	g/με	0.59	m/s ² /με
TED feature		IEEE 1451.4		IEEE 1451.4	

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3273A1T	10	500	0.003	-60 to +250	0.8 - 1.2
3273A4T	50	100	0.0020	-60 to +200	0.8 - 1.2

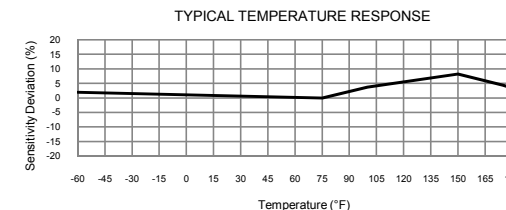
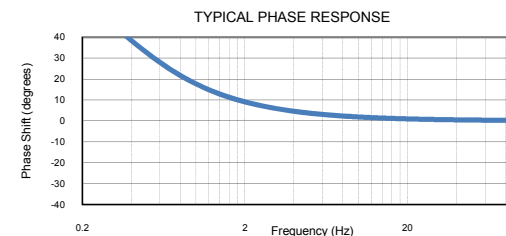
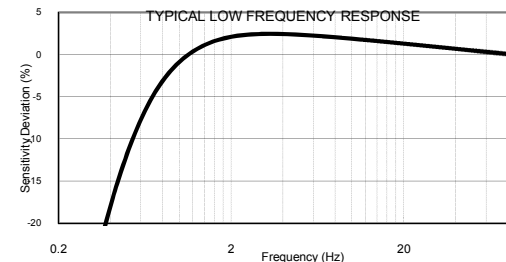
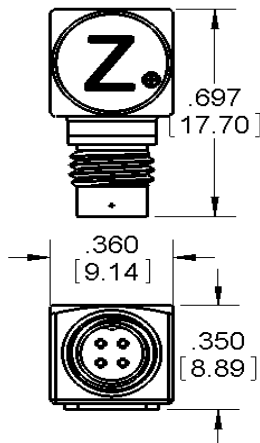
Please, refer to the performance specifications of the products in this family for detailed description

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
- [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 127-3273AT for more information.



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