

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS INC. IS PROHIBITED

MODEL	SENSITIVITY
3713A1T	1.0 mV/g
3713A2T	0.5 mV/g
3713A3T	5 mV/g
3713A4T	10 mV/g

REVISIONS					
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	15001	INITIAL RELEASE. SAME AS REV X6.	KG 10/08/19	AM	

D

D

C

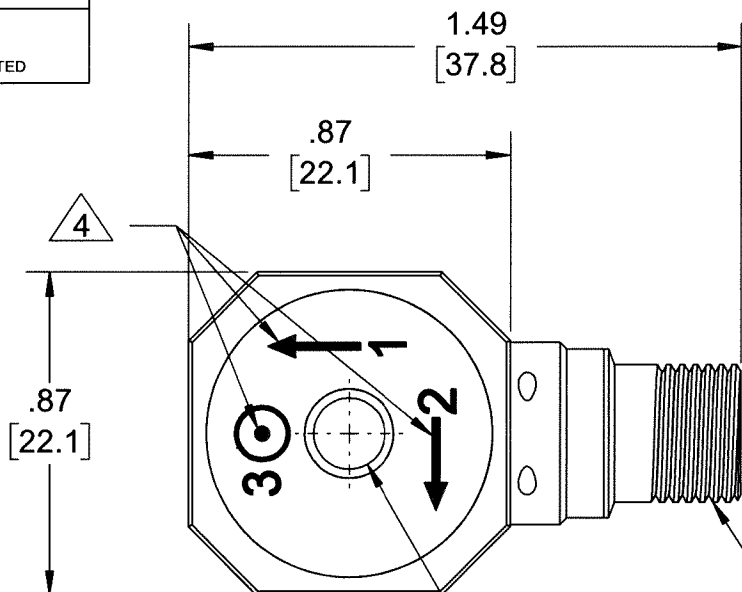
C

B

B

A

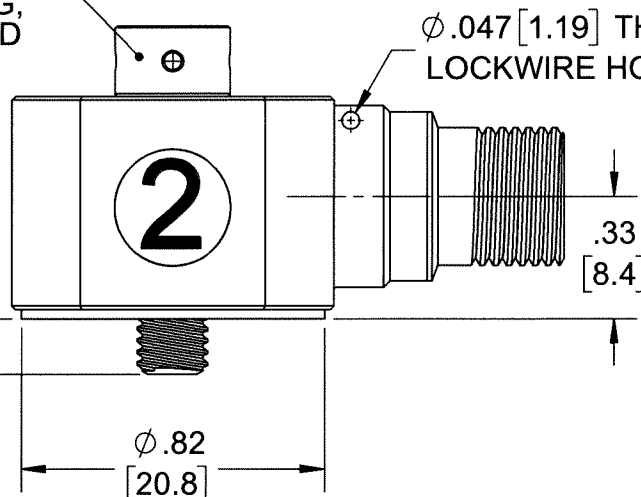
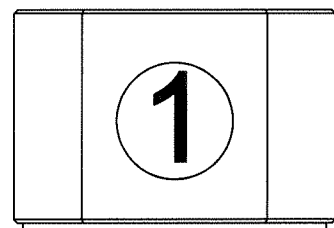
A



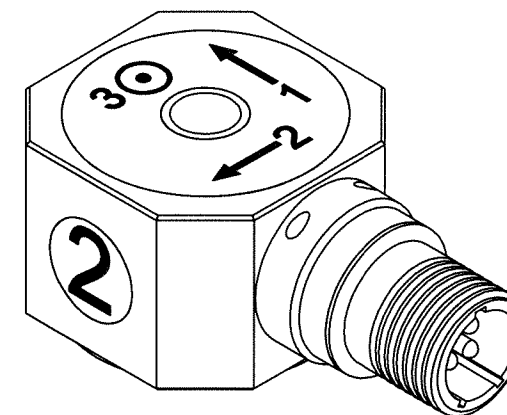
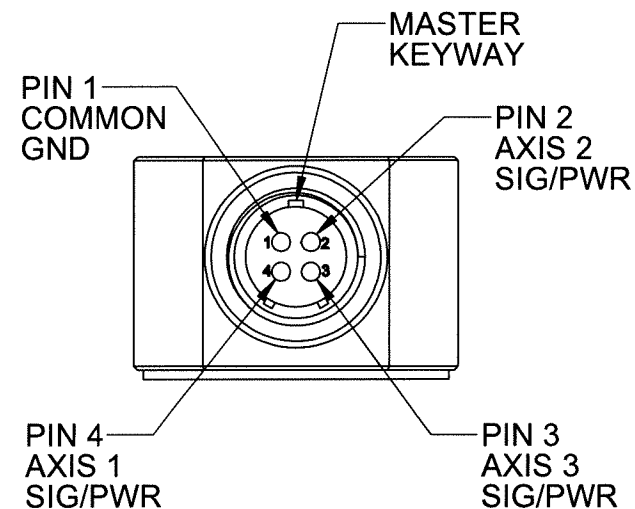
CONNECTOR, 4-PIN, 3/8-28 UN-2A GLENAIR P/N: 800-013-03Z16-4PN Δ 3

MOUNTING SCREW, MODEL 6543, 10-32 x .75" LONG, QTY. 1, SUPPLIED

ϕ .047 [1.19] THRU LOCKWIRE HOLE



MOUNTING RECOMMENDATION: PREPARE A ϕ .83 MIN SURFACE, FLAT TO .001 TIR. TAP 10-32 UNF-2B ∇ .20 [5.1] MIN. MOUNTING TORQUE: 10-12 Lb-in.



5. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR PROCESSING THESE APPEAR AS INDICATORS THAT DO NOT AFFECT FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION

Δ 4 ARROWS INDICATE ACCELERATION DIRECTION FOR POSITIVE OUTPUT.

Δ 3 MATES WITH GLENAIR P/N: 800-006-16-Z16-4-SN MATES WITH DYTRAN CABLE MODEL 6380AXX. (XX = LENGTH IN FEET)

2. WEIGHT: 52 GRAMS, MAX.

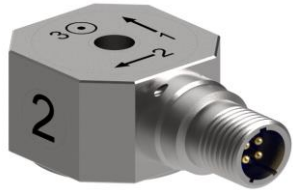
1. MATERIAL: 300 SERIES S.S.

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. DIMENSIONS APPLY AFTER FINISHING.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE:		Chatsworth, CA MASTER ONLY IF IN RED	
DECIMALS .XX ±.03 .XXX ±.010	METRIC .X ±0.8 .XX ±0.25	ANGLES ±1°	TITLE: OUTLINE/INSTALLATION DWG, TRIAXIAL ACCELEROMETER, 3713AXT SERIES		
APPROVALS		DATE	SIZE	CAGE CODE	DWG NO
ORIG	LN	11/20/17	B	2W033	127-3713A1T
CHK	AM	10/29/19	SCALE:		
APP			2:1		
DO NOT SCALE DRAWING			SHEET 1 OF 1		

Triaxial Accelerometer, IEPE

REV A, ECN 15001, 10/08/19



- HERMETICALLY SEALED
- CASE ISOLATED
- TEDS FEATURE

PHYSICAL

		ENGLISH		SI	
Weight, Max.		1.8	oz	52	grams
Mounting		Ø.195 Thru Hole		Ø4.95mm Thru Hole	
Connector [1]		4-Pin		4-Pin	
Material		300 Series S.S.		300 Series S.S.	
Sensing Element	Material	Quartz		Quartz	
	Mode	Shear		Shear	

PERFORMANCE

Sensitivity [2], ±10%	10	mV/g	1.0	mV/m/s ²
Acceleration Range	500	Gpeak	4905	m/s ² peak
Frequency Range, (±5%)	2.0 to 3,000	Hz	2.0 to 3,000	Hz
Frequency Range, (±10%)	1.1 to 4,000	Hz	1.1 to 4,000	Hz
Frequency Range, (±3dB)	0.6 to 6,000	Hz	0.6 to 6,000	Hz
Resonance Frequency	>30	kHz	>30	kHz
Transverse Sensitivity	<6	%	<6	%
Electrical Noise Floor, Max.	0.010	Grms	0.10	m/s ² rms
Linearity [3]	± 1%	% F.S.	± 1%	% F.S.

ELECTRICAL

Compliance Voltage	+18 to +30	VDC	+18 to +30	VDC
Current Range [4]	2 to 20	mA	2 to 20	mA
Output Impedance, Typ.	100	Ω	100	Ω
Output Bias Voltage	7.0 to 12	VDC	7.0 to 12	VDC
Discharge Time Constant	0.3 to 2.0	sec	0.3 to 2.0	sec
Ground Isolation	>1	GΩ	>1	GΩ
TEDS	IEEE 1451.4		IEEE 1451.4	
Base Strain Sensitivity	0.003	g/με	0.03	m/s ² /με

ENVIRONMENTAL

Maximum Shock	2,000	Gpeak	19,620	m/s ²
Maximum Vibration	600	Gpeak	5,886	m/s ²
Operating Temperature	-67 to +302	°F	-55 to +150	°C
TEDS Operating Temperature	-40 to +185	°F	-40 to +85	°C
Seal	Hermetic		Hermetic	

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Time Constant (Sec)	Operating Temp (°F)
3713A1T	1.0	5,000	0.8 to 2.0	-67 to +302
3713A2T	0.5	10,000	0.8 to 2.0	-67 to +302
3713A3T	5.0	1,000	0.5 to 2.0	-67 to +302

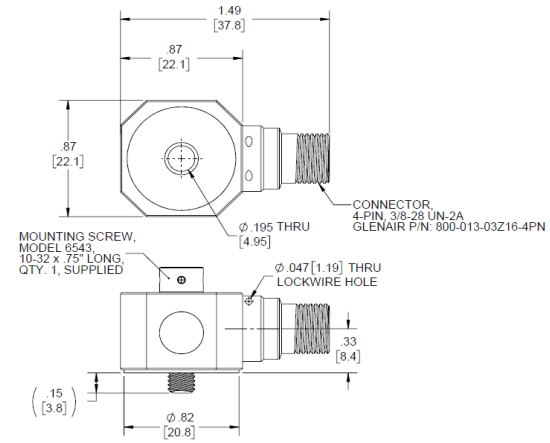
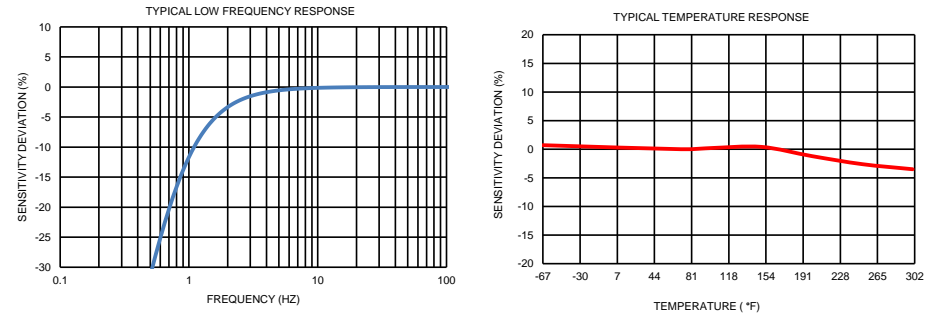
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screw, model 6543, 10-32 x .75" long, Qty. 1

Notes:

- [1] Mates with Glenair connector 800-006-16-Z16-4SN. Dytran cable model 6380AXX
- [2] Measured at 100Hz, 1 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. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3713A1T for more information.

