

PROPRIETARY AND CONFIDENTIAL

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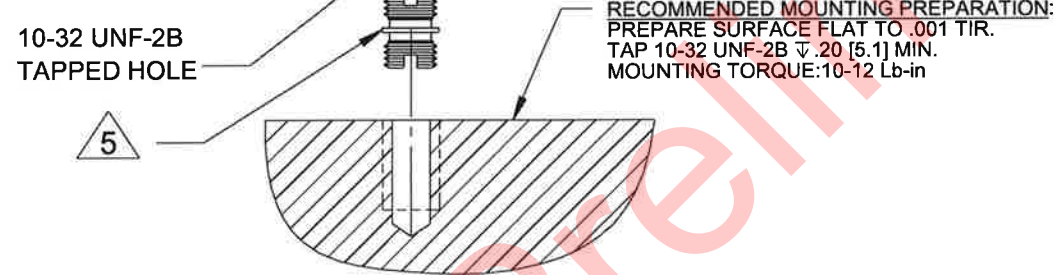
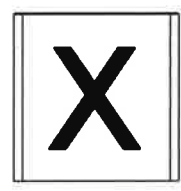
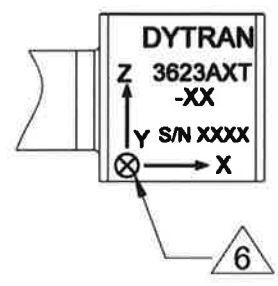
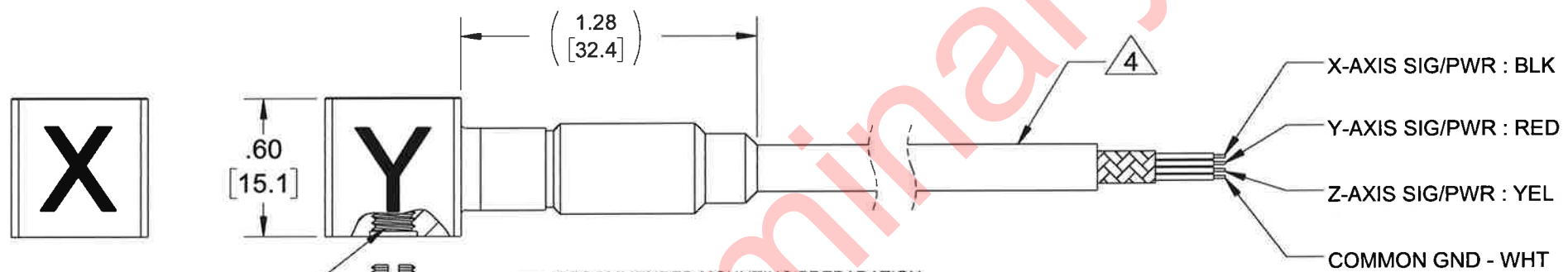
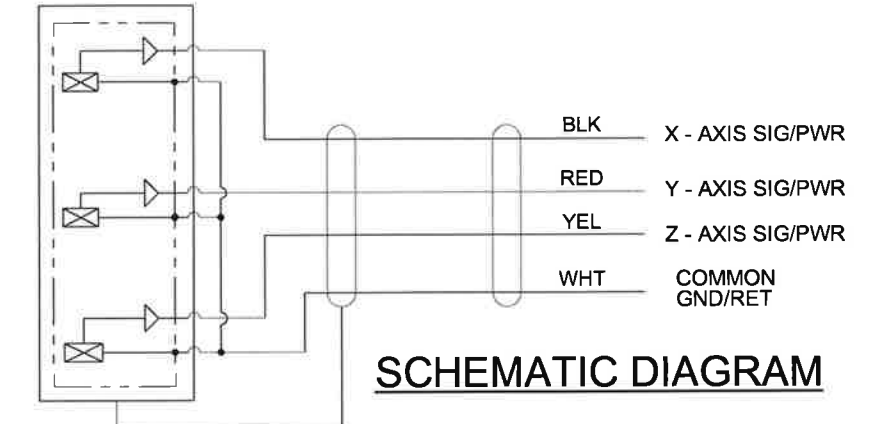
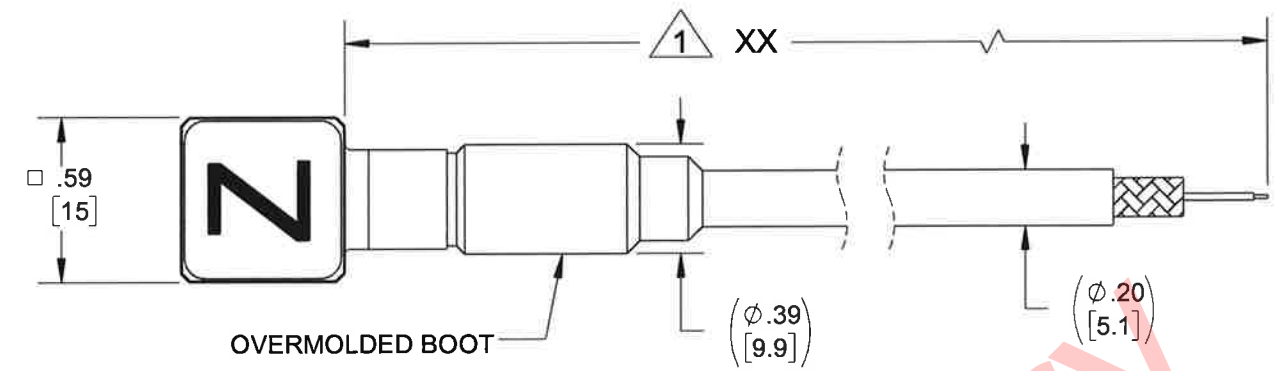
REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
X1		PRELIMINARY RELEASE	NDC 03/30/16	W	R

**1** CABLE LENGTH TOLERANCE

≤1FT	+1/ -0 IN
>1 FT - 5 FT	+2/ -0 IN
> 5 FT - 10 FT	+4/ -0 IN
>10 FT - 25FT	+6 / -0 IN
>25 FT	+5% / -0%

MODEL NO	SENSITIVITY
3623A1T-XX	10 mV/g
3623A2T-XX	100 mV/g



**4** CABLE SPECIFICATIONS

PRESSURE RATING	200 PSI [1.38 MPa] MAX.
VOLTAGE	600 VOLTS
MINIMUM BEND DIAMETER	6 IN. [152.4mm]
CONDUCTORS	28 AWG- 7/36, POLYPROPYLENE INSULATION
SHIELD	TIN PLATED COPPER BRAID, 90% COVERAGE, WATERBLOCKED
INNER JACKET	WHITE, POLYVINYL CHLORIDE (PVC)
OUTER JACKET	ORANGE, POLYURETHANE, φ.200 IN. [5.08mm] NOM.
TEMPERATURE RATING	-55 °C TO 100 °C
WEIGHT IN AIR	22 LB. / 1000 FT.
WEIGHT IN SEAWATER	8 LB. / 1000 FT.

- 7. RATING: IP68, SUBMERSED TO 175PSI.
- 6** ARROWS INDICATE DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT
- 5** MOUNTING STUD, 10-32 TO 10-32, MODEL 6200, SUPPLIED.
- 4** CABLE, 4 CONDUCTOR, POLYURETHANE. SEE TABLE FOR SPECIFICATIONS.
- 3. WEIGHT: 18 GRAMS, MAX. (LESS CABLE).
- 2. TEMPERATURE RATING: -55 °C TO 100°C.
- 1** PART NUMBER 3623AXT-XX. ("XX" DENOTES LENGTH IN FEET).

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:

DECIMALS	METRIC	ANGLES
.XX ±.03	.X ± 0.8	±1°
.XXX ±.010	.XX ±0.25	

APPROVALS: ORIG NDC 03/30/16, CHK W, DATE 3/31/16, APP PT, DATE 4/10/16

THIRD ANGLE PROJECTION USA

DO NOT SCALE DRAWING

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

TITLE: OUTLINE/INSTALLATION DRAWING, 3623A1T-XX SERIES

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-3623A1T-XX	X1

SCALE: 4:1 SHEET 1 OF 1



- GROUND ISOLATED
- HERMETICALLY SEALED
- STUD MOUNT
- TEDS CAPABILITY
- IP68 RATED, FULLY SUBMERSIBLE

**PHYSICAL**

		ENGLISH		SI	
Weight, Max. (Less cable)		0.6	oz	18	grams
Mounting Provision		10-32 Stud Mount		10-32 Stud Mount	
Integral Cable [1]	Type	4x 28AWG, Water-blocked		4x 28AWG, Water-blocked	
Housing	Material	Titanium		Titanium	
Isolation	Material	Case Isolated		Case Isolated	
Sensing Element	Material	Ceramic		Ceramic	
	Element	Shear		Shear	

**PERFORMANCE**

Sensitivity, ±5% [2]		10	mV/g	1.02	mV/m/s <sup>2</sup>
Acceleration Range, ±		500	Gpeak	4905	m/s <sup>2</sup> peak
Frequency Range, ±5%		1.4 to 3000	Hz	1.4 to 3000	Hz
		1.9 to 5000	Hz	1.9 to 5000	Hz
Resonance Frequency		> 30	kHz	> 30	kHz
Linearity [3]		±1	% F.S.	±1	% F.S.
Transverse Sensitivity, Max		6	%	6	%
Noise floor		0.007	Grms	0.07	m/s <sup>2</sup> rms

**ELECTRICAL**

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		0.2 to 1.0	Sec	0.2 to 1.0	Sec

**ENVIRONMENTAL**

Maximum Shock, ±		1000	g pk	9810	m/s <sup>2</sup>
Maximum Vibration, ±		600	g pk	5886	m/s <sup>2</sup>
Operating Temperature		-67 to +212	°F	-55 to +100	°C
TEDs Operating Temperature		-40 to +185	°F	-40 to +85	°C
TEDs Feature [6]		IEEE 1451.4		IEEE 1451.4	
Base Strain Sensitivity		0.002	g/μe	0.02	m/s <sup>2</sup> /μe
Seal		Hermetic		Hermetic	
Maximum Ambient Pressure		175	psi	1.21	MPa

**This family also includes:**

Model	Sensitivity (mV/g)	Range (Gpeak)	Noise(Grms)	Temp Range (°F)	Time Constant (sec)
3623A2T-XX	100	50	0.0007	-67 to +212	0.2 to 1.0

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

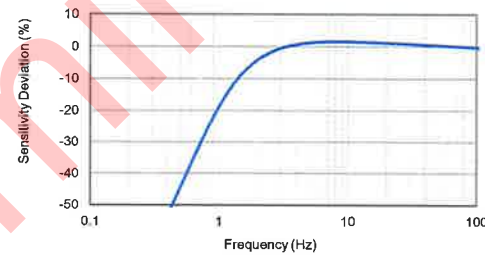
**Supplied Accessories:**

- 1) Accredited Calibration Certificate (ISO 17025).
- 2) Mounting stud model 6200, (10-32 to 10-32), qty 1.

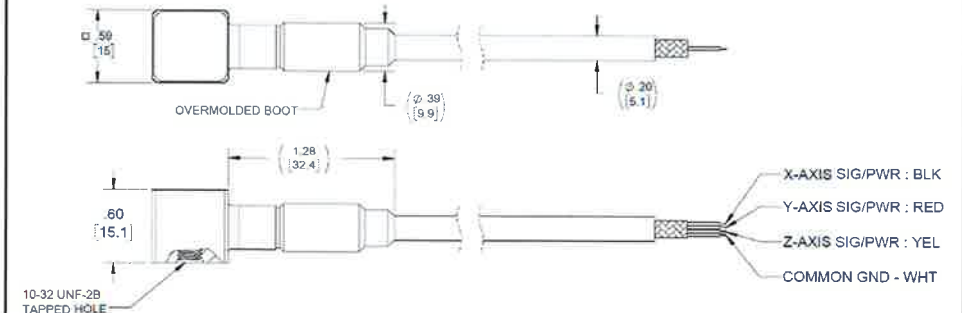
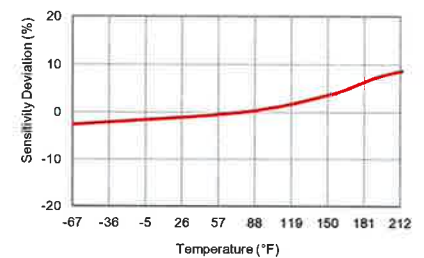
**Notes:**

- [1] Model number: 3623A1T-XX. "XX" denotes cable length in feet.
- [2] Measured At 100 Hz, 1 Grms per ISA RP 37.2.
- [3] Measured using zero-based best 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.
- [6] TEDs is unlocked version.

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL TEMPERATURE RESPONSE



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3623A1T-XX for more information.



*Pr. Adhikari*



- GROUND ISOLATED
- HERMETICALLY SEALED
- STUD MOUNT
- TEDS CAPABILITY
- IP68 RATED, FULLY SUBMERSIBLE

**PHYSICAL**

Weight, Max. (Less cable)  
 Mounting Provision  
 Intergral Cable [1]  
 Type  
 Housing  
 Isolation  
 Sensing Element  
 Material  
 Element

	ENGLISH		SI	
Weight, Max. (Less cable)	0.6	oz	18	grams
Mounting Provision	10-32 Stud Mount		10-32 Stud Mount	
Intergral Cable [1] Type	4 x 28AWG, Water-blocked		4 x 28AWG, Water-blocked	
Housing Material	Titanium		Titanium	
Isolation Material	Case Isolated		Case Isolated	
Sensing Element Material	Ceramic		Ceramic	
Element	Shear		Shear	

**PERFORMANCE**

Sensitivity, ±5% [2]  
 Acceleration Range, ±  
 Frequency Range, ±5%  
 ±10%  
 Resonance Frequency  
 Linearity [3]  
 Transverse Sensitivity, Max  
 Noise floor

	ENGLISH		SI	
Sensitivity, ±5% [2]	100	mV/g	10.2	mV/m/s <sup>2</sup>
Acceleration Range, ±	50	Gpeak	491	m/s <sup>2</sup> peak
Frequency Range, ±5% ±10%	1.4 to 3000	Hz	1.4 to 3000	Hz
	1.9 to 5000	Hz	1.9 to 5000	Hz
Resonance Frequency	> 30	kHz	> 30	kHz
Linearity [3]	±1	% F.S.	±1	% F.S.
Transverse Sensitivity, Max	6	%	6	%
Noise floor	0.0007	Grms	0.007	m/s <sup>2</sup> rms

**ELECTRICAL**

Supply Current Range [4]  
 Compliance Voltage Range  
 Output Impedance, Typ.  
 Output Bias Voltage  
 Discharge Time Constant

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Supply Current Range [4]	2 to 20	mA	2 to 20	mA
Compliance Voltage Range	+18 to +30	VDC	+18 to +30	VDC
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Output Bias Voltage	+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant	0.2 to 1.0	Sec	0.2 to 1.0	Sec

**ENVIRONMENTAL**

Maximum Shock, ±  
 Maximum Vibration, ±  
 Operating Temperature  
 TEDs Operating Temperature  
 TEDs Feature [6]  
 Base Strain Sensitivity  
 Seal  
 Maximum Ambient Pressure

	ENGLISH		SI	
Maximum Shock, ±	100	g pk	981	m/s <sup>2</sup>
Maximum Vibration, ±	60	g pk	589	m/s <sup>2</sup>
Operating Temperature	-67 to +212	°F	-55 to +100	°C
TEDs Operating Temperature	-40 to +185	°F	-40 to +85	°C
TEDs Feature [6]	IEEE 1451.4		IEEE 1451.4	
Base Strain Sensitivity	0.002	g/μe	0.02	m/s <sup>2</sup> /μe
Seal	Hermetic		Hermetic	
Maximum Ambient Pressure	175	psi	1.21	MPa

**This family also includes:**

Model	Sensitivity (mV/g)	Range (Gpeak)	Noise(Grms)	Temp Range (°F)	Time Constant (sec)
3623A1T-XX	10	500	0.007	-67 to +212	0.2 to 1.0

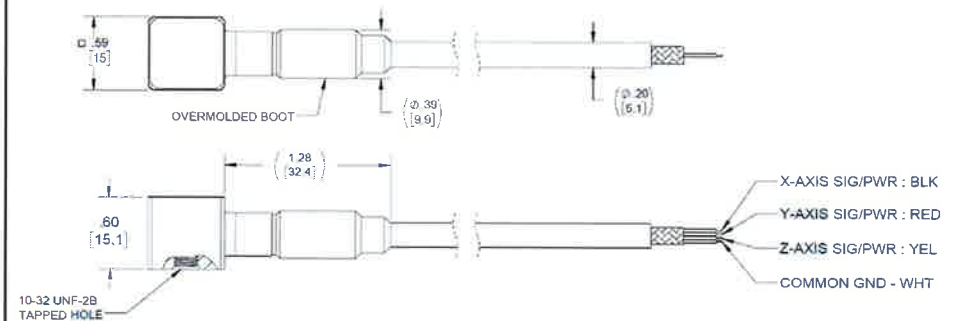
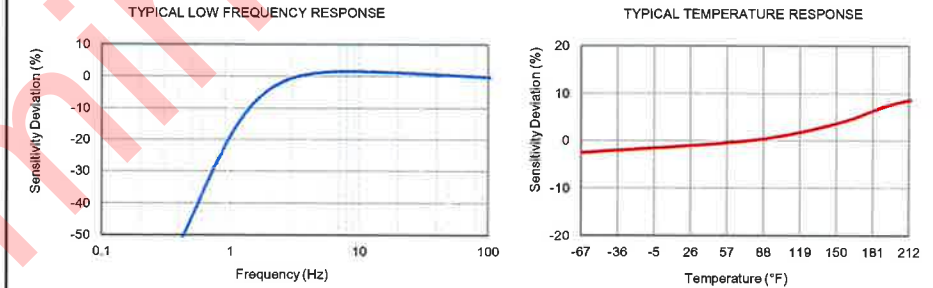
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*R. Alabio*