

PROPRIETARY AND CONFIDENTIAL

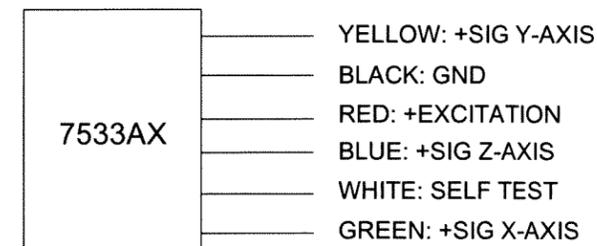
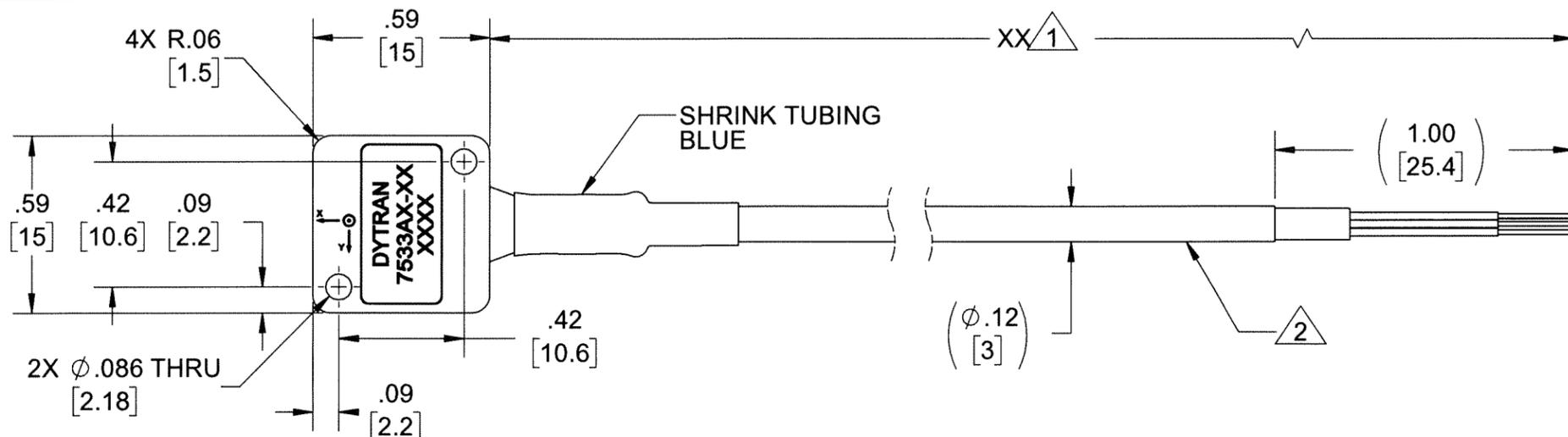
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REVISIONS

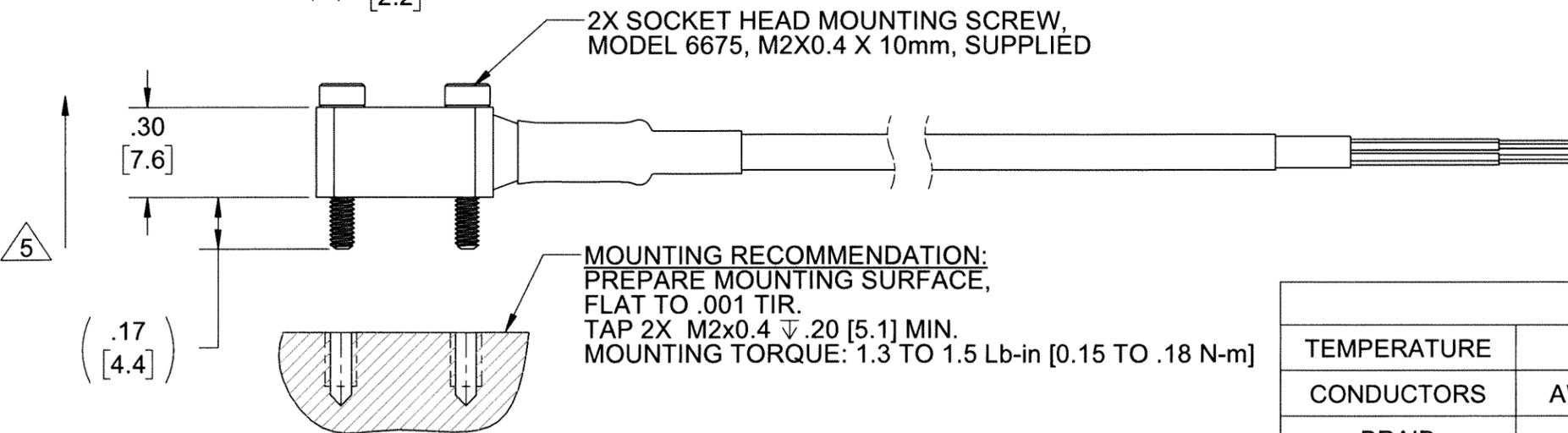
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	12745	REVISED MARKING TO DENOTE CABLE MARKING	EM 06/08/16	AS	LN
C	14900	ZONE 4/D: HEADING: IS: SENSITIVITY WAS: SENSITIVITY (±10%)	AM 03/01/19	KG	LN

MODEL	INPUT RANGE	SENSITIVITY
7533A1-XX	±2g	420 mV/g
7533A2-XX	±3g	300 mV/g
7533A3-XX	±5g	174 mV/g
7533A4-XX	±16g	57 mV/g
7533A5-XX	±200g	6.5 mV/g

CABLE LENGTH TOLERANCE			
ENGLISH		[METRIC]	
≤1FT	+1/ -0 IN	≤0.3m	+25mm -0mm
>1 FT - 5 FT	+2/ -0 IN	.0.3 m-1.5m	+50mm -0mm
> 5 FT - 10 FT	+4/ -0 IN	>1.5m-3m	+100mm -0mm
>10 FT - 25FT	+6 / -0 IN	>3m-7.5m	+150mm -0mm
>25 FT	+5% / -0%	>7.5m	+5%/-0%



WIRING DIAGRAM



CABLE SPECIFICATIONS	
TEMPERATURE	-55 °C TO 120 °C
CONDUCTORS	AWG 30 - 7/38 TIN PLATED COPPER, SANTOPRENE .007 WALL
BRAID	40 AWG TIN PLATED COPPER BRAID, 90% COVERAGE
JACKET	BLACK, SANTOPRENE, .013 NOM. WALL, Ø.118 MAX

- 6. OPERATING TEMPERATURE: -40°F TO +185°F. (-40 °C TO +85 °C)
  - 5. ARROW INDICATE DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT
  - 4. WEIGHT: 6.0 GRAMS, MAX. (LESS CABLE)
  - 3. MATERIAL: ALUMINUM ALLOY, ANODIZED, COLOR: BLACK
  - 2. CABLE, 6- CONDUCTORS, 30AWG, SHIELDED, SANTOPRENE JACKET, COLOR: BLACK. SEE TABLE FOR SPECIFICATIONS.
  - 1. MODEL NUMBER: 7533AX-XX. "XX" DENOTES CABLE LENGTH IN FEET (MAXIMUM CABLE LENGTH 50 FT.). SEE TABLE FOR CABLE LENGTH TOLERANCE.
- 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 LN 07/03/13, CHK EP 02/12/16, APP LN 02/12/16

DATE: 07/03/13, 02/12/16, 02/12/16

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: OUTLINE/INSTALLATION DWG, 7533AX SERIES

SIZE B, CAGE CODE 2W033, DWG NO 127-7533A1-XX, REV C

SCALE: 2:1, SHEET 1 OF 1

<b>MODEL NUMBER</b> 7533A3	<b>PERFORMANCE SPECIFICATIONS</b>	<b>DOC NO.</b> PS7533A3
<b>TRIAxIAL , DC ACCELEROMETER</b>		REV C ECN 13570, 07/20/17



- **LOW COST**
- **WIDE SUPPLY VOLTAGE RANGE**
- **LOW CURRENT CONSUMPTION**

**PHYSICAL**

Weight, Max. (less cable)

Mounting

Cable

Type

Material

Housing

Material

Isolation

	ENGLISH		SI	
Weight, Max. (less cable)	0.21	oz	6.0	grams
Mounting	2X M2 Screws		2X M2 Screws	
Cable Type	6-conductor		6-conductor	
Cable Material	Santoprene		Santoprene	
Housing Material	Aluminum, Anodized		Aluminum, Anodized	
Housing Isolation	Case Isolated		Case Isolated	

**PERFORMANCE**

Sensitivity, +/-10% [1]

Acceleration Range, Min.

Frequency Range, -3dB

X,Y axes

Z-axis

Resonance Frequency

Linearity [2]

Transverse Sensitivity Max

Spectral Noise

Sensitivity Change Due to Temperature

Sensitivity, +/-10% [1]	174	mV/g	17.7	mV/m/s <sup>2</sup>
Acceleration Range, Min.	±5	Gpeak	±49.1	m/s <sup>2</sup> peak
Frequency Range, -3dB	0 to 1600	Hz	0 to 1600	Hz
	0 to 550	Hz	0 to 550	Hz
Resonance Frequency	>5.5	kHz	>5.5	kHz
Linearity [2]	±0.21	%F.S.	±0.21	%F.S.
Transverse Sensitivity Max	5	%	5	%
Spectral Noise	250	µGrms/√Hz	2453	µm/s <sup>2</sup> rms/√Hz
Sensitivity Change Due to Temperature	±0.006	%/°F	±0.01	%/°C

**ELECTRICAL**

Supply Current

Supply Voltage Range

Output Bias Voltage

Output Range

Self-Test Output [3]

X-axis

Y-axis

Z-axis

Turn-On Time

Supply Current	350	µA	350	µA
Supply Voltage Range	4 to 28	VDC	4 to 28	VDC
	100	Ω	100	Ω
Output Bias Voltage	1.3 to 1.7	VDC	1.3 to 1.7	VDC
Output Range	±0.975	VDC	±0.975	VDC
Self-Test Output [3]	-90 to -350	mV	-90 to -350	mV
	+90 to +350	mV	+90 to +350	mV
	+90 to +580	mV	+90 to +580	mV
Turn-On Time	1	ms	1	ms

**ENVIRONMENTAL**

Shock Max

Vibration Max

Operating Temperature

Seal

Shock Max	10,000	g pk	98100	m/s <sup>2</sup>
Vibration Max	5000	g pk	49050	m/s <sup>2</sup>
Operating Temperature	-40 to +185	°F	-40 to +85	°C
Seal	Epoxy		Epoxy	

Model	Sensitivity (mV/g)	Range (Gpeak)	Noise(µGrms/sqr(Hz))	Oper. Temp(°F)
7533A1	420	±2	250	-40 to 185
7533A2	300	±3	175(x,y); 300(z)	-40 to 185
7533A4	57	±16	300	-40 to 185
7533A5	6.5	±200	2700(x,y); 4300(z)	-40 to 185

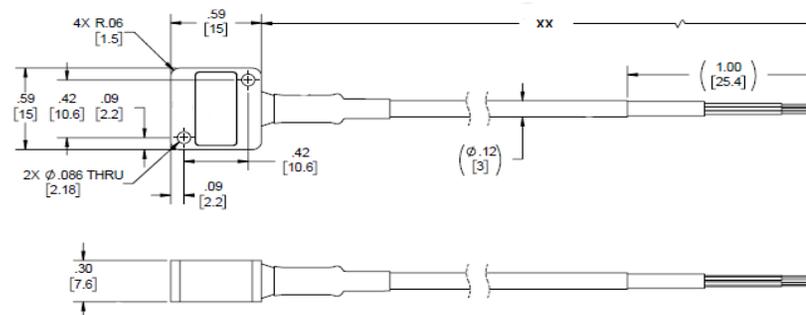
Please, refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting Screw, Model 6675, M2x0.4 x 12mm, qty. 2

**Notes:**

- [1] Measured at 100 Hz, 5 Grms per ISA RP 37.2
- [2] Linearity is % of specified full scale (or any less full-scale range), zero-based best fit straight line method.
- [3] Refer to the Operating Guide for instructions on how to use Self-Test feature



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-7533A1-XX for more information.



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