

PROPRIETARY AND CONFIDENTIAL

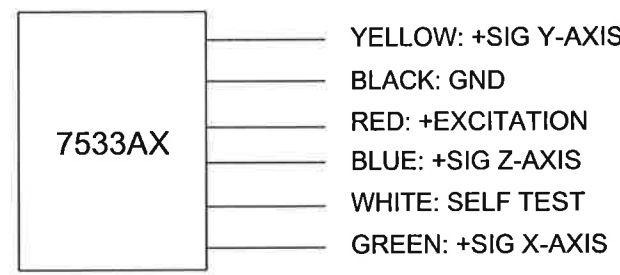
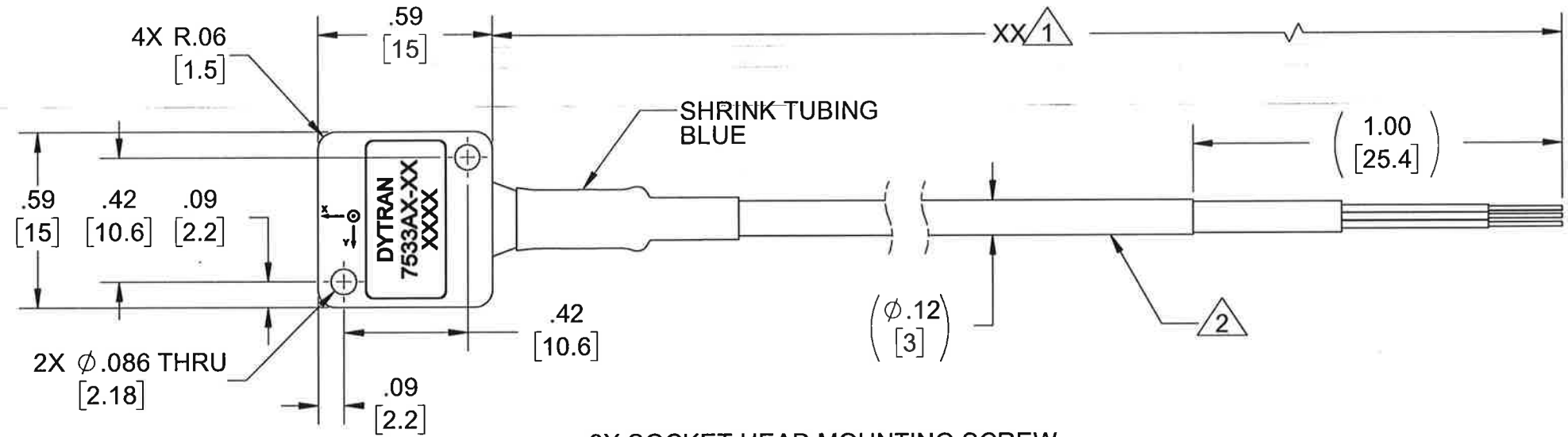
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REVISIONS

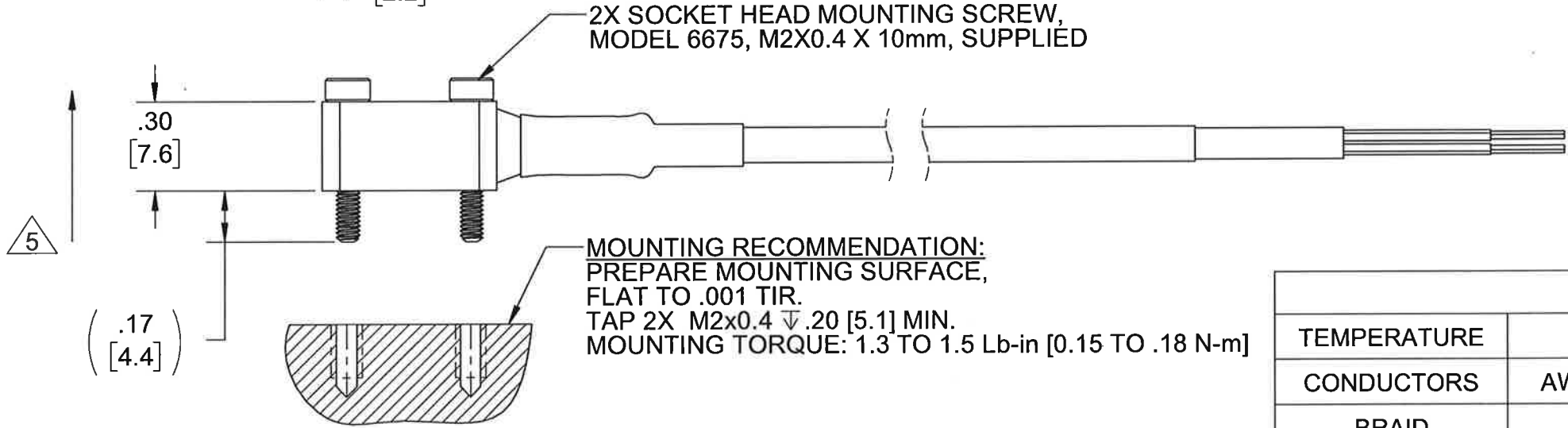
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	12745	REVISED MARKING TO DENOTE CABLE MARKING	EM 06/08/16	AS	W

MODEL	INPUT RANGE	SENSITIVITY ($\pm 10\%$)
7533A1-XX	$\pm 2g$	420 mV/g
7533A2-XX	$\pm 3g$	300 mV/g
7533A3-XX	$\pm 5g$	174 mV/g
7533A4-XX	$\pm 16g$	57 mV/g
7533A5-XX	$\pm 200g$	6.5 mV/g

CABLE LENGTH TOLERANCE			
ENGLISH	[METRIC]		
≤ 1 FT	+1/ -0 IN	≤ 0.3 m	+25mm -0mm
> 1 FT - 5 FT	+2/ -0 IN	.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, ϕ .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 \pm .03	.X \pm 0.8	$\pm 1^\circ$
.XXX \pm .010	.XX \pm 0.25	

APPROVALS		DATE
ORIG	LN	07/03/13
CHK	EP	02/12/16
APP	LN	02/12/16

ALL MACHINED SURFACES. $\sqrt{63}$ 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.

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

DYTRAN INSTRUMENTS, INC. MASTER Chatworth, CA ONLY IF IN RED

TITLE: **OUTLINE/INSTALLATION DWG, 7533AX SERIES**

SIZE B	CAGE CODE 2W033	DWG NO 127-7533A1-XX	REV B
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SCALE: 2:1 SHEET 1 OF 1

MODEL NUMBER 7533A3	PERFORMANCE SPECIFICATIONS	DOC NO. PS7533A3
	TRIAxIAL , DC ACCELEROMETER	REV B ECN 12745, 06/08/16



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

PHYSICAL

Weight, Max. (less cable)

Mounting

Cable

Type

Material

Housing

Material

Isolation

ENGLISH		SI	
0.21	oz	6.0	grams
2X M2 Screws		2X M2 Screws	
6-conductor		6-conductor	
Santoprene		Santoprene	
Aluminum, Anodized		Aluminum, Anodized	
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

174	mV/g	17.7	mV/m/s ²
±5	Gpeak	±49.1	m/s ² peak
0 to 1600	Hz	0 to 1600	Hz
0 to 550	Hz	0 to 550	Hz
>5.5	kHz	>5.5	kHz
±0.21	%F.S.	±0.21	%F.S.
5	%	5	%
250	µGrms/√Hz	2453	µm/s ² rms/√Hz
±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

350	µA	350	µA
4 to 28	VDC	4 to 28	VDC
100	Ω	100	Ω
1.3 to 1.7	VDC	1.3 to 1.7	VDC
±0.975	VDC	±0.975	VDC
-90 to -350	mV	-90 to -350	mV
+90 to +350	mV	+90 to +350	mV
+90 to +580	mV	+90 to +580	mV
1	ms	1	ms

ENVIRONMENTAL

Shock Max

Vibration Max

Operating Temperature

Seal

10,000	g pk	98100	m/s ²
5000	g pk	49050	m/s ²
-40 to +185	°F	-40 to +85	°C
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	-40 to 185
7533A4	57	±16	300	-40 to 185
7533A5	6.5	±200	2700	-40 to 185

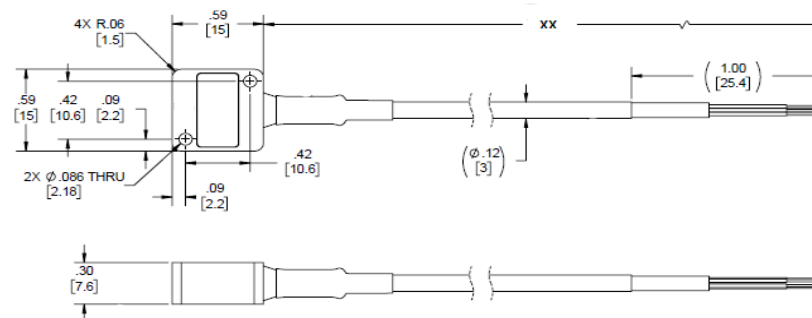
Please, refer to the performance specifications of the products in this family for detailed description

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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