

PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	14900	ZONE 4/D: HEADING: IS: SENSITIVITY WAS: SENSITIVITY (±10%)	AM 03/01/19	KG	LN
D	15400	REVISED CABLE ASSY	KG 11/11/19	AM	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

1 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%

D

D

C

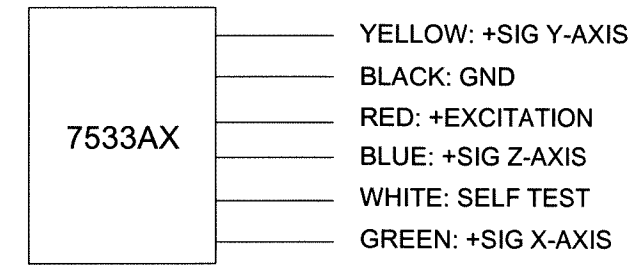
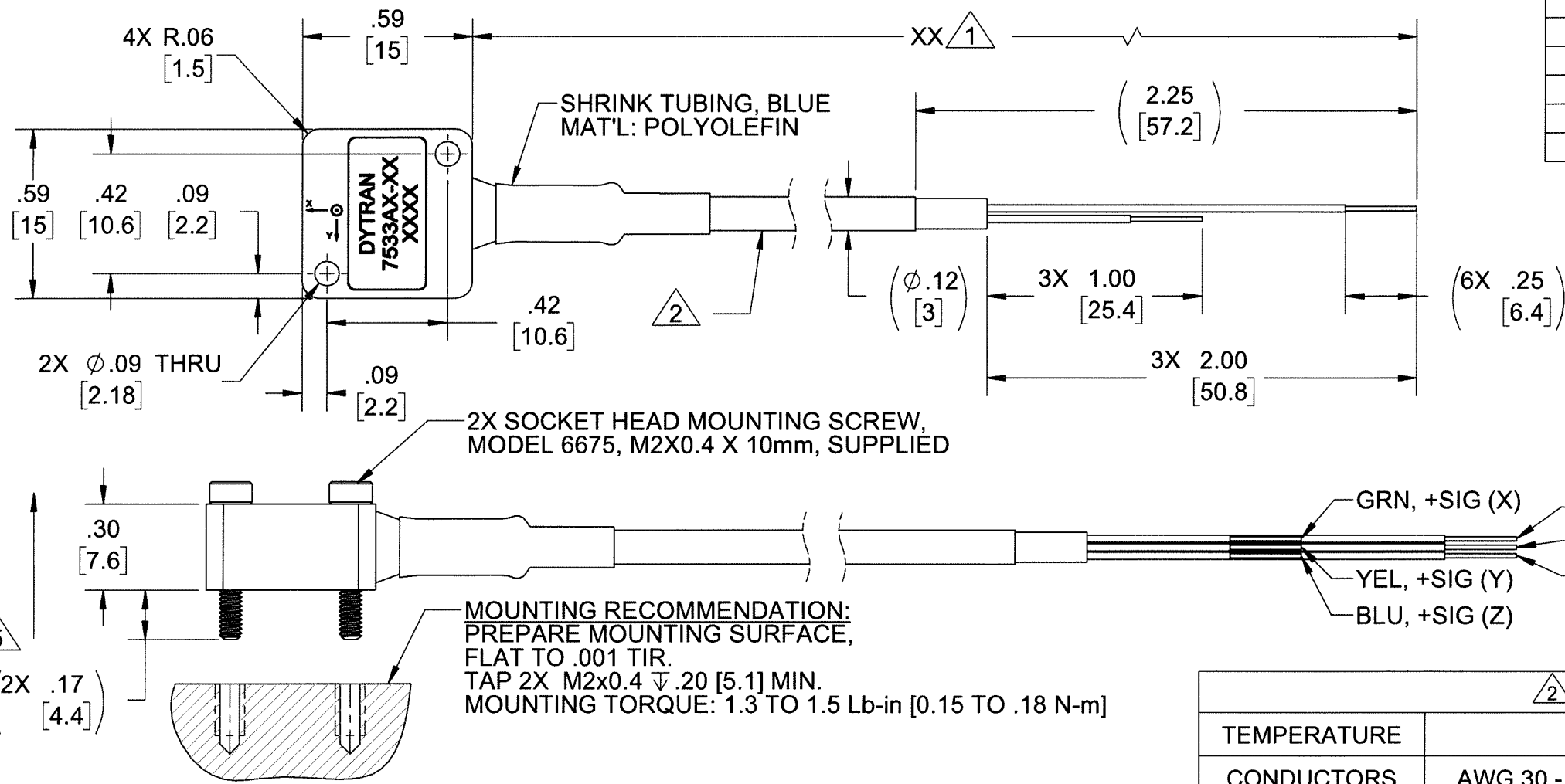
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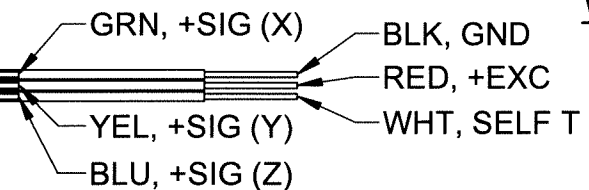
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A

A



WIRING DIAGRAM



2 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 ±.03	.X ±0.8	±1°
.XXX ±.010	.XX ±0.25	

APPROVALS

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

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: OUTLINE/INSTALLATION DWG, 7533AX SERIES

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

SCALE: 2:1 SHEET 1 OF 1

<b>MODEL NUMBER</b> 7533A4	<b>PERFORMANCE SPECIFICATIONS</b>			<b>DOC NO.</b> PS7533A4
	<b>TRIAxIAL , DC ACCELEROMETER</b>			REV E ECN 15400, 11/11/19



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

	ENGLISH		SI	
<b>PHYSICAL</b>				
Weight, Max. (less cable)	0.21	oz	6.0	grams
Mounting	2X M2 Screws		2X M2 Screws	
Cable	Type	6-conductor	6-conductor	
	Material	Santoprene	Santoprene	
Housing	Material	Aluminum, Anodized	Aluminum, Anodized	
	Isolation	Case Isolated	Case Isolated	
<b>PERFORMANCE</b>				
Sensitivity, +/-10% [1]	57	mV/g	5.8	mV/m/s <sup>2</sup>
Acceleration Range, Min.	±16	Gpeak	±157	m/s <sup>2</sup> peak
Frequency Range, -3dB	X,Y axes 0 to 1600		0 to 1600	
	Z-axis 0 to 550		0 to 550	
Resonance Frequency	>3	kHz	>3	
Linearity [2]	±0.31	%F.S.	±0.31	
Transverse Sensitivity Max	5	%	5	
Spectral Noise	300	µGrms/√Hz	2943	µm/s <sup>2</sup> rms/√Hz
Sensitivity Change Due to Temperature	±0.006	%/°F	±0.01	
<b>ELECTRICAL</b>				
Supply Current	350	µA	350	
Supply Voltage Range	4 to 28	VDC	4 to 28	
Output Impedance, Typ.	100	Ω	100	
Output Bias Voltage	X,Y axes 1.35 to 1.65		1.35 to 1.65	
	Z-axis 1.2 to 1.8		1.2 to 1.8	
Self-Test Output [3]	±1.0		±1.0	
	X-axis	-29 to -114	-29 to -114	
	Y-axis	+29 to +114	+29 to +114	
	Z-axis	+29 to +190	+29 to +190	
Turn-On Time	1	ms	1	
<b>ENVIRONMENTAL</b>				
Shock Max	10,000	g pk	98100	
Vibration Max	5000	g pk	49050	
Operating Temperature	-40 to +185	°F	-40 to +85	
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
7533A3	174	±5	250	-40 to 185
7533A5	6.5	±200	2700(x,y); 4300(z)	-40 to 185

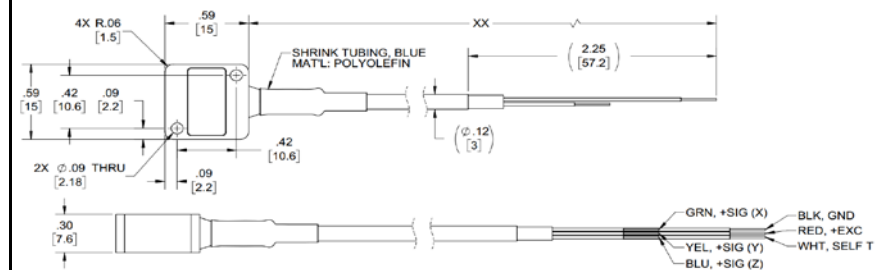
Please, refer to the performance specifications of the products in this family for detailed description

**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
- [4] In the interest of constant product improvement, we reserve the rights 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 127-7533A1-XX for more information.



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