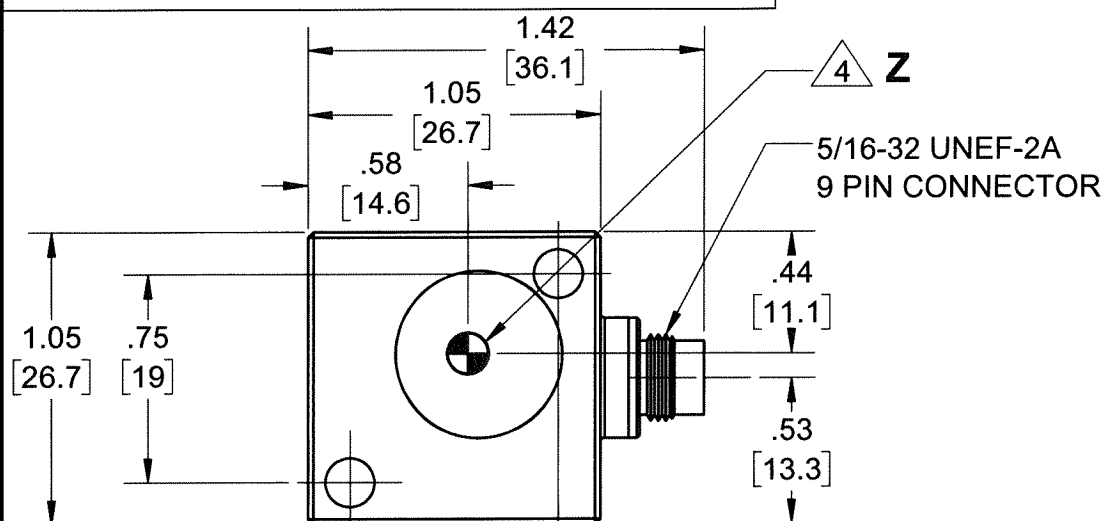


PROPRIETARY AND CONFIDENTIAL

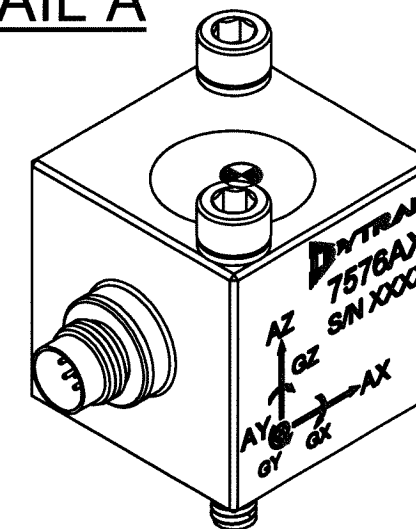
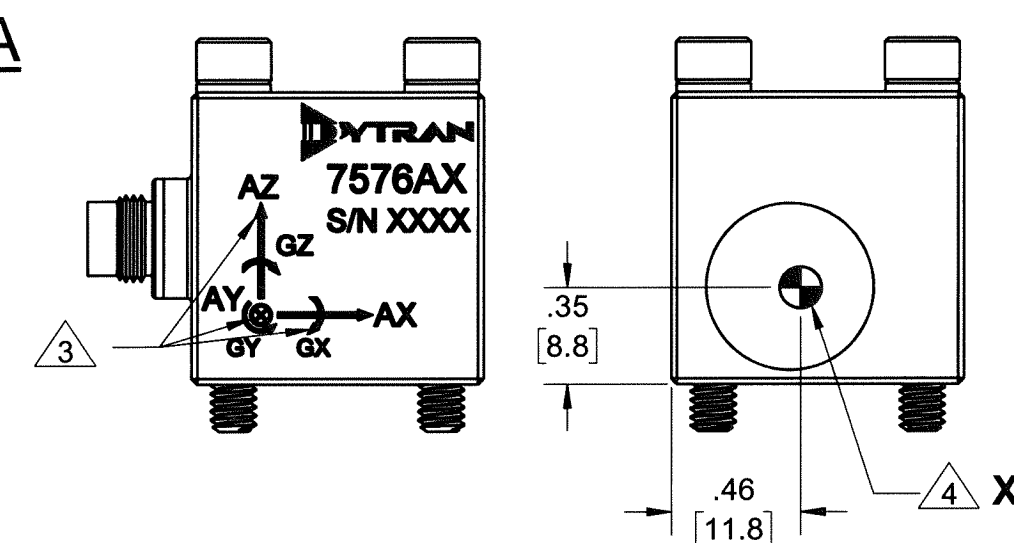
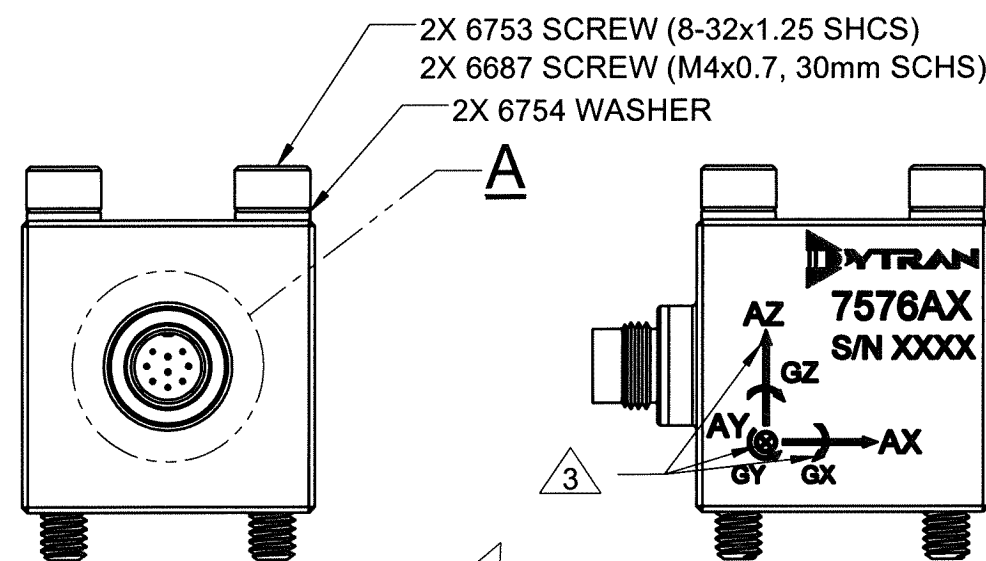
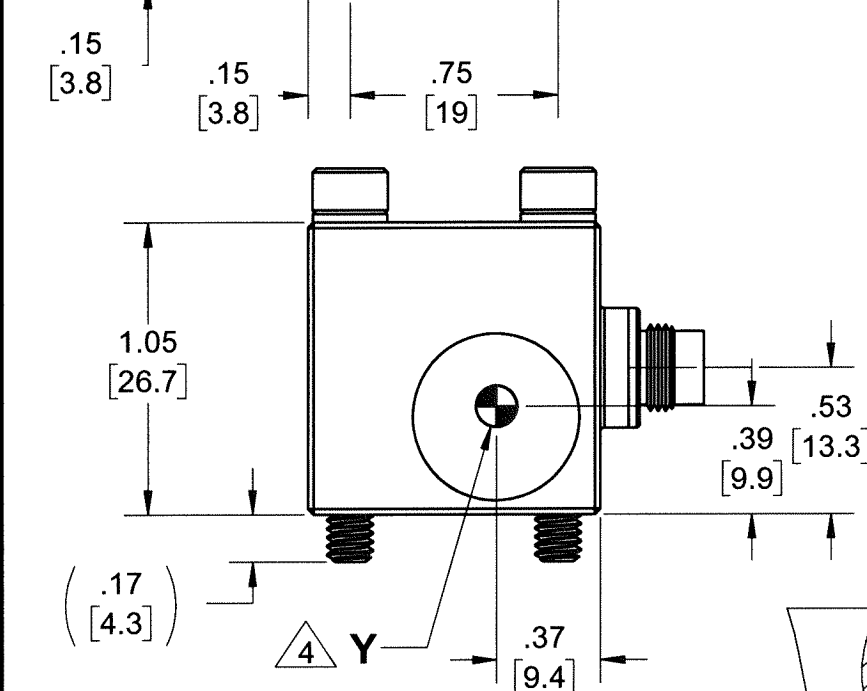
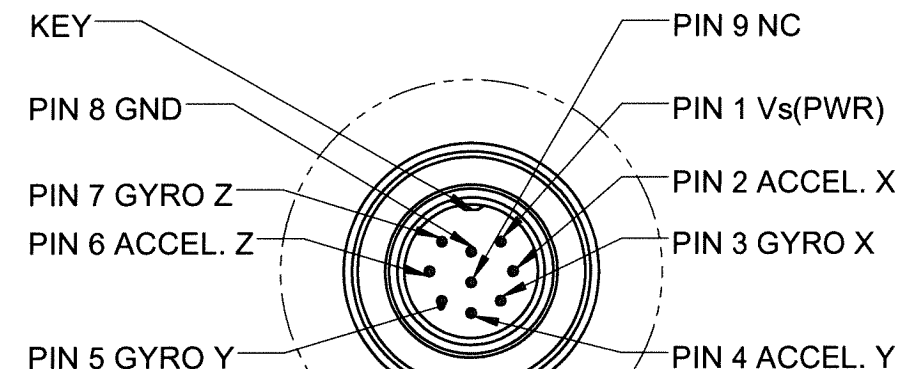
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	14121	ADDED 7576A6 TO VARIATION TABLE.	NDC 03/22/18	KG	DV
C	14221	SEE ECN	EM 05/29/18	MH	W



MODEL	GYRO RANGE	ACCELEROMETER RANGE
7576A1	±50°/sec	±5G
7576A2	±150°/sec	±10G
7576A3	±250°/sec	±30G
7576A4	±20,000°/sec	±200G
7576A5	±50°/sec	±2G
7576A6	±150°/sec	±2G



RECOMMENDED MOUNTING PREPARATION:  
 PREPARE FLAT MOUNTING SURFACE,  $\phi$  1.50 [ $\phi$  38.1] MIN, FLAT TO .001 TIR.  
 TAP 2X 8-32 UNC-2B  $\nabla$  .45 [11.4] MIN. (OR 2X M4x0.7  $\nabla$  .45 [11.4] MIN.)  
 TORQUE TO 10-12 Lb-in. [1.12 - 1.35 N-m]

5 MATES WITH DYTRAN CABLES: - 6964AXX (9-PIN TO FLYING LEADS)  
 - 6445AXX (9-PIN TO 7 BNC PLUGS)  
 (XX DENOTES LENGTH IN FEET)

4 MARKING DENOTES LOCATION OF SENSING ELEMENT'S CENTER OF MASS

3 ARROWS INDICATE GYROSCOPIC & ACCELERATION DIRECTIONS FOR POSITIVE OUTPUT

2. MATERIAL: TITANIUM ALLOY

1. WEIGHT: 25 GRAMS, MAX.

NOTES: UNLESS OTHERWISE SPECIFIED

<small>UNLESS OTHERWISE SPECIFIED:          INTERPRET DIM &amp; 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.</small>	<small>UNLESS OTHERWISE SPECIFIED:          DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE:</small>				<b>MASTER ONLY IF IN RED</b> Chatsworth, CA	
	<small>DECIMALS</small> .XX ±.03 .XXX ±.010	<small>METRIC</small> X ± 0.8 .XX ± 0.25	<small>ANGLES</small> ±1°			
	<small>APPROVALS</small> ORIG DV CHK KG APP DV	<small>DATE</small> 01/18/16 03/27/18 03/28/18	<small>TITLE:</small> <b>OUTLINE/INSTALLATION DRAWING, 7576A SERIES</b>			
	<small>DO NOT SCALE DRAWING</small>	<small>THIRD ANGLE PROJECTION</small> 	<small>SIZE</small> B <small>CAGE CODE</small> 2W033 <small>DWG NO</small> 127-7576A1 <small>SCALE:</small> 2:1			
<small>ALL MACHINED SURFACES.          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.</small>			<small>REV</small> C <small>SHEET 1 OF 1</small>			

<b>Model Number</b> 7576A3	<b>PERFORMANCE SPECIFICATION</b>	<b>DOC NO</b> PS7576A3
	<b>6DOF VIBRATION SENSOR</b>	REV C, ECN 14974, 03/25/19



- VARIABLE CAPACITANCE TECHNOLOGY
- 6 DEGREES OF FREEDOM MEASUREMENTS
- HERMETICALLY SEALED
- DC RESPONSE
- INTERNATIONAL TRAFFIC IN ARMS REGULATION (ITAR) FREE

**PHYSICAL**

Weight, Max  
Connector Type  
Material

ENGLISH		SI	
1.9	oz	55	grams
5/16-32 UNEF-2A		5/16-32 UNEF-2A	
Ti-6Al-4V		Ti-6Al-4V	

**ACCELEROMETER PERFORMANCE**

Input Range  
Frequency Response (±5%)  
Frequency Response (±3dB)  
Scale Factor, Nom. [1]  
Output Noise, Typ.  
Non-Linearity, Typ. [2]  
Temperature Range  
Scale Factor Temperature Coefficient [3]  
Axis misalignment, Max.  
Shock Survivability  
Resonant Frequency  
Cross Axis Sensitivity, Max.

±30	g	±294	m/s <sup>2</sup>
0-1000	Hz	0-1000	Hz
0-3000	Hz	0-3000	Hz
78.33	mV/g	8.0	mV/m/s <sup>2</sup>
0.000089	g rms/√ Hz	0.0009	m/s <sup>2</sup> /√ Hz
0.2	% F.S	0.2	% F.S
-67 to 257	°F	-55 to 125	°C
67	ppm/°F	120	ppm/°C
10	mrad	10	mrad
6000	g	58860	m/s <sup>2</sup>
>5	kHz	>5	kHz
5	%	5	%

**GYRO PERFORMANCE**

Input Range  
Frequency Response  
Sensitivity ±10% [1]  
Rate noise density, Typ.  
Non-Linearity, Typ [2]  
Temperature Range  
Resonant Frequency  
Cross Axis Sensitivity, Max.

±250	°/sec	±250	°/sec
0.01-2500	Hz	0.01-2500	Hz
7.0	mV/°/sec	7.0	mV/°/sec
0.06	(°/sec)/√ Hz	0.06	(°/sec)/√ Hz
0.2	% F.S	0.2	% F.S
-40 to 221	°F	-40 to 105	°C
5.7	kHz	5.7	kHz
5	%	5	%

**ELECTRICAL**

Output Impedance, Nom  
Operating Voltage  
Output Bias Voltage ±0.5 VDC  
Operating Current  
Power Supply Rejection Ratio

Typical  
Max

2	Ω	2	Ω
6 to 14	VDC	6 to 14	VDC
2.5	VDC	2.5	VDC
23	mA DC	23	mA DC
28	mA DC	28	mA DC
>65	dB	>65	dB

**ENVIRONMENTAL**

Storage Temperature  
Seal

-67 to 257	°F	-55 to 125	°C
Hermetic		Hermetic	

**This family also includes:**

Model	Input Range (EU) Accel/Gyro	Frequency response (Hz) Accel./Gyro	Sensitivity, ±10% (mV/EU) Accel./Gyro	Max.Shock (0.1ms), g	Noise (EU/√Hz) Accel./Gyro
7576A1	±5 / ±50	0-1300 / 1-1000	470 / 25	6000	0.000019 / 0.04
7576A2	±10 / ±150	0-2500 / 1-3000	235 / 12.5	6000	0.00004 / 0.04
7576A4	±200 / ±20000	0-3000 / 0-2000	11.75/ 0.1	6000	0.0009 / 0.25
7576A5	±2 / ±50	0-1150 / 1-1000	1175 / 25	6000	0.0000088 / 0.04

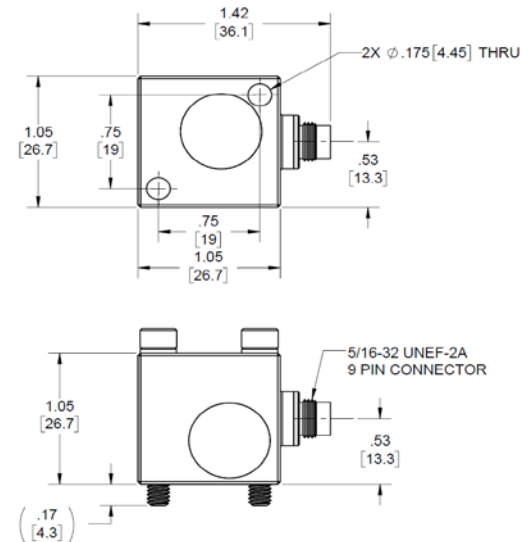
Refer to the performance specifications of the products in this family for detailed description.

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screw model 6753, 8-32 UNF-2A, qty 2
- 3) Mounting washer model 6754, qty 2
- 4) Mounting screw model 6687, M4 X 0.7, qty 2

**Notes:**

- [1] Measured using Earth gravity
- [2] Best fit zero based line method
- [3] Over the rated temperature range.
- [4] 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 over time. 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. Refer to 127-7576A1 for more information.



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