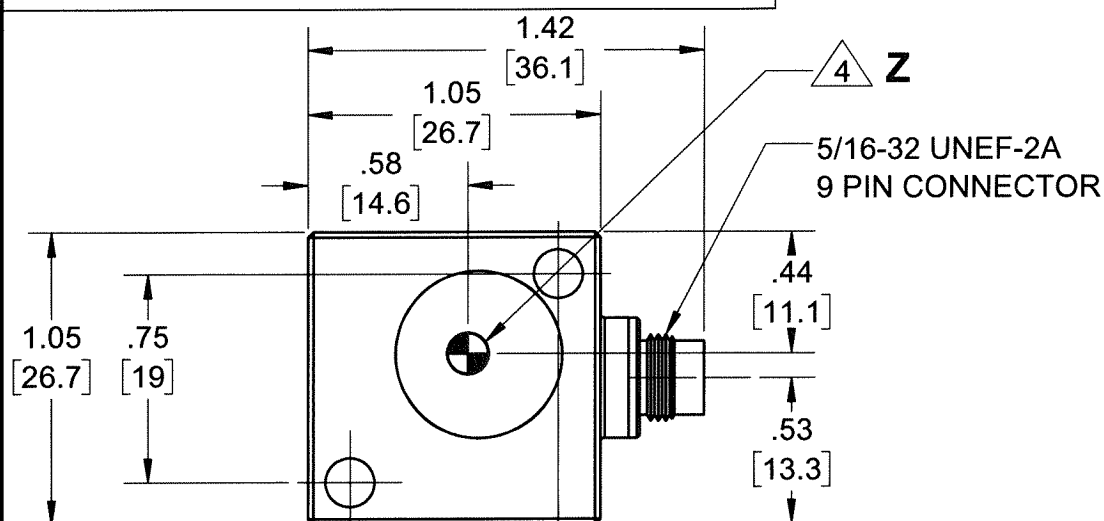


PROPRIETARY AND CONFIDENTIAL

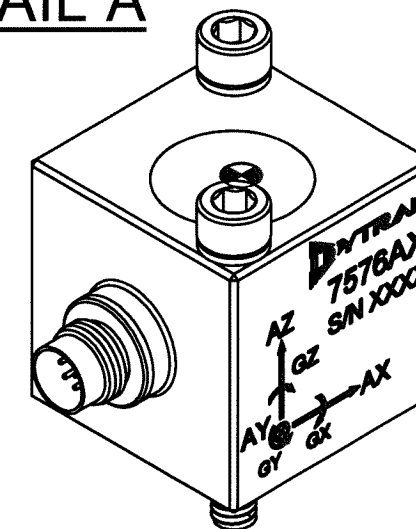
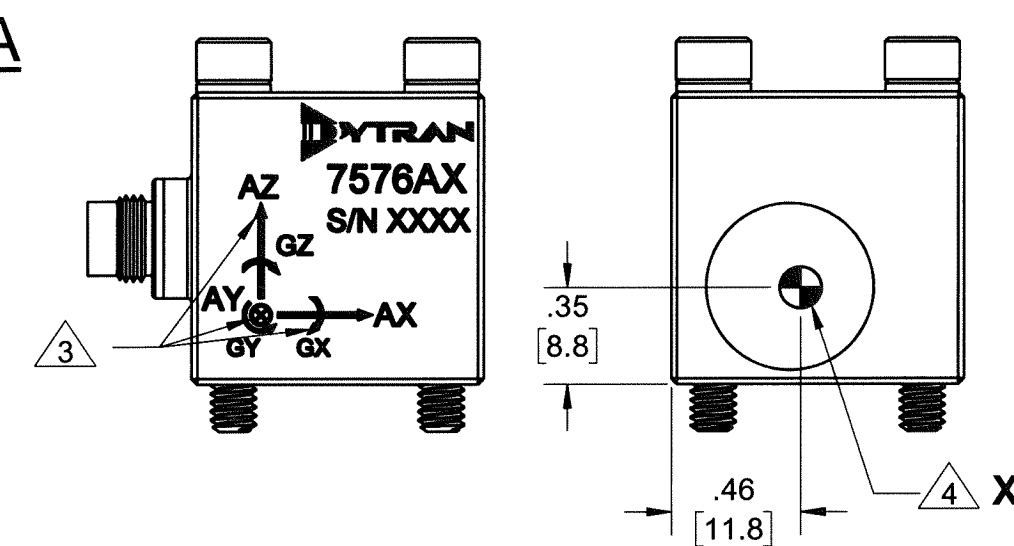
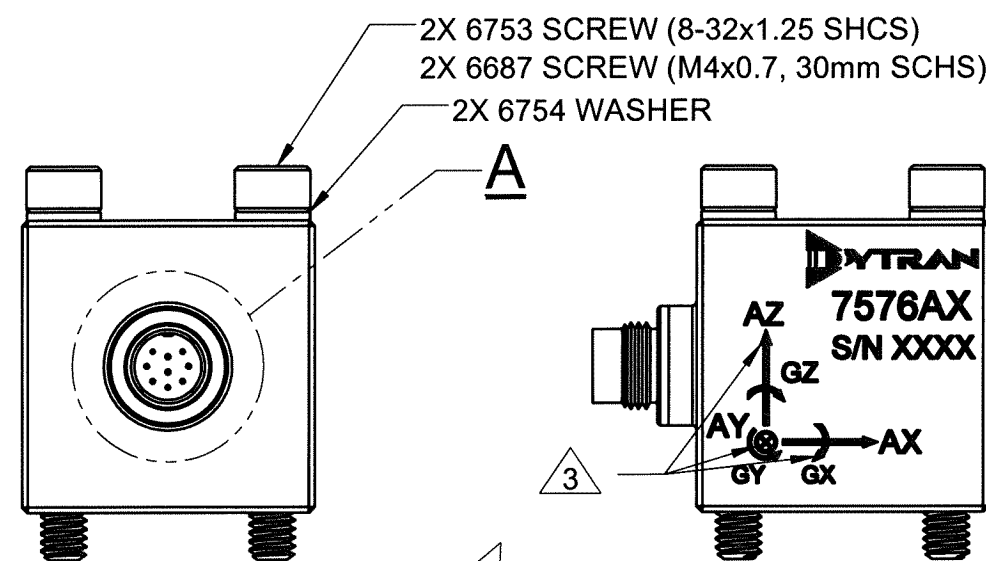
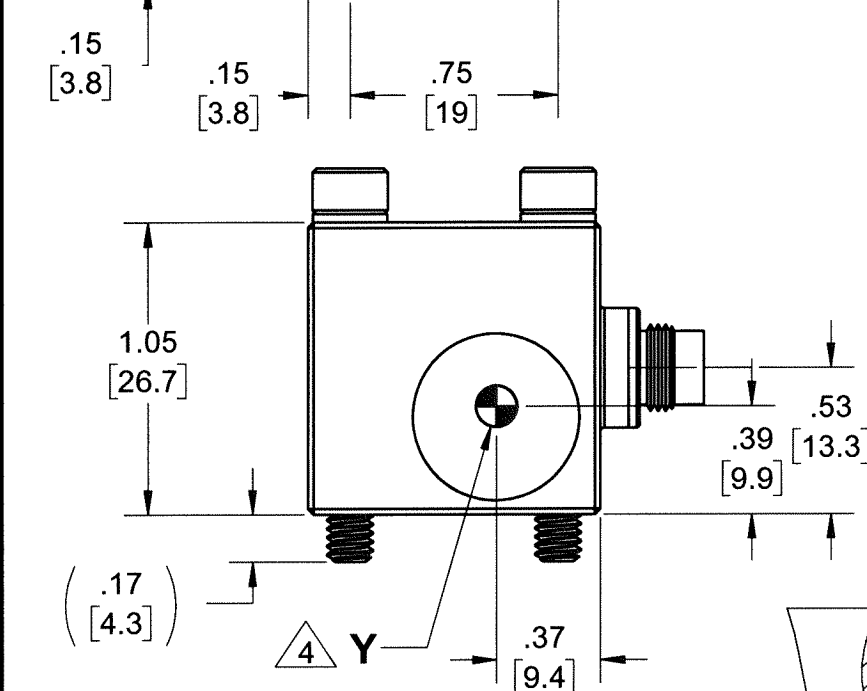
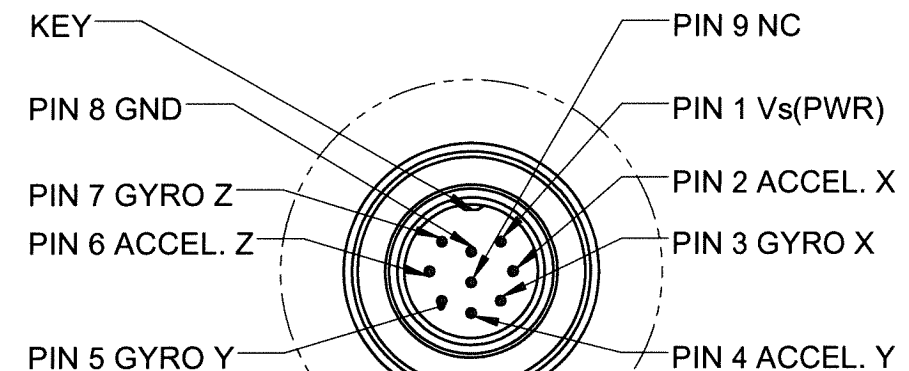
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REVISIONS

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 .XX ±.03 .XXX ±.010</small>	<small>METRIC X ± 0.8 .XX ± 0.25</small>	<small>ANGLES ±1°</small>					
	<small>APPROVALS</small>	<small>DATE</small>	<small>TITLE:</small>					
	<small>ORIG DV</small>	<small>01/18/16</small>	<b>OUTLINE/INSTALLATION DRAWING, 7576A SERIES</b>					
<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>CHK KG</small>	<small>03/27/18</small>	<small>APP DV</small>	<small>03/28/18</small>	<small>SIZE B</small>	<small>CAGE CODE 2W033</small>	<small>DWG NO 127-7576A1</small>	<small>REV C</small>
<small>DO NOT SCALE DRAWING</small>		<small>SCALE: 2:1</small>	<small>SHEET 1 OF 1</small>					

<b>Model Number</b> 7576A5	<b>PERFORMANCE SPECIFICATION</b>	<b>DOC NO</b> PS7576A5
<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	Type
Connector	
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.	

±2	g	±19.6	m/s <sup>2</sup>
0-700	Hz	0-700	Hz
0-1150	Hz	0-1150	Hz
1175	mV/g	119.8	mV/m/s <sup>2</sup>
0.000088	g rms/√ Hz	0.00009	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>
1.2	kHz	1.2	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.	

±50	°/sec	±50	°/sec
1-1000	Hz	1-1000	Hz
25	mV/°/sec	25	mV/°/sec
0.04	(°/sec)/√ Hz	0.04	(°/sec)/√ Hz
0.2	% F.S	0.2	% F.S
-40 to 221	°F	-40 to 105	°C
14.5	kHz	14.5	kHz
5	%	5	%

**ELECTRICAL**

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

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
7576A3	±30 / ±250	0-3000 / 0.01-2500	78.33 / 7	6000	0.000089 / 0.06
7576A4	±200 / ±20000	0-3800 / 0-2000	11.75 / 0.1	6000	0.0009 / 0.25

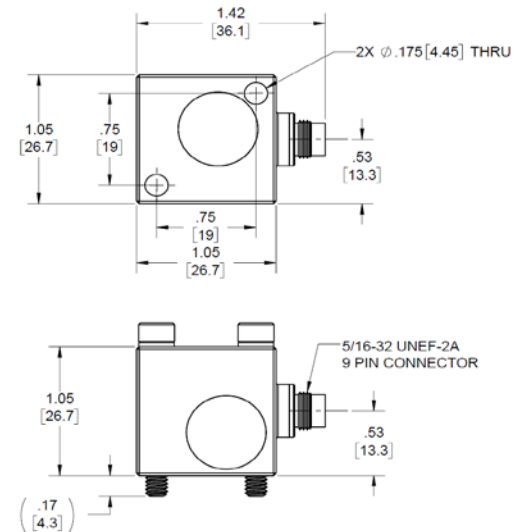
Refer to the performance specifications of the products in this family for detailed description.

**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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