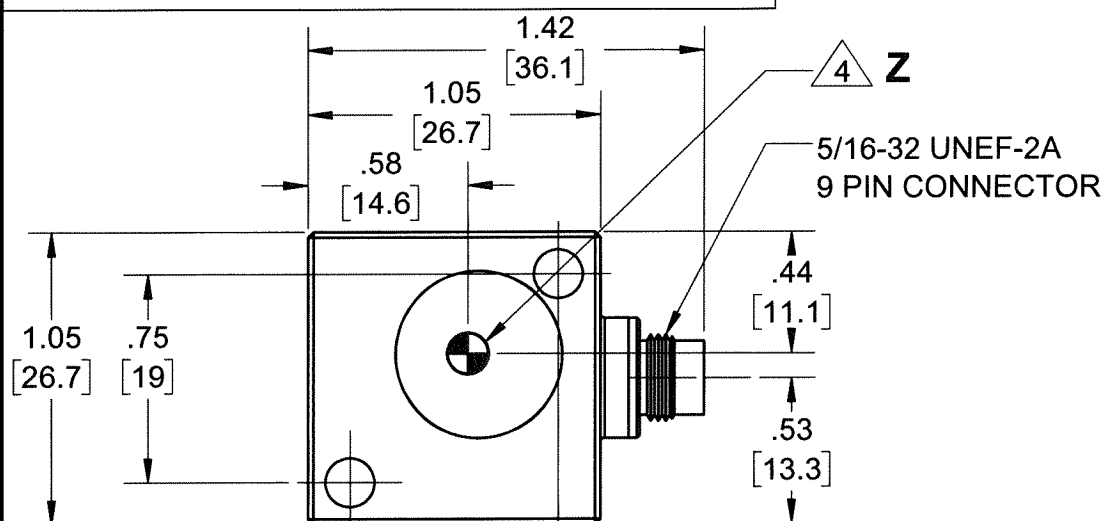


PROPRIETARY AND CONFIDENTIAL

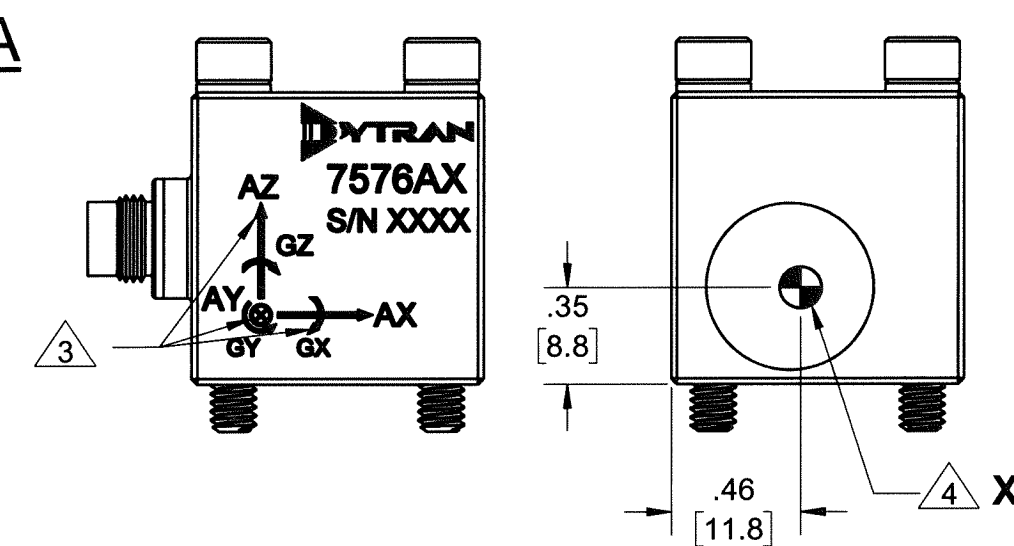
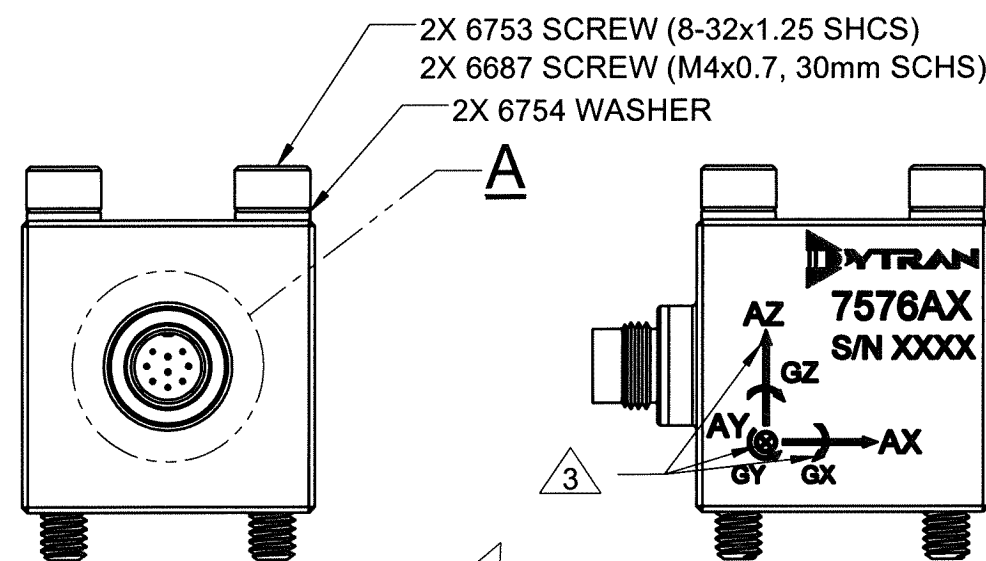
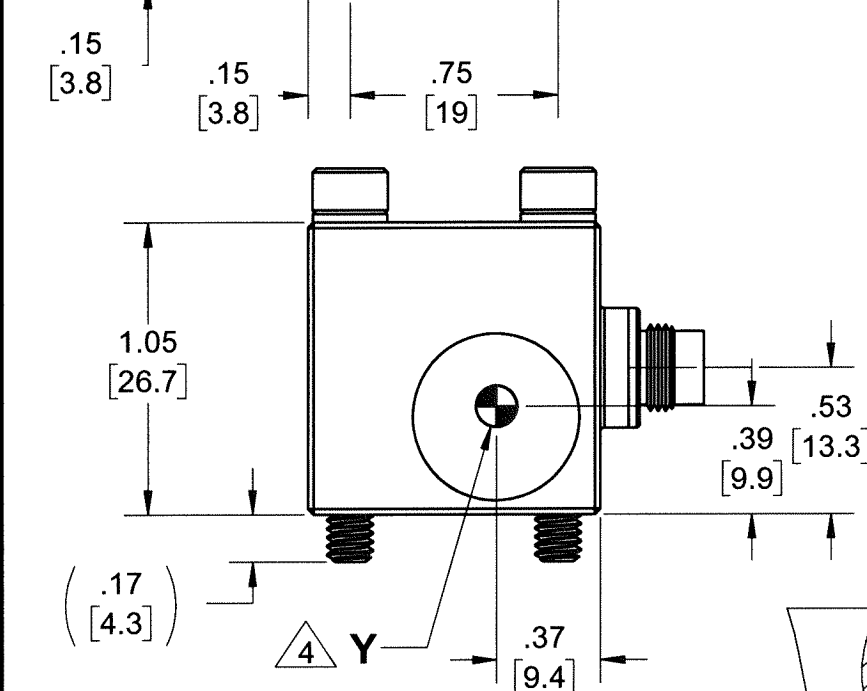
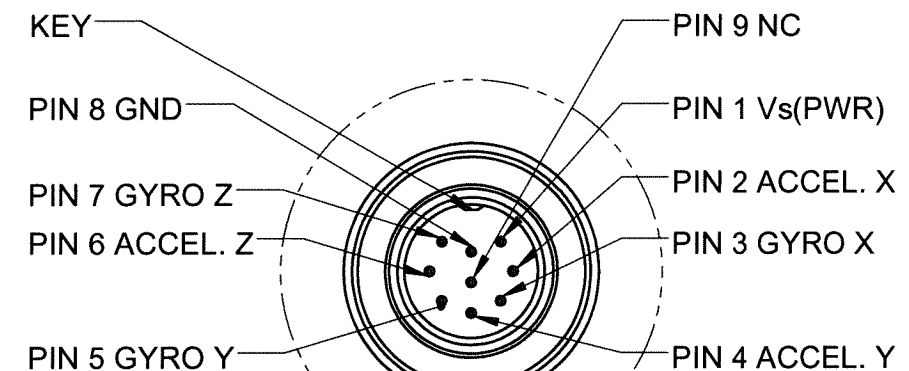
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REVISIONS

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, ϕ 1.50 [ϕ 38.1] MIN, FLAT TO .001 TIR.
 TAP 2X 8-32 UNC-2B ∇ .45 [11.4] MIN. (OR 2X M4x0.7 ∇ .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 & 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>				MASTER ONLY IF IN RED 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>	OUTLINE/INSTALLATION DRAWING, 7576A SERIES					
<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>					

Model Number 7576A1	PERFORMANCE SPECIFICATION	DOC NO PS7576A1
	6DOF VIBRATION SENSOR	REV B, ECN 14119, 03/22/18



- 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	±5	g
Frequency Response (±5%)	0-1000	Hz
Frequency Response (±3dB)	0-1300	Hz
Scale Factor, Nom. [1]	470	mV/g
Output Noise, Typ.	0.000019	g rms/√ Hz
Non-Linearity, Typ. [2]	0.2	% F.S
Temperature Range	-67 to 257	°F
Scale Factor Temperature Coefficient [3]	67	ppm/°F
Axis misalignment, Max.	10	mrad
Shock Survivability	6000	g
Resonant Frequency	3	kHz
Cross Axis Sensitivity, Max.	5	%

±49.1	m/s ²
0-1000	Hz
0-1300	Hz
47.9	mV/m/s ²
0.00019	m/s ² /√ Hz
0.2	% F.S
-55 to 125	°C
120	ppm/°C
10	mrad
58860	m/s ²
3	kHz
5	%

GYRO PERFORMANCE

Input Range	±50	°/sec
Frequency Response	1-1000	Hz
Sensitivity ±10% [1]	25	mV/°/sec
Rate noise density, Typ.	0.04	(°/sec)/√ Hz
Non-Linearity, Typ. [2]	0.2	% F.S
Temperature Range	-40 to 221	°F
Resonant Frequency	14.5	kHz
Cross Axis Sensitivity, Max.	5	%

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

ELECTRICAL

Output Impedance, Nom	2	Ω
Operating Voltage	6 to 14	VDC
Output Bias Voltage ±0.5 VDC	2.5	VDC
Operating Current, Typ.	12	mA DC
Power Supply Rejection Ratio	>65	dB

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

ENVIRONMENTAL

Storage Temperature	-67 to 257	°F
Seal	Hermetic	

-55 to 125	°C
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
7576A2	±10 / ±150	0-2500 / 1-3000	235 / 12.5	6000	0.00004 / 0.04
7576A3	±30 / ±250	0-3000 / 0.01-2500	78.33.3 / 7	6000	0.000089 / 0.06
7576A4	±200 / ±20000	0-3800 / 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

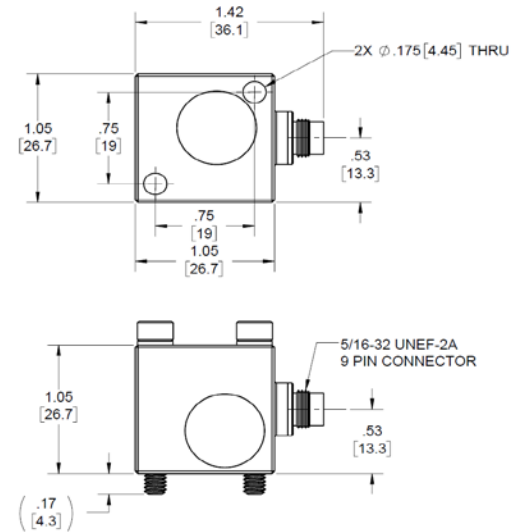
Refer to the performance specifications of the products in this family for detailed description.

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.



Units on the line drawing are in inches. Refer to 127-7576A1 for more information.



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