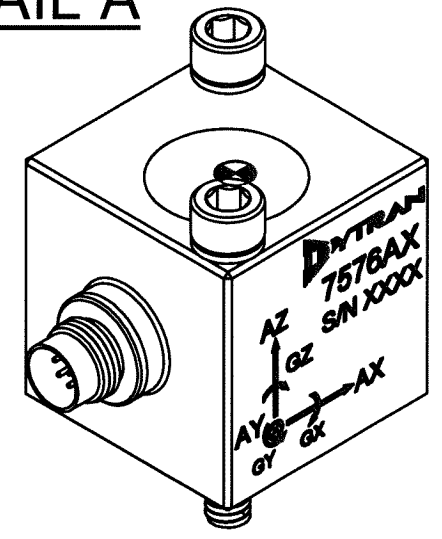
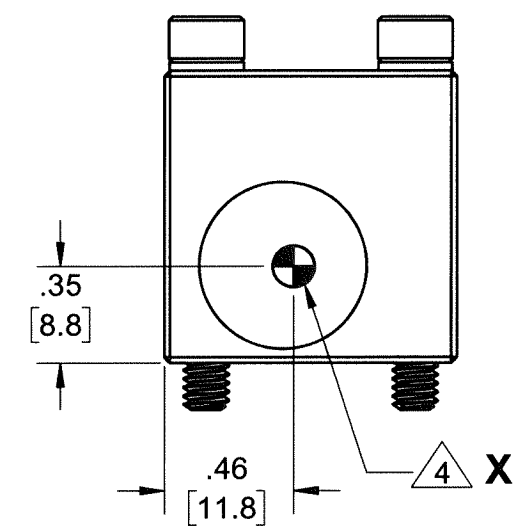
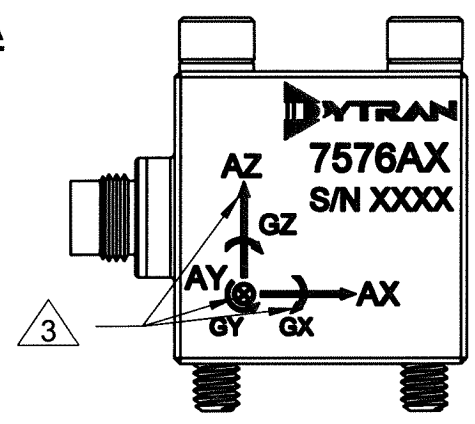
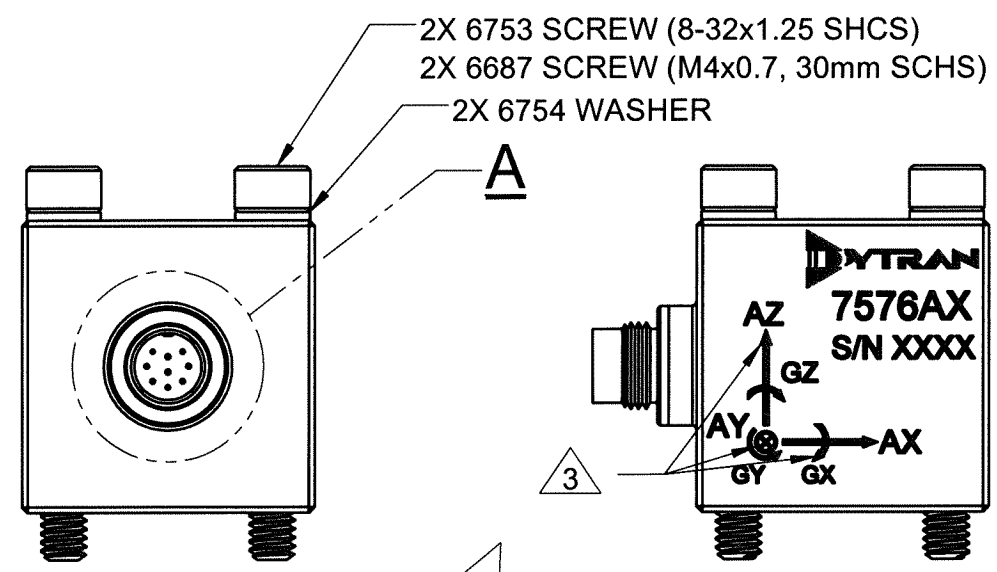
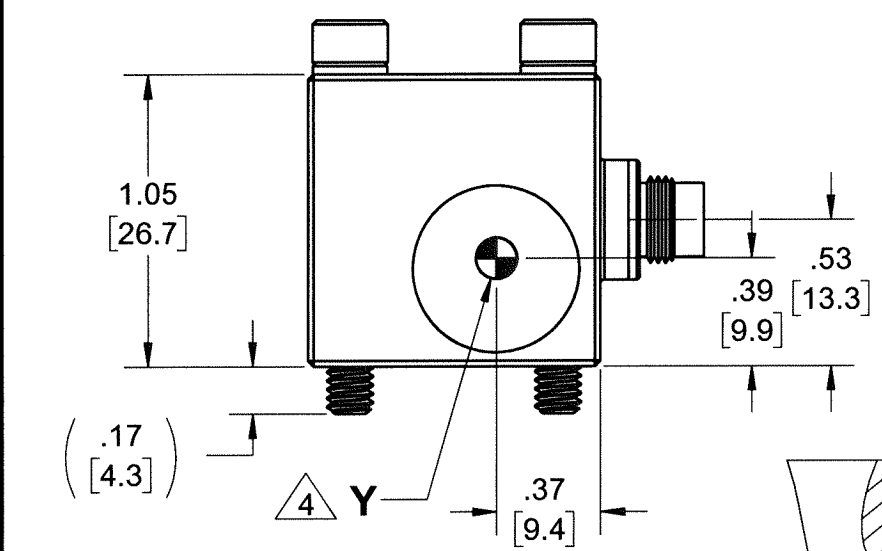
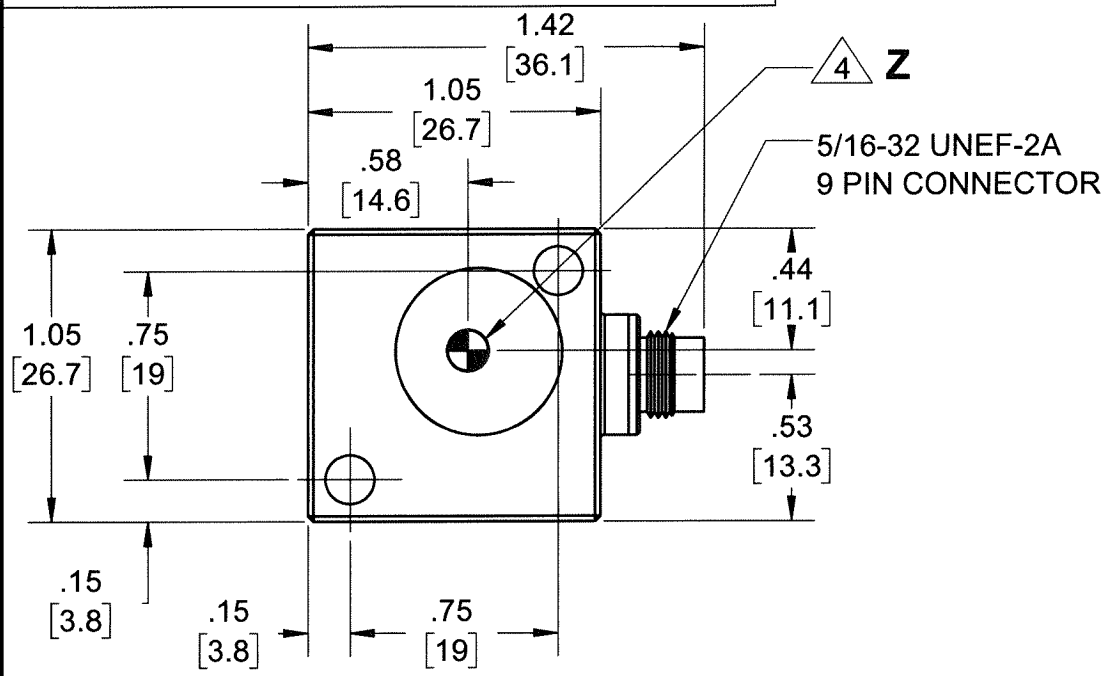
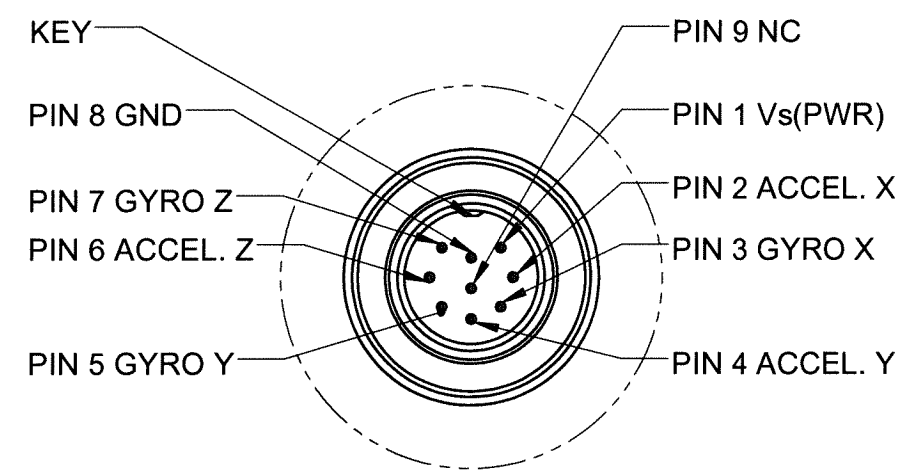


REVISIONS

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

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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

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.

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.

DECIMALS	METRIC	ANGLES
.XX ±.03	X ± 0.8	±1°
.XXX ±.010	.XX ±0.25	

APPROVALS	DATE
ORIG DV	01/18/16
CHK KG	03/27/18
APP DV	03/28/18

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: **OUTLINE/INSTALLATION DRAWING, 7576A SERIES**

SIZE B	CAGE CODE 2W033	DWG NO 127-7576A1	REV C
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SCALE: 2:1 SHEET 1 OF 1

6DOF VIBRATION SENSOR

REV D, ECN 17398, 02/08/24



- **VARIABLE CAPACITANCE TECHNOLOGY**
- **6 DEGREES OF FREEDOM MEASUREMENTS**
- **HERMETICALLY SEALED**
- **DC RESPONSE**

- **INTERNATIONAL TRAFFIC IN ARMS REGULATION (ITAR) FREE**

PHYSICAL
Weight, Max
Connector
Material

	ENGLISH		SI	
Type	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.

Input Range	±30	g	±294	m/s ²
Frequency Response (±5%)	0-1000	Hz	0-1000	Hz
Frequency Response (±3dB)	0-3000	Hz	0-3000	Hz
Scale Factor, Nom. [1]	78.33	mV/g	8.0	mV/m/s ²
Output Noise, Typ.	0.000089	g rms/√ Hz	0.0009	m/s ² /√ Hz
Non-Linearity, Typ. [2]	0.2	% F.S	0.2	% F.S
Temperature Range	-67 to 257	°F	-55 to 125	°C
Scale Factor Temperature Coefficient [3]	67	ppm/°F	120	ppm/°C
Axis misalignment, Max.	10	mrاد	10	mrاد
Shock Survivability	6000	g	58860	m/s ²
Resonant Frequency	>5	kHz	>5	kHz
Cross Axis Sensitivity, Max.	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.

Input Range	±250	°/sec	±250	°/sec
Frequency Response	0-2500	Hz	0-2500	Hz
Sensitivity ±10% [1]	7.0	mV/°/sec	7.0	mV/°/sec
Rate noise density, Typ.	0.06	(°/sec)/√ Hz	0.06	(°/sec)/√ Hz
Non-Linearity, Typ [2]	0.2	% F.S	0.2	% F.S
Temperature Range	-40 to 221	°F	-40 to 105	°C
Resonant Frequency	5.7	kHz	5.7	kHz
Cross Axis Sensitivity, Max.	5	%	5	%

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

Output Impedance, Norm	2	Ω	2	Ω
Operating Voltage	6 to 14	VDC	6 to 14	VDC
Output Bias Voltage ±0.5 VDC	2.5	VDC	2.5	VDC
Operating Current	23	mA DC	23	mA DC
Power Supply Rejection Ratio	28	dB	28	dB
	>65	dB	>65	dB

ENVIRONMENTAL
Storage Temperature
Seal

Storage Temperature	-67 to 257	°F	-55 to 125	°C
Seal	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 / 0-1000	470 / 25	6000	0.00004 / 0.04
7576A2	±10 / ±150	0-2500 / 0-3000	235 / 12.5	6000	0.00004 / 0.04
7576A4	±200 / ±20000	0-3800 / 0-2000	11.75 / 0.1	6000	0.0009 / 0.25
7576A5	±2 / ±50	0-1150 / 0-1000	1175 / 25	6000	0.0000088 / 0.04
7576A6	±2 / ±150	0-1150 / 0-3000	1200 / 12.5	6000	0.0000088 / 0.04

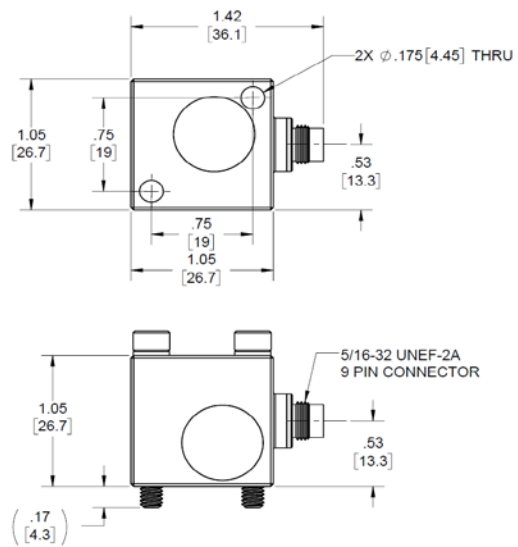
Refer to the performance specifications of the products in this family for detailed description.

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] All specifications are at room temperature unless otherwise specified.
- [2] Measured using Earth gravity
- [3] Best fit zero-based line method
- [4] Over the rated temperature range.
- [5] 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.

