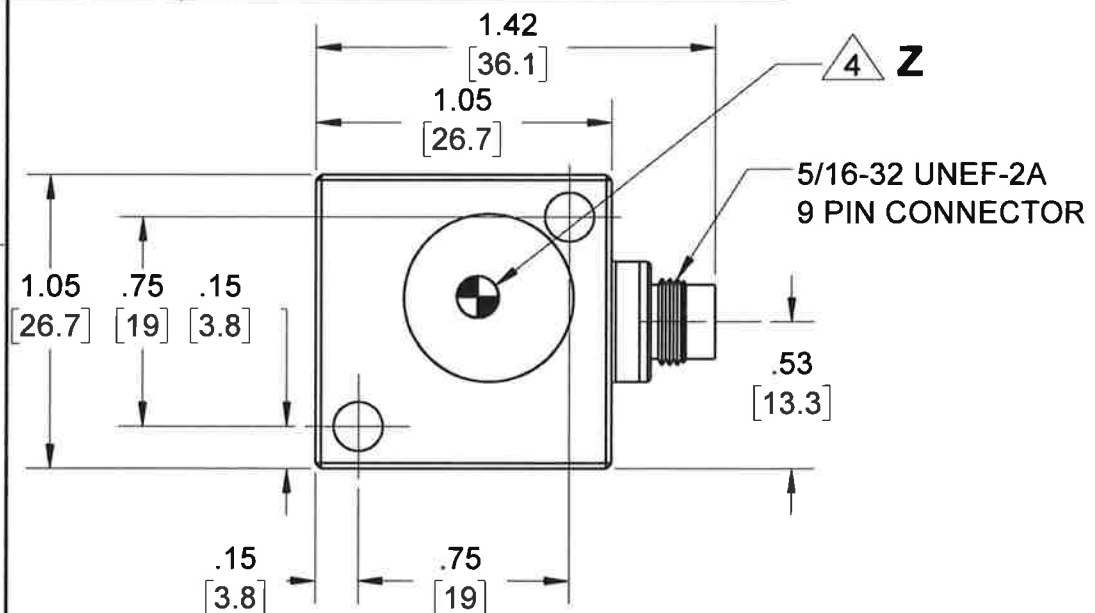


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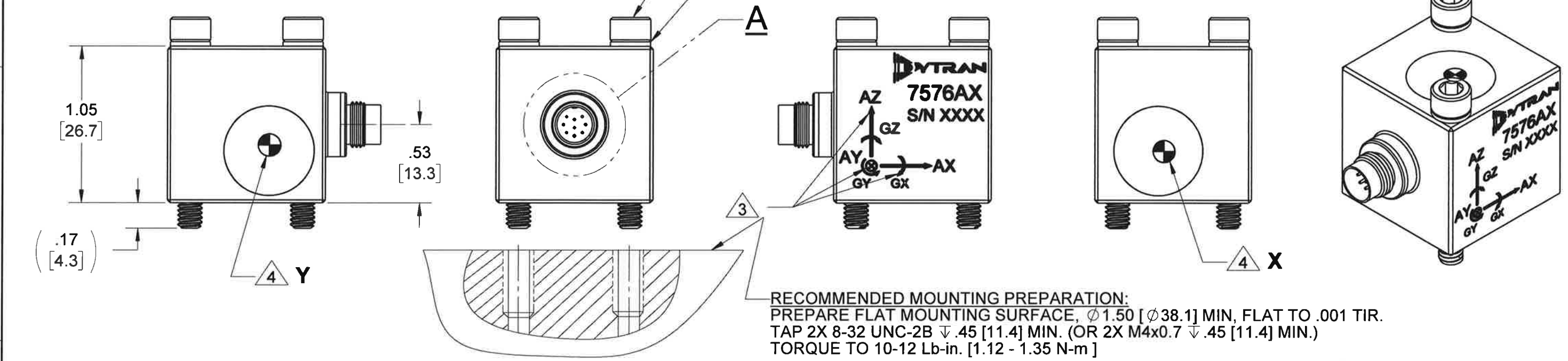
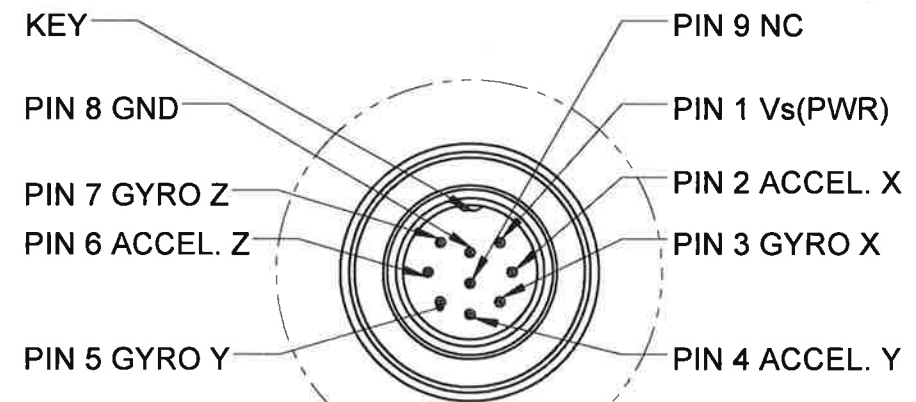
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	13585	INITIAL RELEASE SAME AS REV X2	NDC 07/18/17	AS	SP



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



RECOMMENDED MOUNTING PREPARATION:
 PREPARE FLAT MOUNTING SURFACE, $\phi 1.50$ [$\phi 38.1$] MIN, FLAT TO .001 TIR.
 TAP 2X 8-32 UNC-2B $\downarrow .45$ [11.4] MIN. (OR 2X M4x0.7 $\downarrow .45$ [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 ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE:</small>				TITLE:	
	DECIMALS .XX ±.03 .XXX ±.010	METRIC .X ± 0.8 .XX ± 0.25			ANGLES ±1°	OUTLINE/INSTALLATION DRAWING, 7576A SERIES
	APPROVALS		DATE		SIZE	CAGE CODE
	ORIG DV	CHK AS	APP SP	DATE 1/18/16 7/22/17 8/1/17	DWG NO 127-7576A1	REV A
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.			DO NOT SCALE DRAWING	SCALE: 2:1	SHEET 1 OF 1	

Model Number 7576A4	PERFORMANCE SPECIFICATION 6DOF VIBRATION SENSOR	DOC NO PS7576A4
		REV A, ECN 13585, 07/27/17



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

	ENGLISH		SI	
PHYSICAL				
Weight, Max	1.9	oz	55	grams
Connector	5/16-32 UNEF-2A		5/16-32 UNEF-2A	
Material	Ti-6Al-4V		Ti-6Al-4V	
ACCELEROMETER PERFORMANCE				
Input Range	±200	g	±1962	m/s ²
Frequency Response (±5%)	0-2000	Hz	0-2000	Hz
Frequency Response (±3dB)	0-3800	Hz	0-3800	Hz
Scale Factor, Nom. [1]	12.5	mV/g	1.274	mV/m/s ²
Output Noise, Typ.	0.0009	g rms/√ Hz	0.009	m/s ² /√ Hz
Non-Linearity, Typ. [2]	0.3	% F.S	0.3	% 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	ppm/°C
Shock Survivability	6000	g	58860	m/s ²
Resonant Frequency	>4.5	kHz	>4.5	kHz
Cross Axis Sensitivity, Max.	5	%	5	%
GYRO PERFORMANCE				
Input Range	±20000	°/sec	±20000	°/sec
Frequency Response	0-2000	Hz	0-2000	Hz
Sensitivity ±10% [1]	0.1	mV/°/sec	0.1	mV/°/sec
Rate noise density, Typ.	0.25	(°/sec)/√ Hz	0.25	(°/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	17.5	kHz	17.5	kHz
Cross Axis Sensitivity, Max.	5	%	5	%
ELECTRICAL				
Output Impedance, Nom	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, Typ.	12	mA DC	12	mA DC
Power Supply Rejection Ratio	>65	dB	>65	dB
ENVIRONMENTAL				
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 / 1-1000	500 / 25	6000	0.000019 / 0.04
7576A2	±10 / ±150	0-2500 / 1-3000	250 / 12.5	6000	0.00004 / 0.04
7576A3	±30 / ±250	0-3000 / 0.01-2500	83.33/ 7	6000	0.000089 / 0.06
7576A5	±2 / ±50	0-1150 / 1-1000	1250 / 25	6000	0.0000088 / 0.04

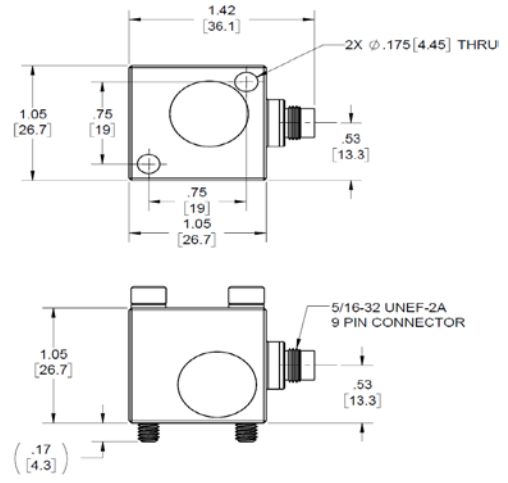
Refer to the performance specifications of the products in this family for detailed description.

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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