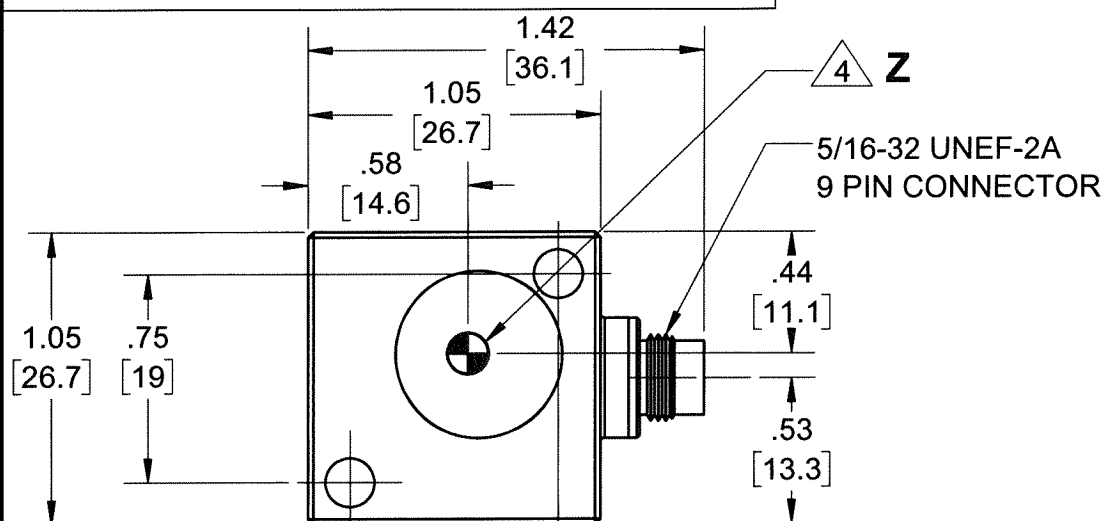


PROPRIETARY AND CONFIDENTIAL

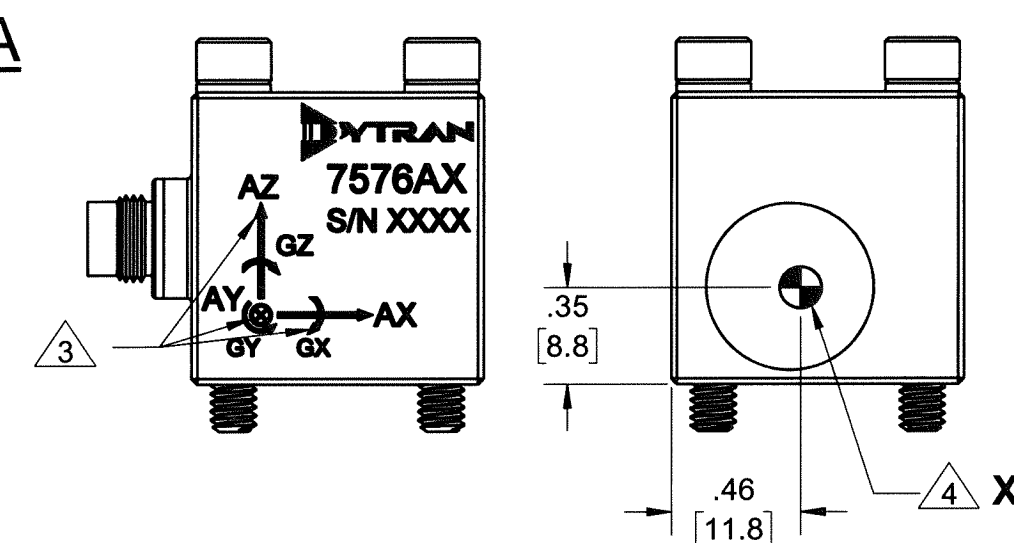
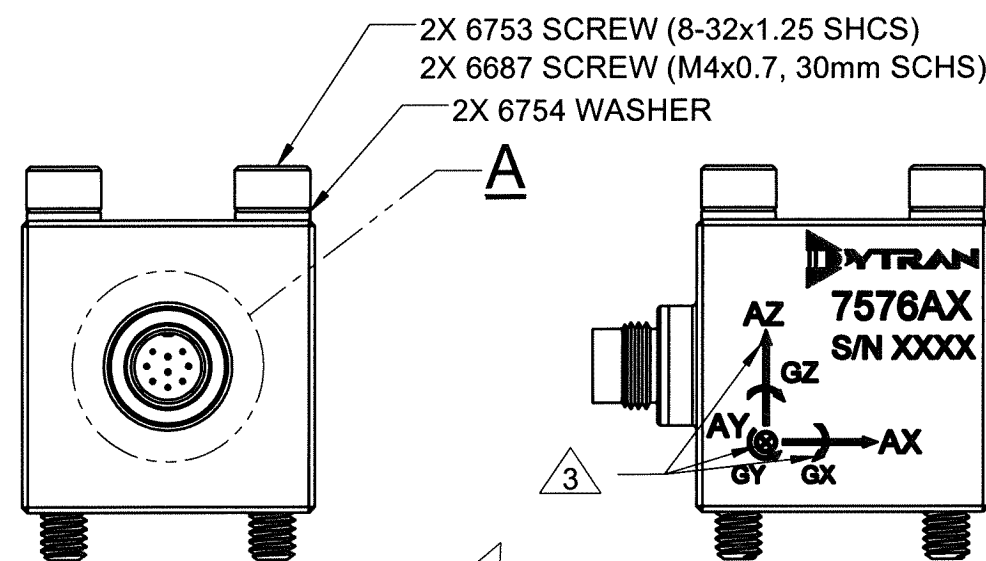
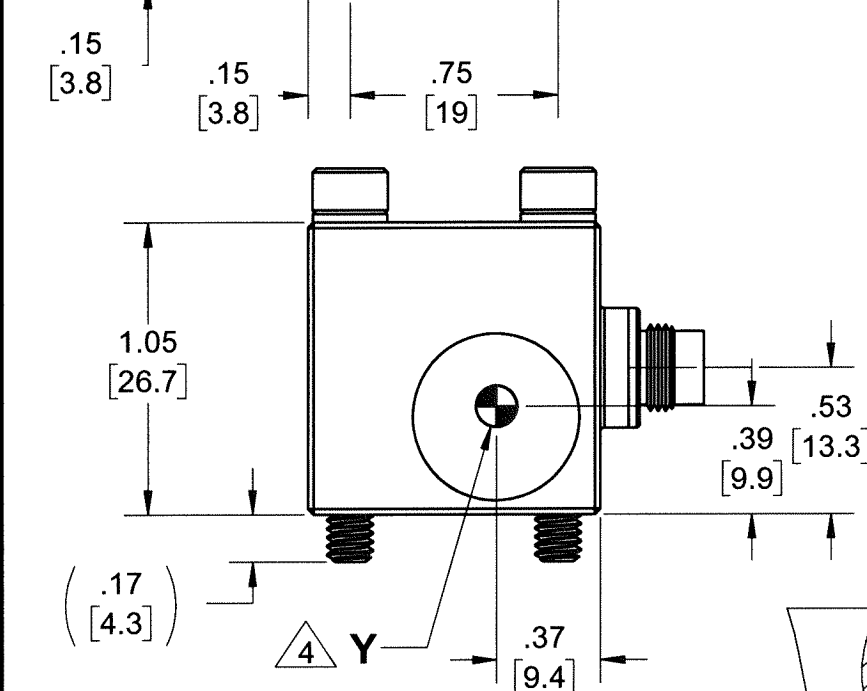
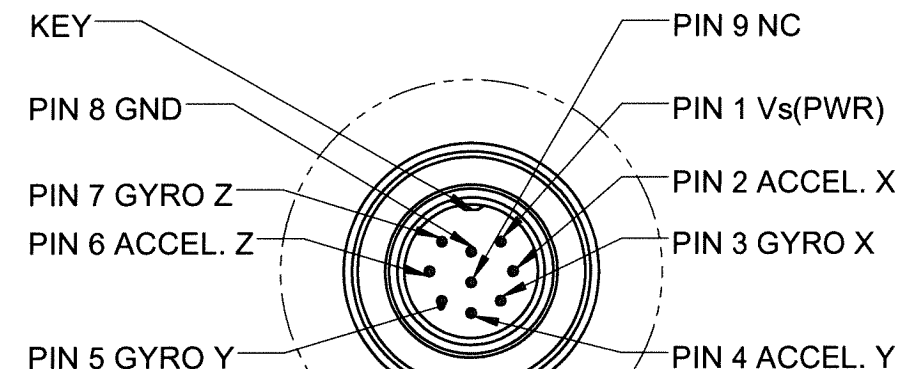
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS INC. IS PROHIBITED

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>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>DO NOT SCALE DRAWING</small>		<small>SCALE: 2:1</small>	<small>REV C</small>	<small>SHEET 1 OF 1</small>		

Model Number 7576A4	PERFORMANCE SPECIFICATION 6DOF VIBRATION SENSOR	DOC NO PS7576A4
		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

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
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.

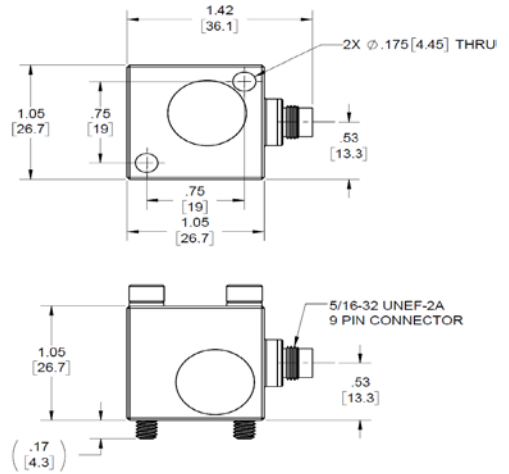
Supplied Accessories:

- 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.

	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]	11.75	mV/g	1.2	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	mrad	10	mrad
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	23	mA DC	23	mA DC
Power Supply Rejection Ratio	28	mA DC	28	mA DC
	>65	dB	>65	dB
ENVIRONMENTAL				
Storage Temperature	-67 to 257	°F	-55 to 125	°C
Seal	Hermetic		Hermetic	



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



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com
For permission to reprint this content, please contact info@dytran.com