

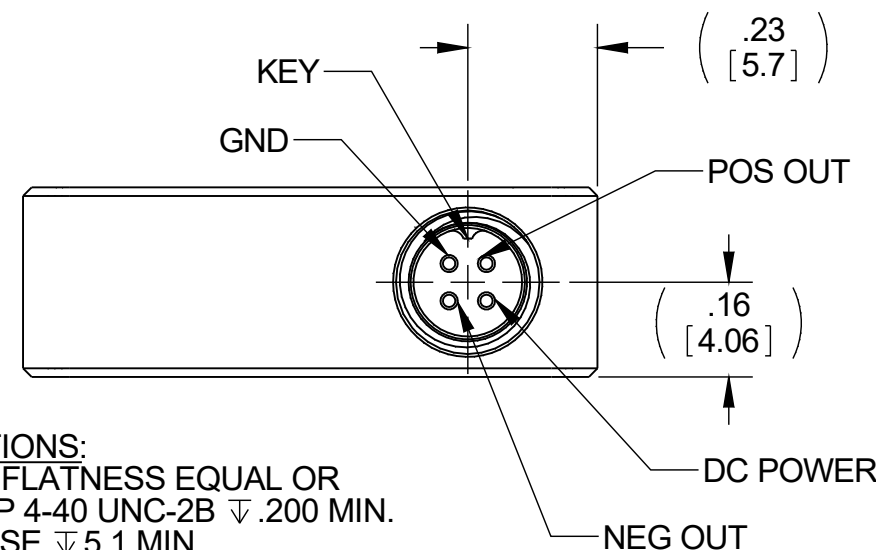
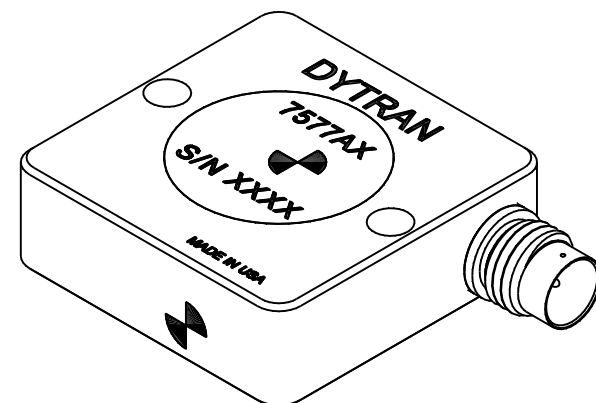
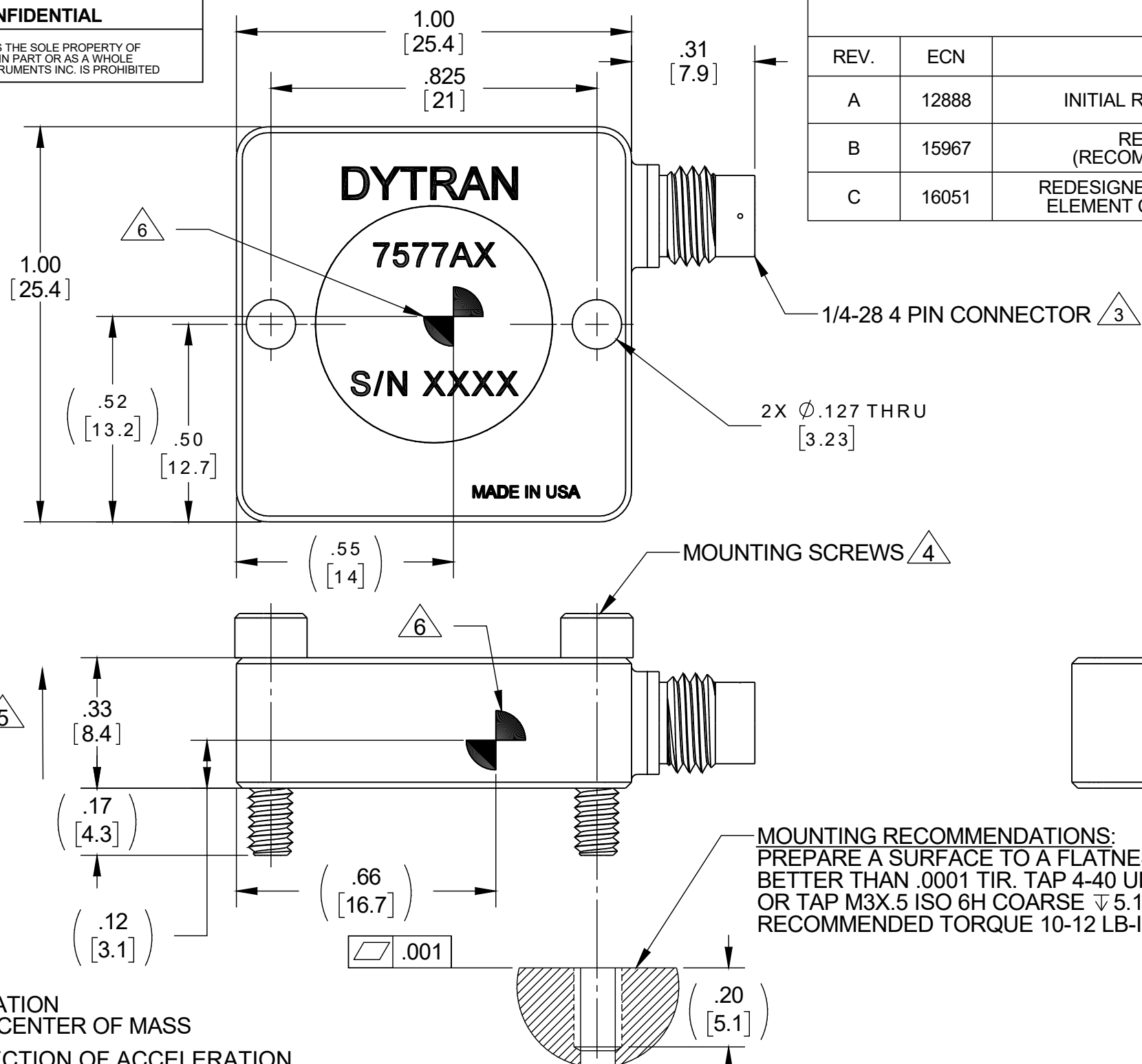
PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	12888	INITIAL RELEASE. SAME AS REV X3.	KG 11/09/18	DP	LN
B	15967	REVISED FLAG NOTE 3 (RECOMMENDED MATING CABLE)	KG 10/20/20	RA	LN
C	16051	REDESIGNED COVER; REVISED SENSING ELEMENT CENTER OF MASS LOCATION	NDC 01/21/21	RA	LN

MODEL NO.	RANGE
7577A1	±2g
7577A2	±5g
7577A3	±10g
7577A4	±30g
7577A5	±50g
7577A6	±100g
7577A7	±200g



**MOUNTING RECOMMENDATIONS:**  
 PREPARE A SURFACE TO A FLATNESS EQUAL OR BETTER THAN .0001 TIR. TAP 4-40 UNC-2B ∇.200 MIN. OR TAP M3X.5 ISO 6H COARSE ∇5.1 MIN. RECOMMENDED TORQUE 10-12 LB-IN.

- 6 MARKING DENOTES LOCATION OF SENSING ELEMENT'S CENTER OF MASS
- 5 ARROW INDICATES DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.
- 4 MOUNTING SCREWS: DYTRAN MODEL 6868 (4-40 UNC-2A) AND 6688 (M3X.5 ISO 6H COARSE), 2 EACH PROVIDED.
- 3 MATES WITH MODEL 6854AXX, 4-PIN TO FLYING LEADS (XX = LENGTH IN FEET).

2. HOUSING/CONNECTOR MATERIAL: TITANIUM ALLOY.  
 1. WEIGHT: 17 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.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE:		Chatsworth, CA	
DECIMALS .XX ±.03 .XXX ±.010	METRIC .X ±.08 .XX ±0.25	ANGLES ±1°		<b>TITLE: OUTLINE/INSTALLATION DRAWING, VARIABLE CAPACITANCE ACCELEROMETER, MODEL 7577A</b>	
<b>APPROVALS</b> ORIG LA 08/11/16 CHK DP 11/19/18 APP LN 12/03/18		<b>DATE</b> 08/11/16 11/19/18 12/03/18		SIZE <b>B</b> CAGE CODE <b>2W033</b> DWG NO <b>127-7577A</b> REV <b>C</b>	
DO NOT SCALE DRAWING				SCALE: 3:1 SHEET 1 OF 1	



- VARIABLE CAPACITANCE ACCELEROMETER
- DIFFERENTIAL MODE
- HERMETICALLY SEALED
- DC RESPONSE
- HIGH SHOCK SURVIVAL
- EXTENDED FREQUENCY RESPONSE

		ENGLISH			SI
<b>PHYSICAL</b>					
Weight, Max		0.70	oz	20	grams
Connector	Type	4-Pin, 1/4-28 UNF-2A		4-Pin, 1/4-28 UNF-2A	
Mounting	Thru Holes	2 X Ø.127"		2 X Ø3.23mm	
Material		Titanium Alloy		Titanium Alloy	
<b>PERFORMANCE</b>					
Input Range		±5	g pk	±49.03	m/s <sup>2</sup> pk
Frequency Response (±5%)		0 - 1025		0 - 1025	
Frequency Response (±3dB)		0 - 1900		0 - 1900	
Resonant Frequency		>1900		>1900	
Sensitivity Differential, ±10% [2]		800	mV/g	81.6	mV/m/s <sup>2</sup>
Output Noise, Differential, Typ.		17	µg RMS/√(Hz)	167	µm/s <sup>2</sup> RMS/√(Hz)
Non-Linearity, Max.		0.5	% F.S.	0.5	% F.S.
Transverse Sensitivity, Max.		3	%	3	%
<b>ENVIRONMENTAL</b>					
Maximum Mechanical Shock		6000	g pk	58840	m/s <sup>2</sup> pk
Operating Temperature Range		-67 to +257		-55 to +125	
Scale Factor Temperature Coefficient [3]		-11 to +122		-20 to +220	
Seal		Hermetic		Hermetic	
<b>ELECTRICAL</b>					
Output Common Mode Voltage		2.45 - 2.65		2.45 - 2.65	
Bias Calibration Error		0.017	g pk	0.0017	m/s <sup>2</sup> pk
Output Impedance, Nom.		1	Ω	1	Ω
Operating Voltage		+6 to +14		+6 to +14	
Operating Current (AOP & AON open)		3 to 6		3 to 6	
Power Supply Rejection Ratio		>65		>65	
Ground Isolation		>30		>30	
Warm Up Time		<0.5		<0.5	
Overload Recovery		<200		<200	

**This family also includes:**

Model	Input Range (g pk)	Frequency Response (Hz) (±3dB)	Sensitivity Differential, ±10% (mV/g)	Max.Shock (g pk)	Noise Differential (µg RMS/√Hz)
7577A1	± 2	0-1150	2,000	6000	8
7577A3	± 10	0-3200	400	6000	34
7577A4	± 30	0-4000	133	6000	102
7577A5	± 50	0-4500	80	6000	170
7577A6	± 100	0-5000	40	6000	339
7577A7	± 200	0-7000	20	6000	678

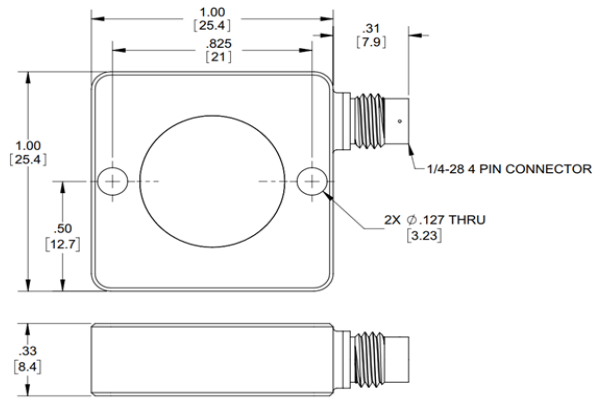
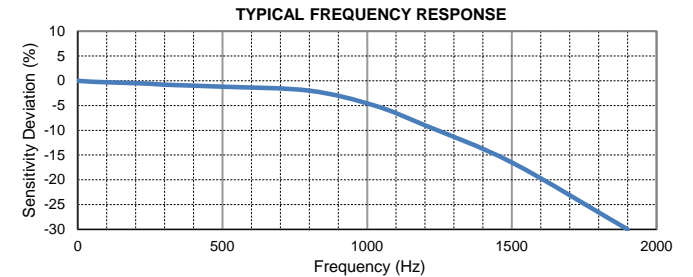
Refer to the performance specifications of the products in this family for detailed description.

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Two mounting screws of each: Model 6688 (M3.5) and Model 6868 (4-40)

**Notes:**

- [1] All specifications are at room temperature unless otherwise specified.
- [2] Single ended sensitivity is half of values shown.
- [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 may vary 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, dimensions in brackets [] are in millimeters. Refer to 127-7577A for more information.

