PROPRIETARY AND CONFIDENTIAL

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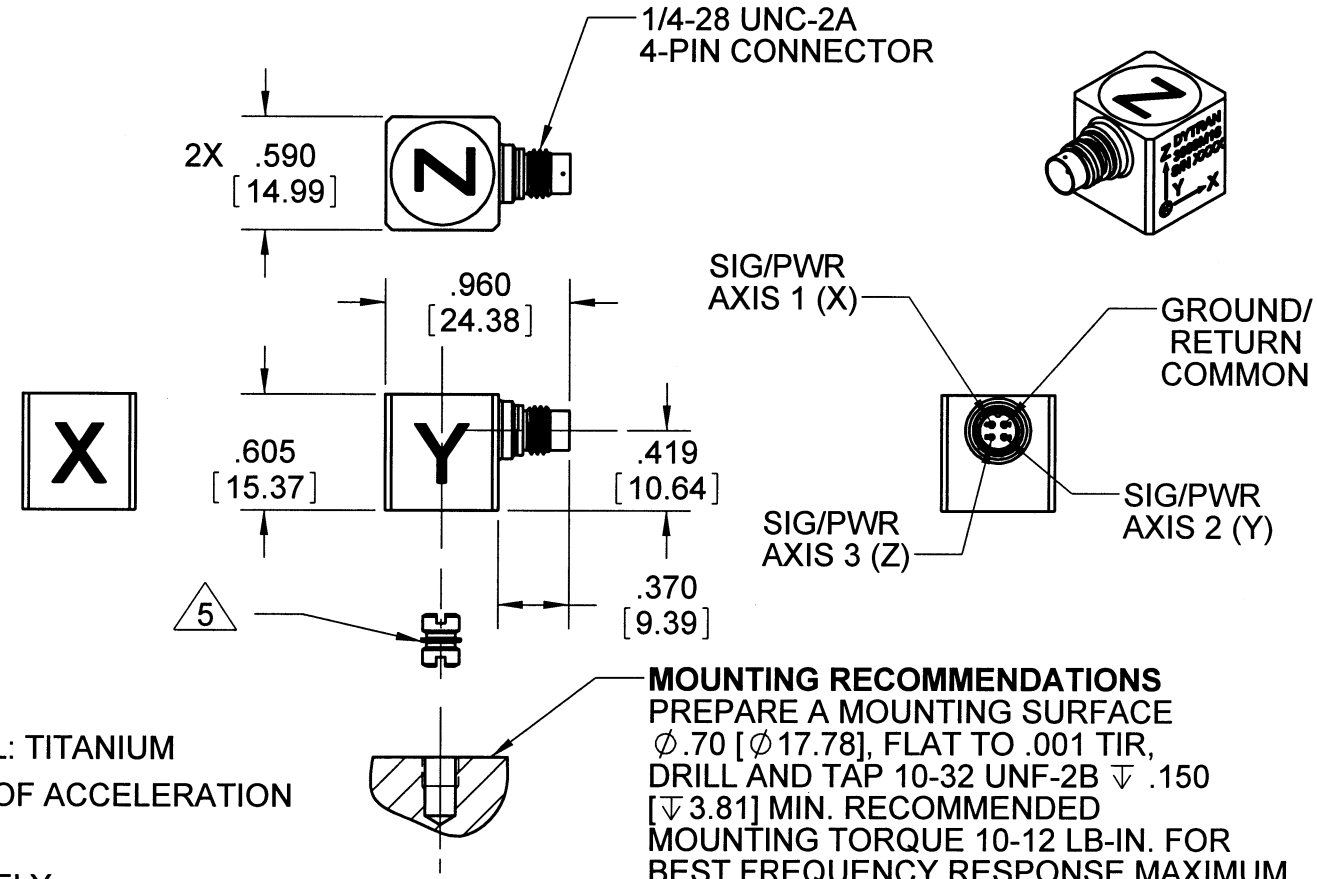
REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	5783	SEE ECN	JS 02/16/09	DV	ANS



MOUNTING RECOMMENDATIONS
PREPARE A MOUNTING SURFACE ∅.70 [∅17.78], FLAT TO .001 TIR, DRILL AND TAP 10-32 UNF-2B ↧ .150 [↧3.81] MIN. RECOMMENDED MOUNTING TORQUE 10-12 LB-IN. FOR BEST FREQUENCY RESPONSE MAXIMUM AREA OF CONTACT REQUIRED

5 MODEL 6200 (SUPPLIED)

4 DELETED

3. HOUSING/CONNECTOR MATERIAL: TITANIUM

2. ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT

1. WEIGHT 10 GRAMS APPROXIMATELY

NOTES: UNLESS OTHERWISE SPECIFIED

USED ON	NEXT ASSY
APPLICATION	

THIRD ANGLE PROJECTION USA

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.
THDS PER MIL-S-7742.
DIMENSIONS APPLY AFTER FINISHING.
ALL MACHINED SURFACES. 63
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.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES.
DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS
TOLERANCES ARE:

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

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS		DATE
ORIG	DV	01/02/09
CHK	EP	01/15/09
APP	ANS	01/17/09
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: OUTLINE/INSTALLATION DRAWING, MODEL 3093M18

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3093M18	B

SCALE: 2:1 | SOLIDWORKS | SHEET 1 OF 1

172-0081, REV C

MODEL NUMBER	PERFORMANCE SPECIFICATION	DOC NO.
3093M18		PS3093M18
	Accelerometer, Triaxial, IEPE	REV B, ECN5818, 03/06/09

- **TEDS FUNCTION**
- **HERMETICALLY SEALED**
- **STUD MOUNTED**

		ENGLISH		SI	
PHYSICAL					
Weight		0.35	oz	10.0	grams
Connector [1]	Type	4-pin, 1/4-28		4-pin, 1/4-28	
	Material	Ti-6 AL-4V		Ti-6 AL-4V	
Housing	Material	Ti-6 AL-4V		Ti-6 AL-4V	
	Isolation	Case Isolated		Case Isolated	
Sensing Element	Material	Ceramic		Ceramic	
	Mode	Shear		Shear	
PERFORMANCE					
Sensitivity, ±15-10% [2]		10	mV/g	1.02	mV/m/s^2
Acceleration Range		500	Gpeak	4905.00	m/s^2 peak
Frequency Range, ±5%		0.7-5000	Hz	0.7-5000	Hz
Resonance Frequency, Nom.		30	kHz	30	kHz
Linearity [3]		1	%F.S.	1	%F.S.
Transverse Sensitivity Max		6	%	6	%
Noise floor		0.006	Grms	0.059	m/s^2 rms
Spectral Noise	1Hz	500	µGrms/sqr(Hz)	4905	µm/s^2 rms/sqr(Hz)
	10Hz	80	µGrms/sqr(Hz)	784.8	µm/s^2 rms/sqr(Hz)
	100Hz	50	µGrms/sqr(Hz)	490.5	µm/s^2 rms/sqr(Hz)
	1000Hz	30	µGrms/sqr(Hz)	294.3	µm/s^2 rms/sqr(Hz)
	10000Hz	15	µGrms/sqr(Hz)	147.15	µm/s^2 rms/sqr(Hz)
ELECTRICAL					
Supply Current Range [4]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		+18 to +30	VDC	+18 to +30	VDC
Output Impedance, Typ.		100	Ω	100	Ω
Output Bias Voltage		11 - 13	VDC	11 - 13	VDC
Discharge Time Constant		0.4 to 0.7	sec	0.4 to 0.7	sec
ENVIRONMENTAL					
Shock Max		5000	g pk	49050	m/s^2
Vibration Max		3000	g pk	29430	m/s^2
Operating Temperature		-60 to +250	°F	-51 to +121	°C
Seal		Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss		0.00007	g/Gauss	0.0006867	m/s^2/Gauss
Base Strain Sensitivity		0.05	g/με	0.4905	m/s^2/με
TEDS					
TEDs Format		1451.4 V1.0		1451.4 V1.0	

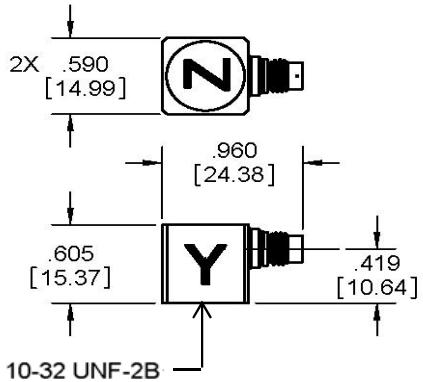
This family also includes:

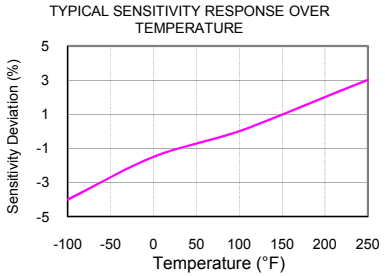
Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC

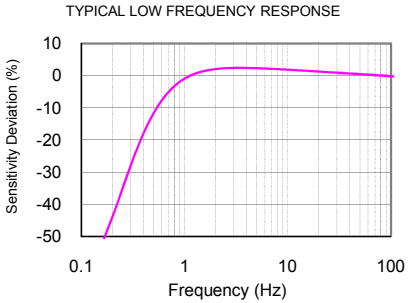
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:
1) Model 6200 Mounting Stud
2) Accredited Calibration Certificate (ISO 17025)

Notes:
[1] Glass to Metal Seal connector. Mates with Dytran cable Model 6811AXX or 6824AXX (XX=length in feet)
[2] Measured At 100 Hz, 1 Grms per ISA RP 37.2
[3] Linearity is % of specified full scale (or any less full-scale range), zero-basec
best fit straight line method.
[4] Do Not Apply Power To This Device Without Current Limiting, 20mA Max, To Do So Will
Destroy The Integral IC Amplifier







Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3093M18 for more information.

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