PROPRIETARY AND CONFIDENTIAL **REVISIONS** THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A **APPR DESCRIPTION** BY/DATE CHK REV. ECN WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED EP В 5628 SEE ECN Aus 11/20/08 3093XX .580 [14.73] **DETAIL A CONNECTOR PINOUT** .961 PIN 1 GND RETURN, COMMON 24.41 PIN 2 SIG/PWR AXIS 2 (Y) 4 PIN CONNECTOR PIN 3 SIG/PWR AXIS 3 (Z) 1/4-28 UNF-2A PIN 4 SIG/PWR AXIS 1 (X) ⁄6\ √6 MATES WITH DYTRAN CABLE .535 6811AXX (XX=LENGTH IN FEET) [13.59] .370 [9.40] √5\ MOUNTING STUD 10-32 UNF-2A (MODEL 6200 SUPPLIED) 4. ARROWS INDICATE ACCELERATION DIRECTION FOR POSITIVE OUTPUT. MOUNTING RECOMMENDATIONS: PREPARE MOUNTING SURFACE FLAT TO .001TIR. DRILL AND TAP 10-32 UNC-2B▼.188 [4.76] MINIMUM. 3. HOUSING AND CONNECTOR MATERIAL: RECOMMENDED MOUNTING TORQUE: 15 LB IN +5/-0 LB IN. TITANIUM ′5 FOR BEST FREQUENCY RESPONSE MOUNTING SURFACE

WEIGHT: 10 GRAMS APPROX.

1. ENVIRONMENTAL SEAL: HERMETIC



UNLESS OTHERWISE SPECIFIED INTERPRET DIM & TOL PER ASME Y14.5M - 1994. USED ON NEXT ASSY APPLICATION THIRD ANGLE PROJECTION

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. 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: METRIC ANGLES INCHES .XX ± .03 .X ± 0.8 ± 1°

.XXX±.010 .XX ±0.25 **APPROVALS** DATE MATERIAL ORIG EP 11/20/08 FINISH CHK RA 07/14/08 APP DV 07/14/08 DO NOT SCALE DRAWING APP

CONTRACT NO.

INSTRUMENTS, INC.

SURFACE.

TITLE:

OUTLINE DRAWING MODEL 3093M17 TRIAXIAL ACCELEROMETER

MUST CONTACT ENTIRE ACCELEROMETER MOUNTING

CAGE CODE DWG. NO. SIZE 2W033 127-3093M17

2:1 SCALE:

SOLIDWORKS

SHEET 1 OF 1

REV

172-0081, REV C

DOC NO PERFORMANCE SPECIFICATION **Model Number** PS3093M17 3093M17 REV E ECN 11333 09/18/14 Accelerometer, Triaxial, IEPE



- HIGH SENSITIVITY
- HERMETICALLY SEALED
- STUD MOUNTED

		ENGLISH		SI	
PHYSICAL					
Weight		0.35	oz	10.0	grams
Size	Length	0.961	inch	24.41	mm
	Width	0.580	inch	14.73	mm
	Height	0.535	inch	13.59	mm
Mounting Stud Mount		10-32 UNF-2A	screw	10-32 UNF-2A	screw
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, +/-5% [2]		100	mV/g	10.19	mV/m/s^2
Acceleration Range		50	Gpeak	490.50	m/s^2 peak
Frequency Range, ±5%		.6-5000	Hz	.6-5000	Hz
Resonance Frequency		> 30	kHz	> 30	kHz
Linearity [3]		1	%F.S.	1	%F.S.
Transverse Sensitivity Max		5	% %	5	//i .3.
Noise floor		0.0007	Grms	0.007	m/s^2 rms
Spectral Noise	1Hz	200	μGrms/sqr(Hz)	1962	µm/s^2 rms/sqr(Hz)
	10Hz	200	μGrms/sqr(Hz)	1962	µm/s^2 rms/sqr(Hz)
	100Hz	90	μGrms/sqr(Hz)	882.9	µm/s^2 rms/sqr(Hz)
	1000Hz	50	μGrms/sqr(Hz)	490.5	µm/s^2 rms/sqr(Hz)
	10000Hz	20	μGrms/sqr(Hz)	196.2	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 to +13	VDC	+11 to +13	VDC
Discharge Time Constant		0.7 to 1.7	sec	0.7 to 1.7	sec
ENVIRONMENTAL					
Shock Max		7000	g pk	68670	m/s^2
Vibration Max		3000	g pk	29430	m/s^2
Operating Temperature		-60 to +225	°F	-51 to +107	°C
Seal		Hermetic	1	Hermetic	1
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

This famil	y also	includes:
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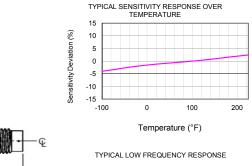
Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC

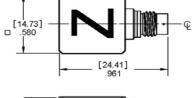
Refer to the performance specifications of the products in this family for detailed description

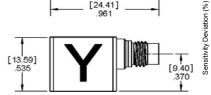
Supplied Accessories:

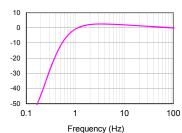
- 1) Model 6247 Mounting Screw
- 2) Accredited Calibration Certificate (ISO 17025)

- [1] Glass to Metal seal connector. Mates with Dytran cable Model 6811AXX (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-sclae range), zero-based 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 127-3093M17 for more information.

