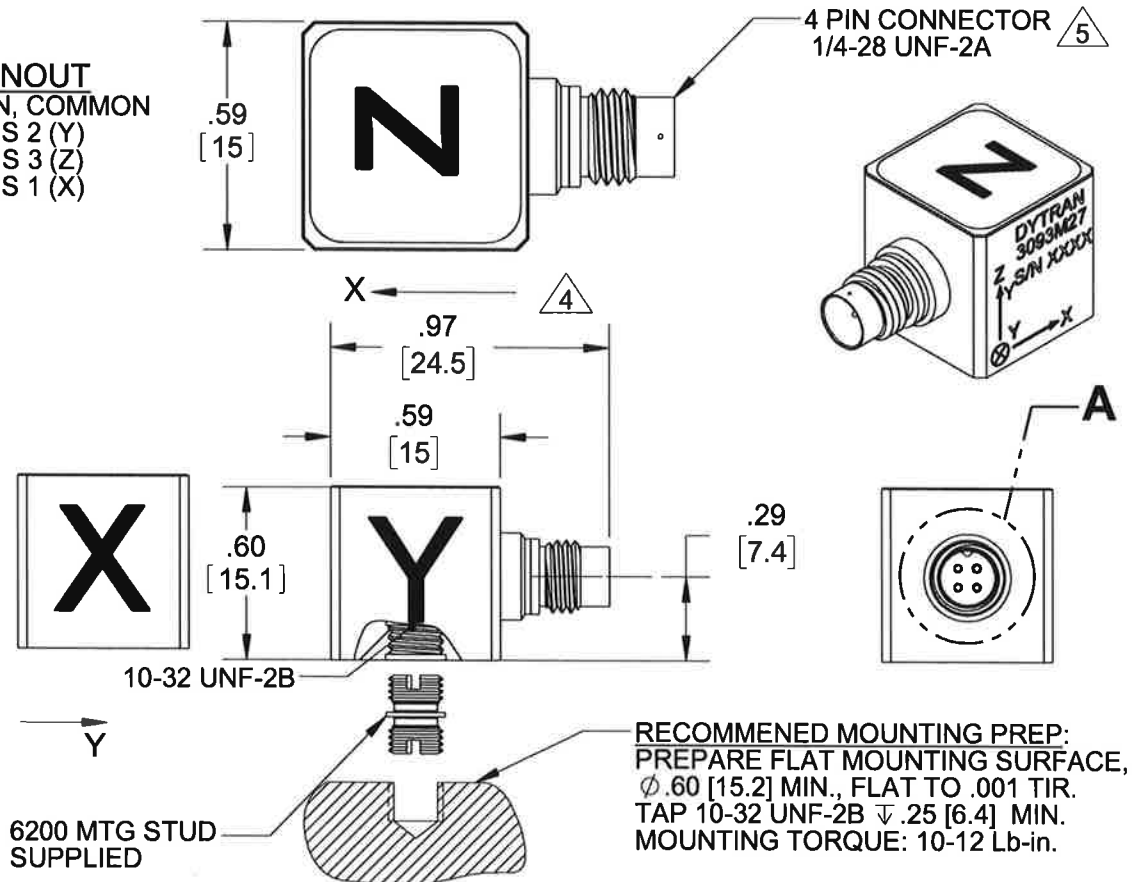
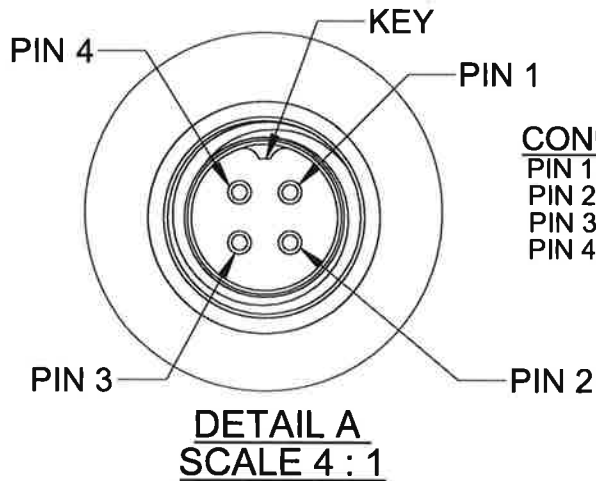


PROPRIETARY AND CONFIDENTIAL
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED

REVISIONS					
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	12604	ADDED NOTE 8	JS 04/06/16	LA	LW



- 8. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR PROCESSING. THESE APPEAR AS INDICATORS THAT DO NOT AFFECT FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION
 - 7. TEMPERATURE RANGE: -60°F(-51°C) TO 320°F(160°C)
 - 6. DIELECTRIC WITHSTAND, SIGNAL GROUND TO HOUSING ISOLATION: 1mA MAX AT 1000 VDC FOR 1 MINUTE WITH 20 SECONDS RAMP
 - 5. MATES WITH DYTRAN CABLE 6811AXX (XX=LENGTH IN FEET)
 - 4. ARROWS INDICATE ACCELERATION DIRECTION FOR POSITIVE OUTPUT.
 - 3. HOUSING AND CONNECTOR MATERIAL: TITANIUM
 - 2. WEIGHT: 15 GRAMS MAX.
 - 1. ENVIRONMENTAL SEAL: HERMETIC
- 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.
 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	06/19/09
CHK LN	05/14/13
APP DV	05/28/13
APP	

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: **OUTLINE/INSTALLATION DRAWING, MODEL 3093M27**

SIZE A	CAGE CODE 2W033	DWG. NO. 127-3093M27	REV C
SCALE: 2:1	SOLIDWORKS	SHEET 1 OF 1	

3093M27	PERFORMANCE SPECIFICATION	DOC NO PS3093M27
	Accelerometer, Triaxial, IEPE	REV C, ECN 13608, 07/27/17



- GROUND ISOLATED
- HERMETICALLY SEALED
- STUD MOUNT
- TEDS FEATURE

	ENGLISH		SI	
Weight, Max	0.5	oz	15	grams
Mounting	10-32 Stud Mount		10-32 Stud Mount	
Connector [1]	4-pin		4-pin	
Housing	Titanium		Titanium	
Isolation	Case Isolated		Case Isolated	
Sensing Element	Piezoelectric		Piezoelectric	
Element	Shear		Shear	

PHYSICAL

Weight, Max	0.5	oz	15	grams
Mounting	10-32 Stud Mount		10-32 Stud Mount	
Connector [1]	4-pin		4-pin	
Housing	Titanium		Titanium	
Isolation	Case Isolated		Case Isolated	
Sensing Element	Piezoelectric		Piezoelectric	
Element	Shear		Shear	

PERFORMANCE

	ENGLISH		SI	
Sensitivity, ±5% [2]	10	mV/g	1.02	mV/m/s ²
Acceleration Range, ±	500	Gpeak	4905	m/s ² peak
Frequency Range, ±5%	3.3-3000	Hz	3.3-3000	Hz
Frequency Range, ±15%	2.2-5000	Hz	2.2-5000	Hz
Frequency Range, ±3dB	1.1-10000	Hz	1.1-10000	Hz
Resonance Frequency	>25	kHz	>25	kHz
Linearity [3]	1	%F.S.	1	%F.S.
Transverse Sensitivity, Max	6	%	6	%
Noise floor	0.007	Grms	0.069	m/s ² rms
Spectral Noise	1000	μGrms/sqr(Hz)	9810	μm/s ² rms/sqr(Hz)
10Hz	500	μGrms/sqr(Hz)	4905	μm/s ² rms/sqr(Hz)
100Hz	100	μGrms/sqr(Hz)	981	μm/s ² rms/sqr(Hz)
1000Hz	60	μGrms/sqr(Hz)	589	μm/s ² rms/sqr(Hz)
10000Hz	50	μGrms/sqr(Hz)	491	μm/s ² rms/sqr(Hz)

ELECTRICAL

	ENGLISH		SI	
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	+7 to +11	VDC	+7 to +11	VDC
Discharge Time Constant	0.15 to 0.25	sec	0.15 to 0.25	sec
Electrical Isolation, Min.	10	GΩ	10	GΩ

ENVIRONMENTAL

	ENGLISH		SI	
Shock Max	5000	g pk	49050	m/s ²
Vibration Max	1500	g pk	14715	m/s ²
Operating Temperature	-60 to +320	°F	-51 to +160	°C
TEDS Operating Temperature	-40 to +185	°F	-40 to +85	°C
Seal	Hermetic		Hermetic	
Base Strain Sensitivity	0.002	g/με	0.02	m/s ² /με
TEDS Feature	IEEE 1451.4		IEEE 1451.4	

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Noise Resolution (Grms)	Temp Range (°F)	Time Constant (sec)

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

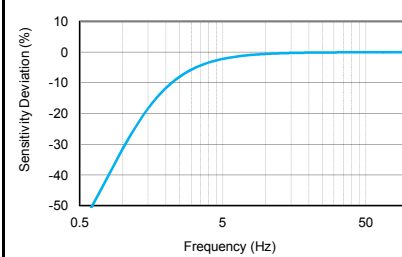
Supplied Accessories:

- 1) Accredited Calibration Certificate (ISO 17025).
- 2) Mounting stud model 6200, (10-32 to 10-32).

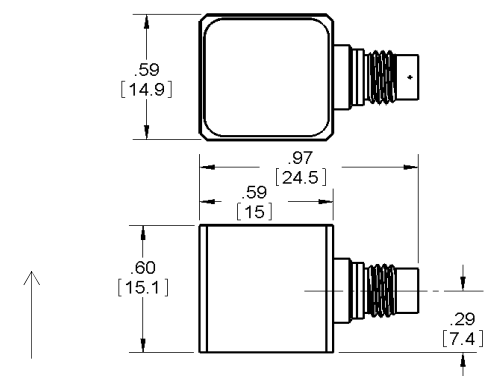
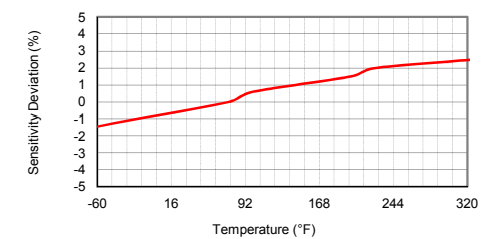
Notes:

- [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] Measured using zero-based best 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.

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL SENSITIVITY RESPONSE OVER TEMPERATURE



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3093M27 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