

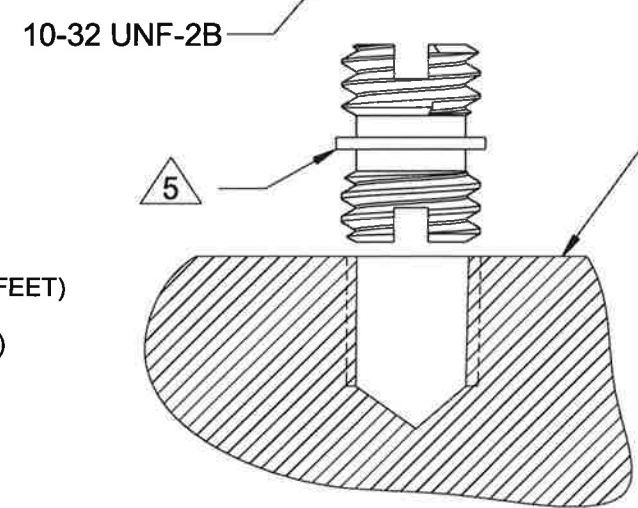
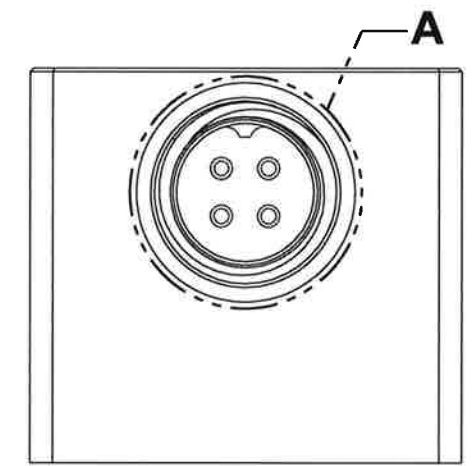
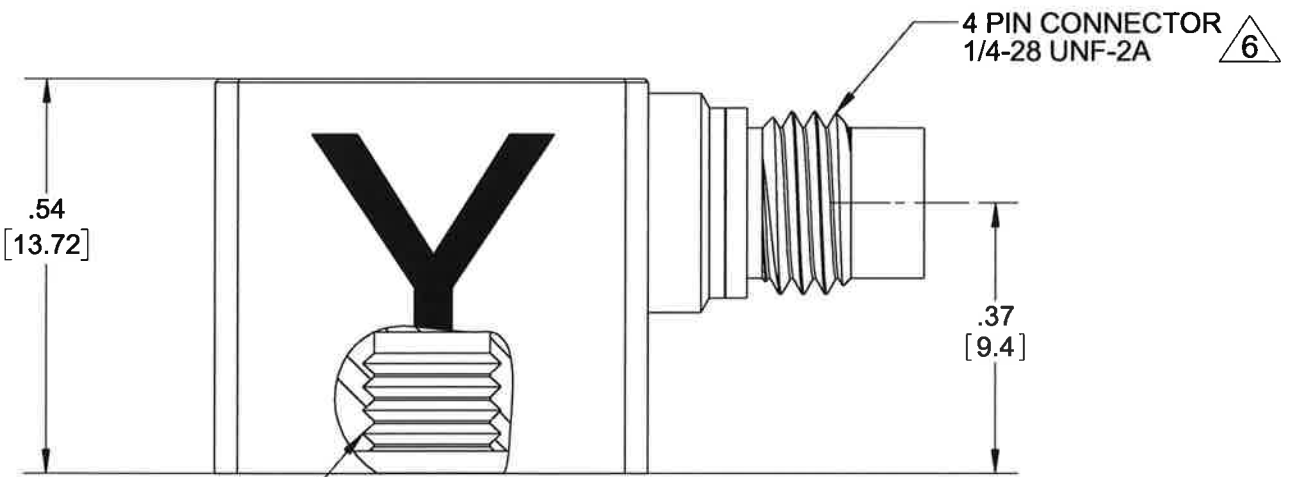
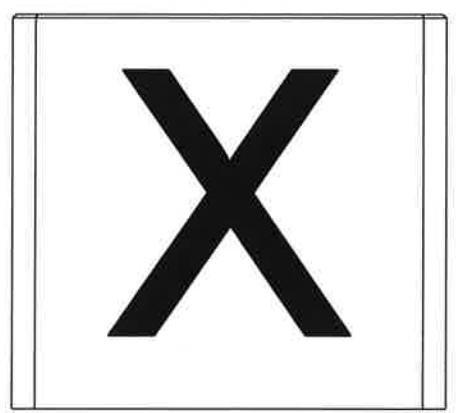
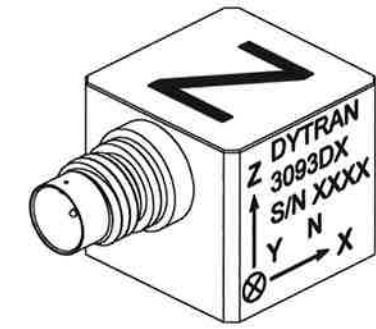
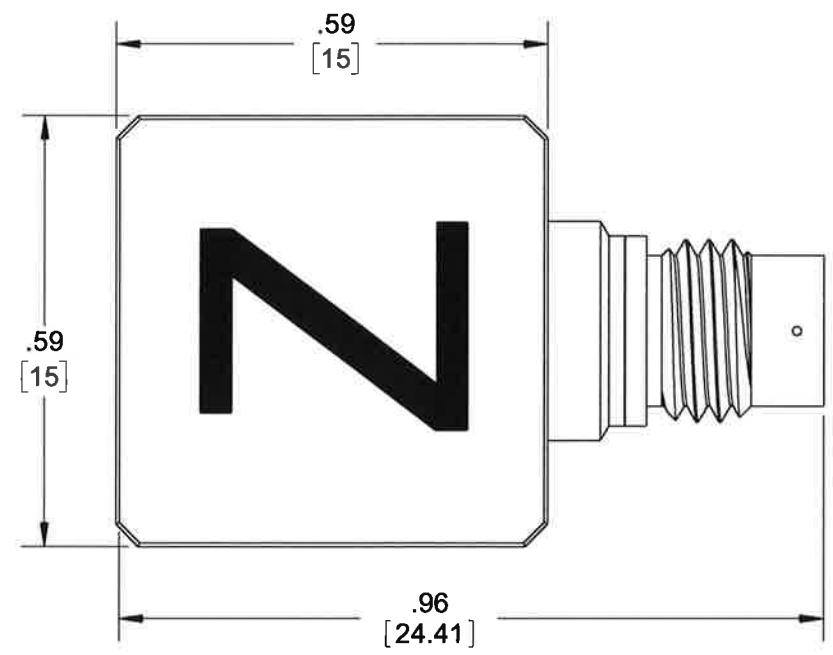
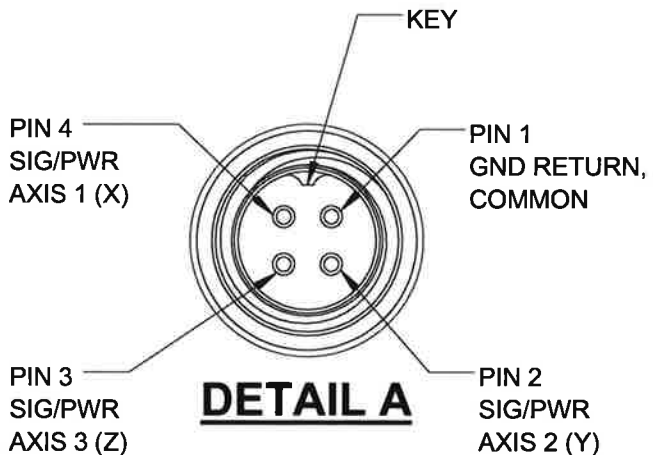
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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	11879	INITIAL RELEASE	JS 11/02/16	LA	LN

VARIATION TABLE	
MODEL NO.	SENSITIVITY
3093D1	1 mV/g
3093D2	5 mV/g
3093D3	10 mV/g
3093D4	20 mV/g
3093D5	25 mV/g
3093D6	50 mV/g
3093D7	100 mV/g



MOUNTING RECOMMENDATIONS:
 PREPARE MOUNTING SURFACE FLAT TO .001TIR.
 DRILL AND TAP 10-32 UNF-2B ∇ .188 [4.76] MINIMUM.
 RECOMMENDED MOUNTING TORQUE: 10-12 LB IN.
 FOR BEST FREQUENCY RESPONSE MOUNTING SURFACE
 MUST CONTACT ENTIRE ACCELEROMETER MOUNTING SURFACE.

- 6 MATES WITH DYTRAN CABLE 6811AXX (XX=LENGTH IN FEET)
 - 5 MOUNTING STUD 10-32 UNF-2A (MODEL 6200 SUPPLIED)
 - 4. ARROWS INDICATE ACCELERATION DIRECTION FOR POSITIVE OUTPUT.
 - 3. HOUSING AND CONNECTOR MATERIAL:TITANIUM
 - 2. WEIGHT: 10 GRAMS APPROX.
 - 1. ENVIRONMENTAL SEAL: HERMETIC
- 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.

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.

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

APPROVALS	DATE
ORIG JS	11/02/16
CHK LA	11/17/16
APP LN	11/17/16

DO NOT SCALE DRAWING

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

THIRD ANGLE PROJECTION USA



DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IN RED

TITLE: **OUTLINE/ INSTALLATION DRAWING 3093D1-7**

SIZE B	CAGE CODE 2W033	DWG NO 127-3093D	REV A
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SCALE: 4:1 SHEET 1 OF 1

Model Number	PERFORMANCE SPECIFICATION				DOC NO																																										
3093D3	Accelerometer, Triaxial, IEPE				PS3093D3																																										
					REV E, ECN 13645, 08/02/17																																										
 <ul style="list-style-type: none"> • CASE ISOLATED • HERMETICALLY SEALED • STUD MOUNTED 																																															
		ENGLISH		SI																																											
PHYSICAL																																															
Weight, Max.	0.35	oz	10.0	grams																																											
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																																												
Housing	Material Titanium		Titanium																																												
	Material Titanium		Titanium																																												
	Isolation Case Isolated		Case Isolated																																												
Sensing Element	Material Ceramic		Ceramic																																												
	Mode Shear		Shear																																												
PERFORMANCE																																															
Sensitivity, +/-5% [2]	10	mV/g	1.0	mV/m/s ²																																											
Acceleration Range, ±	500	Gpeak	4905	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.	6	%	6	%																																											
Noise floor	0.007	Grms	0.07	m/s ² rms																																											
Spectral Noise	1Hz	2000	μGrms/sqr(Hz)	19620	μm/s ² rms/sqr(Hz)																																										
	10Hz	1400	μGrms/sqr(Hz)	13734	μm/s ² rms/sqr(Hz)																																										
	100Hz	900	μGrms/sqr(Hz)	8829	μm/s ² rms/sqr(Hz)																																										
	1000Hz	500	μGrms/sqr(Hz)	4905	μm/s ² rms/sqr(Hz)																																										
	10000Hz	200	μGrms/sqr(Hz)	1962	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																																											
Electrical Isolation, Min.	10	GΩ	10	GΩ																																											
ENVIRONMENTAL																																															
Shock Max., ±	1000	g pk	9810	m/s ²																																											
Vibration Max., ±	600	g pk	5886	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	0.0007	m/s ² /Gauss																																											
Base Strain Sensitivity	0.05	g/με	0.4905	m/s ² /με																																											
<p>This family also includes:</p> <table border="1"> <thead> <tr> <th>Model</th> <th>Sensitivity (mV/g)</th> <th>Range (Gpeak)</th> <th>Resolution (Grms)</th> <th>Oper. Temp (°F)</th> <th>TC</th> </tr> </thead> <tbody> <tr> <td>3093D1</td> <td>1</td> <td>5000</td> <td>0.07</td> <td>-60 to +250</td> <td>0.7 to 1.7</td> </tr> <tr> <td>3093D2</td> <td>5</td> <td>1000</td> <td>0.014</td> <td>-60 to +250</td> <td>0.7 to 1.7</td> </tr> <tr> <td>3093D4</td> <td>20</td> <td>250</td> <td>0.0035</td> <td>-60 to +250</td> <td>0.7 to 1.7</td> </tr> <tr> <td>3093D5</td> <td>25</td> <td>200</td> <td>0.0028</td> <td>-60 to +235</td> <td>0.7 to 1.7</td> </tr> <tr> <td>3093D6</td> <td>50</td> <td>100</td> <td>0.0014</td> <td>-60 to +225</td> <td>0.7 to 1.7</td> </tr> <tr> <td>3093D7</td> <td>100</td> <td>50</td> <td>0.0007</td> <td>-60 to +225</td> <td>0.7 to 1.7</td> </tr> </tbody> </table> <p>Refer to performance specifications of products in this family for detailed description</p> <p>Supplied Accessories:</p> <ol style="list-style-type: none"> 1) Model 6200 Mounting Stud Supplied, Qty: 1 2) Accredited Calibration Certificate (ISO 17025) <p>Notes:</p> <ol style="list-style-type: none"> [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 straight line method, % of F.S. or any lesser range. □ [4] Do not apply power to this device without current limiting, 20mA Max. To do so will destroy the integral IC amplifier. [5] In the interest of constant product improvement, we reserve the right to change specifications without notice. 						Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp (°F)	TC	3093D1	1	5000	0.07	-60 to +250	0.7 to 1.7	3093D2	5	1000	0.014	-60 to +250	0.7 to 1.7	3093D4	20	250	0.0035	-60 to +250	0.7 to 1.7	3093D5	25	200	0.0028	-60 to +235	0.7 to 1.7	3093D6	50	100	0.0014	-60 to +225	0.7 to 1.7	3093D7	100	50	0.0007	-60 to +225	0.7 to 1.7
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<div style="display: flex; justify-content: space-around;"> <div data-bbox="1050 714 1449 1006"> <p>TYPICAL LOW FREQUENCY RESPONSE</p> </div> <div data-bbox="1470 714 1890 1006"> <p>TYPICAL SENSITIVITY RESPONSE OVER TEMPERATURE</p> </div> </div> <div style="text-align: center; margin-top: 20px;"> <p>Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3093D for more information.</p> </div>																																															
 <p>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</p>																																															