

PROPRIETARY AND CONFIDENTIAL

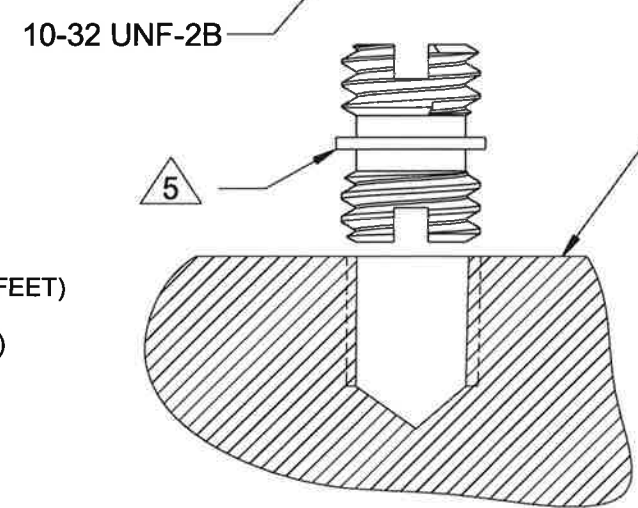
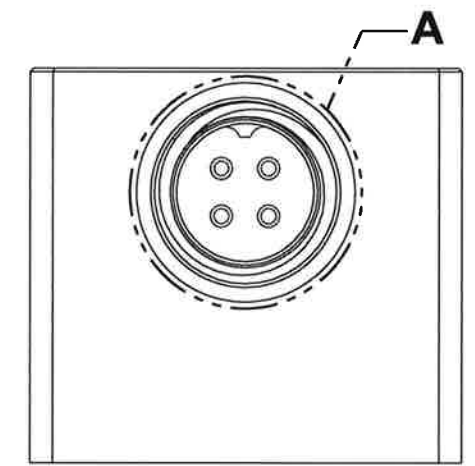
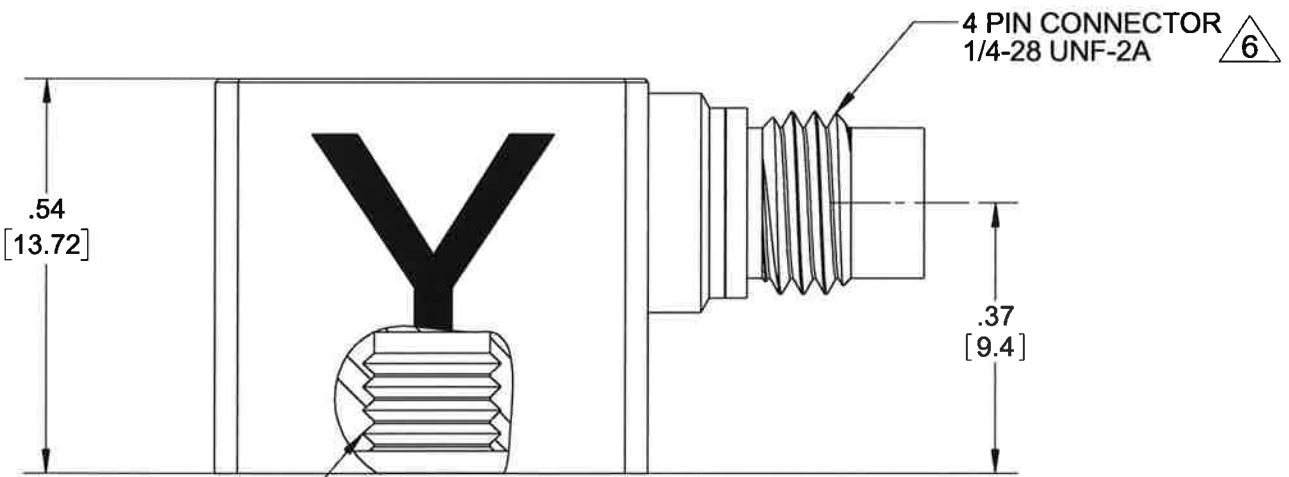
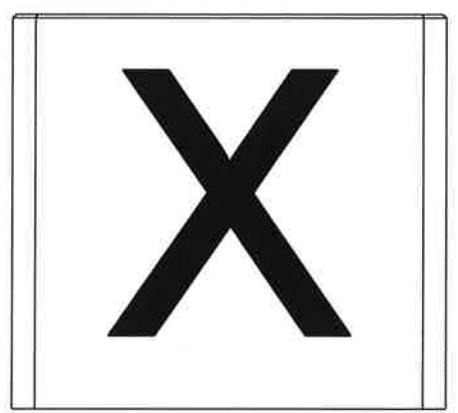
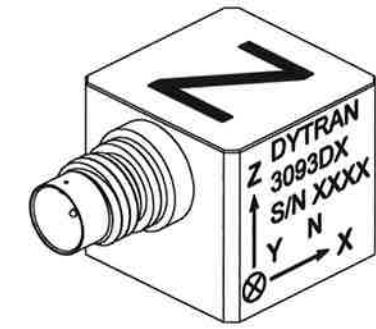
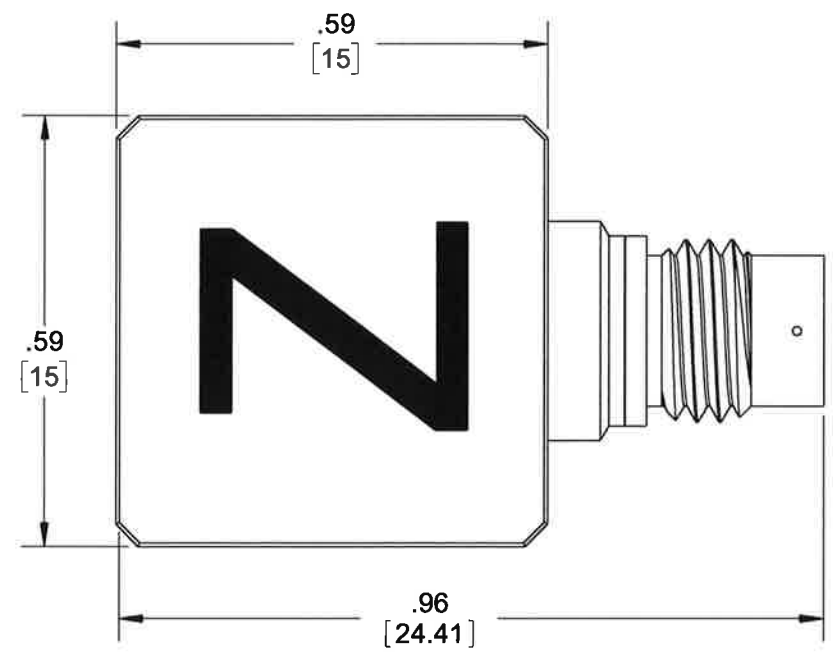
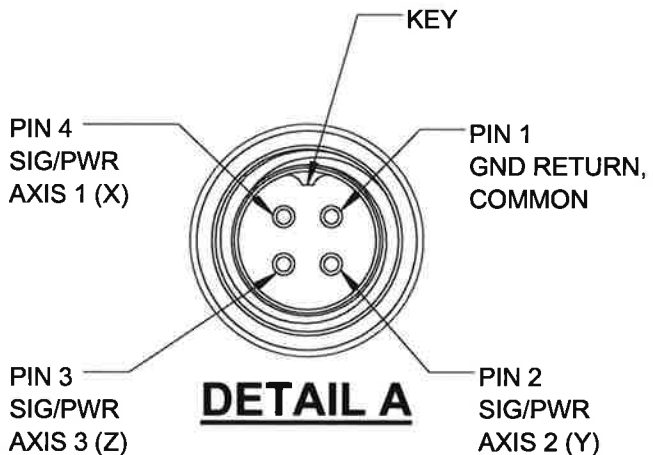
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REVISIONS

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	±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

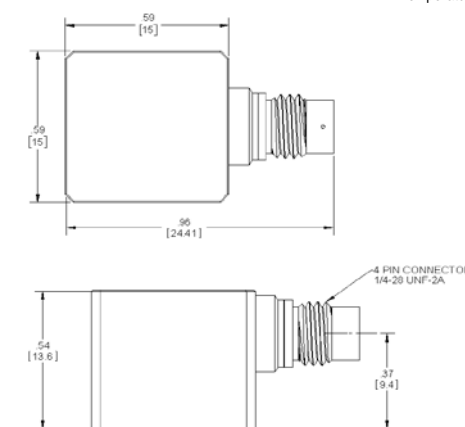
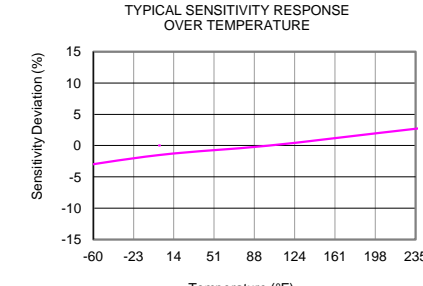
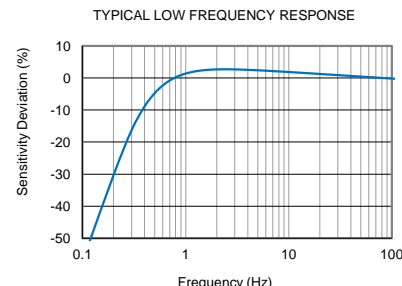
DYTRAN INSTRUMENTS, INC. Chatsworth, CA
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TITLE: **OUTLINE/ INSTALLATION DRAWING 3093D1-7**

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																																										
3093D5	Accelerometer, Triaxial, IEPE				PS3093D5 REV E, ECN 13645, 08/02/17																																										
 <ul style="list-style-type: none"> • CASE ISOLATED • HERMETICALLY SEALED • STUD MOUNTED 	ENGLISH		SI		<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>3093D3</td> <td>10</td> <td>500</td> <td>0.007</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>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"> Model 6200 Mounting Stud Supplied, Qty: 1 Accredited Calibration Certificate (ISO 17025) <p>Notes:</p> <ol style="list-style-type: none"> Glass to Metal seal connector. Mates with Dytran cable Model 6811AXX (XX=length in feet) Measured at 100 Hz, 1 Grms per ISA RP 37.2 Measured using zero-based straight line method, % of F.S. or any lesser range. □ Do not apply power to this device without current limiting, 20mA Max. To do so will destroy the integral IC amplifier. 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	3093D3	10	500	0.007	-60 to +250	0.7 to 1.7	3093D4	20	250	0.0035	-60 to +250	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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	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]	25	mV/g	2.5	mV/m/s ²																																											
Acceleration Range, ±	200	Gpeak	1962	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	0.0028	Grms	0.03	m/s ² rms																																											
Spectral Noise	1Hz	800	μGrms/sqr(Hz)	7848	μm/s ² rms/sqr(Hz)																																										
	10Hz	560	μGrms/sqr(Hz)	5493.6	μm/s ² rms/sqr(Hz)																																										
	100Hz	360	μGrms/sqr(Hz)	3531.6	μm/s ² rms/sqr(Hz)																																										
	1000Hz	200	μGrms/sqr(Hz)	1962	μm/s ² rms/sqr(Hz)																																										
	10000Hz	80	μGrms/sqr(Hz)	784.8	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., ±	400	g pk	3924	m/s ²																																											
Vibration Max., ±	240	g pk	2354	m/s ²																																											
Operating Temperature	-60 to +235	°F	-51 to +113	°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																																											



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



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