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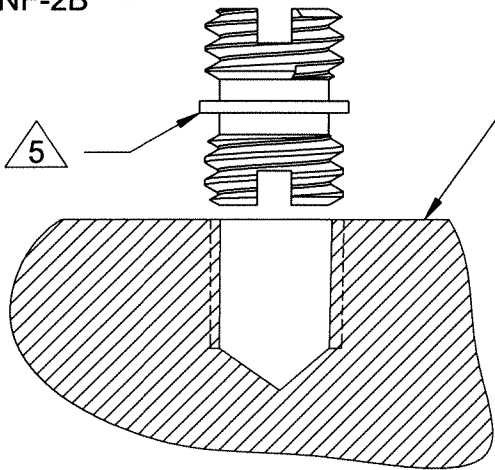
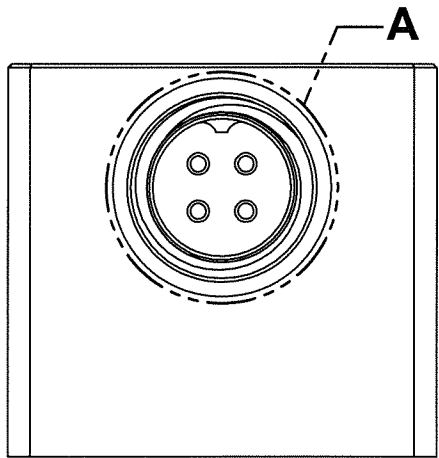
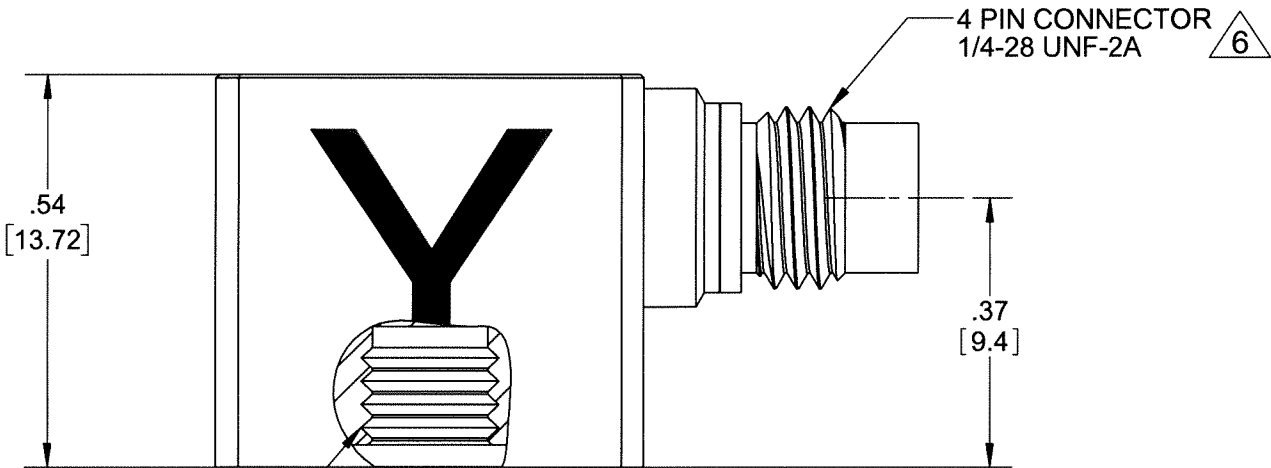
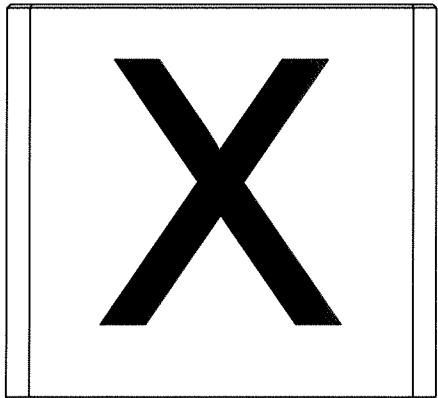
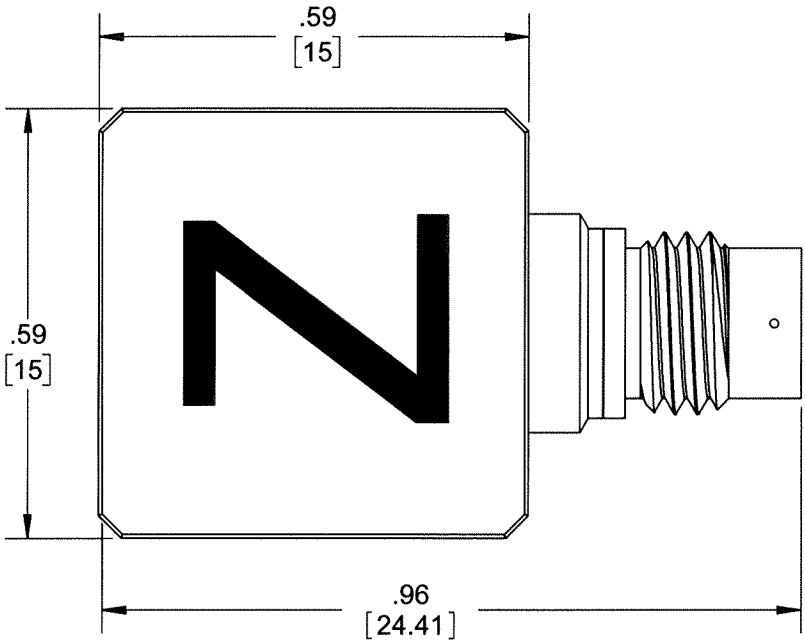
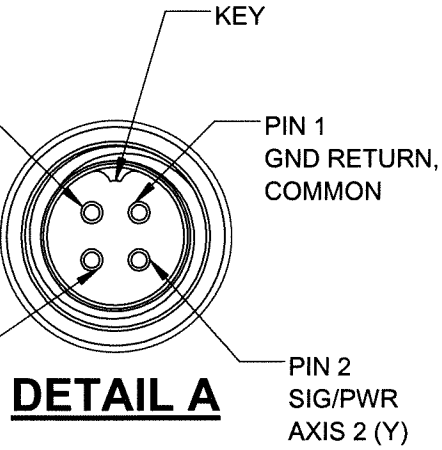
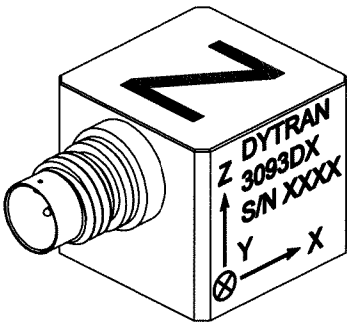
DWG NO 127-3093D

SH 1

REV B

REVISIONS					
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	11879	INITIAL RELEASE	JS 11/02/16	LA	LN
B	15119	REVISED NOTE 2 (WEIGHT)	KG 06/06/19		

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: 14 GRAMS, MAX.
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.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE:		
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		THIRD ANGLE PROJECTION USA

DYTRAN
INSTRUMENTS, INC. Chatsworth, CA

MASTER
ONLY IF IN RED

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

SIZE **B** CAGE CODE **2W033** DWG NO **127-3093D** REV **B**

SCALE: 4:1 SHEET 1 OF 1

Model Number		PERFORMANCE SPECIFICATION				DOC NO PS3093D1	
3093D1		Accelerometer, Triaxial, IEPE				REV F, ECN 15119, 06/07/19	
• CASE ISOLATED • HERMETICALLY SEALED • STUD MOUNTED							
PHYSICAL		ENGLISH		SI		This family also includes:	
Weight, Max.		0.49	oz	14.0	grams	Model	Sensitivity (mV/g)
Mounting Stud Mount		10-32 UNF-2A	screw	10-32 UNF-2A	screw	3093D2	5
Connector [1]	Type	4-pin, 1/4-28		4-pin, 1/4-28		3093D3	10
	Material	Titanium		Titanium		3093D4	20
Housing	Material	Titanium		Titanium		3093D5	25
	Isolation	Case Isolated		Case Isolated		3093D6	50
Sensing Element	Material	Ceramic		Ceramic		3093D7	100
	Mode	Shear		Shear			
PERFORMANCE						Range (Gpeak)	Resolution (Grms)
Sensitivity, +/-5% [2]		1	mV/g	0.10	mV/m/s^2	Oper. Temp (°F)	TC
Acceleration Range, ±		5000	Gpeak	49050	m/s^2 peak	-60 to +250	0.7 to 1.7
Frequency Range, ±5%		.6-5000	Hz	.6-5000	Hz	-60 to +250	0.7 to 1.7
Resonance Frequency		> 30	kHz	> 30	kHz	-60 to +250	0.7 to 1.7
Linearity [3]		1	%F.S.	1	%F.S.	-60 to +235	0.7 to 1.7
Transverse Sensitivity Max.		6	%	6	%	-60 to +225	0.7 to 1.7
Noise floor		0.07	Grms	0.7	m/s^2 rms		
Spectral Noise	1Hz	20000	µGrms/sqr(Hz)	196200	µm/s^2 rms/sqr(Hz)		
	10Hz	14000	µGrms/sqr(Hz)	137340	µm/s^2 rms/sqr(Hz)		
	100Hz	9000	µGrms/sqr(Hz)	88290	µm/s^2 rms/sqr(Hz)		
	1000Hz	5000	µGrms/sqr(Hz)	49050	µm/s^2 rms/sqr(Hz)		
	10000Hz	2000	µGrms/sqr(Hz)	19620	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., ±		10000	g pk	98100	m/s^2		
Vibration Max., ±		6000	g pk	58860	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		
						Refer to performance specifications of products in this family for detailed description	
						Supplied Accessories:	
						1) Model 6200 Mounting Stud Supplied, Qty: 1	
						2) Accredited Calibration Certificate (ISO 17025)	
						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 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. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.	
						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 127-3093D for more information.	

- CASE ISOLATED
- HERMETICALLY SEALED
- STUD MOUNTED

Model Number		PERFORMANCE SPECIFICATION				DOC NO PS3093D1	
3093D1		Accelerometer, Triaxial, IEPE				REV F, ECN 15119, 06/07/19	
PHYSICAL		ENGLISH		SI		This family also includes:	
Weight, Max.		0.49	oz	14.0	grams	Model	Sensitivity (mV/g)
Mounting Stud Mount		10-32 UNF-2A	screw	10-32 UNF-2A	screw	3093D2	5
Connector [1]	Type	4-pin, 1/4-28		4-pin, 1/4-28		3093D3	10
	Material	Titanium		Titanium		3093D4	20
Housing	Material	Titanium		Titanium		3093D5	25
	Isolation	Case Isolated		Case Isolated		3093D6	50
Sensing Element	Material	Ceramic		Ceramic		3093D7	100
	Mode	Shear		Shear			
PERFORMANCE						Range (Gpeak)	Resolution (Grms)
Sensitivity, +/-5% [2]		1	mV/g	0.10	mV/m/s^2	Oper. Temp (°F)	TC
Acceleration Range, ±		5000	Gpeak	49050	m/s^2 peak	-60 to +250	0.7 to 1.7
Frequency Range, ±5%		.6-5000	Hz	.6-5000	Hz	-60 to +250	0.7 to 1.7
Resonance Frequency		> 30	kHz	> 30	kHz	-60 to +250	0.7 to 1.7
Linearity [3]		1	%F.S.	1	%F.S.	-60 to +235	0.7 to 1.7
Transverse Sensitivity Max.		6	%	6	%	-60 to +225	0.7 to 1.7
Noise floor		0.07	Grms	0.7	m/s^2 rms		
Spectral Noise	1Hz	20000	µGrms/sqr(Hz)	196200	µm/s^2 rms/sqr(Hz)		
	10Hz	14000	µGrms/sqr(Hz)	137340	µm/s^2 rms/sqr(Hz)		
	100Hz	9000	µGrms/sqr(Hz)	88290	µm/s^2 rms/sqr(Hz)		
	1000Hz	5000	µGrms/sqr(Hz)	49050	µm/s^2 rms/sqr(Hz)		
	10000Hz	2000	µGrms/sqr(Hz)	19620	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., ±		10000	g pk	98100	m/s^2		
Vibration Max., ±		6000	g pk	58860	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		
						Refer to performance specifications of products in this family for detailed description	
						Supplied Accessories:	
						1) Model 6200 Mounting Stud Supplied, Qty: 1	
						2) Accredited Calibration Certificate (ISO 17025)	
						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 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. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.	
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- CASE ISOLATED
- HERMETICALLY SEALED
- STUD MOUNTED

Model Number		PERFORMANCE SPECIFICATION				DOC NO PS3093D1	
3093D1		Accelerometer, Triaxial, IEPE				REV F, ECN 15119, 06/07/19	
PHYSICAL		ENGLISH		SI		This family also includes:	
Weight, Max.		0.49	oz	14.0	grams	Model	Sensitivity (mV/g)
Mounting Stud Mount		10-32 UNF-2A	screw	10-32 UNF-2A	screw	3093D2	5
Connector [1]	Type	4-pin, 1/4-28		4-pin, 1/4-28		3093D3	10
	Material	Titanium		Titanium		3093D4	20
Housing	Material	Titanium		Titanium		3093D5	25
	Isolation	Case Isolated		Case Isolated		3093D6	50
Sensing Element	Material	Ceramic		Ceramic		3093D7	100
	Mode	Shear		Shear			
PERFORMANCE						Range (Gpeak)	Resolution (Grms)
Sensitivity, +/-5% [2]		1	mV/g	0.10	mV/m/s^2	Oper. Temp (°F)	TC
Acceleration Range, ±		5000	Gpeak	49050	m/s^2 peak	-60 to +250	0.7 to 1.7
Frequency Range, ±5%		.6-5000	Hz	.6-5000	Hz	-60 to +250	0.7 to 1.7
Resonance Frequency		> 30	kHz	> 30	kHz	-60 to +250	0.7 to 1.7
Linearity [3]		1	%F.S.	1	%F.S.	-60 to +235	0.7 to 1.7
Transverse Sensitivity Max.		6	%	6	%	-60 to +225	0.7 to 1.7
Noise floor		0.07	Grms	0.7	m/s^2 rms		
Spectral Noise	1Hz	20000	µGrms/sqr(Hz)	196200	µm/s^2 rms/sqr(Hz)		
	10Hz	14000	µGrms/sqr(Hz)	137340	µm/s^2 rms/sqr(Hz)		
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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., ±		10000	g pk	98100	m/s^2		
Vibration Max., ±		6000	g pk	58860	m/s^2		
Operating Temperature		-60 to +250	°F	-51 to +121	°C		
Seal		Hermetic		Hermetic			
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Housing	Material	Titanium		Titanium		3093D5	25
	Isolation	Case Isolated		Case Isolated		3093D6	50
Sensing Element	Material	Ceramic		Ceramic		3093D7	100
	Mode	Shear		Shear			
PERFORMANCE						Range (Gpeak)	Resolution (Grms)
Sensitivity, +/-5% [2]		1	mV/g	0.10	mV/m/s^2	Oper. Temp (°F)	TC
Acceleration Range, ±		5000	Gpeak	49050	m/s^2 peak	-60 to +250	0.7 to 1.7
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	10000Hz	2000	µGrms/sqr(Hz)	19620	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., ±		10000	g pk	98100	m/s^2		
Vibration Max., ±		6000	g pk	58860	m/s^2		
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						[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. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.	
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						TYPICAL SENSITIVITY RESPONSE OVER TEMPERATURE	
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