

**PROPRIETARY AND CONFIDENTIAL**

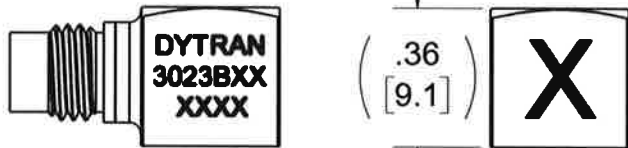
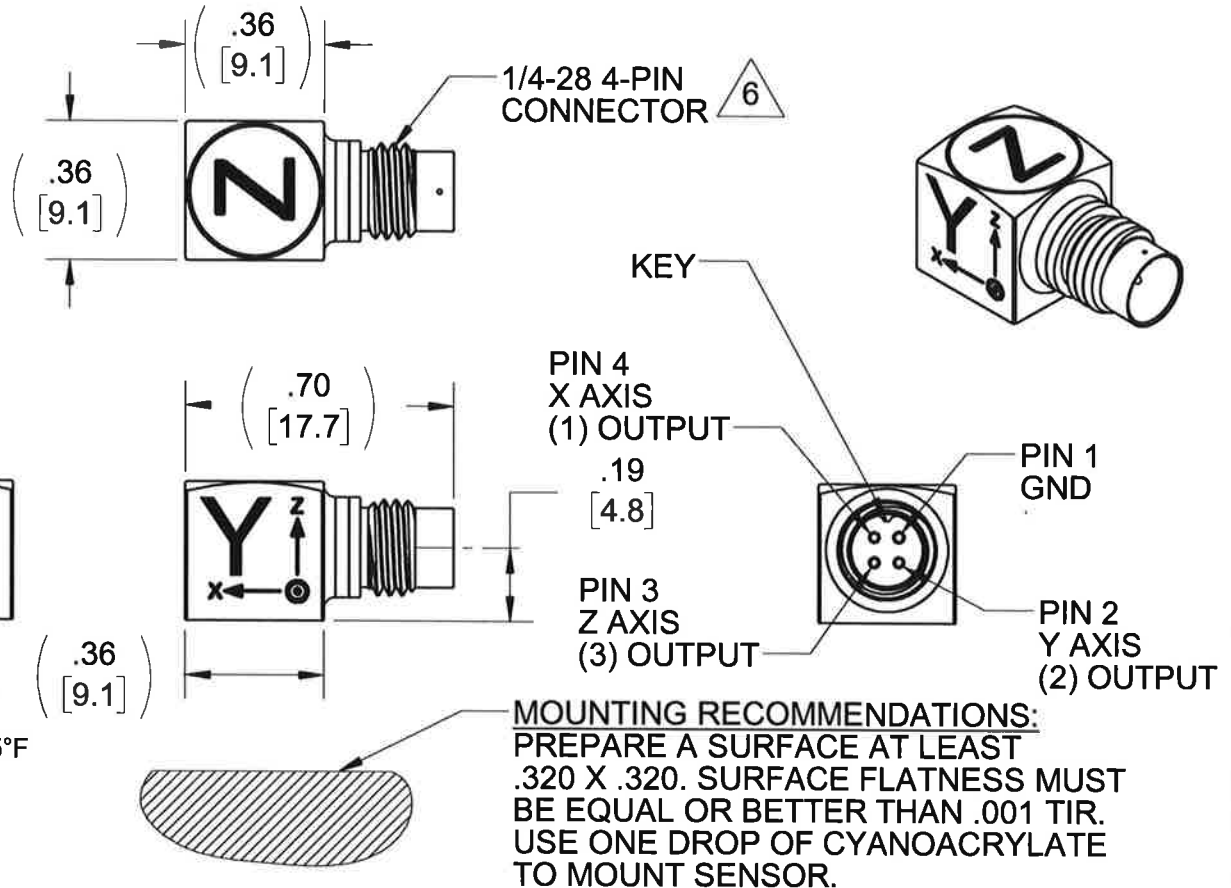
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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	13063	INITIAL RELEASE	JS 10/14/16	LA	W

**VARIATION TABLE**

MODEL NO.	SENSITIVITY	TEDS
3023B1	1mV/g	NO
3023B2	5mV/g	NO
3023B3	10mV/g	NO
3023B1T	1mV/g	YES
3023B2T	5mV/g	YES
3023B3T	10mV/g	YES



- 6 MATES WITH DYTRAN 6811AXX OR 6824AXX CABLE (XX=LENGTH IN FEET)
- OPERATIONAL TEMPERATURE: RANGE -60° TO +325°F
  - SENSITIVITY: SEE CHART.
  - WEIGHT: 3 GRAMS MAX.
  - ARROWS INDICATE ACCELERATION DIRECTION FOR POSITIVE OUTPUT
  - MATERIAL: TITANIUM ALLOY

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.			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
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.			MATERIAL FINISH DO NOT SCALE DRAWING

CONTRACT NO.		APPROVALS		DATE
ORIG	NDC	03/11/14		
CHK	LA	11/4/16		
APP	W	11/10/16		
APP				

**DYTRAN INSTRUMENTS, INC.** MASTER ONLY IF IN RED Chatsworth, CA

TITLE: **OUTLINE/INSTALLATION DRAWING, MODEL 3023B SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3023B1	A

SCALE: NONE      SOLIDWORKS      SHEET 1 OF 1

<b>MODEL NUMBER</b> <b>3023B1</b>	<b>PERFORMANCE SPECIFICATION</b>	<b>DOC NO.</b> <b>PS3023B1</b>
	<b>ACCELEROMETER, TRIAXIAL, IEPE</b>	REV C, ECN 17104, 03/29/23



- **HIGH TEMPERATURE**
- **HERMETICALLY SEALED**
- **MINIATURE SIZE**

**PHYSICAL**

Weight, Max.  
Mounting  
Connector [1]  
Material, Housing / Connector

ENGLISH		SI	
0.11	oz	3.0	grams
Adhesive		Adhesive	
4-pin		4-pin	
Titanium		Titanium	

**PERFORMANCE**

Sensitivity, -10% / +15% [5]  
Range F.S. (each axis)  
Frequency Response, ± 5%  
, ±15%  
Element Natural Frequency  
Equivalent Electrical Noise  
Spectral Noise  
Linearity [2]  
Transverse Sensitivity, Max.  
Signal Polarity

	ENGLISH		SI		
Sensitivity	1	mV/g	0.10	mV/m/s <sup>2</sup>	
Range F.S.	±5000	g pk	±49050	m/s <sup>2</sup> pk	
Frequency Response	2.43 to 4000	Hz	2.43 to 4000	Hz	
	1.29 to 10000	Hz	1.29 to 10000	Hz	
Element Natural Frequency	25	kHz	25	kHz	
Equivalent Electrical Noise	0.1	g RMS	0.981	m/s <sup>2</sup> RMS	
Spectral Noise	1.25Hz	2440	µg RMS/√(Hz)	23936	µm/s <sup>2</sup> RMS/√(Hz)
	10Hz	2440	µg RMS/√(Hz)	23936	µm/s <sup>2</sup> RMS/√(Hz)
	100Hz	610	µg RMS/√(Hz)	5984	µm/s <sup>2</sup> RMS/√(Hz)
	1000Hz	230	µg RMS/√(Hz)	2256	µm/s <sup>2</sup> RMS/√(Hz)
	10000Hz	87	µg RMS/√(Hz)	853	µm/s <sup>2</sup> RMS/√(Hz)
Linearity	±1	% F.S.	±1	% F.S.	
Transverse Sensitivity	6	%	6	%	
Signal Polarity	[4]		[4]		

**ELECTRICAL**

Supply Current Range [3]  
Compliance Voltage Range  
Output Impedance, Typ.  
Output Bias Voltage  
Discharge Time Constant  
Magnetic Sens. at 100 Gauss  
Strain Sensitivity @ 250µε  
Ground Isolation

	ENGLISH		SI	
Supply Current Range	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 12	VDC	7 to 12	VDC
Discharge Time Constant	0.2 - 2.0	sec	0.2 - 2.0	sec
Magnetic Sens. at 100 Gauss	0.00005	g/Gauss	4.905	m/s <sup>2</sup> /T
Strain Sensitivity @ 250µε	0.024	g/µε	0.24	m/s <sup>2</sup> /µε
Ground Isolation	Case Ground		Case Ground	

**ENVIRONMENTAL**

Maximum Shock  
Temperature Range  
Environmental Seal

	ENGLISH		SI	
Maximum Shock	±10000	g pk	±98100	m/s <sup>2</sup> pk
Temperature Range	-60 to +325	°F	-51 to +162	°C
Environmental Seal	Hermetic		Hermetic	

**This family also includes:**

Model	Sensitivity (mV/g)	Range (g pk)	Resolution (g RMS)	Oper. Temp (°F)	TC (Sec)
3023B2	5	1000	0.014	-60 to +325	0.2 to 2.0
3023B3	10	500	0.007	-60 to +325	0.2 to 2.0
3023B1T	1	5000	0.07	-60 to +325	0.2 to 2.0
3023B2T	5	1000	0.014	-60 to +325	0.2 to 2.0
3023B3T	10	500	0.007	-60 to +325	0.2 to 2.0

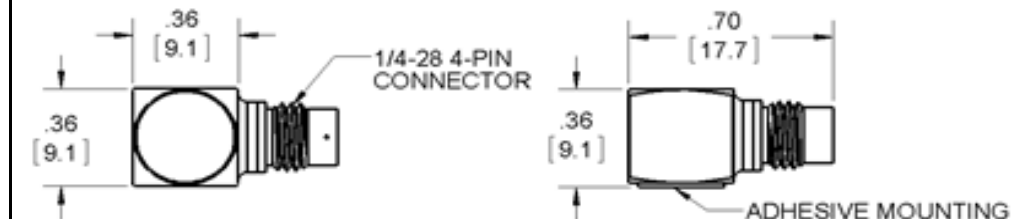
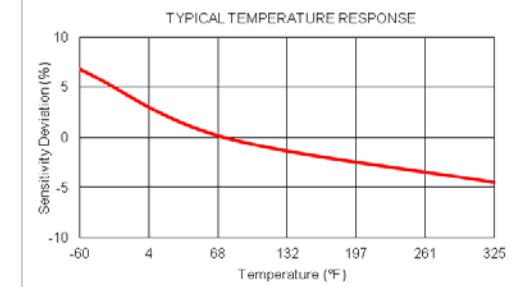
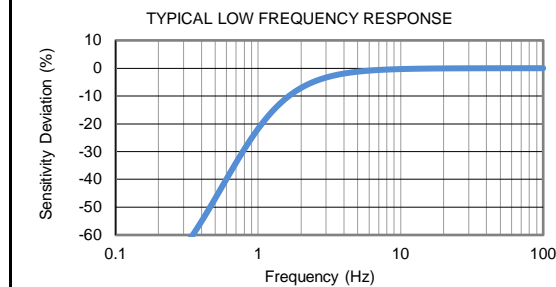
Please, refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited Calibration Certificate (ISO 17025)

**Notes:**

- [1] Connector mates with Dytran's cable assy. model 6811AXX or 6824AXX. (xx = length in feet)
  - [2] Measured using zero-based best straight-line method, % of F.S. or any lesser range.
  - [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
  - [4] Positive for motion in direction of arrows on housing.
  - [5] All specifications are at room temperature unless otherwise specified.
  - [6] 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 over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3023B1 for more information.

