

**PROPRIETARY AND CONFIDENTIAL**

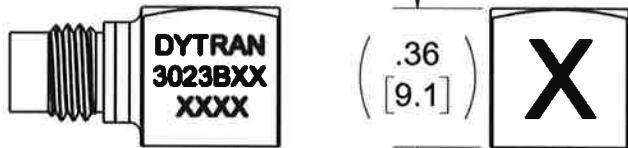
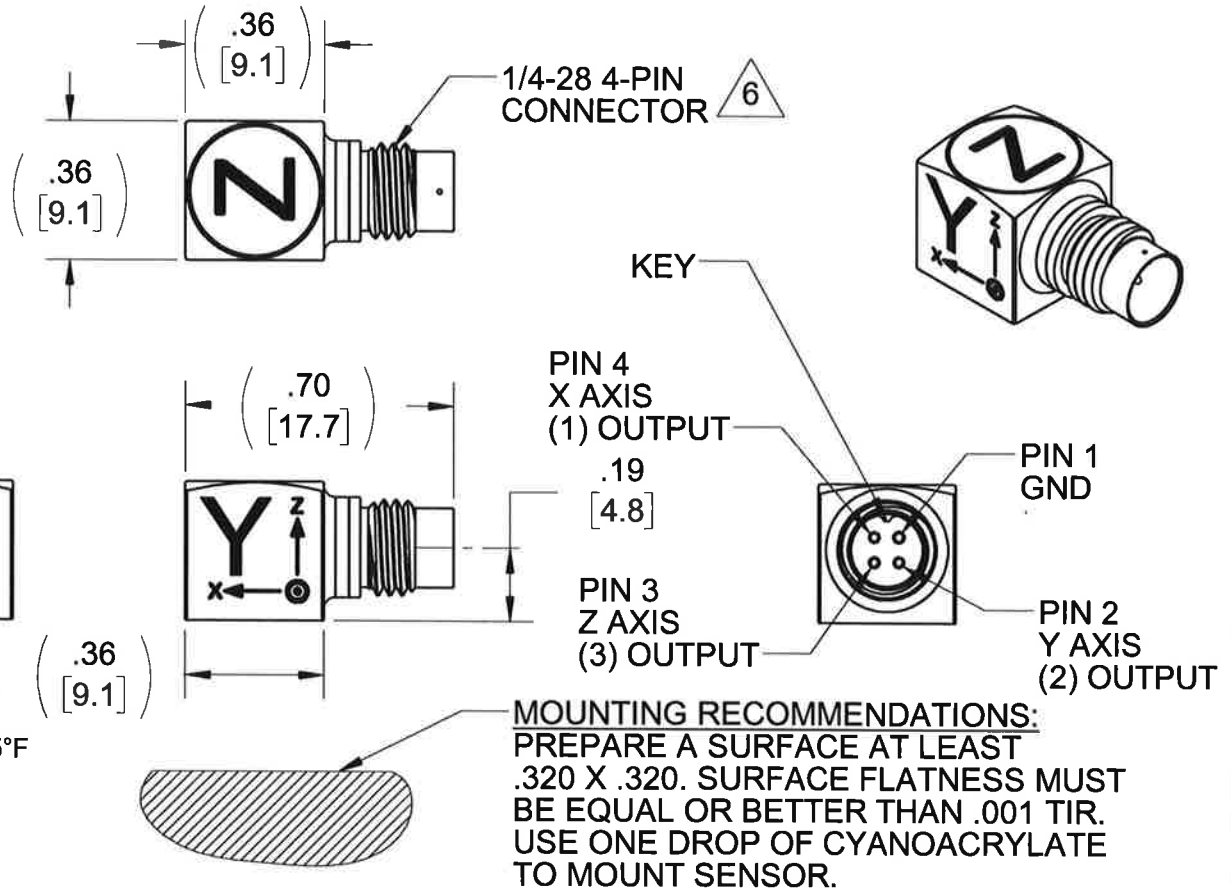
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**REVISIONS**

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



- △ 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.			

CONTRACT NO.	
APPROVALS	DATE
ORIG	NDC 03/11/14
CHK	LA 11/4/16
APP	W 11/10/16
APP	
DO NOT SCALE DRAWING	

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

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

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-3023B1</b>	<b>A</b>
SCALE: NONE		SOLIDWORKS	SHEET 1 OF 1

<b>MODEL NUMBER</b> <b>3023B3</b>	<b>PERFORMANCE SPECIFICATION</b>	<b>DOC NO.</b> <b>PS3023B3</b>
	<b>ACCELEROMETER, TRIAXIAL, IEPE</b>	REV A, ECN 13036, 11/07/16



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

**PHYSICAL**

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

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

**PERFORMANCE**

Sensitivity, -10% / +15% [2]  
Range F.S. (each axis)  
Frequency Response, ±5%  
, ±15%  
Element Natural Frequency  
Equivalent Electrical Noise  
Spectral Noise  
Linearity [3]  
Transverse Sensitivity, Max.  
Signal Polarity

	ENGLISH	SI
Sensitivity	10 mV/g	1.02 mV/m/s <sup>2</sup>
Range	±500 g	±4905 m/s <sup>2</sup>
Frequency Response	2.5 to 4000 Hz	2.5 to 4000 Hz
Element Natural Frequency	2 to 10000 Hz	2 to 10000 Hz
Equivalent Electrical Noise	0.007 grms	0.07 m/s <sup>2</sup> rms
Spectral Noise	1.25Hz: 244 μGrms/v(Hz)	2394 μm/s <sup>2</sup> rms/v(Hz)
	10Hz: 244 μGrms/v(Hz)	2394 μm/s <sup>2</sup> rms/v(Hz)
	100Hz: 61 μGrms/v(Hz)	598 μm/s <sup>2</sup> rms/v(Hz)
	1000Hz: 23 μGrms/v(Hz)	226 μm/s <sup>2</sup> rms/v(Hz)
	10000Hz: 8.7 μGrms/v(Hz)	85 μm/s <sup>2</sup> rms/v(Hz)
Linearity	±1 % F.S.	±1 % F.S.
Transverse Sensitivity	5 %	5 %
Signal Polarity	[5]	[5]

**ELECTRICAL**

Supply Current Range [4]  
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  
Maximum Vibration  
Temperature Range  
Environmental Seal

	ENGLISH	SI
Maximum Shock	±1000 g pk	±9810 m/s <sup>2</sup>
Maximum Vibration	±600 g pk	±5886 m/s <sup>2</sup>
Temperature Range	-60 to +325 °F	-51 to +162 °C
Environmental Seal	Hermetic	Hermetic

**This family also includes:**

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp (°F)	TC
3023B1	1	5000	0.07	-60 to +325	0.2 to 2.0
3023B2	5	1000	0.014	-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

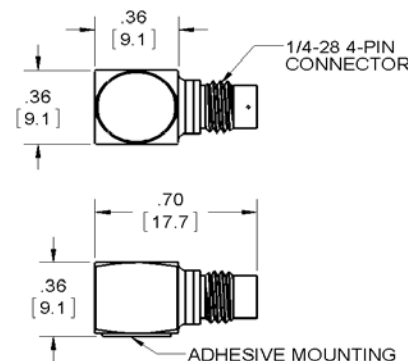
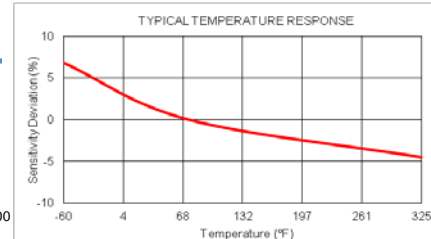
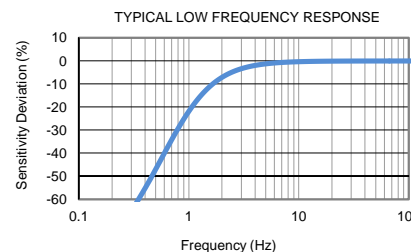
Please, refer to the performance specifications of the products in this family for detailed description

**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 At 100 Hz, 1 Grms per ISA RP 37.2
- [3] Measured using zero-based best straight-line method, % of F.S. or any lesser range.
- [4] Power only with Dytran IEPE power unit or other Dytran-compatible constant current type power unit. If power is applied without current limiting protection, the internal amplifier will be destroyed.
- [5] Positive for motion in direction of arrows on housing.
- [6] In the interest of constant product improvement, we reserve the right to change the specification without notice.



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



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