

Universal Testing Type Accelerometer

DETAILS

BXXB00 series uniaxial acceleration sensor, using piezoelectric ceramic shear structure, with a wide band frequency response, high-quality piezoelectric ceramic with long-term stability can ensure years of accurate measurement. Internal with low impedance circuit, low noise, better sensitivity temperature response and other characteristics. The housing is laser welded stainless steel with high sealing grade and strength, and is equipped with M5 mounting threads at the bottom.

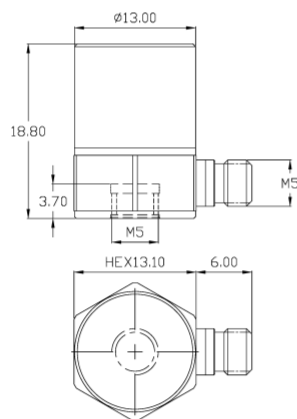
FEATURES

- IEPE Universal Acceleration Sensor
- Standard series with multiple range options
- Shear structure
- Broadband response

TYPICAL APPLICATIONS

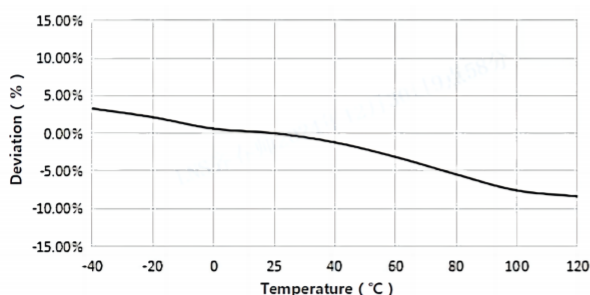
- Modal analysis
- Vibration control
- General vibration monitoring

Fig_1 Dimensions of BXXB00

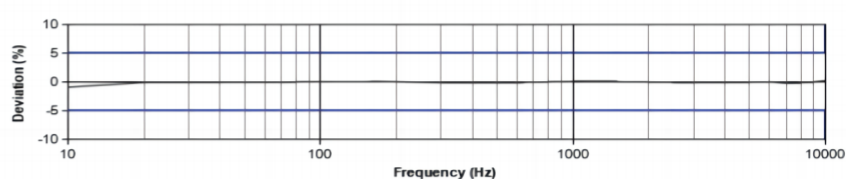


BXXB00

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-BXXB00

MODEL NUMBER		UNIT	B02B00	B03B00	B05B00	B06B00	B07B01
PERFORMANCE							
Sensitivity(±5%) ¹		mV/g	10(±10%)	20	50	100	200
		mV/(m/s²)	1	2	5	10	20
Measurement Range		g	±500	±250	±100	±50	±25
Broadband Resolution ²		g rms	0.001	0.0005	0.0002	0.0001	0.00005
Non-Linearity ³		%	1				
Frequency Range	± 5%	Hz	2-10k	1-10k	1-8k	1-8k	1-6k
	±10%		1.2-12k	0.5-12k	0.5-10k	0.5-10k	0.5-8k
Resonance Frequency ²		Hz	≥48k	≥40k	≥32k	≥29k	≥26k
Discharge Time Constant ²		s	≤1				
Transverse Sensitivity		%	≤5				
ELECTRICAL							
Excitation Voltage		VDC	20-30				
Constant Current Excitation		mA	2-20				
Output Impedance		Ω	≤100				
Output Bias Voltage		V	8-12				
Electrical Isolation		Ω	-				
Spectral Noise ²	10Hz	μg/√Hz	60	30	12	6	3
	100Hz		24	12	4.8	2.4	1.2
	1000Hz		16	8	3.2	1.6	0.8
ENVIRONMENTAL							
Sinusoidal Vibration Limit ⁴		g rms	2200	2000	800	400	200
Shock Limit ⁴		g pk	5500	5000	2000	1000	500
Temperature Range		°C	-40~120				
		°F	-40~248				
Temperature Response ²		%/°C	-0.1				
PHYSICAL							
Sealing		-	Laser welding IP68				
Sensing Element		-	Piezoelectric ceramics				
Housing Material		-	Stainless steel				
Size	mm	HEX 13.1×18.8					
	in	HEX 0.516×0.740					
Electrical Connector		-	M5 Side (Opt. 10-32)				
Mounting Thread		-	M5 (Opt. 10-32)				
Weight ²	g	12	12.5	13.3	14.2	14.5	
	oz	0.423	0.441	0.469	0.501	0.511	
TEDS Optional ⁵		-	Yes				

Additional Information

Note:

1. @ 160Hz, 24VDC, 4mA conditions
2. Typical values
3. JBT 6822-2018 7.12.1 Vibration Testing Method
4. References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state
5. Some products may have changes in size after adding TEDS

BXXB00

Supplied Accessories:

- Product Verification Report
- Install Screws

OPTIONAL VERSIONS

- A: 10-32 Output Connector
- E: 10-32 Mounting Threads

COMPLIANCE WITH STANDARDS



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