

## Universal Testing Type Accelerometer

### DETAILS

BXXA00 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.

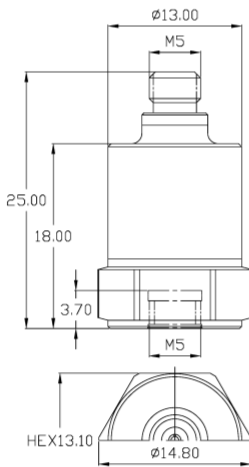
### FEATURES

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

### TYPICAL APPLICATIONS

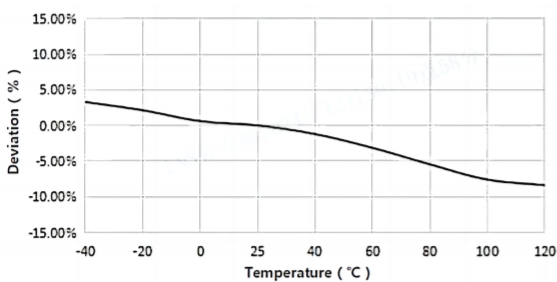
- Modal analysis
- Vibration control
- General vibration monitoring

**Fig\_1** Dimensions of BXXA00

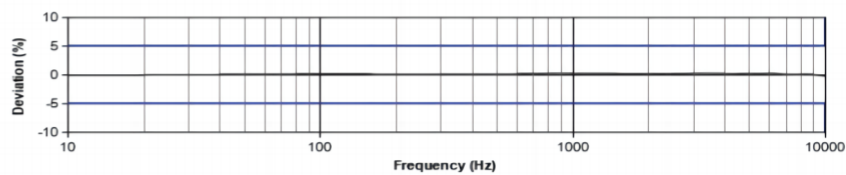


BXXA00

**Fig\_2** Typical Temperature Response



**Fig\_3** Typical Frequency Response



## Specifications-BXXA00

MODEL NUMBER	UNIT	B02A00	B03A00	B05A00	B06A00	B07A01
<b>PERFORMANCE</b>						
Sensitivity(±5%) <sup>1</sup>	mV/g	10(±10%)	20	50	100	200
	mV/(m/s <sup>2</sup> )	1	2	5	10	20
Measurement Range	g	±500	±250	±100	±50	±25
Broadband Resolution <sup>2</sup>	g rms	0.001	0.0005	0.0002	0.0001	0.00005
Non-Linearity <sup>3</sup>	%	1				
Frequency Range	± 5%	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 <sup>2</sup>	Hz	≥48k	≥40k	≥32k	≥29k	≥26k
Discharge Time Constant <sup>2</sup>	s	≤1				
Transverse Sensitivity	%	≤5				
<b>ELECTRICAL</b>						
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 <sup>2</sup>	μg/√Hz	60	30	12	6	3
		24	12	4.8	2.4	1.2
		16	8	3.2	1.6	0.8
<b>ENVIRONMENTAL</b>						
Sinusoidal Vibration Limit <sup>4</sup>	g	2200	2000	800	400	200
Shock Limit <sup>4</sup>	g	5500	5000	2000	1000	500
Temperature Range	°C	-40-120				
	°F	-40-248				
Temperature Response <sup>2</sup>	%/°C	-0.1				
<b>PHYSICAL</b>						
Sealing	-	Laser welding IP68				
Sensing Element	-	Piezoelectric ceramics				
Housing Material	-	Stainless steel				
Size	mm	HEX 13.1×25				
	in	HEX 0.516×0.984				
Electrical Connector	-	M5 Top (Opt. 10-32)				
Mounting Thread	-	M5 (Opt. 10-32)				
Weight <sup>2</sup>	g	12	12.5	13	14	15
	oz	0.423	0.441	0.459	0.494	0.529
TEDS Optional <sup>5</sup>	-	Yes				

## Additional Information

### Note:

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

### BXXA00

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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