

## Watertight Type Accelerometer

### DETAILS

BXXB72 series watertight acceleration sensor built-in micro-small impedance converter, can be vibration process charge signal into voltage signal. One-piece waterproof polyurethane cable, unique waterproof technology multi-layer protection measures to withstand pressure up to 2MPa, the shell of stainless steel laser welding, can be achieved in small size and light weight and other characteristics.

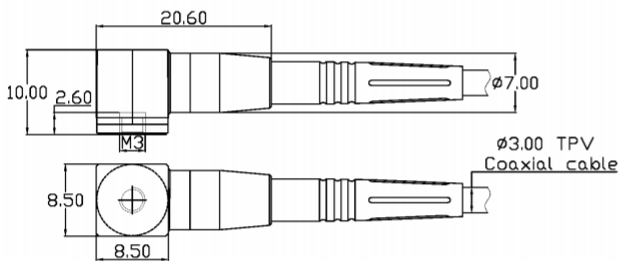
### FEATURES

- Built-in integrated circuit IEPE type
- Memory Alloy Fasteners
- Special watertight construction
- Resistant to water pressure up to 2MPa

### TYPICAL APPLICATIONS

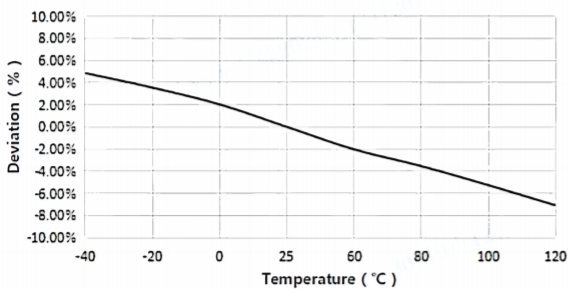
- Underwater vibration testing

**Fig\_1** Dimensions of BXXB72

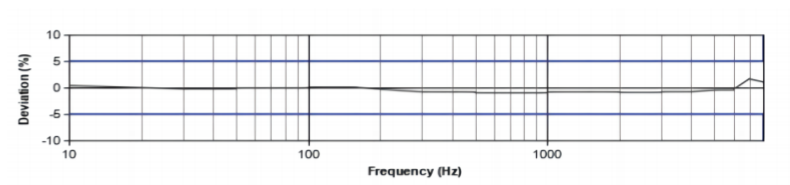


BXXB72

**Fig\_2** Typical Temperature Response



**Fig\_3** Typical Frequency Response



## Specifications-BXXB72

MODEL NUMBER	UNIT	B00B72	B02B72	B05B72	B06B72
<b>PERFORMANCE</b>					
Sensitivity <sup>1</sup>	mV/g	2(±10%)	10(±10%)	50	100
	mV/(m/s <sup>2</sup> )	0.2	1	5	10
Measurement Range	g	±2500	±500	±100	±50
Broadband Resolution <sup>2</sup>	g rms	0.005	0.001	0.0002	0.0001
Non-Linearity <sup>3</sup>	%	1			
Frequency Range	± 5%(Hz)	10-8k	1-8k	1-8k	1-8k
	±10%(Hz)	5-10k	0.5-10k	0.5-10k	0.5-10k
Resonance Frequency <sup>2</sup>	Hz	≥80k	≥50k	≥50k	≥50k
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	750	150	30	15
		200	40	8	4
		100	20	4	2
<b>ENVIRONMENTAL</b>					
Sinusoidal Vibration Limit <sup>4</sup>	g	3000	2200	800	400
Shock Limit <sup>4</sup>	g	7000	5500	2000	1000
Temperature Range	°C	-50-120			
	°F	-58-248			
Temperature Response <sup>2</sup>	%/°C	-0.07			
<b>PHYSICAL</b>					
Sealing	-	Laser welding IP68			
Sensing Element	-	Piezoelectric ceramics			
Housing Material	-	Stainless steel			
Size	mm	8.5×8.5×10			
	in	0.335×0.335×0.394			
Electrical Connector	-	Watertight connected cable			
Mounting Thread	-	M3			
Weight <sup>2</sup>	g	9	9	9	9
	oz	0.317	0.317	0.317	0.317
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

### BXXB72

Supplied Accessories:

- Product Verification Report
- Install Screws

### COMPLIANCE WITH STANDARDS



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