BXXB0X

IEPE Accelerometer

DETAILS

B06B06 B10B01 type low-frequency measurement acceleration sensor, using piezoelectric ceramic shear structure, with a broadband frequency response, high-quality piezoelectric ceramics with long-term stability can ensure years of accurate measurement. Built-in ultra-low frequency low-impedance circuit, low noise, better sensitivity temperature response and other characteristics. The shell is laser welded stainless steel with extremely high sealing grade and strength, and is equipped with M5 mounting threads at the bottom.

FEATURES

- IEPE Low frequency acceleration
- Shear structure
- Low frequency circuit
- Ground insulation

TYPICAL APPLICATIONS

- Low frequency measurement
- Structural testing of bridges, buildings, etc

Fig_1 Dimensions of B06B06 B10B01

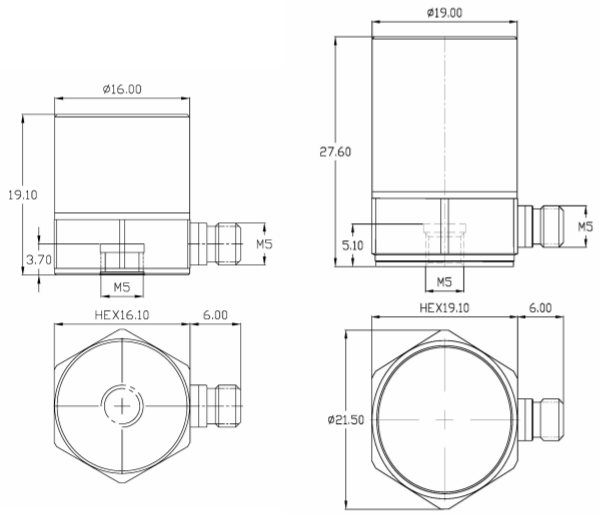

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Fig_2 Typical Temperature Response

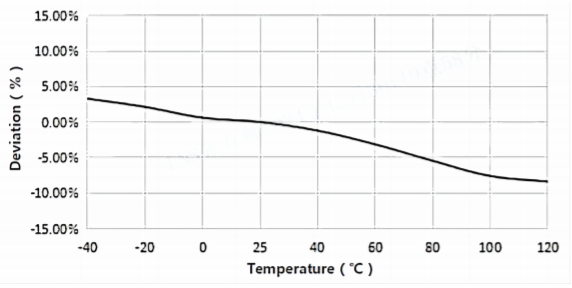
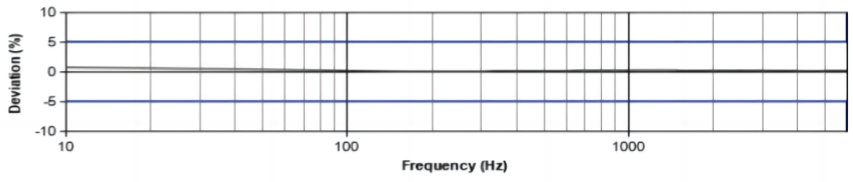


Fig_3 Typical Frequency Response



Specifications-BXXB0X

MODEL NUMBER		UNIT	B06B06	B10B01
PERFORMANCE				
Sensitivity [1]		mV/g	100	1000
		mV/(m/s²)	10	100
Measurement Range		g	±50	±5
Broadband Resolution [2]		g rms	0.0001	0.00001
Non-Linearity [3]		%	1	
Frequency Range	± 5%(Hz)	Hz	0.1-6k	0.06-2k
	±10%(Hz)		0.05-7k	0.04-3k
Resonance Frequency [2]		Hz	≥25k	≥13k
Discharge Time Constant [2]		s	≤1	≥10
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	-	≥1×10⁸
Spectral Noise [2]		μg/√Hz	6	0.6
			2.4	0.24
			1.6	0.16
ENVIRONMENTAL				
Sinusoidal Vibration Limit [4]		g	400	40
Shock Limit [4]		g	1000	100
Temperature Range		℃	-40~120	
		℉	-40~248	
Temperature Response [2]		%/℃	-0.1	
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	Stainless steel	
Size		mm	HEX 16.1×19.1	HEX 19.1×27.6
		in	HEX 0.634×0.752	HEX 0.752×1.087
Electrical Connector		-	M5 Side (Opt. 10-32)	
Mounting Thread		-	M5 (Opt. 10-32)	
Weight [2]		g	24	60
		oz	0.847	2.116
TEDS Optional [5]		-	Yes	

Additional Information

Note:

1. @ 160Hz, 1g
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

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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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