

IEPE Accelerometer

DETAILS

B06A04 B10A01 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.

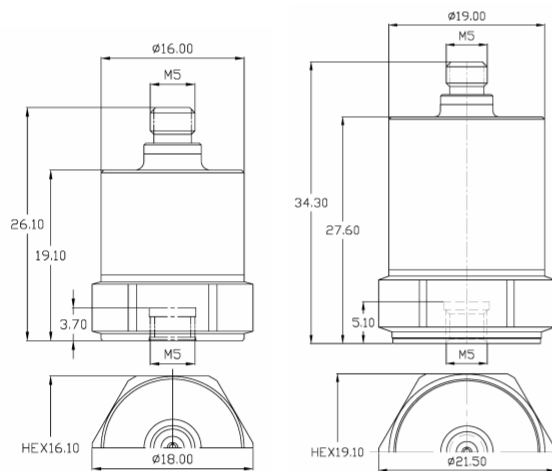
FEATURES

- IEPE Low-Frequency Accelerometer
- Shear structure

TYPICAL APPLICATIONS

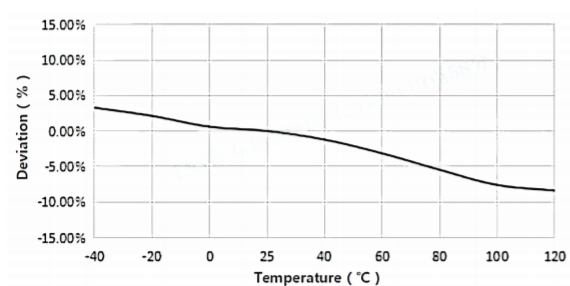
- Low frequency measurements
- Structural testing of bridges, buildings, etc

Fig_1 Dimensions of B06A04 B10A01

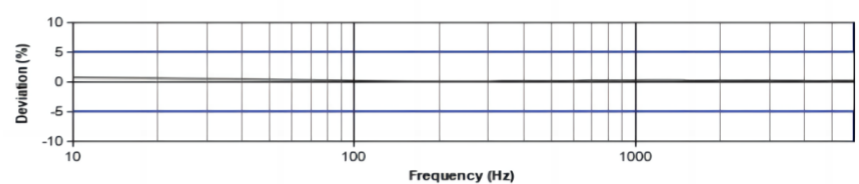


B06A04
B10A01

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-BXXA0X

MODEL NUMBER		UNIT	B06A04	B10A01
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	0.1-6k	0.06-2k
	±10%		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	-	≥1×10 ⁸
Spectral Noise ²	10Hz	μg/√Hz	6	0.6
	100Hz		2.4	0.24
	1000Hz		1.6	0.16
ENVIRONMENTAL				
Sinusoidal Vibration Limit ⁴		g rms	400	40
Shock Limit ⁴		g pk	1000	100
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 16.1×26.1		HEX 19.1×34.3
	in	HEX 0.634×1.028		HEX 0.752×1.350
Electrical Connector		-	M5 Top (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, 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

BXXA0X

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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