BXXA01

Universal Testing Type Accelerometer

DETAILS

BXXA01 series single-axis 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 BXXA01

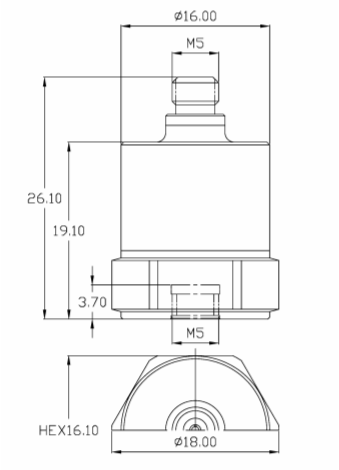

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Fig_2 Typical Temperature Response

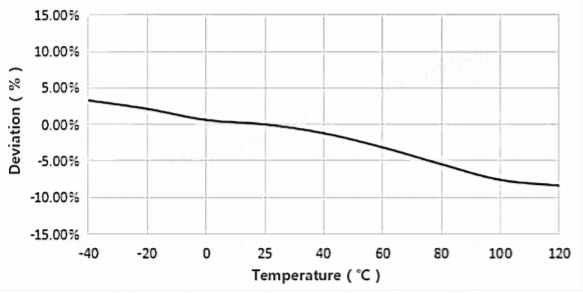
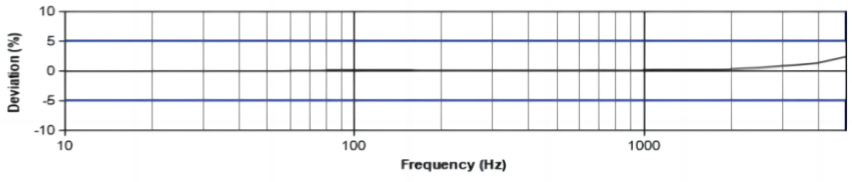


Fig_3 Typical Frequency Response



Specifications-BXXA01

MODEL NUMBER		UNIT	B08A01	B09A01
PERFORMANCE				
Sensitivity(±10%) [1]		mV/g	300	500
		mV/(m/s²)	30	50
Measurement Range		g	±15	±10
Broadband Resolution [2]		g rms	0.00004	0.00002
Non-Linearity [3]		%	1	
Frequency Range	± 5%	Hz	1-4k	1-5k
	±10%		0.5-6k	0.5-6k
Resonance Frequency [2]		Hz	≥18k	≥17k
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]		μg/√Hz	2	1.2
			0.8	0.48
			0.53	0.32
ENVIRONMENTAL				
Sinusoidal Vibration Limit [4]		g	180	80
Shock Limit [4]		g	350	200
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	
		in	HEX 0.634×1.028	
Electrical Connector		-	M5 Top (Opt. 10-32)	
Mounting Thread		-	M5 (Opt. 10-32)	
Weight [2]		g	25	29.5
		oz	0.882	1.041
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

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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

LNS Intelligent Technology Co., Ltd
NO.3 Building
Qilu High-Tech District, Qihe,Dezhou
Shandong Province, China 251100
+86-534-2150417

International:
9620 NE Tanasbourne Dr Ste 300
Hillsboro, OR, USA 97124
+1-503-208-5512
info@lnsdynamics.com