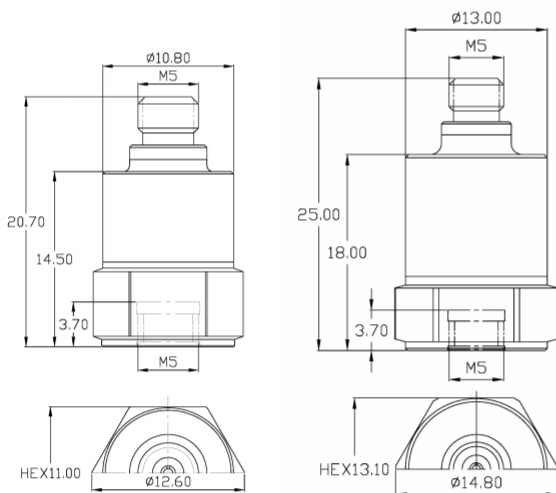


IPEP High Temperature Accelerometer

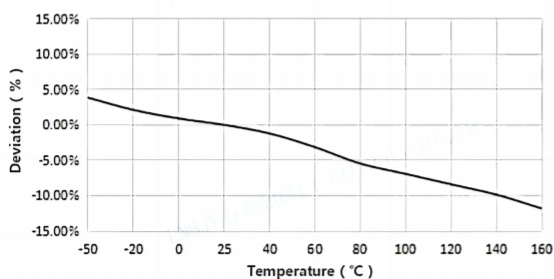
DETAILS

BXXA90 series uniaxial acceleration sensor, using piezoelectric ceramic shear structure, with a wide bandwidth frequency response, low lateral sensitivity, thermal transients corresponding to low and other characteristics. Internal with high temperature low impedance circuit, low noise, better sensitivity temperature response and other characteristics, the maximum operating temperature of +160°C. The shell is laser-welded with stainless steel, with extremely high sealing grade and strength, and equipped with M5 mounting threads at the bottom.

Fig_1 Dimensions of BXXA90



Fig_2 Typical Temperature Response



FEATURES

- Built-in high temperature circuit
- Small size and light weight
- High quality piezoelectric material, low temperature drift
- Standard Series

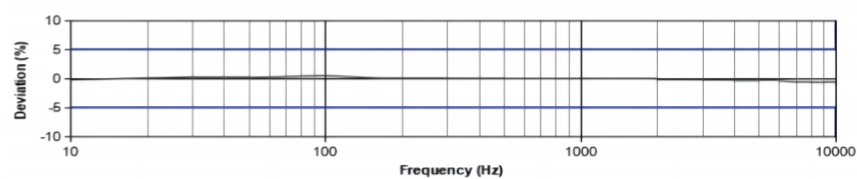
TYPICAL APPLICATIONS

- Environmental testing
- ESS、NVH
- Vibration control



BXXA90

Fig_3 Typical Frequency Response



Specifications-BXXA90

MODEL NUMBER		UNIT	B02A90	B03A90	B05A90	B06A90
PERFORMANCE						
Sensitivity ¹		mV/g	10(10%)	20	50	100
		mV/(m/s²)	1	2	5	10
Measurement Range		g	±500	±250	±100	±50
Broadband Resolution ²		g rms	0.001	0.0005	0.0002	0.0001
Non-Linearity ³		%	1			
Frequency Range	± 5%	Hz	1-10k	1-10k	1-10k	1-9k
	±10%		0.5-13k	0.5-13k	0.5-13k	0.5-11k
Resonance Frequency ²		Hz	≥48k	≥50k	≥32k	≥29k
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	10Hz	μg/√Hz	60	30	12	6
	100Hz		24	12	4.8	2.4
	1000Hz		16	8	3.2	1.6
ENVIRONMENTAL						
Sinusoidal Vibration Limit ⁴		g rms	2200	2000	800	400
Shock Limit ⁴		g pk	5500	5000	2000	1000
Temperature Range		°C	-50~160			
		°F	-58~320			
Temperature Response ²		%/°C	-0.07			
PHYSICAL						
Sealing		-	Laser welding IP68			
Sensing Element		-	Piezoelectric ceramics			
Housing Material		-	Stainless steel			
Size	mm	HEX 11.00×20.70	HEX 13.10×25.00			
	in	HEX 0.433×0.815	HEX 0.516×0.984			
Electrical Connector		-	M5 Top (Opt. 10-32)			
Mounting Thread		-	M5 (Opt. 10-32)			
Weight ²	g	9	14	17	17	
	oz	0.317	0.494	0.600	0.600	
TEDS Optional ⁵		-	No			

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

BXXA90

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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