

Universal Testing Type Accelerometer

DETAILS

Model B00B01 B00B00 B00B07 B00B08 uniaxial shock acceleration sensor using a unique shear structure, smaller base strain and lateral sensitivity, high-quality piezoelectric ceramics with long-term stability can ensure years of accurate measurement. The housing material is high strength stainless steel with welded seals and industry standard M5 connectors.

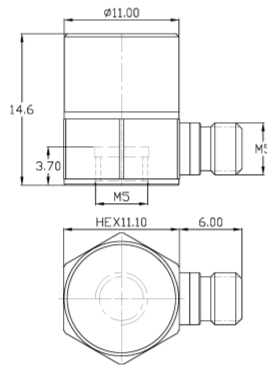
FEATURES

- IEPE Universal Acceleration Sensor
- Standard series with multiple range options
- Shear structure
- Broadband response

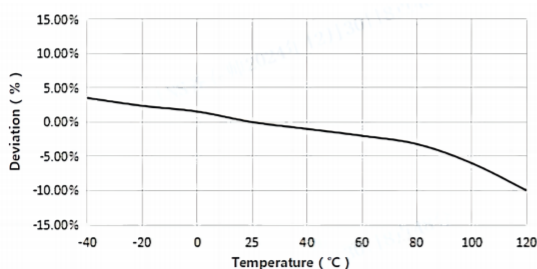
TYPICAL APPLICATIONS

- Powertrain NVH
- Component/system testing
- Structure response testing where sensors must fit within devices

Fig_1 Dimensions of B00B01 B00B00 B00B07 B00B08

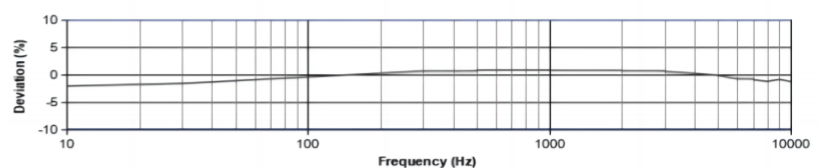


Fig_2 Typical Temperature Response



B00B01
B00B00
B00B07
B00B08

Fig_3 Typical Frequency Response



Specifications-B00B0X

MODEL NUMBER		UNIT	B00B01	B00B00	B00B07	B00B08
PERFORMANCE						
Sensitivity ¹		mV/g	0.5	1	2	5
		mV/(m/s²)	0.05	0.1	0.2	0.5
Measurement Range		g	±10000	±5000	±2500	±1000
Broadband Resolution ²		g rms	0.02	0.01	0.005	0.002
Non-Linearity ³			per 1000g 2%	1%		
Frequency Range	± 5%	Hz	-	-	-	3-11k
	±10%		10-11k	5-11k	5-11k	2-13k
Resonance Frequency ²		Hz	≥80k	≥80k	≥80k	≥70k
Discharge Time Constant ²		s	≤0.5			
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	3000	1500	750	300
	100Hz		800	400	200	80
	1000Hz		400	200	100	40
ENVIRONMENTAL						
Sinusoidal Vibration Limit ⁴		g rms	-	6000	3500	3000
Shock Limit ⁴		g pk	13000	10000	7000	8000
Temperature Range		°C	-50-120			
		°F	-58-248			
Temperature Response ²		%/°C	-0.07			
PHYSICAL						
Sealing		-	Laser welding IP68			
Sensing Element		-	Piezoelectric ceramics			
Housing Material		-	Stainless steel			
Size	mm	HEX 11.10×14.60				
	in	HEX 0.433×0.575				
Electrical Connector		-	M5 Side (Opt. 10-32)			
Mounting Thread		-	M5 (Opt 10-32)			
Weight ²	g		5.4	5.4	7.5	7.5
	oz		0.190	0.190	0.265	0.265
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

B00B0X

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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