

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.

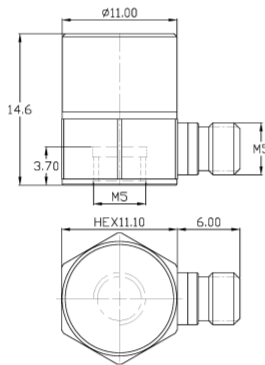
FEATURES

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

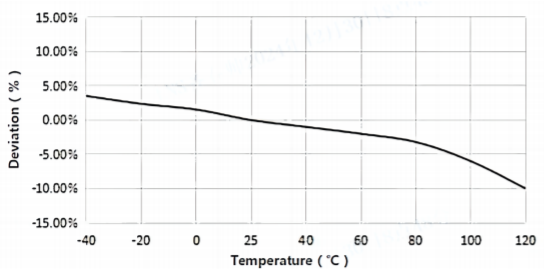
TYPICAL APPLICATIONS

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

Fig_1 Dimensions of B00B01 B00B00 B00B07 B00B08

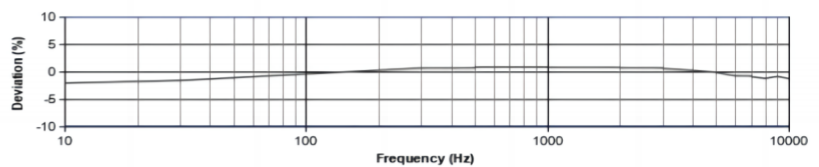


Fig_2 Typical Temperature Response



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/s ²)	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	%	3	1			
Frequency Range	± 5%(Hz)	Hz	-	-	-	3-11k
	±10%(Hz)		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	μg/√Hz	3000	1500	750	300	
		800	400	200	80	
		400	200	100	40	
ENVIRONMENTAL						
Sinusoidal Vibration Limit ⁴	g	-	6000	3500	3000	
Shock Limit ⁴	g	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:

- @ 160Hz, 24VDC, 4mA conditions
- Typical values
- JBT 6822-2018 7.12.1 Vibration Testing Method
- References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state
- 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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