

Shock Accelerometer

DETAILS

Model B00A00 B00A01 B00A07 B01A08 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.

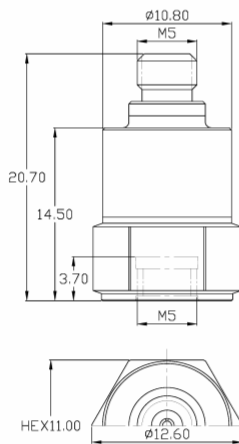
FEATURES

- IEPE shock acceleration sensor
- Standard series with multiple range options
- Shear structure
- Broadband response

TYPICAL APPLICATIONS

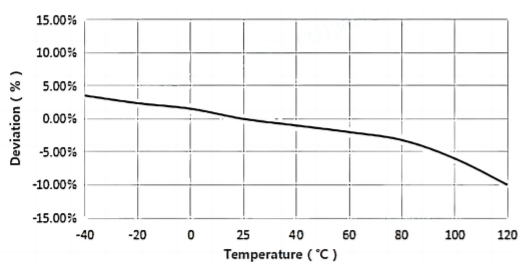
- Drop test
- Burst Impact test

Fig_1 Dimensions of B00A00 B00A01 B00A07 B01A08

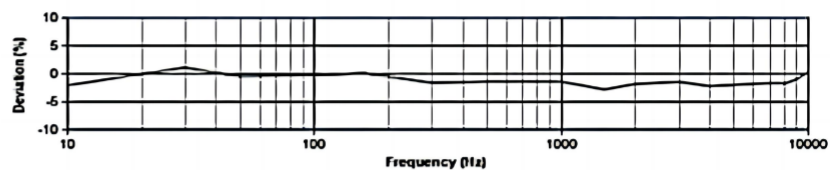


B00A00
B00A01
B00A07
B01A08

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-B0XA0X

MODEL NUMBER		UNIT	B00A01	B00A00	B00A07	B01A08
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 11.00×20.70				
	in	HEX 0.433×0.815				
Electrical Connector		-	M5 Top (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

B0XA0X

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