

Universal Testing Type Accelerometer

DETAILS

The B00AGX series of single-axis shock acceleration sensors utilize a unique shear structure for smaller base strains and lateral sensitivity, and high quality piezoelectric ceramics with long term stability to ensure years of accurate measurements. The unique double shielded construction is insulated to ground and the one-piece screws are strong and reliable.

FEATURES

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

TYPICAL APPLICATIONS

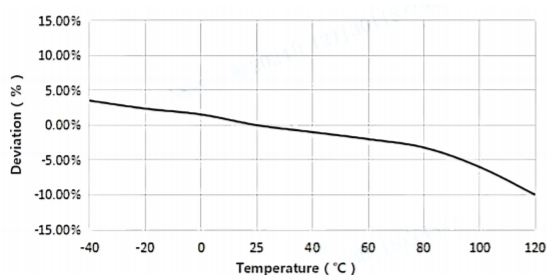
- Drop test
- Burst impact test

Fig_1 Dimensions of BXXAGX

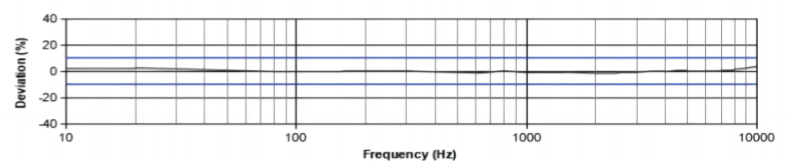


B00AGX

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-B00AGX

MODEL NUMBER		UNIT	B00AG5	B00AG3	B00AG4	B00AG1	B00AG2
PERFORMANCE							
Sensitivity ¹		mV/g	0.17	0.25	0.5	1	2
		mV/(m/s²)	0.017	0.025	0.05	0.1	0.2
Measurement Range		g	±30000	±20000	±10000	±5000	±2500
Broadband Resolution ²		g rms	0.05	0.04	0.02	0.01	0.005
Non-Linearity ³			per10000g 3%			1%	
Frequency Range	± 5%	Hz	-	-	-	-	-
	±10%		10-11k	10-11k	10-11k	5-11k	5-11k
Resonance Frequency ²		Hz	≥70k	≥70k	≥70k	≥60k	≥60k
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	≥1×10 ⁸				
Spectral Noise ²	10Hz	μg/√Hz	8820	6000	3000	1500	750
	100Hz		2350	1600	800	400	200
	1000Hz		1180	800	400	200	100
ENVIRONMENTAL							
Sinusoidal Vibration Limit ⁴		g rms	-	-	-	6000	4000
Shock Limit ⁴		g pk	35000	24000	12000	10000	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		-	Titanium Alloy				
Size		mm	HEX 11×24.9				
		in	HEX 0.433×0.980				
Electrical Connector		-	M5 Top (Opt. 10-32)				
Mounting Thread		-	M5/M6×0.75Jointed thread (Opt. 10-32)				
Weight ²		g	7.7	7.7	7.7	7.7	7.7
		oz	0.272	0.272	0.272	0.272	0.272
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

B00AGX

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