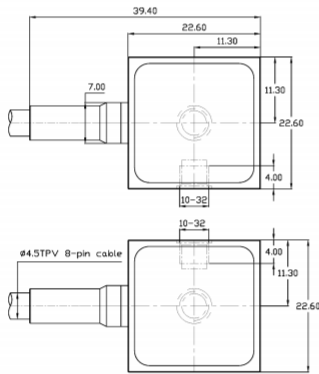


## Universal Testing Type Accelerometer

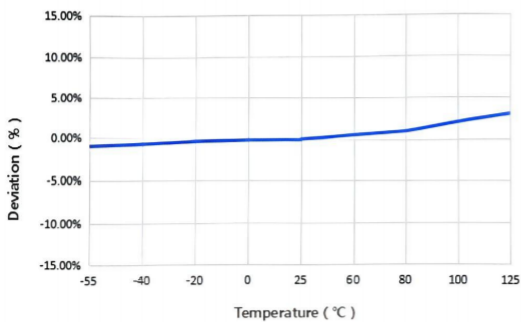
### DETAILS

Dual-axis capacitive acceleration sensors, type AXXE2, utilize a variable capacitive MEMS sensitive element. The sensitive element consists of a very small inertial mass and a flexure element. The mass is deflected under acceleration and the capacitance changes. The internal circuitry inside the sensor contains AC excitation and modulation-demodulation circuits that output an analog voltage signal proportional to the acceleration. The sensitive element and circuitry are encapsulated within a titanium alloy housing with an optional conjoined eight-conductor cable or 5/16-32 nine-conductor connector, and signal ground isolated from the housing.

**Fig\_1** Dimensions of AXXE2



**Fig\_2** Typical Temperature Response



### FEATURES

- Zero frequency voltage output type
- Low power consumption, low noise, high resolution
- Connected cable output
- Broadband response

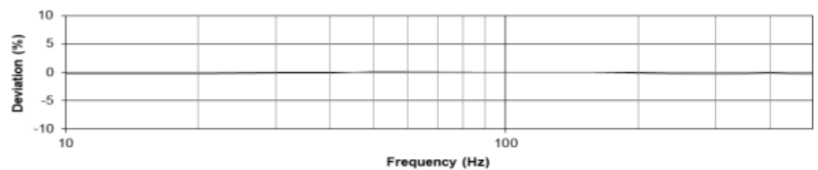
### TYPICAL APPLICATIONS

- Road spectrum testing
- Overload testing
- Foundation building structure testing
- Low frequency testing



AXXE2

**Fig\_3** Typical Frequency Response



## Specifications-AXXE2

MODEL NUMBER	UNIT	A03YE2	A05YE2	A06YE2	A07YE2	A09YE2	A10YE2	A11YE2	
<b>PERFORMANCE</b>									
Sensitivity <sup>1</sup>	mV/g	20	40	80	135	400	800	2000	
	mV/(m/s <sup>2</sup> )	2	4	8	13.5	40	80	200	
Input Range	g	±200	±100	±50	±30	±10	±5	±2	
Non-Linearity (typ) <sup>2</sup>	%	0.1							
Non-Linearity (max) <sup>2</sup>	%	0.3							
Frequency Range	± 5%	Hz	0-2k	0-1.5k	0-1.5k	0-1.5k	0-1k	0-0.7k	0-0.5k
	±10%		-	-	-	-	-	-	-
Resonance Frequency <sup>3</sup>	Hz	11k	8.5k	5.8k	4.2k	3.2k	1.9k	1.2k	
Transverse Sensitivity	%	≤0.2							
Output Mode	-	Differential output							
<b>ELECTRICAL</b>									
Excitation Voltage	V DC	6-30							
Full Range Voltage	V	±4							
Output Impedance	Ω	≤90							
<b>ENVIRONMENTAL</b>									
Sinusoidal Vibration Limit <sup>4</sup>	g rms	5000	5000	5000	5000	5000	2000	2000	
Shock Limit <sup>4</sup>	g pk	5000	5000	5000	5000	5000	2000	2000	
Temperature Range	°C	-55-125							
	°F	-67-257							
<b>PHYSICAL</b>									
Sealing	-	Laser welding IP68							
Sensing Element	-	MEMS Chip							
Housing Material	-	Titanium alloy							
Size	mm	22.6 Cube							
	in	0.890 Cube							
Electrical Connector	-	Connected cable							
Mounting Thread	-	M5							
Weight <sup>5</sup>	g	37							
	oz	1.305							

## Additional Information

### Note:

- @ 160Hz, under the condition of 23 °C± 5 °C
- JBT 6822-2018 7.12.1 Vibration Testing Method
- Typical values
- It refers to the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state

### AXXE2

Supplied Accessories:

- Product Verification Report
- Install screws

### 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