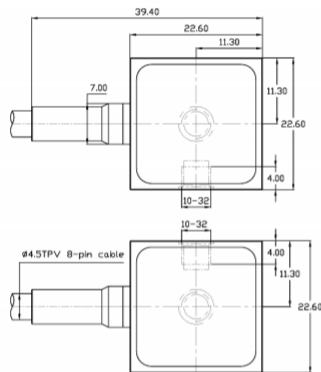


Universal Testing Type Accelerometer

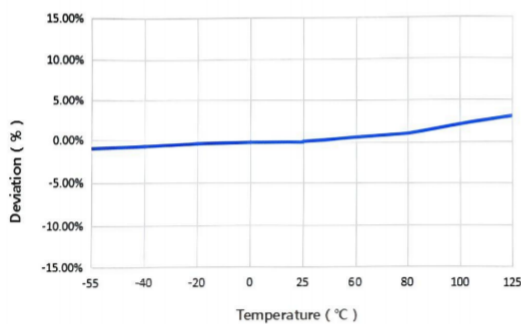
DETAILS

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

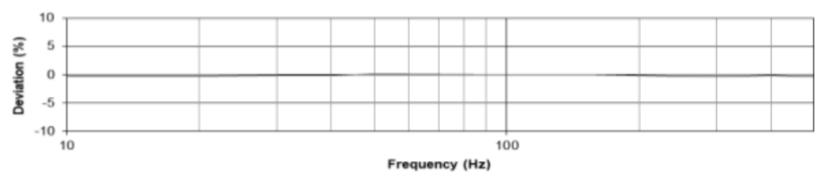
TYPICAL APPLICATIONS

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



AXXE2

Fig_3 Typical Frequency Response



Specifications-AXXYE2

MODEL NUMBER		UNIT	A03YE2	A05YE2	A06YE2	A07YE2	A09YE2	A10YE2	A11YE2
PERFORMANCE									
Sensitivity ¹		mV/g	20	40	80	135	400	800	2000
		mV/(m/s ²)	2	4	8	13.5	40	80	200
Broadband Resolution		g	±200	±100	±50	±30	±10	±5	±2
Non-Linearity (typ) ²		%	0.1						
Non-Linearity (max) ²		%	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 ³		Hz	11k	8.5k	5.8k	4.2k	3.2k	1.9k	1.2k
Transverse Sensitivity		%	≤0.2						
Output Mode		-	Differential output						
ELECTRICAL									
Excitation Voltage		V DC	6-30						
Full Range Voltage		V	±4						
Output Impedance		Ω	≤90						
ENVIRONMENTAL									
Sinusoidal Vibration Limit ⁴		g rms	5000	5000	5000	5000	5000	2000	2000
Shock Limit ⁴		g pk	5000	5000	5000	5000	5000	2000	2000
Temperature Range		°C	-55-125						
		°F	-67-257						
PHYSICAL									
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 ³	g	37							
	oz	1.305							

Additional Information

Note:

1. @ 160Hz, under the condition of 23 °C± 5 °C
2. JBT 6822-2018 7.12.1 Vibration Testing Method
3. Typical values
4. It refers to the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state

AXXYE2

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