

Universal Testing Type Accelerometer

DETAILS

CXXA01 series charge uniaxial acceleration sensor, using piezoelectric ceramic shear structure, with wide band frequency response, low sensitivity temperature response characteristics, high quality piezoelectric ceramics with long-term stability can ensure years of accurate measurement. The housing is laser welded stainless steel for high sealing grade and strength, with M5 mounting threads on the bottom.

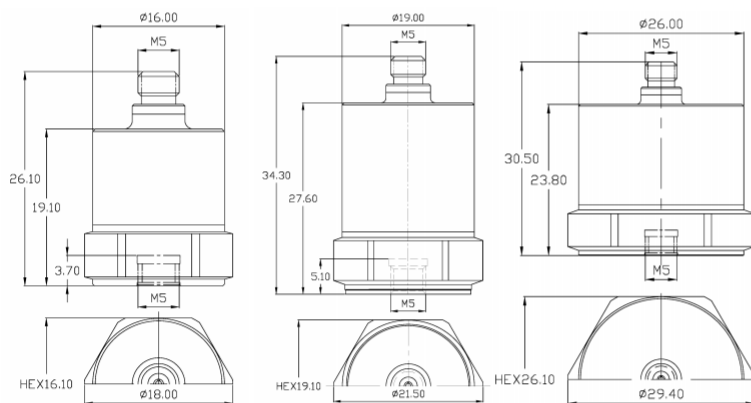
FEATURES

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

TYPICAL APPLICATIONS

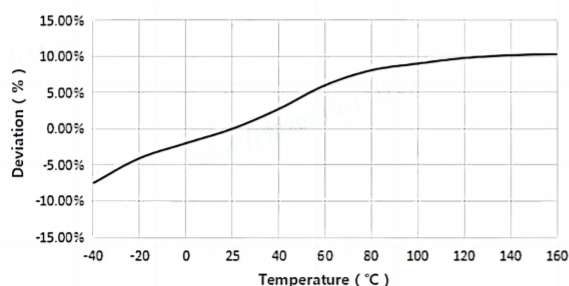
- Modal analysis
- Vibration control
- General vibration monitoring

Fig_1 Dimensions of CXXA01

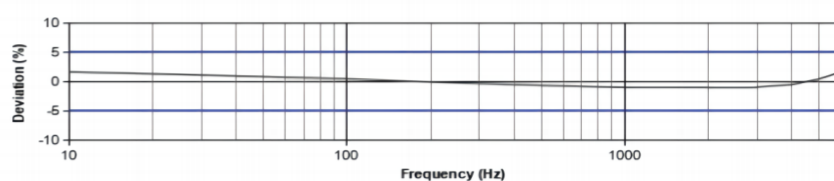


CXXA01

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-CXXA01

MODEL NUMBER		UNIT	C06A01	C08A01	C10A00
PERFORMANCE					
Sensitivity ¹		pC/g	100	300	1000
		pC/(m/s²)	10	30	100
Measurement Range		g	±500	±200	±50
Non-Linearity ³		%	1		
Frequency Range	± 5%	Hz	0.5-5k	0.5-3k	0.5-1.5k
	±10%		0.3-6k	0.3-4k	0.3-2k
Resonance Frequency ²		Hz	≥22k	≥16k	≥8k
Discharge Time Constant ²		s	-		
Transverse Sensitivity		%	≤5		
ELECTRICAL					
Capacitance		PF	2400	2300	2300
Resistance		Ω	≥1×10 ¹¹	≥1×10 ¹¹	≥1×10 ¹¹
Electrical Isolation		Ω	-	≥1×10 ⁸	-
ENVIRONMENTAL					
Sinusoidal Vibration Limit ⁴		g	800	500	200
Shock Limit ⁴		g	1500	800	600
Temperature Range		°C	-40~160		
		°F	-40~320		
Temperature Response ²		%/°C	0.08		
PHYSICAL					
Sealing		-	Laser welding IP68		
Sensing Element		-	Piezoelectric ceramics		
Housing Material		-	Stainless steel		
Size	mm	HEX 16.1×26.1	HEX 19.1×34.3	HEX 26.1×30.5	
	in	HEX 0.634×1.028	HEX 0.752×1.350	HEX 1.028×1.201	
Electrical Connector		-	M5 Top (Opt. 10-32)		
Mounting Thread		-	M5 (Opt. 10-32)		
Weight ²	g	27	54	130	
	oz	0.952	1.905	4.586	

Additional Information

Note:

1. @ 160Hz, 1g
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

CXXA01

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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