

## Universal Testing Type Accelerometer

### DETAILS

CXXA00 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.

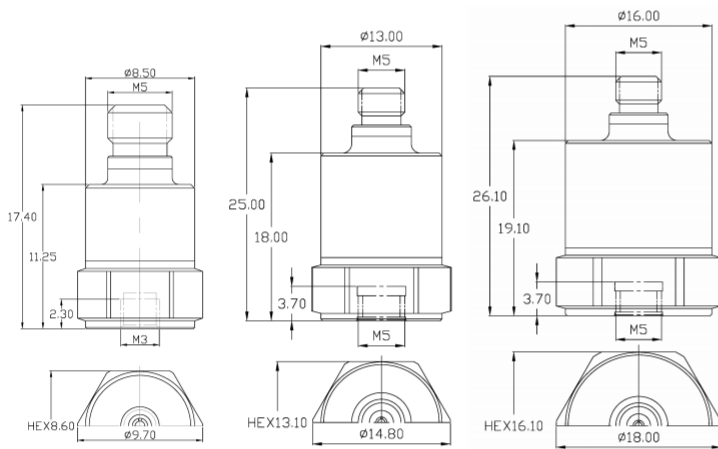
### FEATURES

- General purpose vibration test charge output sensor
- Memory alloy fasteners, shear structure, stable and reliable
- The low frequency of charge type sensor is determined by the low frequency characteristic of charge amplifier

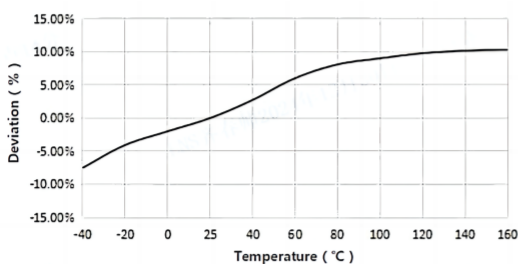
### TYPICAL APPLICATIONS

- Modal analysis
- Vibration control
- Universal vibration monitoring

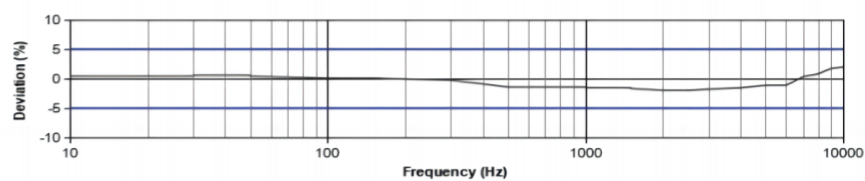
Fig\_1 Dimensions of CXXA00



Fig\_2 Typical Temperature Response



Fig\_3 Typical Frequency Response



## Specifications-CXXA00

MODEL NUMBER	UNIT	C01A00	C02A00	C04A03	C05A00	
<b>PERFORMANCE</b>						
Sensitivity <sup>1</sup>	pC/g	3	10	30	50	
	pC/(m/s <sup>2</sup> )	0.3	1	3	5	
Measurement Range	g	±3500	±1500	±1000	±800	
Non-Linearity <sup>3</sup>	%	1				
Frequency Range	± 5%	Hz	0.5-12k	0.5-10k	0.5-7k	0.5-5k
	±10%		0.3-15k	0.3-11k	0.3-9k	0.3-6k
Resonance Frequency <sup>2</sup>	Hz	≥50k	≥42k	≥32k	≥20k	
Discharge Time Constant <sup>2</sup>	s	-				
Transverse Sensitivity	%	≤5				
<b>ELECTRICAL</b>						
Capacitance	PF	350	850	850	850	
Resistance	Ω	≥1×10 <sup>11</sup>	≥1×10 <sup>11</sup>	≥1×10 <sup>11</sup>	≥1×10 <sup>11</sup>	
Electrical Isolation	Ω	-	-	-	-	
<b>ENVIRONMENTAL</b>						
Sinusoidal Vibration Limit <sup>4</sup>	g	4000	3000	2000	1600	
Shock Limit <sup>4</sup>	g	6000	5000	2500	2500	
Temperature Range	°C	-40~160				
	°F	-40~320				
Temperature Response <sup>2</sup>	%/°C	0.08				
<b>PHYSICAL</b>						
Sealing	-	Laser welding IP68				
Sensing Element	-	Piezoelectric ceramics				
Housing Material	-	Titanium alloy	Stainless steel			
Size	mm	HEX 8.6×17.4	HEX 13.1×25	HEX 13.1×25	HEX 16.1×26.1	
	in	HEX 0.339×0.685	HEX 0.516×0.984	HEX 0.516×0.984	HEX 0.634×1.028	
Electrical Connector	-	M5 Top (Opt 10-32)				
Mounting Thread	-	M3	M5 (Opt. 10-32)			
Weight <sup>2</sup>	g	3	14	17	27.5	
	oz	0.106	0.494	0.600	0.970	

## Additional Information

### Note:

- @ 160Hz, 1g
- Typical values
- JBT 6822-2018 7.12.1 Vibration Testing Method
- References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state

### CXXA00

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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