

Universal Testing Type Accelerometer

DETAILS

CXXB00 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.

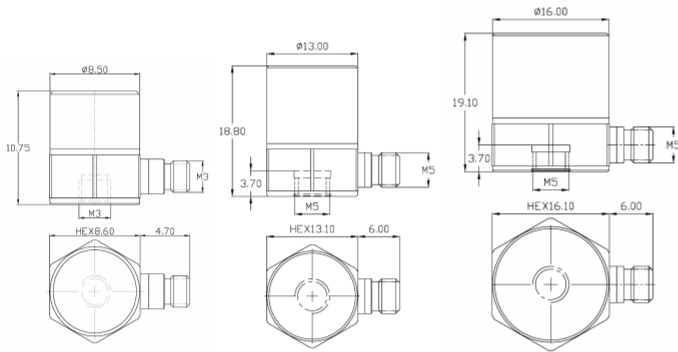
FEATURES

- General purpose vibration test charge output sensor
- The whole series uses 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

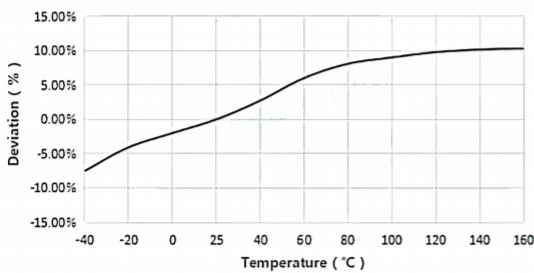
- Modal analysis
- Vibration control
- Universal vibration monitoring

Fig_1 Dimensions of CXXB00

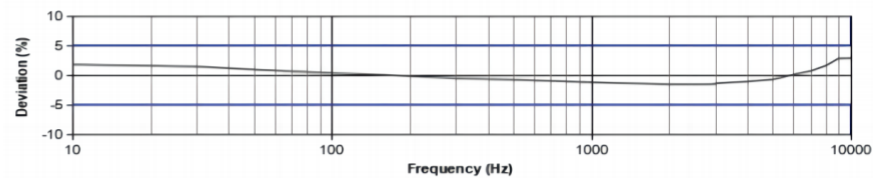


CXXB00

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-CXXB00

MODEL NUMBER		UNIT	C01B00	C02B00	C04B03	C05B00
PERFORMANCE						
Sensitivity ¹		pC/g	3	10	30	50
		pC/(m/s ²)	0.3	1	3	5
Measurement Range		g	±3500	±1500	±1000	±800
Non-Linearity ³		%	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 ²		Hz	≥50k	≥42k	≥32k	≥20k
Discharge Time Constant ²		s	-			
Transverse Sensitivity		%	≤5			
ELECTRICAL						
Capacitance		PF	350	850	850	850
Resistance		Ω	≥1×10 ¹¹	≥1×10 ¹¹	≥1×10 ¹¹	≥1×10 ¹¹
Electrical Isolation		Ω	-	-	-	-
ENVIRONMENTAL						
Sinusoidal Vibration Limit ⁴		g	4000	3000	2000	1600
Shock Limit ⁴		g	6000	5000	2500	2500
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		-	Titanium alloy	Stainless steel		
Size		mm	HEX 8.6×10.75	HEX 13.1×18.8	HEX 13.1×18.8	HEX 16.1×19.1
		in	HEX 0.339×0.423	HEX 0.516×0.740	HEX 0.516×0.740	HEX 0.634×0.752
Electrical Connector		-	M3 Side	M5 Side (Opt. 10-32)		
Mounting Thread		-	M3	M5 (Opt. 10-32)		
Weight ²		g	4	14.4	16.5	26.5
		oz	0.141	0.508	0.582	0.934

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

CXXB00

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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