# C**XX**B01

## **Universal Testing Type Accelerometer**

#### DETAILS

Model C02B01 C04B01 charge single-axis acceleration sensor, using piezoelectric ceramic shear structure, with a wide band frequency response, low sensitivity temperature response characteristics, highquality piezoelectric ceramics with long-term stability can ensure many 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**

- ·IEPE Universal Acceleration Sensor
- ·Standard series with multiple range options
- ·Shear structure
- ·Broadband response

#### **TYPICAL APPLICATIONS**

- ·Vibration control
- ·General vibration monitoring

Fig\_1 Dimensions of C02B01 C04B01



Fig\_2 Typical Temperature Response





Fig\_3 Typical Frequency Response





### Specifications-CXXB01

MODEL NUMBER		UNIT	C02B01	C04B01
PERFORMANCE				
Sensitivity <sup>1</sup>		pC/g	10	30
		pC/(m/s²)	1	3
Broadband Resolution <sup>2</sup>		g	±1500	±1000
Non-Linearity <sup>3</sup>		%	1	
Frequency Range	± 5%	– Hz	-	-
	±10%		0.5-8k	0.5-8k
Resonance Frequency <sup>2</sup>		Hz	≥30k	≥25k
Discharge Time Constant <sup>2</sup>		s	-	
Transverse Sensitivity		%	<5	
ELECTRICAL				
Capacitance		PF	800	780
Resistance		Ω	≥1×10 <sup>11</sup>	≥1×10 <sup>11</sup>
Electrical Isolation		Ω	-	-
ENVIRONMENTAL				
Sinusoidal Vibration Limit <sup>4</sup>		g	3000	2000
Shock Limit <sup>4</sup>		g	5000	2500
Temperature Range		°C	-40~160	
		°F	-104~320	
Temperature Response <sup>2</sup>		%/°C	0.08	
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	Stainless steel	
Size		mm	HEX 16.1×19.1	HEX 16.1×19.1
		in	HEX 0.634×0.752	HEX 0.634×0.752
Electrical Connector		-	M5 Side	
Mounting Thread		-	M5	M5
Weight <sup>2</sup>		g	25	23.6
		oz	0.882	0.832

#### Additional Information

#### Note:

- 1. @ 160Hz, 24VDC, 4mA conditions
- 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 state5. Some products may have changes in size after adding TEDS

#### CXXB01

Supplied Accessories:

- Product Verification Report
- Install Screws

#### OPTIONALVERSIONS

-A: 10-32 Output Connector -E: 10-32 Mounting Threads

#### COMPLIANCE WITH STANDARDS



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