

PE Ultra-High-Temperature Accelerometer

DETAILS

The CXXAT2/CXXBT2 series charge-type high-temperature accelerometer uses ultra-high-temperature piezoelectric ceramics with ultra-low sensitivity temperature response and high impedance at high temperatures. Nickel-based alloy housing, laser-welded. Special coaxial 10-32 connector, signal ground isolated from housing. Compatible with high-temperature metal cables. M5 or 10-32 mounting hole at bottom.

FEATURES

- Designed for high-temperature testing environments
- Maximum operating temperature 500°C, ultra-low sensitivity temperature coefficient
- Special high-temperature metal housing and piezoelectric material, low temperature drift

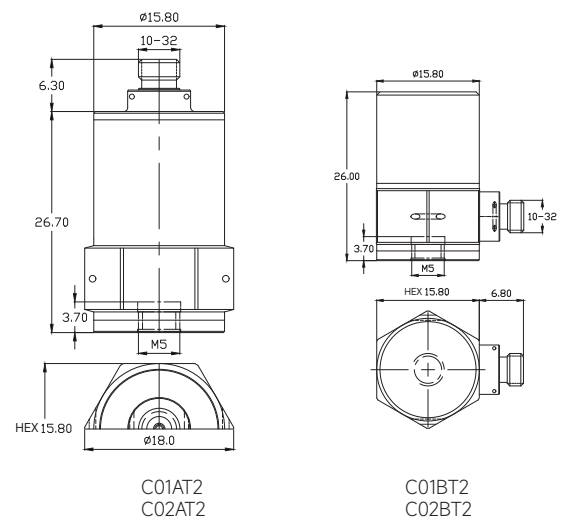
TYPICAL APPLICATIONS

- Automotive engine testing
- High-temperature industrial vibration monitoring
- High-temperature turbine vibration measurement

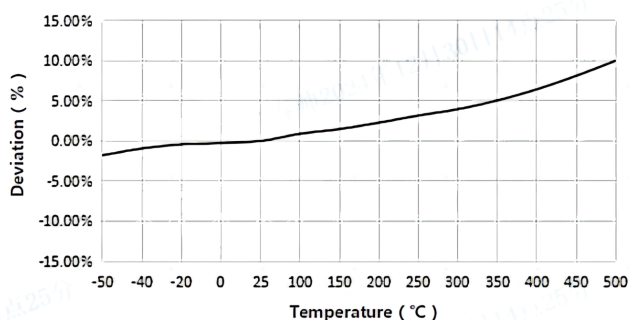
Fig_1 Picture



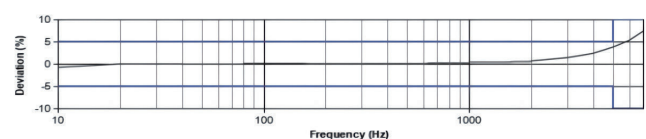
Fig_3 Dimensions



Fig_4 Typical Temperature Response



Fig_5 Typical Frequency Response



Specifications-CXXAT2 CXXBT2

MODEL NUMBER		UNIT	C01AT2	C02AT2	C01BT2	C02BT2
PERFORMANCE						
Sensitivity ¹		pC/g	5	10	5	10
		pC/(m/s²)	0.5	1	0.5	1
Measurement Range ²		g	±1000	±800	±1000	±800
Non-Linearity ³		%	1			
Frequency Range	± 5%	Hz	10-6k	10-6k	10-6k	10-5k
	±10%	Hz	1-8k	1-8k	1-8k	1-8k
Resonance Frequency ²		Hz	≥25k	≥25k	≥25k	≥25k
Transverse Sensitivity		%	≤5			
ELECTRICAL						
Capacitance		pF	300	550	300	550
Resistance		Ω	≥1×10 ⁹	≥1×10 ⁹	≥1×10 ⁹	≥1×10 ⁹
Electrical Isolation		Ω	≥1×10 ⁹	≥1×10 ⁹	≥1×10 ⁹	≥1×10 ⁹
ENVIRONMENTAL						
Sinusoidal Vibration Limit ⁴		g rms	1000	1000	1000	1000
Shock Limit ⁴		g pk	3000	3000	3000	3000
Temperature Range		°C	-55~500			
		°F	-67~932			
Temperature Response ²		-	See typical curve			
PHYSICAL						
Sealing		-	Laser welding IP68			
Sensing Element		-	Piezoelectric ceramics			
Housing Material		-	Nickel-based alloy			
Size		mm	HEX 15.8×26.7		HEX 15.8×26	
		in	HEX 0.622×1.051		HEX 0.622×1.024	
Electrical Connector		-	10-32 Top		10-32 Side	
Mounting Thread		-	M5 (Opt.10-32)			
Weight ²		g	30	30	28	30
		oz	1.058	1.058	0.988	1.058
Mounting Torque		-	3.0N·m			
Recommended Accessories	Cable	-	K61AW61			
	Mounting Base	-	H02B62			

Additional Information

Note:

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

CXXAT2/CXXBT2

Supplied Accessories:

- Product Verification Report
- M5*8 Mounting screw

OPTIONALVERSIONS

-E: 10-32 Mounting Threads

COMPLIANCE WITH STANDARDS

