

Universal Testing Type Accelerometer

DETAILS

CXXCT3 series charge high temperature acceleration sensor, the use of ultra-high temperature piezoelectric ceramics, with ultra-low sensitivity temperature response and high impedance at high temperatures. The shell is sealed by laser welding of nickel-based alloy with good airtightness, one-piece double-core conjoined cable signal ground and shell isolation differential output, optional output connector, the bottom of the standard $3 \times \varphi 4$ through-hole.

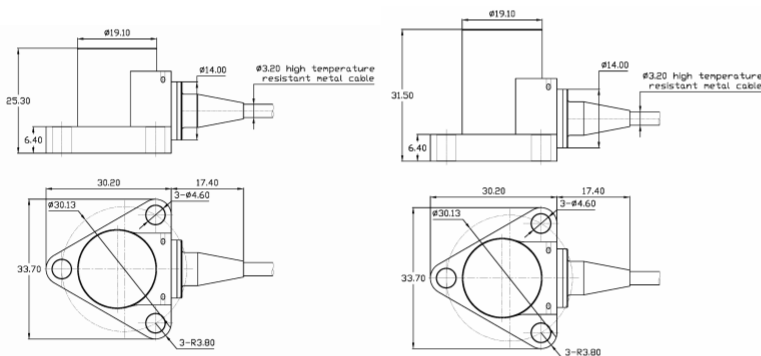
FEATURES

- Designed for high temperature test environments
- Maximum operating temperature up to 500°C, ultra-low sensitivity temperature coefficient

TYPICAL APPLICATIONS

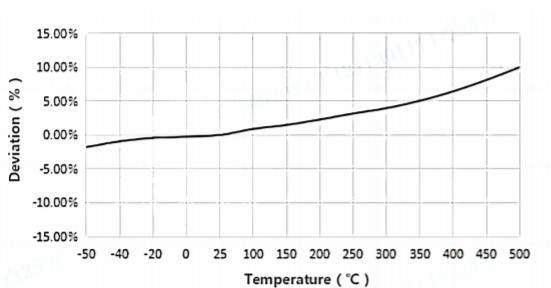
- Automobile engine test
- High temperature industrial vibration monitoring
- Vibration measurement of high temperature turbines

Fig_1 Dimensions of CXXCT3

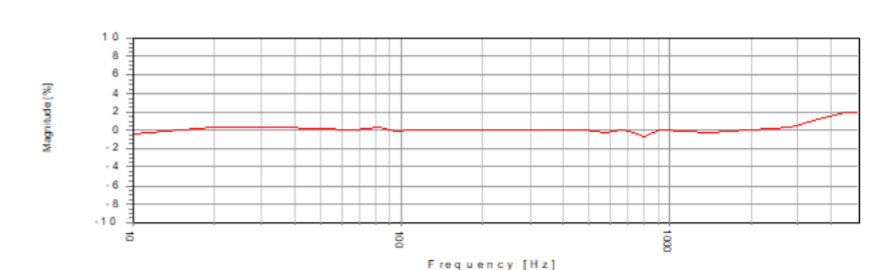


CXXCT3

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-CXXCT3

MODEL NUMBER		UNIT	C02CT3	C05CT3
PERFORMANCE				
Sensitivity ¹		pC/g	10	50
		pC/(m/s ²)	1	5
Measurement Range		g	±600	±300
Non-Linearity ³		%	1	
Frequency Range	± 5%	Hz	10-5k	10-2.5k
	±10%		1-9k	1-4.5k
Resonance Frequency ²		Hz	≥30k	≥16k
Discharge Time Constant ²		s	-	
Transverse Sensitivity		%	≤5	
ELECTRICAL				
Capacitance		PF	500	650
Resistance		Ω	≥1×10 ⁹	≥1×10 ⁹
Electrical Isolation		Ω	≥1×10 ⁸	≥1×10 ⁸
ENVIRONMENTAL				
Sinusoidal Vibration Limit ⁴		g	1000	500
Shock Limit ⁴		g	1500	1000
Temperature Range		°C	-50-500	
		°F	-58-932	
Temperature Response ²		%/°C	0.023	
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	nickel-based alloy	
Size	mm		33.7×30.2×25.3	33.7×30.2×31.5
	in		1.327×1.189×0.996	1.327×1.189×1.240
Electrical Connector		-	High temperature conjoined -Lemo 2-pin	
Mounting Thread		-	M4×3THRU	M4×3THRU
Weight ²	g		75	105
	oz		2.646	3.704

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

CXXCT3

Supplied Accessories:

- Product Verification Report
- Install Screws

COMPLIANCE WITH STANDARDS



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