

Universal Testing Type Accelerometer

DETAILS

C02A02 C04A05 C06A02 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.

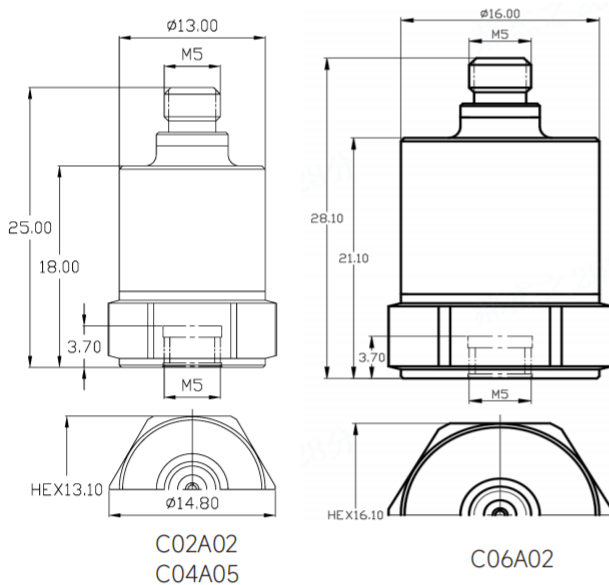
FEATURES

- Charge-type Universal Acceleration Sensor
- Standard series with multiple range options
- Shear structure
- Broadband response

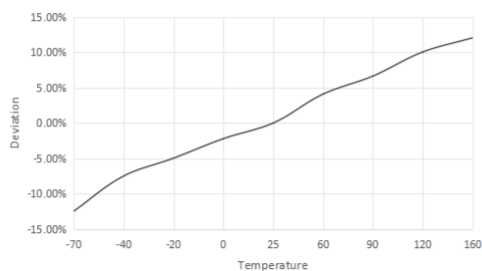
TYPICAL APPLICATIONS

- Environmental Stress Screening (ESS)
- Vibration Control
- Generalized High Temperature Vibration Monitoring

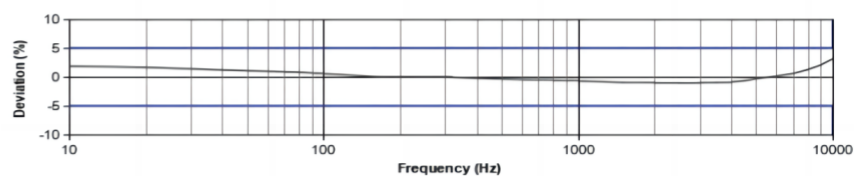
Fig_1 Dimensions of C02A02 C04A05 C06A02



Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-CXXAXX

MODEL NUMBER		UNIT	C02A02	C04A05	C06A02
PERFORMANCE					
Sensitivity ¹		pC/g	10	30	100
		pC/(m/s²)	1	3	10
Measurement Range		g	±500	±150	±200
Non-Linearity ³		%	1		
Frequency Range	± 5%	Hz	0.5-10k	0.5-7k	0.5-4.5k
	±10%		0.3-11k	0.3-9k	0.3-6k
Resonance Frequency ²		Hz	≥50k	≥38k	≥22k
Discharge Time Constant ²		s	-		
Transverse Sensitivity		%	≤5		
ELECTRICAL					
Capacitance		pF	1250	1700	2000
Resistance		Ω	≥1×10 ¹¹	≥1×10 ¹¹	≥1×10 ¹¹
Electrical Isolation		Ω	-	-	-
ENVIRONMENTAL					
Sinusoidal Vibration Limit ⁴		g	650	300	800
Shock Limit ⁴		g	650	300	1500
Temperature Range		°C	-70~160		
		°F	-94~320		
Temperature Response ²		%/°C	See typical curve		
PHYSICAL					
Sealing		-	Laser welding IP68		
Sensing Element		-	Piezoelectric ceramics		
Housing Material		-	Stainless steel		
Size	mm		HEX 13.1×25		HEX 16.1×28.1
	in		HEX 0.516×0.984		HEX 0.634×1.106
Electrical Connector		-	M5 Top (Opt. 10-32)		
Mounting Thread		-	M5 (Opt. 10-32)		
Weight ²	g		16	17	40
	oz		0.564	0.600	1.411

Additional Information

Note:

1. @ 160Hz, 1g
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

C02A02&C04A05&C06A02

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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