C02A02 C04A05 C06A02

PE Environmental Test Accelerometer

DETAILS

This series of charge-type uniaxial accelerometers uses a piezoelectric ceramic shear structure with wide-bandwidth frequency response and low sensitivity temperature response. High-quality ceramics ensure long-term stability. Stainless steel housing, laser-welded, extremely high sealing level. M5 or 10-32 mounting thread at bottom.

FEATURES

- Multiple standard ranges available
- Wide-bandwidth response
- Shear structure

TYPICAL APPLICATIONS

- Modal analysis
- Vibration control
- General vibration monitoring

Fig_1 Picture

Fig_3 Dimensions

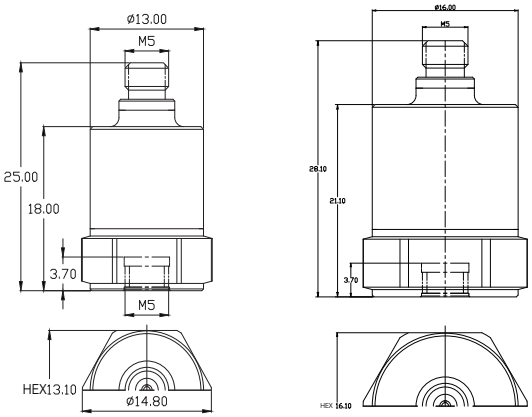

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Fig_4 Typical Temperature Response

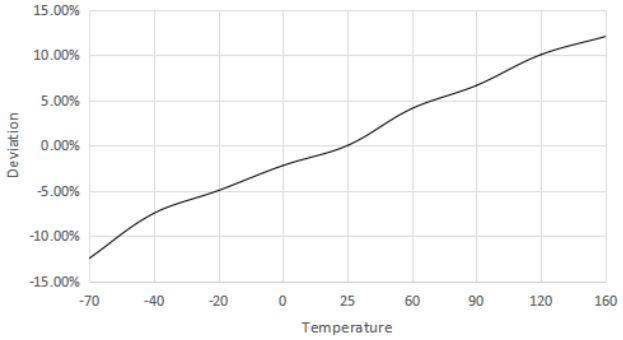
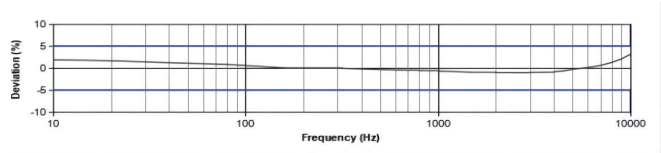


Fig_5 Typical Frequency Response



Specifications-CXXAXX

MODEL NUMBER		UNIT	C02A02	C04A05	C06A02
PERFORMANCE					
Sensitivity [1]		pC/g	10	30	100
		pC/(m/s²)	1	3	10
Measurement Range [2]		g	±500	±150	±200
Non-Linearity [3]		%	1		
Frequency Range	± 5%	Hz	0.5-10k	0.5-7k	0.5-4.5k
	±10%	Hz	0.3-11k	0.3-9k	0.3-6k
Resonance Frequency [2]		Hz	≥50k	≥38k	≥22k
Transverse Sensitivity		%	≤5		
ELECTRICAL					
Capacitance		pF	1250	1700	2000
Resistance		Ω	≥1×10¹¹	≥1×10¹¹	≥1×10¹¹
Electrical Isolation		Ω	-	-	-
ENVIRONMENTAL					
Sinusoidal Vibration Limit [4]		g rms	650	300	800
Shock Limit [4]		g pk	650	300	1500
Temperature Range		℃	-70~160		
		℉	-94~320		
Temperature Response [2]		-	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*3.70 (Opt. 10-32)		
Weight [2]		g	14.6	17	40
		oz	0.515	0.600	1.411
Mounting Torque		-	3.0N·m		
Recommended Accessories	Cable	-	K14AB14/K01AB01		
	Mounting Base	-	H02B02/H02B36		

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

CXXAXX

Supplied Accessories:

- Product Verification Report
- M5*8 Mounting screw

OPTIONALVERSIONS

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

COMPLIANCE WITH STANDARDS