

Universal Testing Type Accelerometer

DETAILS

Model C02A01 C04A01 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.

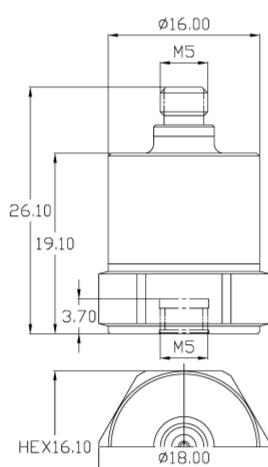
FEATURES

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

TYPICAL APPLICATIONS

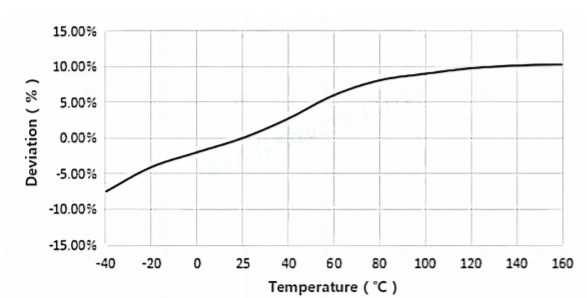
- Vibration control
- General vibration monitoring

Fig_1 Dimensions of C02A01 C04A01

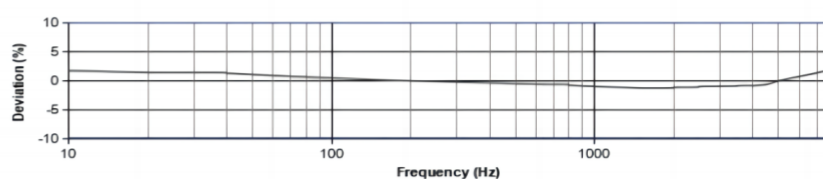


C02A01
C04A01

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-CXXA01

MODEL NUMBER		UNIT	C02A01	C04A01
PERFORMANCE				
Sensitivity ¹		pC/g	10	30
		pC/(m/s²)	1	3
Measurement Range		g	±1500	±1000
Non-Linearity ³		%	1	
Frequency Range	± 5%	Hz	-	-
	±10%		0.5-8k	0.5-8k
Resonance Frequency ²		Hz	≥30k	≥25k
Discharge Time Constant ²		s	-	
Transverse Sensitivity		%	≤5	
ELECTRICAL				
Capacitance		PF	800	780
Resistance		Ω	≥1×10 ¹¹	≥1×10 ¹¹
Electrical Isolation		Ω	-	-
ENVIRONMENTAL				
Sinusoidal Vibration Limit ⁴		g	3000	2000
Shock Limit ⁴		g	5000	2500
Temperature Range		°C	-40~160	
		°F	-40~320	
Temperature Response ²		%/°C	0.08	
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	Stainless steel	
Size	mm	HEX 16.1×26.1		
	in	HEX 0.634×1.028		
Electrical Connector		-	M5 Top (Opt. 10-32)	
Mounting Thread		-	M5 (Opt. 10-32)	
Weight ²	g	23		24.1
	oz	0.811		0.850

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, rather than in a working state

CXXA01

Supplied Accessories:

- Product Verification Report
- Install Screws

OPTIONAL VERSIONS

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

COMPLIANCE WITH STANDARDS



LNS Intelligent Technology Co., Ltd

NO.3 Building
Qilu High-Tech District, Qihe,Dezhou
Shandong Province, China 251100
+86-0534-2150417

International:

9620 NE Tanasbourne Dr Ste 300
Hillsboro, OR, USA 97124
+1-503-208-5512
info@lnsdynamics.com