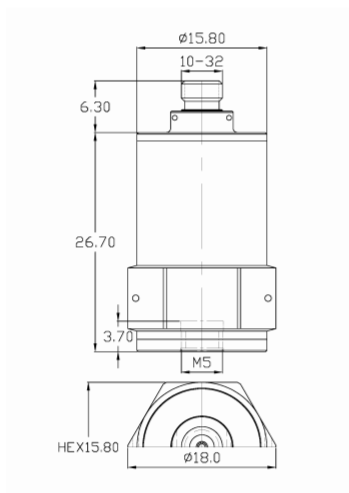


## Universal Testing Type Accelerometer

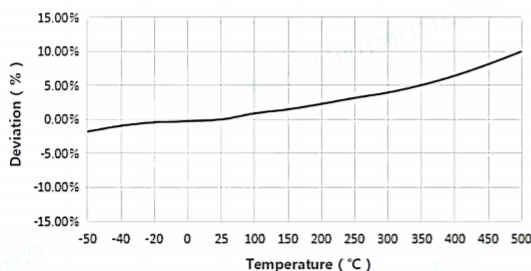
### DETAILS

CXXAT2 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 maximum operating temperature of 500 °C. The shell is sealed by laser welding of nickel-based alloy with good airtightness, special coaxial 10-32 connector, signal ground and shell isolation, can be equipped with domestic and foreign high-temperature metal cables, the bottom is equipped with M5 mounting holes.

**Fig\_1** Dimensions of CXXAT2



**Fig\_2** Typical Temperature Response



### FEATURES

- Designed for high temperature test environments
- Maximum operating temperature up to 500°C, ultra-low sensitivity temperature coefficient
- Special high temperature resistant metal shell, special high temperature resistant piezoelectric material, low temperature bleaching

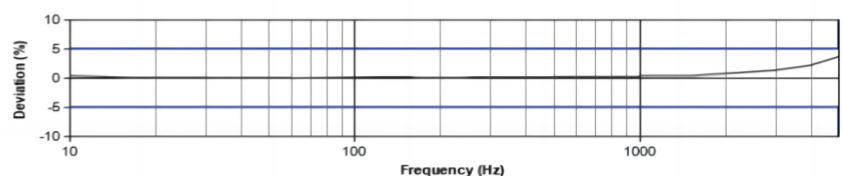
### TYPICAL APPLICATIONS

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



CXXAT2

**Fig\_3** Typical Frequency Response



## Specifications-CXXAT2

| MODEL NUMBER                            |      | UNIT               | C01AT2                 | C02AT2             |
|-----------------------------------------|------|--------------------|------------------------|--------------------|
| PERFORMANCE                             |      |                    |                        |                    |
| Sensitivity <sup>1</sup>                |      | pC/g               | 5                      | 10                 |
|                                         |      | pC/(m/s²)          | 0.5                    | 1                  |
| Measurement Range                       |      | g                  | ±1000                  | ±800               |
| Non-Linearity <sup>3</sup>              |      | %                  | 1                      |                    |
| Frequency Range                         | ± 5% | Hz                 | 10-4k                  | 10-5k              |
|                                         | ±10% |                    | 1-6k                   | 1-7k               |
| Resonance Frequency <sup>2</sup>        |      | Hz                 | ≥30k                   | ≥25k               |
| Discharge Time Constant <sup>2</sup>    |      | s                  | -                      |                    |
| Transverse Sensitivity                  |      | %                  | ≤5                     |                    |
| ELECTRICAL                              |      |                    |                        |                    |
| Capacitance                             |      | PF                 | 300                    | 550                |
| Resistance                              |      | Ω                  | ≥1×10 <sup>9</sup>     | ≥1×10 <sup>9</sup> |
| Electrical Isolation                    |      | Ω                  | ≥1×10 <sup>8</sup>     | ≥1×10 <sup>8</sup> |
| ENVIRONMENTAL                           |      |                    |                        |                    |
| Sinusoidal Vibration Limit <sup>4</sup> |      | g                  | 1500                   | 1000               |
| Shock Limit <sup>4</sup>                |      | g                  | 2000                   | 1500               |
| Temperature Range                       |      | °C                 | -50~500                |                    |
|                                         |      | °F                 | -58~932                |                    |
| Temperature Response <sup>2</sup>       |      | %/°C               | 0.02                   |                    |
| PHYSICAL                                |      |                    |                        |                    |
| Sealing                                 |      | -                  | Laser welding IP68     |                    |
| Sensing Element                         |      | -                  | Piezoelectric ceramics |                    |
| Housing Material                        |      | -                  | Nickel-based alloy     |                    |
| Size                                    | mm   | HEX<br>15.8×26.7   |                        |                    |
|                                         | in   | HEX<br>0.622×1.051 |                        |                    |
| Electrical Connector                    |      | -                  | 10-32 Top              |                    |
| Mounting Thread                         |      | -                  | M5 (Opt. 10-32)        |                    |
| Weight <sup>2</sup>                     | g    | 30                 | 30                     |                    |
|                                         | oz   | 1.058              | 1.058                  |                    |

## 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

## CXXAT2

Supplied Accessories:

- Product Verification Report
- Install Screws

## OPTIONAL VERSIONS

-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