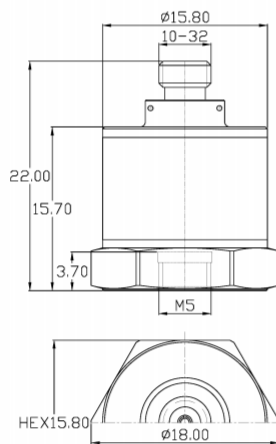


## Universal Testing Type Accelerometer

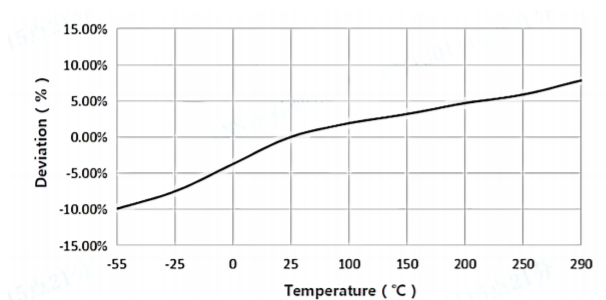
### DETAILS

COXAG4 series charge high temperature acceleration sensor, using ultra-high temperature piezoelectric ceramics, has ultra-low sensitivity temperature response and high impedance at high temperatures. The shell adopts nickel-based alloy laser welding seal with good air tightness, special coaxial 10-32 connector, signal ground isolation from the shell, can be equipped with domestic and foreign high-temperature metal cables, the bottom is equipped with M5 mounting holes.

**Fig\_1** Dimensions of COXAG4



**Fig\_2** Typical Temperature Response



### FEATURES

- Operating temperature up to 300°C, ultra-low sensitivity temperature coefficient
- High quality high temperature piezoelectric material, low temperature bleaching
- Special high temperature 10-32 connector output form

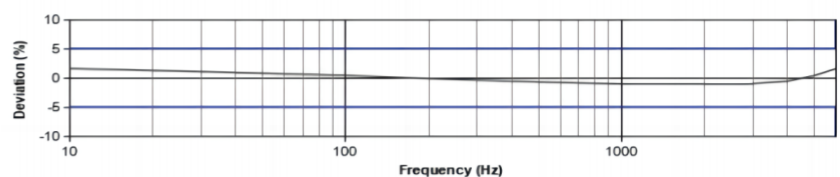
### TYPICAL APPLICATIONS

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



COXAG4

**Fig\_3** Typical Frequency Response



## Specifications-C0XAG4

| MODEL NUMBER                            |      | UNIT      | C05AG4                 | C06AG4              |
|-----------------------------------------|------|-----------|------------------------|---------------------|
| PERFORMANCE                             |      |           |                        |                     |
| Sensitivity <sup>1</sup>                |      | pC/g      | 50                     | 100                 |
|                                         |      | pC/(m/s²) | 5                      | 10                  |
| Measurement Range                       |      | g         | ±800                   | ±500                |
| Non-Linearity <sup>3</sup>              |      | %         | 1                      |                     |
| Frequency Range                         | ± 5% | Hz        | 1-6k                   | 1-5k                |
|                                         | ±10% |           | 1-9k                   | 1-8k                |
| Resonance Frequency <sup>2</sup>        |      | Hz        | ≥30k                   | ≥25k                |
| Discharge Time Constant <sup>2</sup>    |      | s         | -                      |                     |
| Transverse Sensitivity                  |      | %         | ≤1                     |                     |
| ELECTRICAL                              |      |           |                        |                     |
| Capacitance                             |      | PF        | 2300                   | 2300                |
| Resistance                              |      | Ω         | ≥1×10 <sup>11</sup>    | ≥1×10 <sup>11</sup> |
| Electrical Isolation                    |      | Ω         | ≥1×10 <sup>8</sup>     | ≥1×10 <sup>8</sup>  |
| ENVIRONMENTAL                           |      |           |                        |                     |
| Sinusoidal Vibration Limit <sup>4</sup> |      | g         | 2000                   | 2000                |
| Shock Limit <sup>4</sup>                |      | g         | 3000                   | 3000                |
| Temperature Range                       |      | °C        | -55~288                |                     |
|                                         |      | °F        | -67~550.4              |                     |
| Temperature Response <sup>2</sup>       |      | %/°C      | 0.04                   |                     |
| PHYSICAL                                |      |           |                        |                     |
| Sealing                                 |      | -         | Laser welding IP68     |                     |
| Sensing Element                         |      | -         | Piezoelectric ceramics |                     |
| Housing Material                        |      | -         | Nickel-based alloy     |                     |
| Size                                    | mm   |           | HEX<br>15.8×22         | HEX<br>15.8×22      |
|                                         | in   |           | HEX<br>0.622×0.866     | HEX<br>0.622×0.866  |
| Electrical Connector                    |      | -         | 10-32 Top              |                     |
| Mounting Thread                         |      | -         | M5 (Opt. 10-32)        |                     |
| Weight <sup>2</sup>                     | g    |           | 23                     | 26                  |
|                                         | oz   |           | 0.811                  | 0.917               |

## 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

### C0XAG4

Supplied Accessories:

- Product Verification Report
- Install Screws

### OPTIONAL VERSIONS

-E: 10-32 Mounting Threads

### COMPLIANCE WITH STANDARDS



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