

# Compact, ultra low-frequency accelerometer

## 731-207

### SPECIFICATIONS

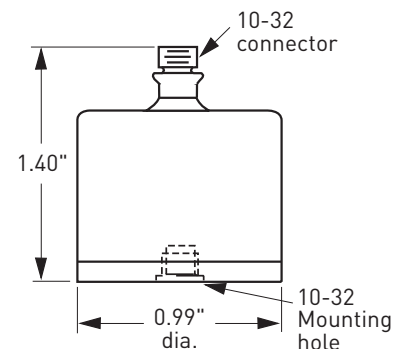
|                                       |                  |                                  |
|---------------------------------------|------------------|----------------------------------|
| Sensitivity, $\pm 10\%$ , 25°C        |                  | 10 V/g                           |
| Acceleration range                    |                  | 0.5 g peak                       |
| Amplitude nonlinearity                |                  | 1%                               |
| Frequency response, nominal:          | $\pm 5\%$        | 0.6 - 650 Hz                     |
|                                       | $\pm 10\%$       | 0.5 - 850 Hz                     |
|                                       | $\pm 3$ dB       | 0.2 - 1,300 Hz                   |
| Resonance frequency, mounted, nominal |                  | 2.4 kHz                          |
| Transverse sensitivity, max           |                  | 1% of axial                      |
| Temperature response:                 | 0°C              | -14%                             |
|                                       | +80°C            | +14%                             |
| Power requirement:                    |                  |                                  |
| Voltage source                        |                  | 18 - 30 VDC                      |
| Current regulating diode              |                  | 2 - 10 mA                        |
| Electrical noise, equiv. g, nominal:  |                  |                                  |
| Broadband                             | 2.5 Hz to 25 kHz | 2 $\mu$ g                        |
|                                       | 2 Hz             | 0.28 $\mu$ g/ $\sqrt{\text{Hz}}$ |
|                                       | 10 Hz            | 0.09 $\mu$ g/ $\sqrt{\text{Hz}}$ |
|                                       | 100 Hz           | 0.03 $\mu$ g/ $\sqrt{\text{Hz}}$ |
| Spectral                              |                  |                                  |
| Output impedance, max                 |                  | 500 $\Omega$                     |
| Bias output voltage, nominal          |                  | 10 VDC                           |
| Grounding                             |                  | case grounded                    |
| Temperature range                     |                  | 0° to +80°C                      |
| Vibration limit                       |                  | 50 g peak                        |
| Shock limit                           |                  | 250 g peak                       |
| Electromagnetic sensitivity at 60 Hz  |                  | 20 $\mu$ g/gauss                 |
| Sealing                               |                  | hermetic                         |
| Base strain sensitivity               |                  | 0.0005 g/ $\mu$ strain           |
| Weight                                |                  | 60 grams                         |
| Case material                         |                  | 316L stainless steel             |
| Mounting                              |                  | 10-32 UNF                        |
| Output connector                      |                  | 10-32 coaxial                    |
| Recommended cabling                   |                  | J93                              |

Accessories supplied: SF1 mounting stud; calibration data (level 3)



### Key features

- Ultra high sensitivity
- Ultra low noise
- Compact construction
- Ideal for seismic applications
- Manufactured in ISO 9001 facility



Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.