# Low-frequency, filtered accelerometer

799LF





# 2.55 1 1/8" hex 01.00 1/4-28 MOUNTING THREADS

# **Key features**

- High sensitivity
- Ultra low-noise electronics for clear signals at very low vibration levels
- Opimized for 15V supply
- Low pass filtered to eliminate high frequencies
- · Hermetically sealed
- ESD protection
- Reverse wiring protection

| Connections  |               |
|--------------|---------------|
| Function     | Connector pin |
| power/signal | Α             |
| common       | В             |
| ground       | shell         |

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

Wilcoxon Sensing Technologies 20511 Seneca Meadows Parkway Germantown, MD 20876 info@wilcoxon.com

Tel: (301) 330 8811 Fax: (301) 330 8873 www.wilcoxon.com



# SENSING TECHNOLOGIES

# 799LF

## **SPECIFICATIONS**

| Sensitivity, ±5%, 25° C                                   |                                   | 500 mV/g   |
|---|-----------------------------------|--|
| Acceleration range  |                                   | 10 g peak  |
| Amplitude nonlinearity                                    |                                   | 1%   |
| Frequency response: ± 5% ± 10% ± 3 dB                     |                                   | 0.3 - 1,200 Hz<br>0.2 - 1,600 Hz<br>0.1 - 2,500 Hz |
| Resonance frequency                                       |                                   | 18 kHz   |
| Transverse sensitivity                                    |                                   | 5% of axial  |
| Temperature response:<br>-50° C<br>+120° C                |                                   | –7%<br>+5%   |
| Power requirement: Voltage source Current regulating diod | e                                 | 15 - 30 VDC<br>2 - 10 mA                           |
| Electrical noise, equiv. g:<br>Spectral                   | 0.1 Hz<br>1 Hz<br>10 Hz<br>100 Hz | 15 μg/√Hz<br>3 μg/√Hz<br>1 μg/√Hz<br>1 μg/√Hz      |
| Output impedance, max                                     |                                   | 400 Ω  |
| Bias output voltage                                       |                                   | 8.0 VDC  |
| Grounding   |                                   | case isolated, internally shielded                 |
| Temperature range   |                                   | –50 to +120° C                                     |
| Vibration limit   |                                   | 250 g peak   |
| Shock limit   |                                   | 5,000 g peak                                       |
| Electromagnetic sensitivity, equiv. g                     |                                   | 150 μg/gauss                                       |
| Sealing   |                                   | hermetic   |
| Base strain sensitivity                                   |                                   | 0.0005 g/µstrain                                   |
| Sensing element design                                    |                                   | PZT ceramic / shear                                |
| Weight  |                                   | 205 grams  |
| Case material   |                                   | 316L stainless steel                               |
| Mounting  |                                   | 1/4-28 tapped hole                                 |
| Output connector  |                                   | 2-pin, MIL-5015 style                              |
| Mating connector  |                                   | R6 type  |
|   |                                   |  |

### **Contact**

Wilcoxon Sensing Technologies

20511 Seneca Meadows Parkway Germantown MD 20876, USA

Tel: +1 301 330 8811 Fax: +1 301 330 8873

info@wilcoxon.com

www.wilcoxon.com

### Accessories supplied:

- Calibration data (level 3)
- SF6 mounting stud (international customers specify mounting requirements)

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