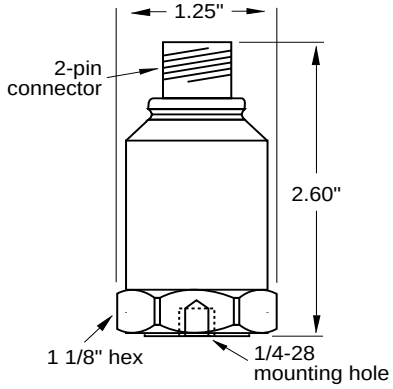
w i l c o x o n

Model 799LF
Low Frequency, Filtered Accelerometer

FEATURES:

- High sensitivity
- Ultra low-noise electronics for clear signals at very low vibration levels
- Opimized for 15V supply
- Filtered to eliminate high frequencies
- Hermetic seal
- ESD protection
- Miswiring protection



SPECIFICATIONS

DYNAMIC		
Sensitivity, ±5%, 25 °C		500 mV/g
Acceleration Range[1]		10 g peak
Amplitude Nonlinearity		1%
Frequency Response:		
±5%		0.3 - 1,200 Hz
±10%		0.2 - 1,600 Hz
±3 dB		0.1 - 2,500 Hz
Resonance Frequency		18 kHz
Transverse Sensitivity, max		5% of axial
Temperature Response		see graph
ELECTRICAL		
Power Requirement: voltage source		15 - 30 VDC
current regulating diode[1,2]		2 - 10 mA
Electrical Noise, equiv. g, nominal:		
Spectral	0.10 Hz	15 µg/√Hz
	1 Hz	3 µg/√Hz
	10 Hz	1 µg/√Hz
	100 Hz	1 µg/√Hz
Output Impedance, max.		400 Ω
Bias Output Voltage, nominal		8.0 VDC
Grounding		case isolated, internally shielded
Turn on Time		3 seconds
ENVIRONMENTAL		
Temperature Range		–50 to 120°C
Vibration Limit		250 g peak
Shock Limit		5,000 g peak
Electromagnetic Sensitivity, equiv. g		150 µg/gauss
Seal		hermetic
Base Strain Sensitivity		0.0005 g/µstrain
PHYSICAL		
Weight		205 grams
Case Material		316L stainless steel
Mounting		1/4-28 tapped hole
Output Connector		MIL-C-5015, 2 pin
Pin A		signal, power
Pin B		common
Cabling: Mating connector		Wilcoxon Research R6, Amphenol 97-3106A-10SL-4S
Recommended Cable		J9T2, two conductor shielded, Tefzel jacket, 30 pF/ft

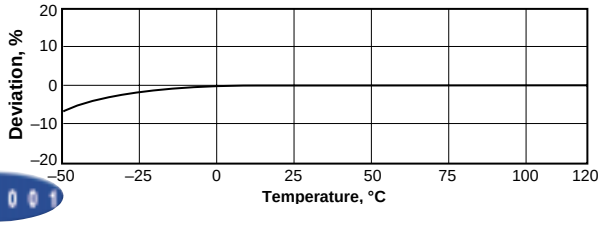
NOTES: [1] To minimize the possibility of signal distortion when driving long cables with high vibration signals, 24 to 30 VDC powering is recommended. The higher level constant current source should be used when driving long cables (please consult Wilcoxon Customer Service).

[2] A maximum current of 6 mA is recommended for operating temperatures in excess of 100 °C.

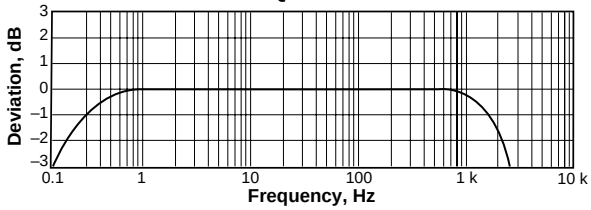
ACCESSORIES SUPPLIED: SF6 mounting stud, Calibration data, CCD powering card

ACCESSORIES AVAILABLE: R6SL-J9T2-XX splash-proof cable assembly, magnetic mounting bases, SF8 cementing studs, power supplies, amplifiers, signal conditioners

TYPICAL TEMPERATURE RESPONSE



TYPICAL FREQUENCY RESPONSE



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Due to continued research and development, Wilcoxon Research reserves the right to amend this specification without notice.

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