

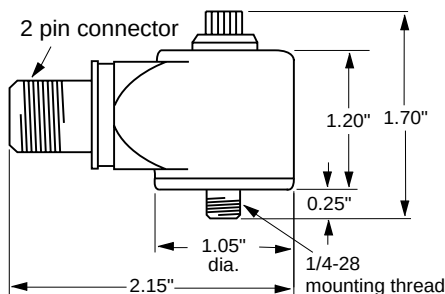
Model 797L

Low Profile, Low Frequency, Industrial IsoRing® Accelerometer



FEATURES:

- Intrinsically Safe Certification options
- High sensitivity
- Ultra low-noise electronics for clear signals at very low vibration levels
- Low frequency capable
- Filtered to eliminate high frequencies
- Hermetic seal
- ESD protection
- Miswiring protection



SPECIFICATIONS

DYNAMIC

Sensitivity, $\pm 5\%$, 25°C	500 mV/g
Acceleration Range ¹	10 g peak
Amplitude Nonlinearity	1%
Frequency Response, nominal:	
$\pm 5\%$	0.6 - 850 Hz
$\pm 10\%$	0.4 - 1,500 Hz
± 3 dB	0.2 - 3,700 Hz
Resonance Frequency	18 kHz
Transverse Sensitivity, max	7% of axial
Temperature Response	see graph

ELECTRICAL

Power Requirement: voltage source	18 - 30 VDC
current regulating diode ^{1,2}	2 - 10 mA
Electrical Noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz	12 μ g
Spectral 2 Hz	2.0 μ g/ $\sqrt{\text{Hz}}$
10 Hz	0.6 μ g/ $\sqrt{\text{Hz}}$
100 Hz	0.2 μ g/ $\sqrt{\text{Hz}}$
Output Impedance, max.	100 Ω
Bias Output Voltage, nominal	10 VDC
Grounding	case isolated, internally shielded

ENVIRONMENTAL

Temperature Range	-50 to 120°C
Vibration Limit	250 g peak
Shock Limit	2,500 g peak
Electromagnetic Sensitivity, equiv. g	5 μ g/gauss
Sealing	hermetic
Base Strain Sensitivity	0.001 g/ μ strain

PHYSICAL

Weight	148 grams
Case Material	316L stainless steel
Mounting	1/4-28 captive screw
Output Connector	MIL-C-5015, 2 pin
Pin A	signal, power
Pin B	common
Cabling: Mating connector	Wilcoxon 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.

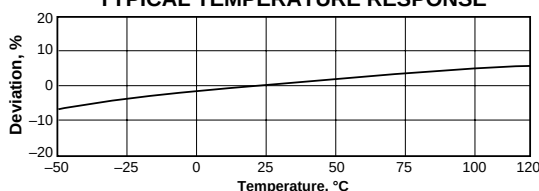
OPTIONS: Intrinsic Safety Certifications; stainless steel flexible hose; customer specified sensitivity; filtering; cable length

ACCESSORIES SUPPLIED: 1/4 - 28 captive screw, calibration data, CCD card

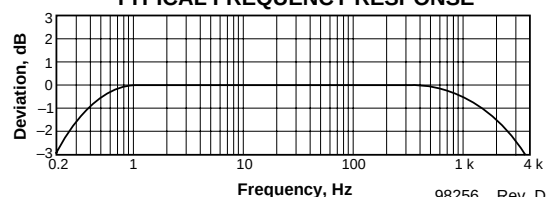
ACCESSORIES AVAILABLE: R6SL-J9T2-XX splash-proof cable assembly, magnetic mounting bases, SF8-2 cementing stud, power supplies, amplifiers, signal conditioners



TYPICAL TEMPERATURE RESPONSE



TYPICAL FREQUENCY RESPONSE



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



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