

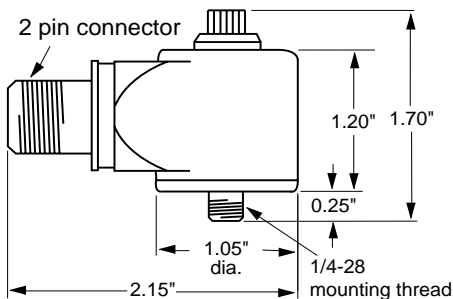
# Model 797

## Low Profile, Industrial IsoRing® Accelerometer



### FEATURES:

- Rugged, general purpose
- Corrosion resistant
- Hermetic seal
- Ground isolated
- ESD protection
- Miswiring protection
- Intrinsic safety certified options



### SPECIFICATIONS

#### DYNAMIC

Sensitivity, ±5%, 25°C .....	100 mV/g
Acceleration Range <sup>1</sup> .....	50 g peak
Amplitude Nonlinearity .....	1%
Frequency Response:	
±5% .....	3 - 5,000 Hz
±10% .....	2 - 7,000 Hz
±3 dB .....	1 - 12,000 Hz
Resonance Frequency .....	26 kHz
Transverse Sensitivity, max .....	5 % of axial
Temperature Response .....	see graph

#### ELECTRICAL

Power Requirement: voltage source .....	18 - 30 VDC
current regulating diode <sup>1,2</sup> .....	2 - 10 mA
Electrical Noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz .....	600 µg
Spectral 10 Hz .....	8 µg/√Hz
100 Hz .....	5 µg/√Hz
1000 Hz .....	5 µg/√Hz
Output Impedance, max. ....	100 Ω
Bias Output Voltage, nominal .....	12 VDC
Grounding .....	case isolated, internally shielded

#### ENVIRONMENTAL

Temperature Range .....	-50 to 120°C
Vibration Limit .....	500 g peak
Shock Limit .....	5,000 g peak
Electromagnetic Sensitivity, equiv. g .....	30 µg/gauss
Base Strain Sensitivity .....	0.002 g/µstrain

#### PHYSICAL

Weight .....	135 grams
Case Material .....	316L stainless steel
Mounting .....	1/4-28 screw
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:**
- <sup>1</sup> 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).
  - <sup>2</sup> A maximum current of 6 mA is recommended for operating temperatures in excess of 100 °C.

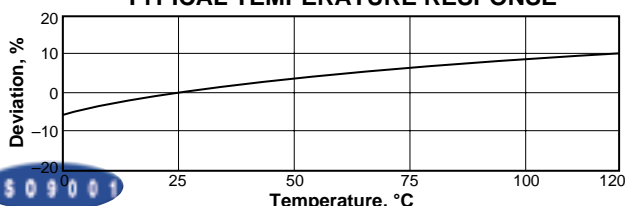
**OPTIONS:** Intrinsic Safety certifications; stainless steel flexible hose; customer specified sensitivity, filtering, cable length

**ACCESSORIES SUPPLIED:** 1/4 - 28 screw, calibration data

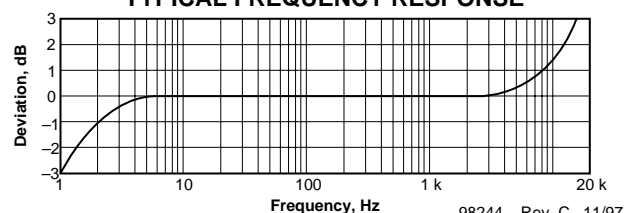
**ACCESSORIES AVAILABLE:** R6SL-J9T2-XX splash-proof cable assembly, magnetic mounting bases, SF8-2 cementing stud, power supplies, amplifiers, signal conditioners



**TYPICAL TEMPERATURE RESPONSE**



**TYPICAL FREQUENCY RESPONSE**



98244 Rev. C 11/97

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

