

# PREMIUM LOW-PROFILE ACCELEROMETERS



## ACC797

- Rugged, General Purpose
- Corrosion Resistant
- ESD Protection
- Reverse Wiring Protection

The OMEGAROMETER™ accelerometer is designed for industrial vibration measurements. It features a hermetically sealed 316L SS case suitable for harsh environments. The ACC797 is a high-performance model with a side cable exit.

### SPECIFICATIONS

#### DYNAMIC

**Sensitivity, ±5%, 25°C (77°F):** 100 mV/g

**Acceleration Range<sup>1</sup>:** 50 g peak

**Amplitude Non-Linearity:** 1%

**Frequency Response:**

±5%: 3 to 5000 Hz

±10%: 2 to 7000 Hz

±3 dB: 1 to 12,000 Hz

**Resonance Frequency:** 26 kHz

**Transverse Sensitivity, Max:**

5% of axial

#### ELECTRICAL

**Power Requirement:**

**Voltage Source:** 18 to 30 Vdc

**Current Regulating Diode<sup>1,2</sup>:** 2 to 10 mA

**Electrical Noise, Equiv. g:**

**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:** 12 Vdc

**Grounding:** Isolated case,

internally shielded

#### ENVIRONMENTAL

**Temperature Range:** -50 to 120°C

(-58 to 248°F)

**Vibration Limit:** 500 g peak

**Shock Limit:** 5000 g peak

**Electromagnetic Sensitivity, Equiv. g:**

30 µg/gauss

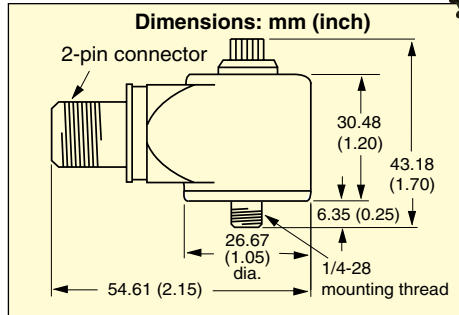
**Base Strain Sensitivity:**

0.002 g/microstrain

#### PHYSICAL

**Weight:** 135 g (4.8 oz)

**Case Material:** 316L SS



ACC797, with ACC-CB7-10WP cable, shown smaller than actual size.

Mounting screw included!

**Mounting:** 1/4-28 screw

**Output Connector:** 2 pin, MIL-C-5015 style

**Connections:**

**Pin A:** Power/signal

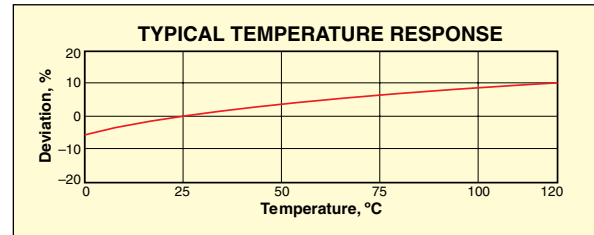
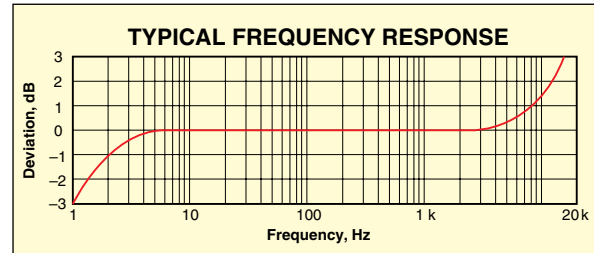
**Pin B:** Common

**Mating Connector:** Amphenol

97-3106A-10SL-4S type

**Recommended Cabling:** ACC-CB7-10

**NOTES:** <sup>1</sup> To minimize 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 Sales. <sup>2</sup> A maximum current of 6 mA is recommended for operating temperatures above 100°C (212°F).



### To Order

MODEL NO.	DESCRIPTION
ACC797	Premium accelerometer with side exit connector

ACC797 includes captive mounting screw and calibration data. Specify cable separately; see Accessories.

### ACCESSORIES

MODEL NO.	DESCRIPTION
ACC-CB7-10	3.05 m (10') MIL/BNC twisted-pair shielded cable
ACC-CB7-10WP	3.05 m (10') waterproof twisted-pair shielded cable
ACC-B3-1	Magnetic mounting base for flat surfaces, 40 lbf
ACC-B5	Magnetic mounting base for curved surfaces, 30 lbf
ACC-PS2	Rechargeable power supply with built-in amplifier
ACC-PS3	115 Vac power supply

\* Add suffix "-230" for 230 Vac power supply, no extra charge.

**Ordering Example:** ACC797 accelerometer, ACC-CB7-10, cable, ACC-B3-1, mounting base, and ACC-PS2, power supply (typical system).