

PREMIUM LOW-PROFILE ACCELEROMETERS

ACC797



- Rugged, General Purpose
- Corrosion Resistant
- ESD Protection
- Reverse Wiring Protection
- Intrinsic Safety Certified Options

The OMEGAROMETER™ Series accelerometers are designed for industrial vibration measurements. They feature a hermetically sealed 316L SS case suitable for harsh environments. The ACC797 is a high-performance model with a side cable exit. FM and CSA intrinsic safety approval is an available option.

SPECIFICATIONS

DYNAMIC

Sensitivity, $\pm 5\%$, 25°C (77°F): 100 mV/g

Acceleration Range¹: 50 g peak

Amplitude Non-Linearity: 1%

Frequency Response:

$\pm 5\%$: 3 to 5000 Hz

$\pm 10\%$: 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^{1,2}: 2 to 10 mA

Electrical Noise, Equiv. g:

Broadband: 2.5 Hz to 25 kHz: 600 μ g

Spectral: 10 Hz: 8 μ g/ $\sqrt{\text{Hz}}$

100 Hz: 5 μ g/ $\sqrt{\text{Hz}}$

1000 Hz: 5 μ g/ $\sqrt{\text{Hz}}$

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 μ g/gauss

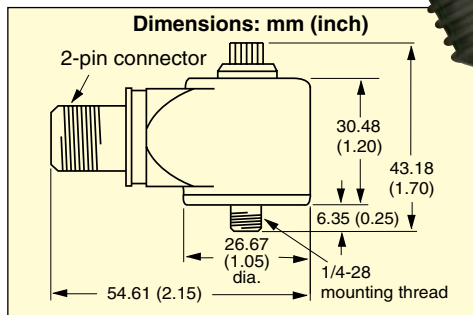
Base Strain Sensitivity:

0.002 g/microstrain

PHYSICAL

Weight: 135 g (4.8 oz)

Case Material: 316L SS



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

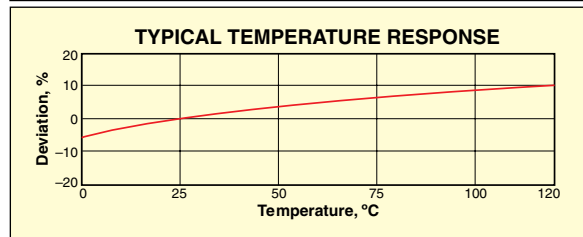
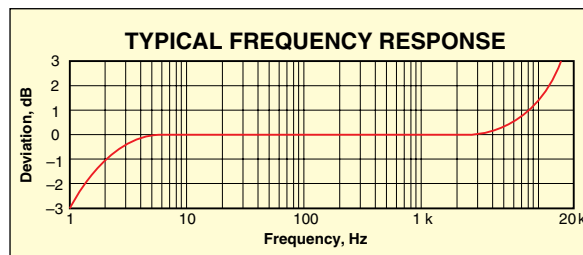
Agency Approvals:

FM: Class I, II, III, Division I, Groups A, B, C, D, E, F, G; Division II, Groups A, B, C, D, F, G
CSA: Class I, Division I, Groups A, B, C, D

NOTES: ¹ 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. ² A maximum current of 6 mA is recommended for operating temperatures above 100°C (212°F).

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

Mounting screw included!



To Order

MODEL NO.	DESCRIPTION
ACC797	Premium accelerometer with side exit connector
ACC797-FM	FM-certified intrinsically safe premium accelerometer with side exit cable
ACC797-CSA	CSA-certified intrinsically safe premium accelerometer with side exit cable

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).