

TOP-MOUNT INDUSTRIAL-GRADE ACCELEROMETERS

ACC786A

- ✓ Rugged Design
- ✓ Corrosion Resistant
- ✓ Hermetic Seal
- ✓ Isolated Case
- ✓ ESD Protection
- ✓ Reverse Wiring Protection

The OMEGAROMETER™ Series accelerometers are designed for industrial vibration measurements. They feature a hermetically sealed 316L SS case suitable for harsh environments. The ACC786A is a general purpose model with a top cable exit.

SPECIFICATIONS

DYNAMIC

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

Acceleration Range: 80 g peak

Amplitude Non-Linearity: 1%

Frequency Response:

±5%: 3 to 5000 Hz

±10%: 1 to 9000 Hz

±3 dB: 0.5 to 14,000 Hz

Resonance Frequency: 30 kHz

Transverse Sensitivity, Maximum: 5% of axial

Temperature Response:

-50°C (-58°F) = -5%;

120°C (248°F) = 5%

ELECTRICAL

Power Requirement:

Voltage Source: 18 to 30 Vdc

Current Regulating Diode: 2 to 10 mA

Electrical Noise, Equiv. g:

Broadband: 2.5 Hz to 25 kHz: 700 µg

Spectral: 10 Hz: 10 µg/Hz

100 Hz: 5 µg/Hz

1000 Hz: 5 µg/Hz

Output Impedance, Maximum: 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



ACC786A with optional ACC-CB7-10WP cable shown smaller than actual size.



Shock Limit: 5000 g peak
Electromagnetic Sensitivity, Equiv. g, Max: 70 µg/gauss

Sealing: Hermetic

Base Strain Sensitivity, Max: 0.0002 g/microstrain

PHYSICAL

Sensing Element Design:

PZT ceramic/shear

Weight: 90 g (3.2 oz)

Case Material: 316L SS

Mounting: ¼-28 UNF tapped hole

Connections:

Pin A: Power/signal

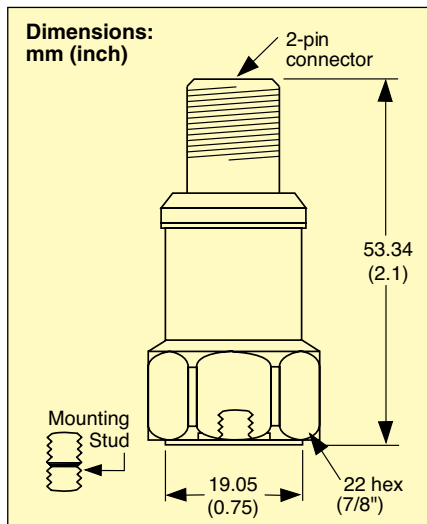
Pin B: Common

Output Connector:

2 pin, MIL-C-5015 style

Mating Connector: Amphenol 97-3106A-10SL-4S type

Recommended Cabling: ACC-CB7-10



To Order

| MODEL NO. | DESCRIPTION |
|-----------|---|
| ACC786A | General purpose accelerometer with top exit connector |

ACC786A includes mounting stud and calibration data and instruction sheet. Specify cable separately; see Accessories.

ACCESSORIES

| MODEL NO. | DESCRIPTION |
|--------------|--|
| ACC-CB7-10 | 3 m (10') MIL/BNC twisted-pair shielded cable |
| ACC-CB7-10WP | 3 m (10') waterproof twisted-pair shielded cable |
| ACC-B3 | Magnetic mounting base for flat surfaces, 30 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 |

Note: Visit us online for details on the above power supplies and cables

* For 230 Vac power supply add suffix "-230" to model number, no extra charge.

Ordering Example: ACC786A + ACC-CB7-10 + ACC-B3 + ACC-PS2, typical accelerometer system.