

PREMIUM-GRADE ACCELEROMETERS TOP-MOUNT PREMIUM GRADE

ACC793



- ✓ Intrinsic Safety Certified Options
- ✓ Hermetic Design
- ✓ Ground Isolated
- ✓ 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 ACC793 is a high-performance model with a top cable exit. FM and CSA intrinsic safety approval is an available option.

SPECIFICATIONS

DYNAMIC

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

Acceleration Range: 80 g peak

Amplitude Non-Linearity: 1%

Frequency Response:

±5%: 1.5 to 5000 Hz

±10%: 1.0 to 7000 Hz

±3 dB: 0.5 to 15,000 Hz

Resonance Frequency: 25 kHz

Transverse Sensitivity, Maximum:

5% of axial

Temperature Response:

-50°C (-58°F) = -10%

120°C (248°F) = 5%

ELECTRICAL

Power Requirement:

Voltage Source: 18 to 30 Vdc

Current Regulating Diode¹: 2 to 10 mA

Electrical Noise (Equiv. g, Nominal):

Broadband: 2.5 Hz to 25 kHz: 600 µg

Spectral: 10 Hz: 8 µg/√Hz

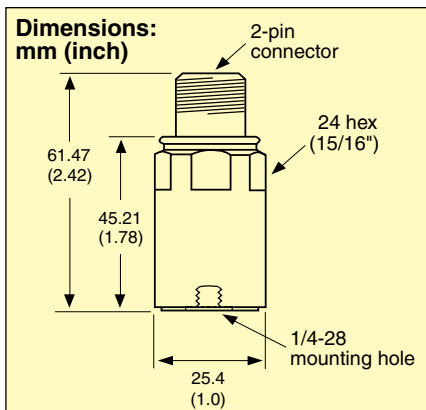
100 Hz: 5 µg/√Hz

1000 Hz: 5 µg/√Hz

Output Impedance, 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

Base Strain Sensitivity, Maximum: 0.0005 g/microstrain

Sealing: Hermetic to 10⁻⁸ cc/s

PHYSICAL

Weight: 112 g (3.9 oz)

Case Material: 316L SS

Mounting: ¼-28 tapped hole

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



ACC793 with ACC-CB7-10WP cable shown smaller than actual size.

Mounting stud included!

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

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

To Order

MODEL NO.	DESCRIPTION
ACC793	Premium accelerometer with top exit connector
ACC793-FM	FM-certified intrinsically safe premium accelerometer with top exit cable
ACC793-CSA	CSA-certified intrinsically safe premium accelerometer with top exit cable

ACC793 includes mounting stud 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	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

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

Ordering Example: ACC793 + ACC-CB7-10 + ACC-B3 + ACC-PS2, typical accelerometer system.