DJB Instruments

AMB/200.10 Biaxial MEMS DC Response Accelerometer ±200g range, 10mV/g sensitivity



The AMB range of accelerometers are Biaxial MEMS (micro electro mechanical system) DC response voltage output devices for testing at low frequency vibration measurement from DC (0Hz) and above. They are Biaxial (measuring in 2 directions simultaneously) variable capacitance design and are available with a 2m integral cable fitted with a 7pin connector to suit the DJB DCM-03 MEMS signal conditioning unit or alternatively as bare wires.

Ideally suited to low frequency vibration applications including low level vibration where high sensitivity is required.

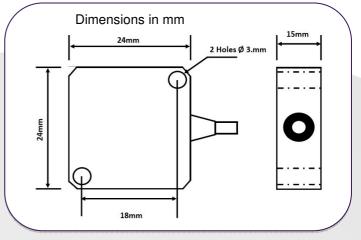
Due to their ability to measure DC response they can also be used to measure constant gravity application.

The AMB/200.10 has a range of $\pm 200g$ and a sensitivity of 10mV/g, we recommend using with DJB's MEMS signal conditioner the DCM-03

Features:

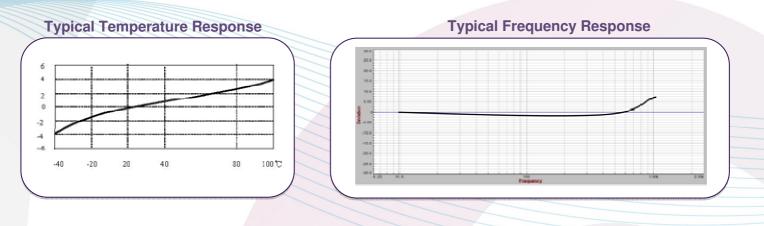
- Operational frequency range DC to 1100Hz
- Integral cable with 7 pin connector or pigtails.
- DJB signal conditioner model DCM-03 available as an option
- Differential Capacitance operation
- Compact form and low mass
- Constant gravity measurement

AMB/200.10



Applications:

- Auto/Aero structural body surveys
- Constant gravity measurements
- General vibration measurement
- Seismic vibration measurement
- Crash testing



Please note: For information and reference only. Data should not be used as pass / fail criteria for calibration purposes.

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A UK company with UK-based manufacturing, assembly and calibration in-house.

ISO 9001 - 00025363



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| | Metric | Imperial |
|--------------------------------|-------------------------------------|--------------------------|
| Sensitivity (20°C) | 1mV/(m/s²)±10% | 10mV/g±10% |
| Measurement Range | ±1961m/s² pk | ±200g pk |
| Transverse sensitivitv | ≤5% | |
| Frequency Range (±5%) | DC to 1000 Hz | |
| Frequency Range (±10%) | DC to 1100Hz | |
| Mounted Resonance Frequency | 5,000 Hz | |
| Temperature Range | -40 to +120°C | -40 to +248°F |
| Temperature Sensitivity | 0.1 mV/°C | |
| Shock limit (No Supply) | 29,420m/s ² | ±3,000g |
| Power Supply | +6 to +30 VDC | |
| Operating Current | ≤5mA | |
| Offset Voltage | 2.5±0.1VDC | |
| Noise(100Hz) | < 0.14mVrms | |
| Resolution | 210mg (rms) | |
| Weight (no cable) | 18grams | 0.63oz |
| Case material | Titanium | |
| Case sealing | Hermetic | |
| Mounting | 2 x Ø3.2mm hole | 2 x Ø0.12inch holes |
| Integral Output Cable | 2m | 6.5ft |
| Cable Exit | Side | |
| Cable connector | 7 pin connector (optional pigtails) | |
| Size | 24 x 24 x 15mm | 0.94x 0.94 x 0.59 inches |
| IP rating | IP65 | |

Options:

DCM-03 – 3 channel MEMS signal conditioning unit.

Tel

Pigtail cable terminations

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