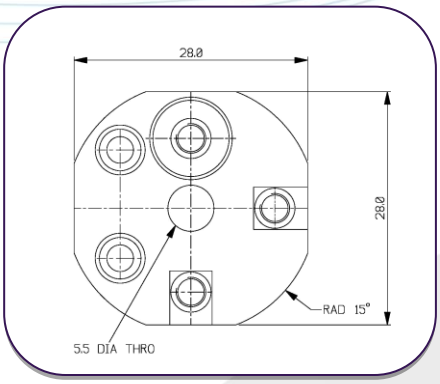
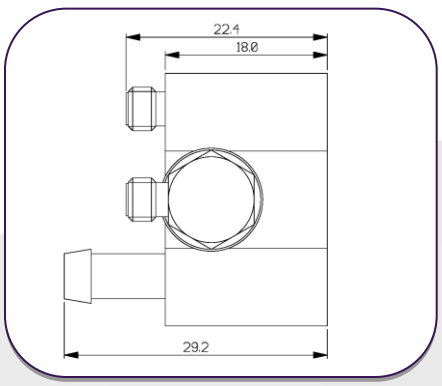
DJB Instruments
SENSING ENGINEERING INNOVATION

A/33, A/33-1 High Temperature, Water-cooled Triaxial Piezoelectric Accelerometer

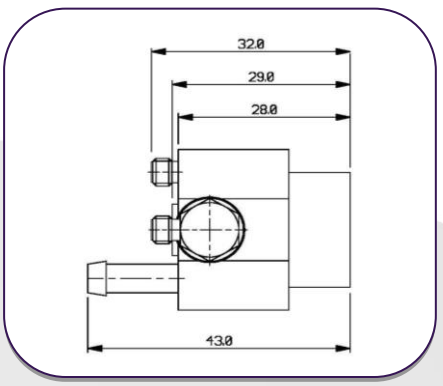
7pC/g nom. 38gm
900˚C Max surface temp with water flow

A/33





A/33-1



The A/33 charge output range of piezoelectric triaxial accelerometers feature ultra-high temperature usage on surfaces up to 900ºC. Developed as solutions for Vibration Measurements on exhaust pipes or engine turbo collectors, they have since found uses in many other high temperature test applications.

Mono-axial versions can also be supplied on request, axis selection to suit customer application.

Water flow is via two titanium pipes and it's recommended that the flow rate of 0.5 litres/min is maintained permanently when in use at high temperature. Failure to do so could lead to injury and damage to the unit.

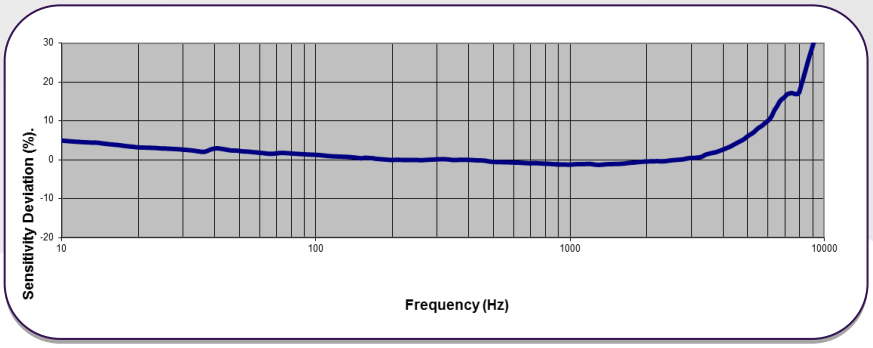
It is recommended at the highest temperatures a constant supply of chilled cooling water should be used.

The A/33 consists of 3 mono axial charge accelerometers mounted into an anodized aluminium block. This allows the advantage of single axis repair if required.

Accessories:
Silicone tubing
General purpose 12V pump

Typical Frequency Response

X



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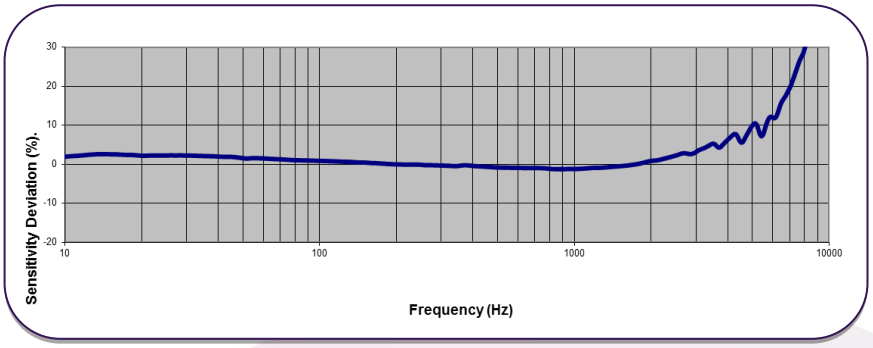

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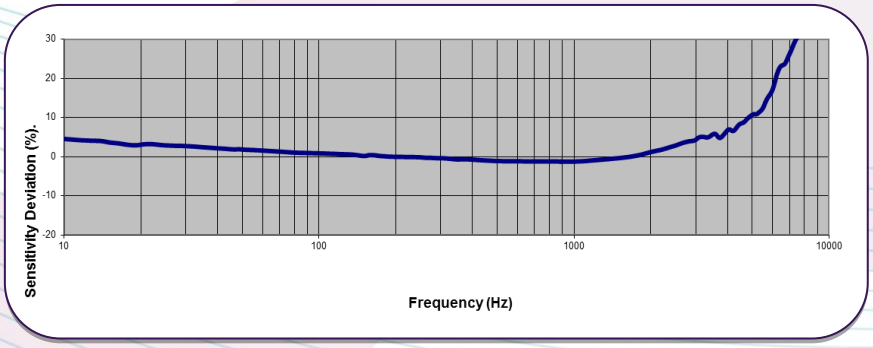

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A UK company with UK-based manufacturing, assembly and calibration in-house.

ISO 9001 Quality Management

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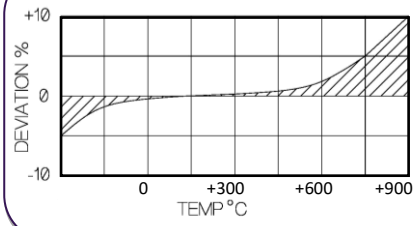
	Metric	Imperial
Charge sensitivity	0.71pC/(m/s^2)	7pC/g
Nominal Frequency Response	1Hz to 4kHz ±5% 1Hz to 5kHz ±10%	1Hz to 4kHz ±5% 1Hz to 5kHz ±10%
Resonant Frequency KHz	15	15
Cross Axis error % max	5	5
Temperature Range °C/°F Without water flow With water flow of 0.5 ltr/min	 -50/ +220°C +900°C(surface temp)	 -58/ +428°F +1652°F(surface temp)
Maximum Continuous g level	4,903m/s^2	500g
Mounting	1 x 5.5mm Ø through hole	1 x 5.5mm Ø through hole
Materials	s/steel 303 s31 mtg. block al.alloy	s/steel 303 s31 mtg. block al.alloy
Case Material	Transducer inserts welded, bonded into hard anodised al. block	Transducer inserts welded, bonded into hard anodised al. block
Connector	10-32 UNF Microdot	10-32 UNF Microdot
Weight	38gm	1.34oz

Options

- Wideband temperature calibration
- Voltage output versions available: A/133/V

Temperature Response with water flow



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