

# A/133/V-3.XX

## Tri-axial IEPE accelerometer

IEPE, 3x Top Entry 10-32 Microdot, Water Cooled, Flat Base



### KEY FEATURES

- ✓ Anodized aluminum body
- ✓ Flat base for use on flat mounting surface
- ✓ 38 grams
- ✓ 4 standard sensitivity options; 5mV/g to 100mV/g
- ✓ Operating temperature up to 900°C (surface temp) with water cooling

### WATER COOLING

- ✓ Via 2x Titanium pipes
- ✓ 0.5 litres/min recommended waterflow

### INCLUDED WITH DEVICE

- ✓ Silicone tubing
- ✓ General purpose 12V pump

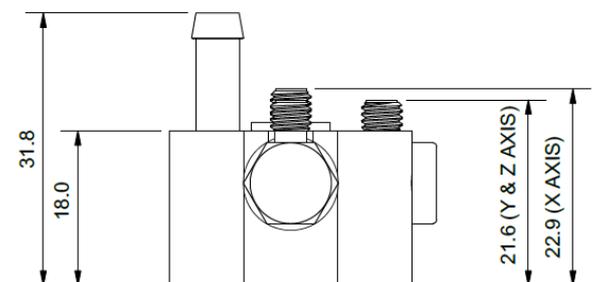
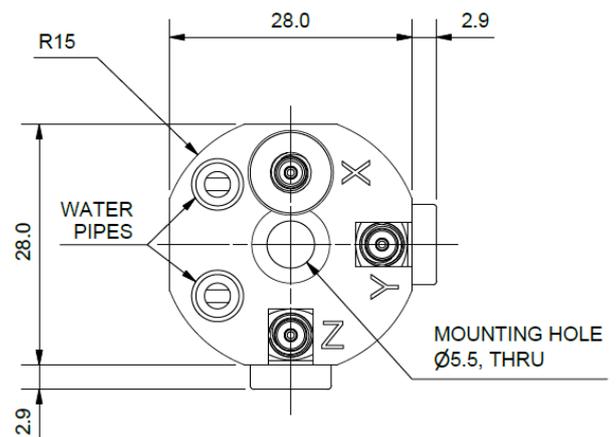
### DEVICE / FAMILY OPTIONS

- ✓ A/133/V-10 - Raised base for irregular surface mounting
- ✓ Extended low & high frequency calibration
- ✓ Custom sensitivities available on request

### TYPICAL CABLE OPTIONS

- ✓ MP2/BC1/T18/30 - Microdot to BNC, FEP jacket co-axial, 3 meters
- ✓ MP2/MP2/T18/30 - Microdot to Microdot, FEP jacket co-axial, 3 meters
- ✓ Other options and lengths available

### A/133/V-3 ACCELEROMETER DIMENSIONS

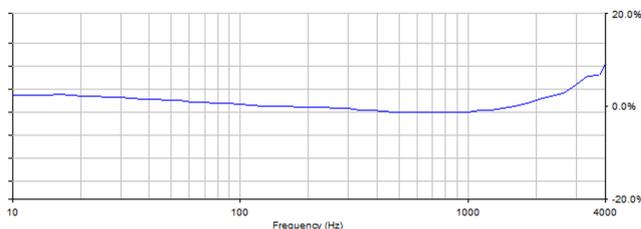


All measurements in millimeters (mm)

# TECHNICAL SPECIFICATIONS

Performance	A/133/V-3.5	A/133/V-3.10	A/133/V-3.30	A/133/V-3.100
<b>Voltage Sensitivity (<math>\pm 10\%</math>)</b>	5mV/g	10mV/g	30mV/g	100mV/g
<b>Measurement Range</b>	$\pm 1000g$	$\pm 500g$	$\pm 160g$	$\pm 50g$
<b>Frequency Response (<math>\pm 5\%</math>)</b>	1Hz to 3kHz			
<b>Frequency Response (<math>\pm 10\%</math>)</b>	0.7Hz to 4kHz			
<b>Resonant Frequency</b>	$\geq 15kHz$			
<b>Cross Axis Error</b>	$\leq 5\%$			
<b>Maximum Shock Limit</b>	1000g			
<b>Non-linearity (% FS)</b>	$\pm 1\%$			
<b>Base Strain Sensitivity</b>	$\leq 0.001 g/\mu$ strain			
<b>Broadband Resolution</b>	0.003grms (100mV/g)			
<b>Electrical Characteristics</b>				
<b>Supply Voltage</b>	15V to 35V DC			
<b>Supply Current</b>	2mA to 20mA (max 2mA above 125°C)			
<b>Bias Voltage</b>	10V to 14V DC			
<b>Output Impedance</b>	$\leq 100\Omega$			
<b>Base Isolation Impedance</b>	N/A			
<b>Settling Time Constant</b>	<5 seconds			
<b>Physical</b>				
<b>Case Material</b>	Titanium inserts, anodized aluminium body			
<b>Connector</b>	3x 10-32 UNF Microdot			
<b>Mounting</b>	1x $\varnothing 5.5mm$ through hole			
<b>Recommended Mounting Torque</b>	N/A			
<b>Weight</b>	38.0 grams			
<b>Size (metric)</b>	28 x 28 x 32mm			
<b>(imperial)</b>	1.1 x 1.1 x 1.23in			
<b>Environmental</b>				
<b>Temperature Range (<math>^{\circ}C</math>)</b>	-50°C to +125°C (without waterflow); -50°C to +900°C* (with waterflow)			
<b>(<math>^{\circ}F</math>)</b>	-58°F to +257°F (without waterflow); -58°F to +1652°F* (with waterflow)			
* = Surface temperature				

**TYPICAL FREQUENCY RESPONSE**



**TYPICAL SPECTRAL NOISE (100mV/g)**

1 Hz - 761  $\mu g/\sqrt{Hz}$   
 10 Hz - 193  $\mu g/\sqrt{Hz}$   
 100 Hz - 37.8  $\mu g/\sqrt{Hz}$   
 1 kHz - 11.2  $\mu g/\sqrt{Hz}$   
 10 kHz - 4.2  $\mu g/\sqrt{Hz}$

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SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

ALL DEVICES CALIBRATED IN ACCORDANCE WITH BS ISO 16063-21:2003. ALL DEVICE CALIBRATIONS ARE UKAS TRACEABLE.