

A/142

Mono-axial IEPE accelerometer

IEPE, Integral Cable, Adhesive Mount



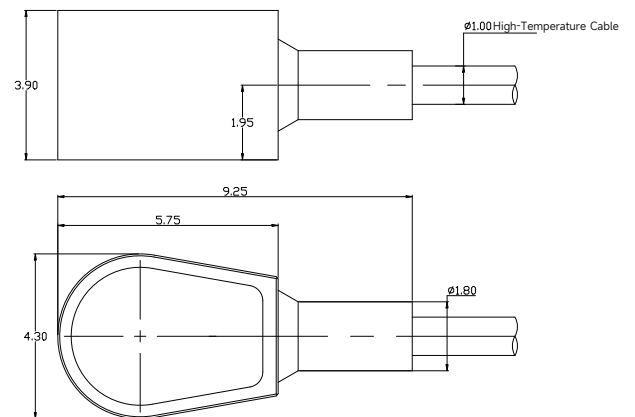
KEY FEATURES

- ✓ Two Sensitivity Options: 5mV/g, 10mV/g
- ✓ Titanium case
- ✓ 0.35 grams
- ✓ Integral cable

TYPICAL CABLE OPTIONS

- ✓ MS2/BC1/S11/30 - 10-32 to Microdot, FEP jacket, co-axial, 3 metres
- ✓ Customisable Integral Cable Output Connector
- ✓ Customisable Cable Length
- ✓ Other options and lengths available

A/142 ACCELEROMETER DIMENSIONS

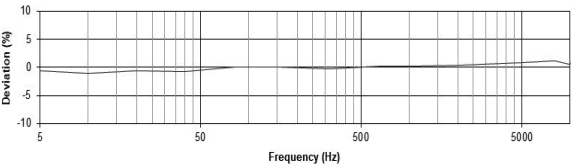


All measurements in millimeters (mm)

TECHNICAL SPECIFICATIONS

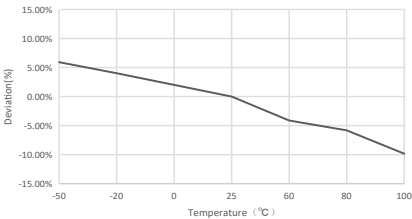
Performance	A/142.5	A/142.10
Voltage Sensitivity	5mV/g (±10%)	10mV/g (±20%)
Measurement Range	±1000g pk	±500g pk
Frequency Response (±5%)	3Hz to 10kHz	5Hz to 10kHz
Frequency Response (±10%)	2Hz to 12kHz	
Resonant Frequency	≥50kHz	
Cross Axis Error	≤5%	
Maximum Shock Limit	2000g pk	
Non-linearity (% FS)	≤1%	
Base Strain Sensitivity	0.005g/ μ ε	
Broadband Resolution	0.0025g rms	0.001g rms
Electrical Characteristics		
Supply Voltage	20V to 30V DC	
Supply Current	2mA to 20mA	
Bias Voltage	8.0V to 12.0V DC	
Output Impedance	≤100Ω	
Base Isolation Impedance	N/A	
Settling Time Constant	<5 seconds	
Physical		
Case Material	Titanium Alloy	
Connector	Integral Cable - Ending in 10-32 Microdot (Customisable)	
Mounting	Adhesive	
Recommended Mounting Torque	N/A	
Weight	0.35 grams	
Size (mm)	4.3 x 3.9 x 5.75mm	
(Inches)	0.169 x 0.154 x 0.226"	
Environmental		
Temperature Range (°C)	-50°C to +120°C	-50°C to +100°C
(°F)	-58°F to +248°F	-58°F to +212°F

TYPICAL FREQUENCY RESPONSE



TYPICAL THERMAL RESPONSE

Response shows performance of piezoelectric sensing element, including beyond the stated operating limits.



TYPICAL SPECTRAL NOISE

A/142.5	A/142.10
10Hz 300 μg/√Hz	10Hz 150 μg/√Hz
100Hz 80 μg/√Hz	100Hz 40 μg/√Hz
1000Hz 40 μg/√Hz	1000Hz 20 μg/√Hz

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ISO 9001 – 00025363



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.