DJB Instruments
SENSING ENGINEERING INNOVATION

A/120/VI Piezo-Tronic IEPE Accelerometer
Case Isolated

10mV/g up to 1V/g ±10% | 12.5gm | Std temp 125˚C

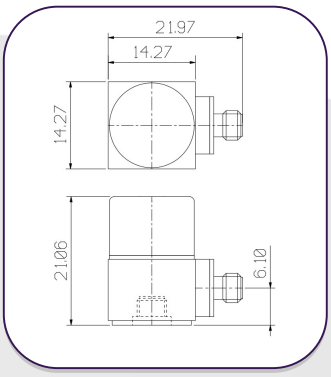
The A/120 range of general purpose Konic shear IEPE vibration transducers offer a wide range of mounting, connectors and sensitivities all using DJB's unique and technically superior Konic shear design of piezoelectric ceramic sensor. Offering anything from 10mV/g up to 1V/g output within the same size accelerometer body it is perfectly suited to applications from vibration shaker control and delicate testing through to industrial machine monitoring.

The A/120/VI is a case isolated version of the A/120 with a side entry 10/32UNF microdot connector

Using a wide range of IEPE signal conditioning levels the A/120 can interface directly to a wide range of commercially available vibration spectrum analyzers and data acquisition systems as well as in our own VB/01 & VB/02 and CV9 signal conditioners which offer a range of amplification options.

Note:
Voltage sensitivities shown are standard. We offer a wide range of sensitivities on request and recommend that applications are evaluated to determine the requisite sensitivity.

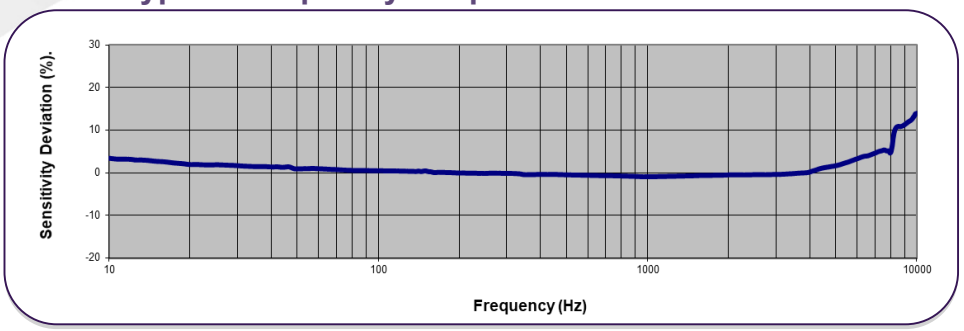
A/120/VI



Options:
Cable assemblies available to any length and with any terminating connector.

A/120/CR – Side entry
A/120/V – Side entry
A/120/VI – Side entry
A/120/VT – Top entry
A/120/VTC – Top entry
A/120/VTI – Top entry

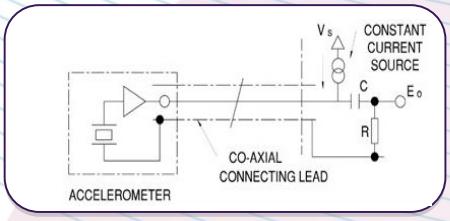
Typical Frequency Response



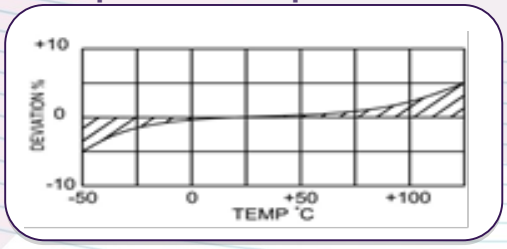
Typical Spectral Noise (100mV/g)

1Hz	732 µg/√Hz
10Hz	28.7 µg/√Hz
100Hz	8.9 µg/√Hz
1kHz	4.75 µg/√Hz
10kHz	3.99 µg/√Hz

Accelerometer Connection



Temperature Response



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.

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CERTIFIED ISO 9001 | UKAS MANAGEMENT SYSTEMS 001
ISO 9001 – 00025363

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	Metric		Imperial	
Voltage Sensitivity ±10%	1.0mV/(m/s^2)	10.2mV/(m/s^2)	10mV/g	100mV/g
Resonant frequency	≥28 kHz			
Typical Frequency ±5% Response ±10%	1Hz – 7kHz 0.7Hz – 8kHz			
Cross Axis error	≤5%			
Insulation Resistance	10^{10}`Ω at 250V			
Temperature Range	-50/+125°C		-58/+257°F	
Voltage sensitivity deviation (20°C/68°F)	-5% @ -50°C +5% @ +125°C		-5% @ -58°F +5% @ +257°F	
Supply voltage	18/35 V DC			
Supply current	2/20mA			
Bias voltage	10/14 V DC			
Output Impedance	≤100Ω			
Settling time within 10% bias	<5 secs			
Shock Limit	49,033m/s^2		5000g	
Saturation Limit, equiv .g	4903m/s^2	490m/s^2	500g	50g
Base Strain Sensitivity	≤0.001g/μ strain			
Discharge Time Coef.	1 to 3 Seconds			
Broadband Resolution grms (1Hz to 10kHz – Typical)	0.005	0.003	0.005	0.003
Case material	Stainless Steel 303			
Mounting	Base tapped hole, 10-32 UNF x 4mm deep		Base tapped hole, 10-32 UNF x 0.16 deep	
Weight	18g		0.65oz	
Case seal	Welded hermetic connector		Welded hermetic connector	
Connector	10-32 UNF Microdot side entry			
Size	21.06mm x 21.97mm x 14.27mm		.865” x .829” x .562”	

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