



## A/120/V Piezo-Tronic IEPE Accelerometer

10mV/g up to 1V/g  $\pm 10\%$

12.5gm

Std temp 125°C (HT 185°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.

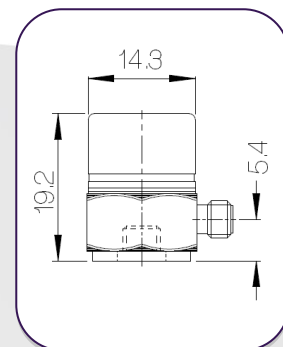
Using a wide range of IEPE signal conditioning levels the A/120 can interface directly to a wide range of commercially available vibration spectrum analyzers and data acquisition systems as well as in our own VV/04, V3/04, V4/04 and CV9 signal conditioners which offer a range of normalizing and amplification options.

Also available with DJB's world leading high temperature IEPE electronics for 185°C operation.

### 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/V

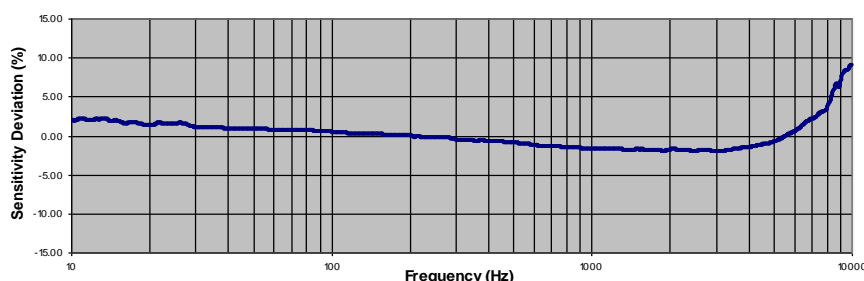


### Options:

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

- A/120/CR – Side entry
- A/120/V – Side entry
- A120VI – Side entry
- A120VT – Top entry
- A120VTC – Top entry
- A/120/VTI – Top entry

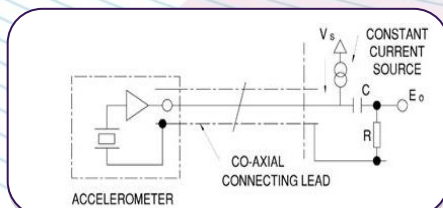
### Typical Frequency Response



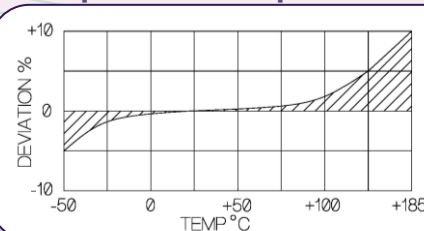
### Typical Spectral Noise (500mV/g)

1Hz	98.7 $\mu\text{g}/\sqrt{\text{Hz}}$
10Hz	61 $\mu\text{g}/\sqrt{\text{Hz}}$
100Hz	13.1 $\mu\text{g}/\sqrt{\text{Hz}}$
1kHz	4.2 $\mu\text{g}/\sqrt{\text{Hz}}$
10kHz	0.5 $\mu\text{g}/\sqrt{\text{Hz}}$

### 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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	Metric		Imperial	
Voltage Sensitivity $\pm 10\%$	1.0mV/(m/s <sup>2</sup> )	0.1V/(m/s <sup>2</sup> )	10mV/g	100mV/g
Resonant frequency	28 kHz			
Typical Frequency Response	1Hz – 8kHz			
	0.7Hz – 9kHz			
Cross Axis error	$\geq 5\%$			
Temperature Range	-50/+185°C		-58/+365°F	
Voltage sensitivity deviation (20°C/68°F)	+/-5% @ -50°C +/-5% @ +125°C +/- 10% @ +185°C		+/-5% @ -58°F +/-5% @ +257°F +/- 10% @ +365°F	
Supply voltage	15/35 V DC			
Supply current	2/15mA			
Bias voltage	8/10 V DC			
Settling time to 90% final val.	<2 secs			
Max continuous accn. g sine	9807m/s <sup>2</sup>		1000g	
Saturation Limit, equiv .g	4903m/s <sup>2</sup>	490m/s <sup>2</sup>	500g	50g
Base Strain Sensitivity	$\leq 5\%$		$\leq 5\%$	
Noise level, equiv. mg	5	3	5	3
Case material	Titanium Grade 2			
Mounting	Base tapped hole, 10-32 UNF x 4mm deep		Base tapped hole, 10-32 UNF x 0.16 deep	
Weight	12.5g		0.44oz	
Case seal	Welded hermetic connector		Welded hermetic connector	
Connector	10-32 UNF Microdot, TNC			
Size	14.3 (A/F) x 19.2mm		0.562in (A/F) x 0.75in	

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