

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

10mV/g up to 1V/g  $\pm 10\%$     12.5gm    Std temp 125°C



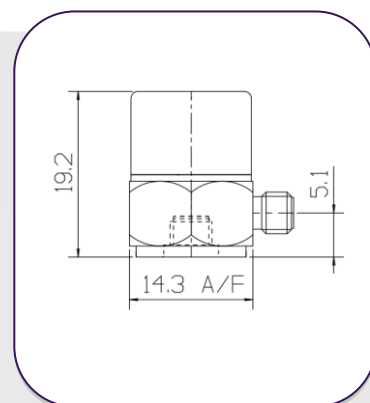
The A/120 range of general purpose Konic shear IEPE vibration transducers offer a wide range of mounting, connectors and sensitivities all using DJB's unique and technically superior Konic shear design of piezoelectric ceramic sensor. Offering anything from 10mV/g up to 1V/g output within the same size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

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.

### 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

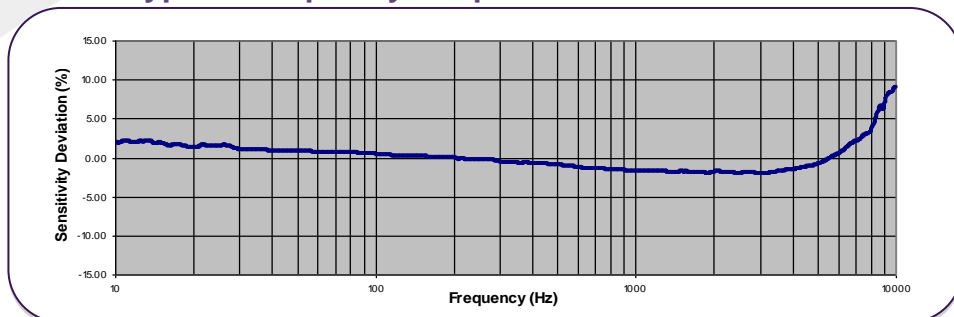


### Options:

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

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

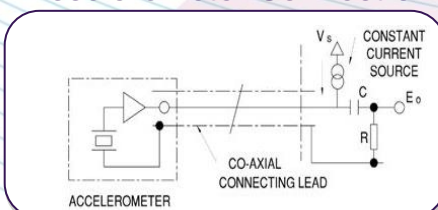
### Typical Frequency Response



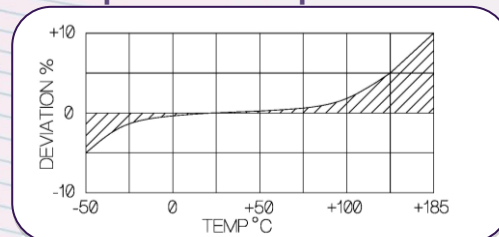
### Typical Spectral Noise (100mV/g)

1Hz	732 $\mu\text{g}/\sqrt{\text{Hz}}$
10Hz	28.7 $\mu\text{g}/\sqrt{\text{Hz}}$
100Hz	8.9 $\mu\text{g}/\sqrt{\text{Hz}}$
1kHz	4.75 $\mu\text{g}/\sqrt{\text{Hz}}$
10kHz	3.99 $\mu\text{g}/\sqrt{\text{Hz}}$

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

12.5gm

Std temp 125°C

	Metric			Imperial		
	Voltage Sensitivity $\pm 10\%$	1.0mV/(m/s <sup>2</sup> )	10.2mV/(m/s <sup>2</sup> )	50.98mV/(m/s <sup>2</sup> )	10mV/g	100mV/g
Resonant frequency	$\geq 33$ kHz					
Typical Frequency Response	1Hz – 7kHz 0.7Hz – 8kHz					
Cross Axis error/Transverse Sensitivity	$\leq 5\%$					
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	15/35 V DC					
Supply current	2/20mA					
Bias voltage	10 - 14 V DC					
Settling time to 90% final val.	<2 secs					
Max continuous accn. g sine	9807m/s <sup>2</sup>			1000g		
Measurement Range	$\pm 4903$ m/s <sup>2</sup>	$\pm 490$ m/s <sup>2</sup>	$\pm 98$ m/s <sup>2</sup>	$\pm 500$ g	$\pm 50$ g	$\pm 10$ g
Base Strain Sensitivity	$\leq 5\%$			$\leq 5\%$		
Discharge Time Coef.	1 to 3 Seconds					
Non-linearity (%FS)	$\leq 1\%$					
Broadband Resolution (1Hz to 10kHz – Typical)	0.0025grms					
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			0.562" (A/F) x 0.75"		

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