

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

10mV/g up to 1V/g ±10%

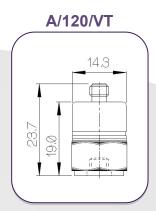
12.9gm

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 CV9, VB/01 and VB/02 signal conditioners which offer a range of normalizing and amplification options.



#### Note:

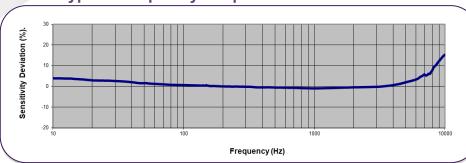
Voltage sensitivities shown are standard. We offer a wide range of sensitivities on request and recommend that applications are evaluated to determine the requisite sensitivity.

### 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

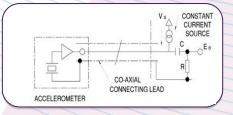
## **Typical Frequency Response**



# Typical Spectral Noise (100mV/g)

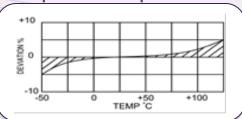
1Hz 978 μg/√Hz 10Hz 28.7 μg/√Hz 100Hz 8.92 μg/√Hz 1kHz 4.75 μg/√Hz 10kHz 3.99 μg/√Hz

## **Accelerometer Connection**



### Temperature Response

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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 ±10%	1.0mV/(m/s <sup>2</sup> )	10.2mV/(m/s <sup>2</sup> )	10mV/g	100mV/g
Resonant frequency	≥34 kHz			
Typical Frequency ±5% Response ±10%	1Hz – 7kHz 0.7Hz – 8kHz			
Cross Axis error	≤5%			
Temperature Range	-55/+125°C		-67/+257°F	
Voltage sensitivity deviation (20°C/68°F)	-5% @ -55°C +5% @ +125°C		-5% @ -67°F +5% @ +257°F	
Supply voltage	15/35 V DC			
Supply current	2/20mA			
Bias voltage	11/14 V DC			
Output Impedance	≤100Ω			
Broadband resolution (grms)	0.005	0.003	0.005	0.003
Amplitude linearity (%FS)			≤1%	I
Settling time within 10% bias	<3 secs			
Discharge Time Coef.	1 to 3 Seconds			
Shock Limit	49,033m/s <sup>2</sup>		5000g	
Saturation Limit, equiv .g	4903m/s <sup>2</sup>	490m/s <sup>2</sup>	500g	50g
Base Strain Sensitivity	≤0.001g/µ strain			
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	12.9g		0.46oz	
Case seal	Welded		Welded	
Connector	10-32 UNF Microdot			
Size	14.3 (A/F) x 23.7mm 0.562" (A/F) x 0.934"			



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