

A/120/V Piezo-Tronic IEPE Accelerometer

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



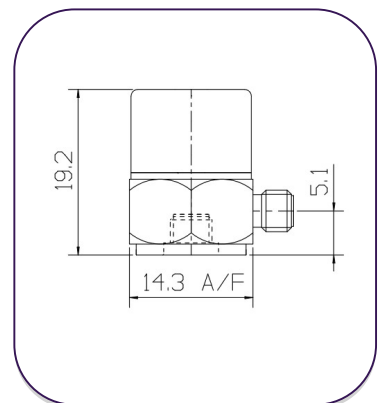
The A/120 range of general purpose Konic shear IEPE vibration transducers offer a wide range of mounting, connectors and sensitivities all using DJB's unique and technically superior Konic shear design of piezoelectric ceramic sensor. Offering anything from 10mV/g up to 1V/g output within the same size 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 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.

A/120/V

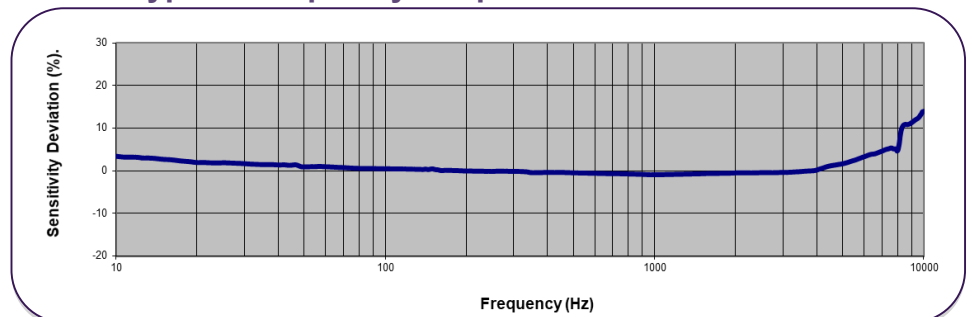


Options:

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

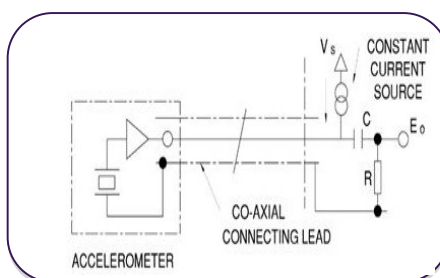
Typical Frequency Response



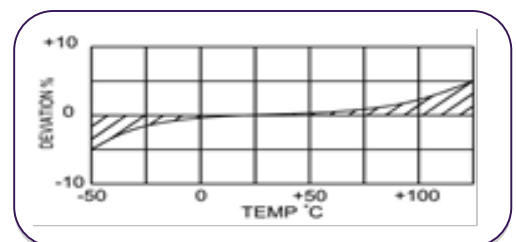
Typical Spectral Noise (100mV/g)

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

A/120/V Piezo-Tronic IEPE Accelerometer

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



	Metric			Imperial		
Voltage Sensitivity $\pm 10\%$	1.0mV/(m/s ²)	10.2mV/(m/s ²)	50.98mV/(m/s ²)	10mV/g	100mV/g	500mV/g
Resonant frequency	≥ 33 kHz					
Typical Frequency Response	1Hz – 8kHz					
$\pm 5\%$	0.7Hz – 9kHz					
$\pm 10\%$						
Cross Axis error/Transverse Sensitivity	$\leq 5\%$					
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	10 - 14 V DC					
Output Impedance	$\leq 100\Omega$					
Settling time within 10% bias	<3 secs					
Shock Limit	49,033m/s ²			5000g		
Measurement Range	± 4903 m/s ²	± 490 m/s ²	± 98 m/s ²	± 500 g	± 50 g	± 10 g
Base Strain Sensitivity	≤ 0.001 g/ μ strain					
Discharge Time Coef.	1 to 3 Seconds					
Non-linearity (%FS)	$\leq 1\%$					
Broadband Resolution grms (1Hz to 10kHz – Typical)	0.005	0.003	0.001	0.005	0.003	0.001
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			Welded		
Connector	10-32 UNF Microdot					
Size	14.3 (A/F) x 19.2mm			0.562" (A/F) x 0.75"		

Please note: For information and reference only. Data should not be used as pass / fail criteria for calibration purposes