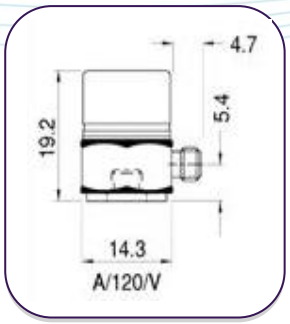
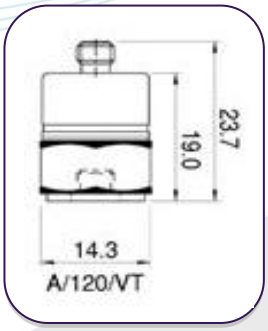
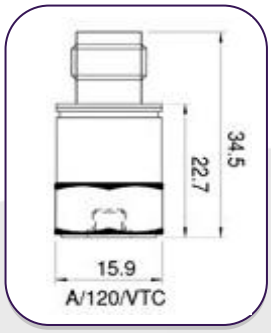
DJB Instruments
SENSING ENGINEERING INNOVATION

A/120/V, A/120/VT, A/120/ VTC, A/120/VI, A/120/VTI Piezo-Tronic IEPE Accelerometer

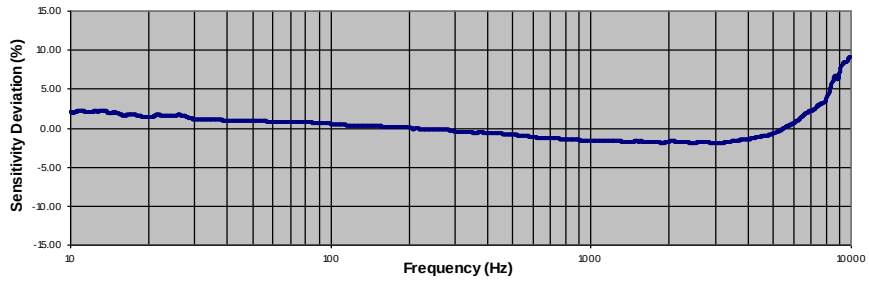
10mV/g up to 1V/g ±10% 12.5 - 32.6gm Std temp 125°C (HT 185°C)







Typical Frequency Response



Spectral Noise

1Hz	98.7µg/√Hz
10Hz	61µg/√Hz
100Hz	13.1µg/√Hz
1kHz	4.2µg/√Hz
10kHz	0.5µg/√Hz

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.

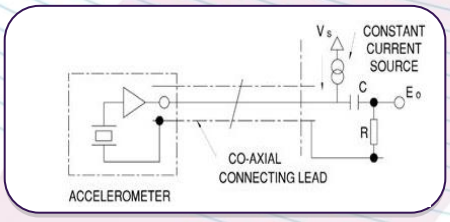
Options:

Non-Magnetic version available, A/120/VN, VTN.
Cable assemblies available to any length and with any terminating connector.

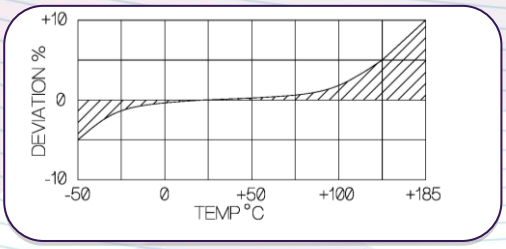
Note:

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.

Accelerometer Connection



Temperature Response



DJB Instruments (UK) Ltd
Finchley Avenue,
Mildenhall, Suffolk IP28 7BG

Tel +44 (0)1638 712 288
Email sales@djbinstruments.com
Web www.djbinstruments.com

A UK company with UK-based manufacturing, assembly and calibration in-house.

bsi. ISO 9001 Quality Management

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10mV/g up to 1V/g ±10% 12.5 - 32.6gm Std temp 125°C (HT 185°C)

	Metric	Imperial
Voltage Sensitivity ±10%	1.0mV/(m/s^2) 0.1V/(m/s^2)	10mV/g 1V/g
Resonant frequency kHz	≈28	≈28
Cross Axis error % max	5	5
Temperature Range	-50/+185°C	-58/+365°F
Voltage sensitivity deviation re 20°C/68°F	+/-5% @ -50°C +/-5% @ +125°C +/- 10% @ +185°C	+/-5% @ -58°F +/-5% @ +257°F +/- 10% @ +365°F
Supply voltage V DC	15/35	15/35
Supply voltage mA	2/15	2/15
Bias voltage V DC	8/10	8/10
Settling time to 90% final val. secs	<2	<2
Max continuous accn. g sine	9,807m/s^2	1000g
Saturation Limit, equiv .g	4,903m/s^2 490m/s^2	500g 50g
Noise level, equiv. mg	5 3	5 3
Frequency Response	1Hz - 8KHz ±5% 1Hz - 10KHz ±10%	1Hz - 8KHz ±5% 1Hz - 10KHz ±10%
L.F corner frequency, Hz	0.1 0.5	0.1 0.5
Case material	Titanium Grade 2, st/steel 303S31(VTC)	Titanium Grade 2, st/steel 303S31(VTC)
Mounting	Base tapped hole, 10-32 UNF x 4mm deep	Base tapped hole, 10-32 UNF x 0.16 deep
Weight	12.5g, 32.6gm (/VTC)	0.44oz, 1.15oz(/VTC)
Case seal	Welded hermetic connector	Welded hermetic connector
Size	14.3 (A/F) x 19.2mm 14.3 (A/F) x 19.0mm 14.3 (A/F) x 21.5mm 14.3 (A/F) x 19.3mm 14.3 (A/F) x 19.3mm	14.3 (A/F) x 0.75in 14.3 (A/F) x 0.75in 14.3 (A/F) x 0.85in 14.3 (A/F) x 0.76in 14.3 (A/F) x 0.76in
Connector	10-32 UNF Microdot, TNC	10-32 UNF Microdot, TNC

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