

## A/31 Piezoelectric Triaxial Accelerometer

7pC/g nom.      19gm      220°C Max



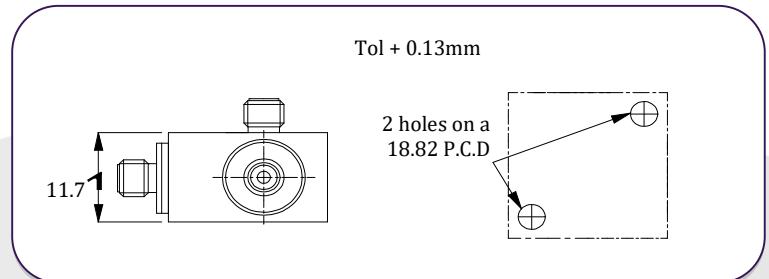
Lightweight triaxial vibration transducer comprising three Konic Shear® sensing elements all welded inserts bonded orthogonally into hard anodized aluminum housing.

The inserts are electrically insulated, individually and from the housing, thus eliminating ground loop interference. The additional mechanical isolation implicit in the construction provides near elimination of strain induced error.

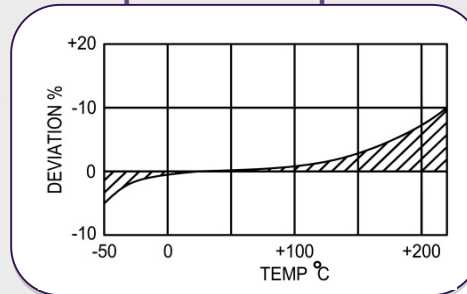
The spatial response of a structure to dynamic forcing may lead to erroneous single axis vibration or shock measurement due to the inherent directional property of the transducer. In cases where this is deemed to be a problem, an orthogonal three axis measurement, allowing computation of absolute value and direction offers a solution.

The d33 component suppression property of the Konic shear design, resulting in minimization of cross axis error, is particularly advantageous for three axis measurement integrity.

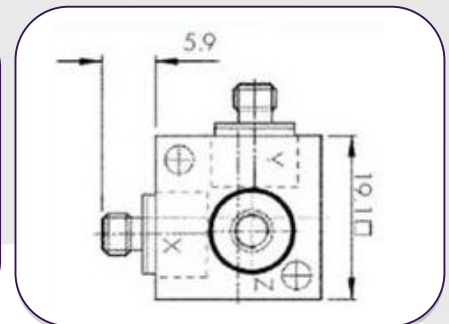
### A/31 Fixing Centers



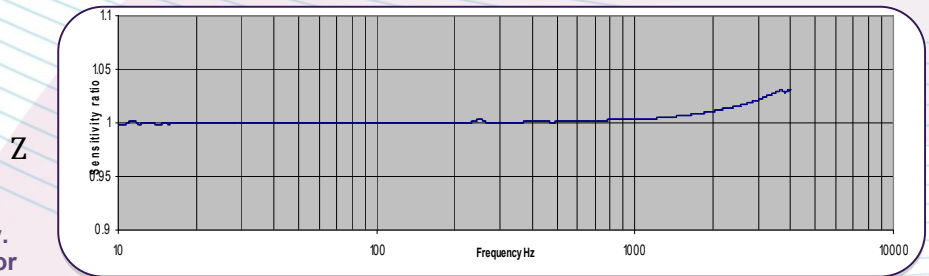
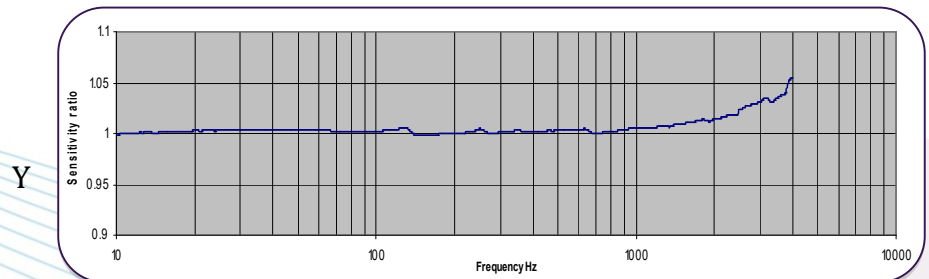
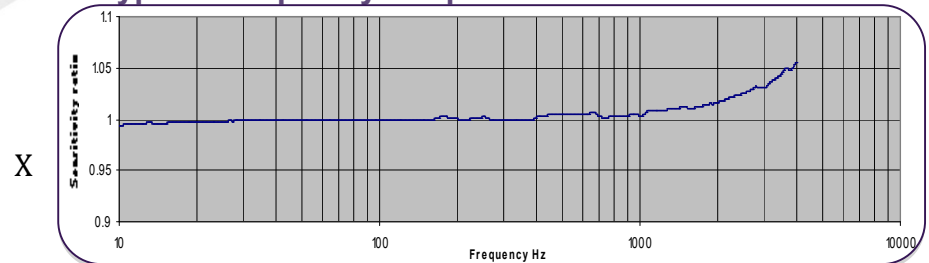
### Temperature Response



### A/31



### Typical Frequency Response



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

**DJB Instruments (UK) Ltd**

Finchley Avenue,  
Mildenhall, Suffolk IP28 7BG

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

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

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	Metric	Imperial
Charge sensitivity nom. @20°C	0.71pC/(m/s <sup>2</sup> )	7pC/g
Resonant frequency	X / Y Axis 25kHz	Z Axis 28kHz
Typical frequency response	±5% ±10%	1Hz – 3kHz 0.7Hz – 4kHz
Pyro-electric output		0.2g/°C
Pyro-electric corner frequency		0.001Hz
Cross axis error		≤5%
Capacitance nom.		1150 pF
Temperature range	-50/ +220°C	-58/ +428°F
Charge sensitivity deviation (20°C/68°F)	-5% @ -50°C +10% @ +220°C	-5% @ -58°F +10% @ +428°F
Base strain sensitivity		≤ 0.001g/μ strain
Maximum shock	49,033m/s <sup>2</sup>	5000g
Case material		s/steel 303 S31 inserts Hard anodized al. alloy mounting block
Mounting	3 x 2.5mm Ø through holes	3 x 0.098in Ø through holes
Weight	19g	0.67oz
Size	19.1 x 19.1 x 11.7mm	0.75 x 0.75 x 0.46in
Connector		3 x 10-32UNF Microdot

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