

## A/31 Piezoelectric Triaxial Accelerometer

7pC/g nom.

19gm

220°C Max



Lightweight triaxial vibration transducer compromising 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.

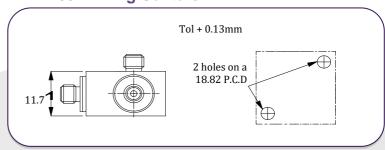
The spatial response of a structure to dynamic forcing may lead to erroneous single axis vibration or shock measurement due to the inherent directional property of the transducer. In cases where this is deemed to be a problem, an orthogonal three axis measurement, allowing computation of absolute value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

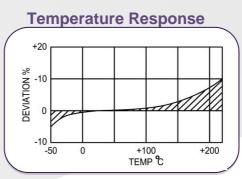
The d33 component suppression property of the Konic shear design, resulting in minimization of cross axis error, is particularly advantageous for three axis measurement integrity.

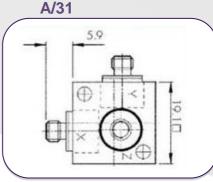
## **Options**

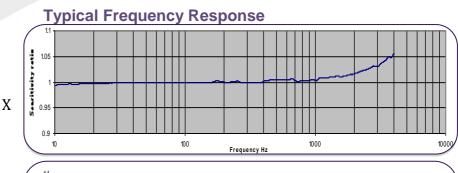
Wideband temperature calibration

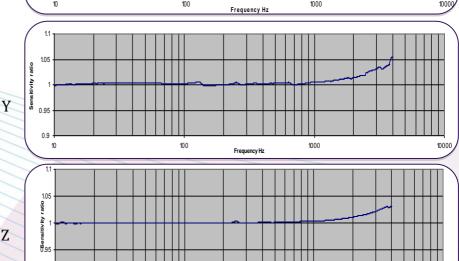
## A/31 Fixing Centers











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

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DJB Iss.2 2018





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	Metric	Imperial
Charge sensitivity nom.	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		
Pyro-electric corner frequency		
Cross axis error	≤5%	
Capacitance	1150 pF	
Temperature range	-50/ +220°C	-58/ +428°F
Charge sensitivity deviation (20°C/68°F)	-5% @ -50°C (-58°F) +10% @ +220°C (+428°F)	-5% @ -50°C (-58°F) +10% @ +220°C (+428°F)
Base strain sensitivity	≤ 5%	
Maximum continuous accn.g sine	9807m/s <sup>2</sup>	1000g
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	10-32UNF Microdot	

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