DJB Instruments
SENSING ENGINEERING INNOVATION

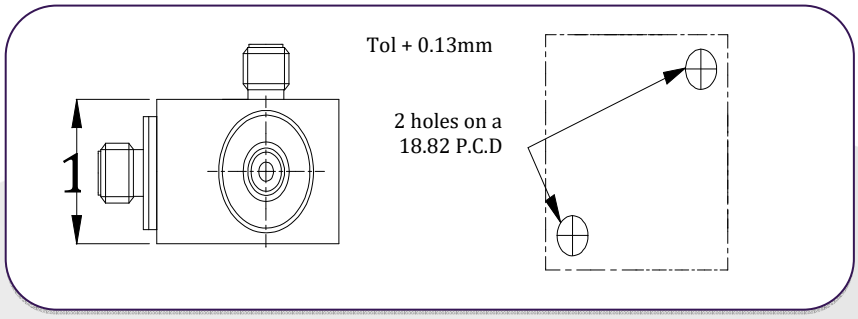
A/131/V Triaxial Piezo-Tronic IEPE Accelerometer

10mV/g up to 200 mV/g ± 10% 19gm Std Temp 125˚C

A lightweight triaxial vibration transducer compromising three, Konic shear® IEPE all welded inserts, bonded orthogonally into hard anodized aluminum housing. The inserts are electrically insulated, individually and from the housing eliminating ground loop interference. Low impedance O/P provides a high degree of noise immunity (80dB improvement vs. equiv. charge source device @ 50Hz) and allows use with low cost coaxial cable. The additional mechanical isolation implicit in the construction provides also near elimination of strain induced error.

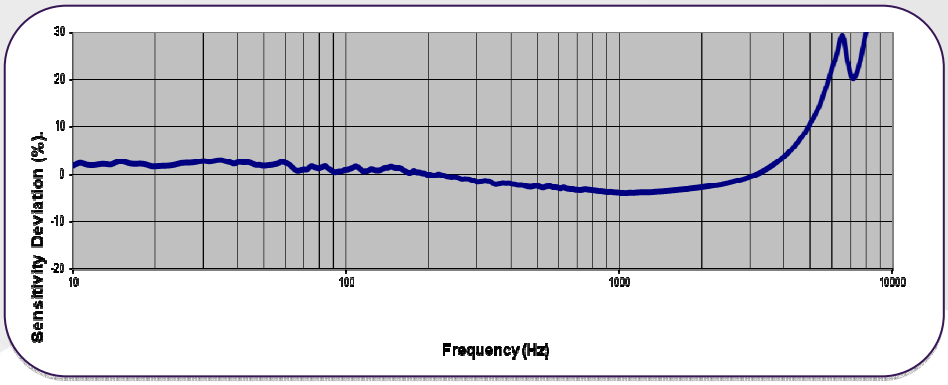
The multi sensor solution also offers the benefit of being repairable. If an insert is damaged it can usually be removed and replaced saving the cost of a new accelerometer.

A/131/V



Typical Frequency Response

X



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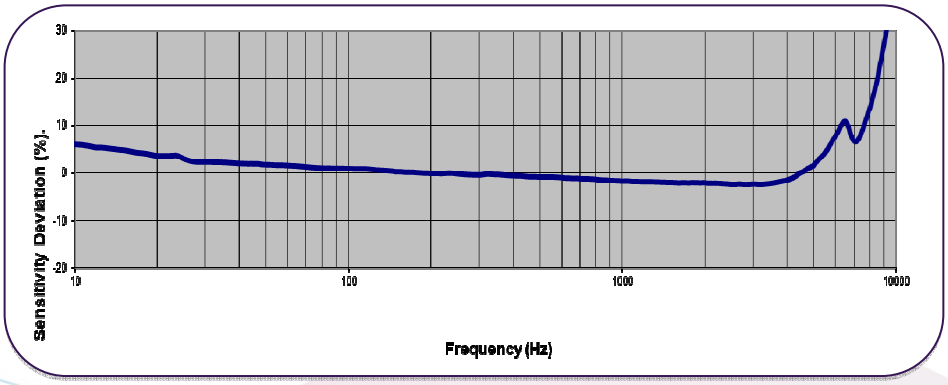
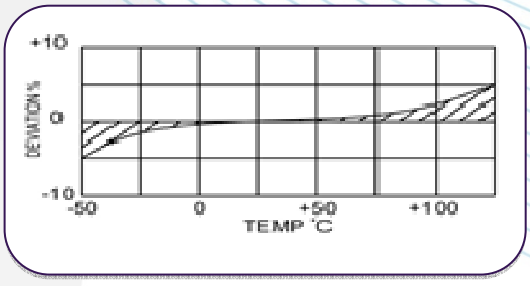


Temperature Response



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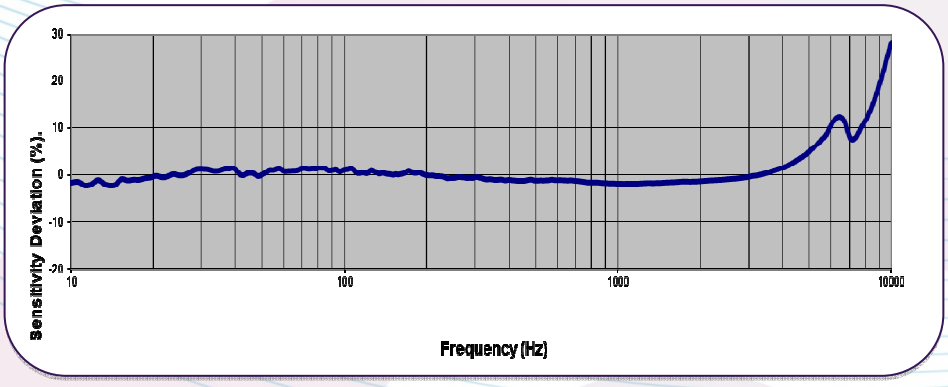

Please note: For information and reference only. Data should not be used as pass / fail criteria for calibration purposes

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

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Typical Spectral Noise (100mV/g)

1Hz	345µg/√Hz
10Hz	156µg/√Hz
100Hz	44µg/√Hz
1kHz	12.1µg/√Hz
10kHz	8.2µg/√Hz

	Metric		Imperial	
Voltage Sensitivity ±10%	1.02mV/(m/s²)	10.2mV/(m/s²)	10mV/g	100mV/g
Resonant frequency	X/Y Axis 25 kHz Z Axis 28 kHz			
Typical Frequency Response ±5% ±10%	1Hz - 3kHz 0.7Hz – 4kHz			
Cross axis error	≤5% max			
Temperature range	-50/+125°C		-58/+257°F	
Voltage sensitivity deviation (20°C/68°F)	-5% @ -50°C +5% @+125°C		-5% @-58°F +5% @+257°F	
Supply voltage	15/35 VDC			
Supply current	2/20mA			
Bias voltage	10/14 VDC			
Base strain sens/strain	<0.01g/µ strain			
Shock level	9806m/s²		1000g	
Case/Block Material	Inserts stainless steel 303 S31/ Aluminium Mounting Block			
Mounting	2x3.57mm through holes		2x 0.14in through holes	
Weight	19g		0.67oz	
Case seal	Transducer inserts welded and bonded into hard anodized aluminium block			
Size	19.1 x 19.1 x 11.7mm		0.75 x 0.75 x 0.46in	
Connector	3 x 10-32 UNF Microdot			

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