

A/34, A/34-2 Piezoelectric Triaxial Accelerometer

7pC/g nom.

19/22gm

220°C Max



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

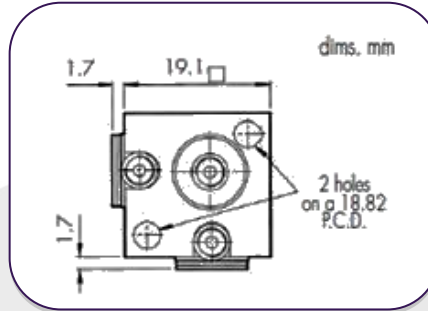
All the 3x10/32 Microdot connectors are exiting in the same direction. The inserts are electrically insulated, individually and from the housing, thus eliminating ground loop interference.

The additional mechanical isolation implicit in the construction provides near elimination of strain induced error.

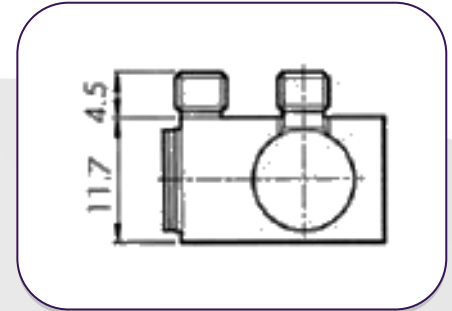
The spatial response of structure to dynamic forcing may lead to erroneous single axis vibration or shock measurement, due to the inherent directional property of the transducer. In cases where this is deemed to be a problem, an orthogonal three axis measurement allowing computation of absolute value 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/34

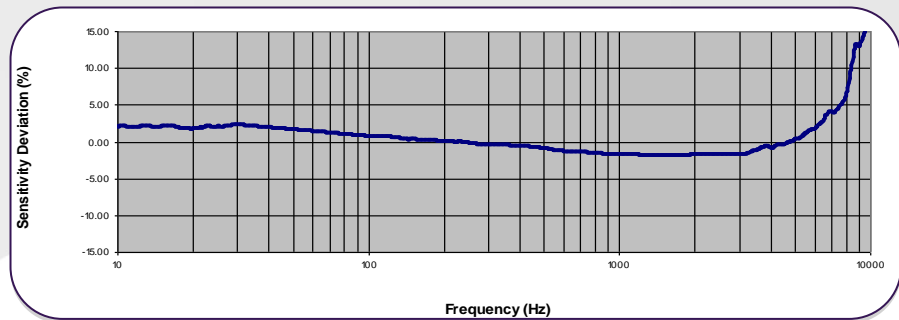


A/34-2

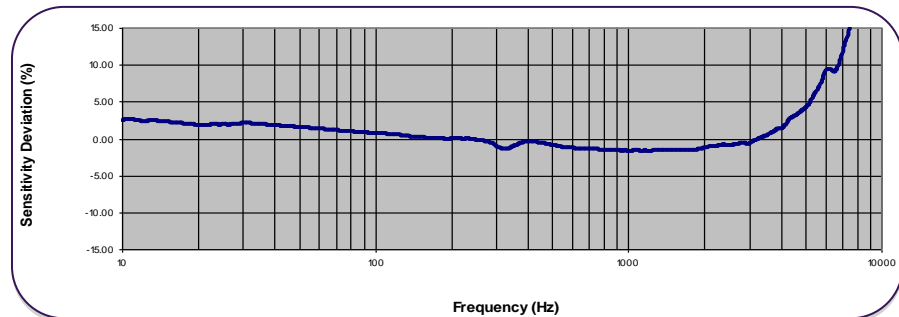


Typical Frequency Response

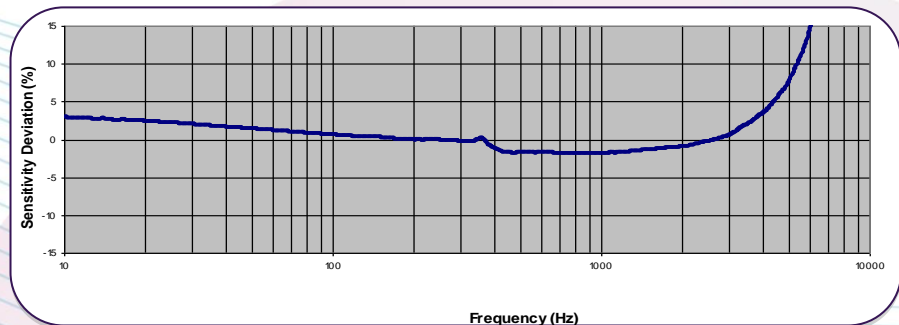
X



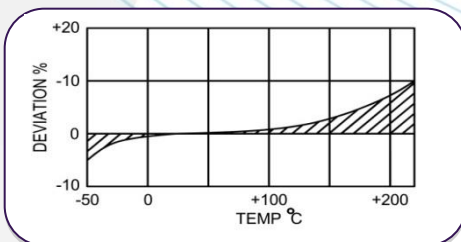
Y



Z



Temperature Response



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DJB Iss.1



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Options

- Wideband temperature calibration

	Metric	Imperial
Charge sensitivity nom.	0.71pC/(m/s ²)	7pC/g
Capacitance pF	1150	1150
Resonant Frequency KHz	15	15
Frequency Response (X & Y Axis) +/- 5% (Z Axis)	1Hz – 4KHz 1Hz – 3.5KHz	1Hz – 4KHz 1Hz – 3.5KHz
Cross Axis error % max	5	5
Temperature Range	-50/ +220°C	-58/ +428°F
Materials	s/steel 303 s31 inserts mtg. block al.alloy	s/steel 303 s31 inserts mtg. block al.alloy
Case Material	Transducer inserts welded, bonded into hard anodised al.block	Transducer inserts welded, bonded into hard anodised al.block
Connector	10-32 UNF Microdot	10-32 UNF Microdot
Maximum Continuous g/oz level	9,807m/s ²	1000g
Mounting	2 x 3.25mm Ø through holes (A/34) 1 x M4 Ø though hole + 3 x tapped 10-32 UNF x 4mm deep (A/34-2)	2 x 0.127in Ø through holes (A/34) 1 x M4 Ø though hole + 3 x tapped 10-32 UNF x 0.157in deep (A/34-2)
Weight	19g A34, 22g A/34-2	0.67oz A/34, 0.78oz A34-2
Size	19.1 x 19.1 x 11.7mm A/34 22.2 X 22.2 X 11.7mm A/34-2	0.75 x 0.75 x 0.46in A/34 0.87 x 0.87 x 0.46in a/34-2
Base strain Sensitivity	<0.01 g/μ strain	<0.01 g/μ strain
Max shock g pk. Rise time μ sec	98100m/s ² , 30	10000g,30
Case seal	Welded	Welded
Charge sensitivity deviation re 20°C/68°F	-5% @ -50°C +15% @ +250°C	-5% @ -50°C +15% @ +250°C

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