

Triaxial piezo-electric accelerometer

A/31



7pC/g nom./axis • 18gm wt.
220°C max. temp.

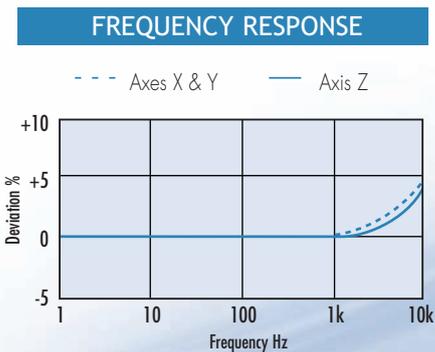
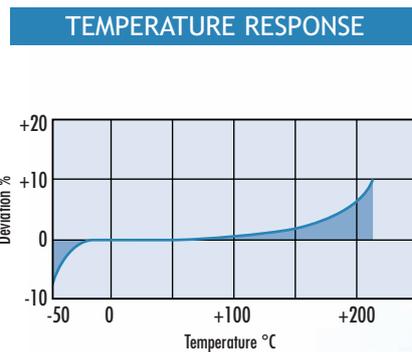
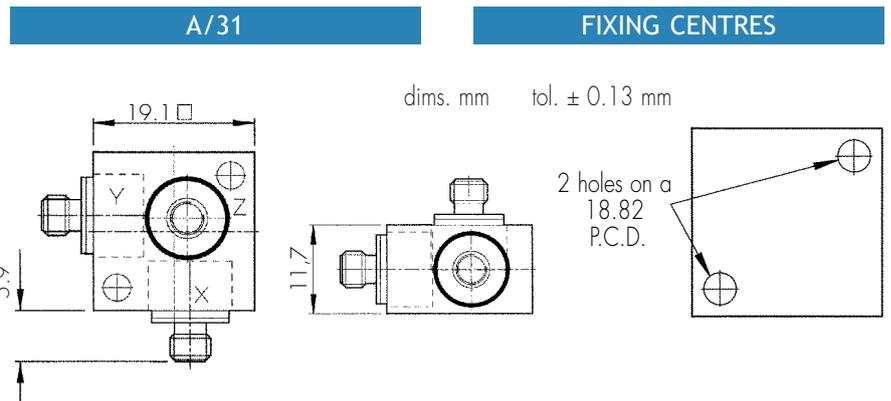
Lightweight triaxial vibration transducer comprising three KONIC all welded inserts bonded orthogonally into a hard anodised aluminium housing.

The inserts are electrically insulated, individually and from the housing, thus eliminating ground loop interference.

The additional mechanical isolation implicit in the construction provides also 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 design, resulting in minimisation of cross axis error, is particularly advantageous for three axis measurement integrity.



CONVERSION MODE	KONIC
Charge sensitivity pC/g (X, Y, Z)	5/9
Charge sens. % deviation re nom.	± 5
Capacitance pF	900/1400
Resonant frequency kHz	X (25) ; Y (25) ; Z (28)
Cross axis error % max	5
Temperature range °C	-50/+220
Charge sensitivity deviation re 20°C	-5% @ -50°C +10% @ +220°C
Pyro-electric output, g/°C	0.2
Pyro-electric corner freq. Hz	0.001
Base strain sens. g/ μ strain	< 0.001
Max continuous accn. g sine	1000
Insert /block insul. resce., M ohms	1000 @ 100V, 20°C
Materials	inserts s/steel 303 S31, mtg. block al. alloy
Mounting	2 x 3.25mm ϕ through holes
Weight gm	18
Connector	Microdot skt. 10/32 UNF thd.
Case seal	transducer inserts welded, bonded into hard anodised al.block

options

> wideband temperature calibration