

Piezo-electric accelerometer

A/29
A/29/T
A/29/TC

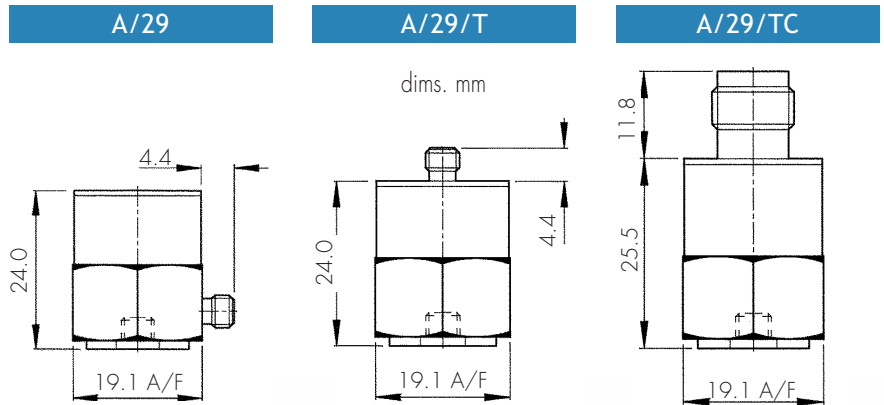


100pC/g ($\pm 5\%$) • 46gm wt.
250°C max. temp.

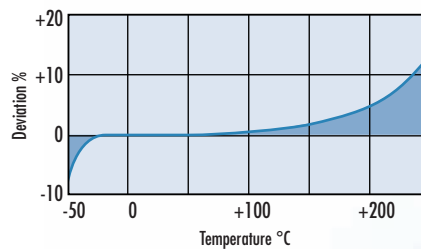
Close tolerance, 100pC/g normalised output accelerometers with ultra low strain induced error. Piezo-electric materials convert mechanical loading, however induced, to electrical charge. The A/29 is specifically configured to minimise the effect of physical inputs other than acceleration, thus enhancing measurement integrity in situations where flexural strain of the transducer could give rise to significant errors.

Accelerometers based around piezo-electric discs operating in d33 compression mode are particularly prone to this phenomenon, and typically have a strain sensitivity 40dB greater than that of the A/29.

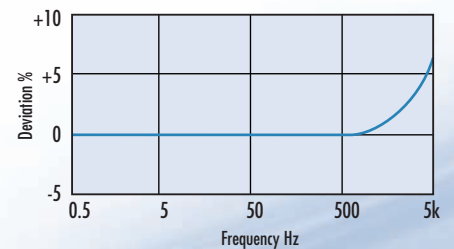
High sensitivity KONIC sensing element produces 100pC/g output from 46gm wt. transducer. Totally welded construction maximises reliability.



TEMPERATURE RESPONSE



FREQUENCY RESPONSE



CONVERSION MODE	KONIC
Charge sensitivity pC/g	100, $\pm 5\%$
Capacitance pF	1400/2000
Resonant frequency kHz	15
Cross axis error % max	5
Temperature range °C	-50/+250
Charge sensitivity deviation re 20°C	-5% @ -50°C +15% @ +250°C
Pyro-electric output, g/°C	0.2
Pyro-electric corner freq. Hz	0.002
Base strain sens. g/ μ strain	> 0.001
Max continuous accn. g sine	1000
Case material	s/steel 303 S31
Mounting	base tapped 10/32 UNF x 4mm deep
Weight gm	46, 50 (/TC)
Connector	Microdot skt. 10/32 UNF thd. (A/29, A/29/T) TNC skt. (A/29/TC)
Mounting torque Nm	1
Case seal	welded, hermetic connector (TNC)

options

- > Wideband temperature calibration, -50/+250°C
- > hermetic TNC connector version : ref. A/29/TC
- > proof pressure testing to 60 bar for submersible applications (hermetic versions)