

A/28 Micro-miniature Piezo Electric accelerometer

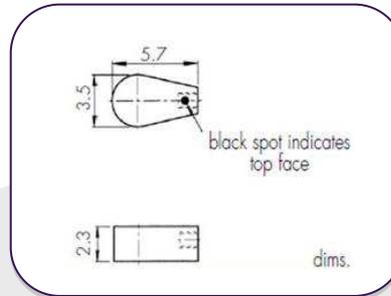
0.4pC/g nom.

0.25gm wt.

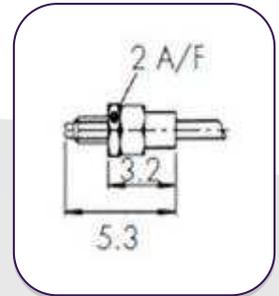
200°C Max



A/28/E

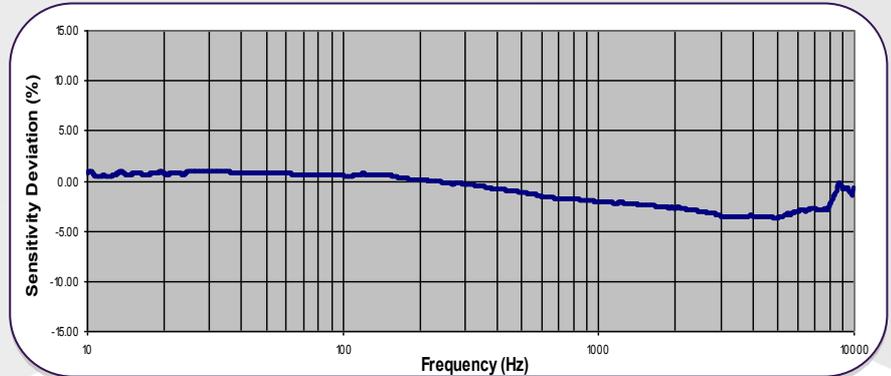


L8 CONNECTOR

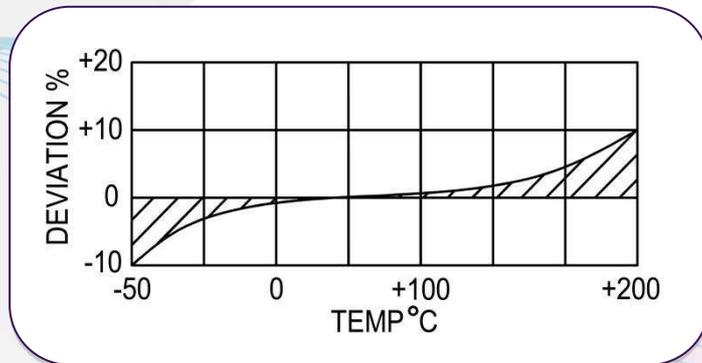


This ultra-small vibration transducer provides virtual transparency applied to the lightweight structures, allied to relative freedom from strain induced error. A/28/E incorporates a mechanically pre-loaded shear plate sensing element. Good practice in use of A/28/E will maximize service life. Removal from a structure involves shearing an adhesive bond, shock means are not advisable, use the detachment tool provided. Abrasive cleaning of the attachment face will reduce base thickness over time; sparing use of adhesive will aid longevity. Signal outlet is via a surface contact socket.

A 0.8mm dia. Soft line cable is available specifically for the A/28/E. although graded antimicrophonic a certain amount of triboelectric induced noise will be generated. This together with cable induced strain may be minimized by anchoring the cable adjacent to the transducer, which should reduce measurement uncertainty around 5% @ 10g. Minimum g threshold is determined by instrumentation noise and environmental factors. A typical instrumentation (charge amplifier) noise spectral density (nsd) is around 0.02fC Hz above 100Hz increasing by 3dB/octave below 100Hz. Wideband noise is nsd x bandwidth, i.e. 0.006pC/100 and assumes zero input capacitance, increasing by a further 0.006pC/nF input capacitance (assuming 1nF charge amplifier transfer capacitance).



Typical Frequency Response



Temperature Response

Conversion Mode	Konic
Charge sensitivity pC/g	0.3-0.6
Capacitance	250/420
Resonant Frequency KHz	45
Cross Axis error % max	5
Temperature Range °C	-50/ +200
Charge sensitivity deviation re 20 °C	-5% @ - 50°C +10% @ +200°C
Frequency Range	1Hz- 10KHz
Maximum Continuous 'g level	5000
Maximum Shock g level	10000
Case Material	s/steel 303 S31
Connector	L8
Case seal	Welded