DJB Instruments
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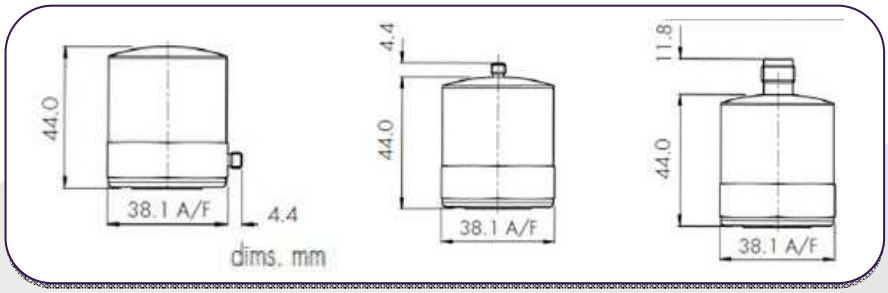
A/800/T/ TC Micro g Piezo-Electric Accelerometer

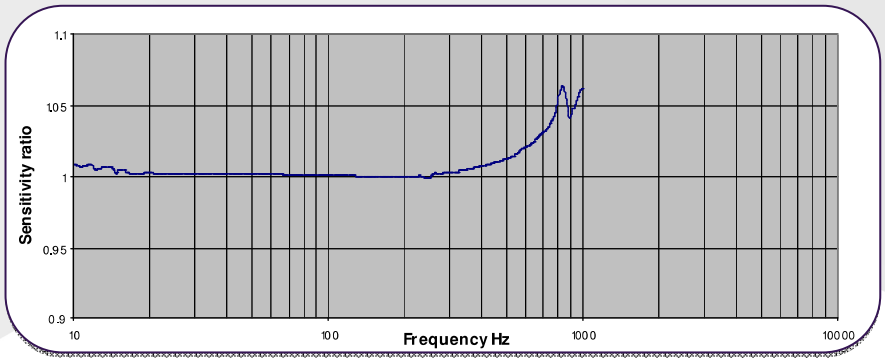
9nC/g nom **400gm wt** **150°C max temp**

Highest sensitivity multiple shear plate vibration transducers intended for micro g level measurement – virtual immunity to strain input side effects provides guarantee of low frequency ,measurement integrity. System nose level of 10-3pC is equivalent to 1µg. With bandwidth restricted to 2 kHz, 1 octave below resonance, noise floor should be significantly below this. Noise level vs. upper corner frequency for the CA/04/N charge amplifier, A/800 source and nominal 10Mtr, cable is shown in fig.1. Bear in mind that charge amplifier noise increases as a function of input capacitance – noise assessment should be made with the charge amplifier input correctly terminated. The transducer adds mass as it points of attachment to a structure, thus imposes a transparency constraint above which data corruption will be excessive.
The single degree of freedom example $\omega = \sqrt{\frac{I}{MT}}$ where MT represents the transducer mass, reduces ω by 3% for a transducer adding 10% to the structure mass. Application area of the A/800 is this limited in scope to low level vibration surveys in the civil engineering and heavy engineering domain.

A/800 A/800/T A/800/TC

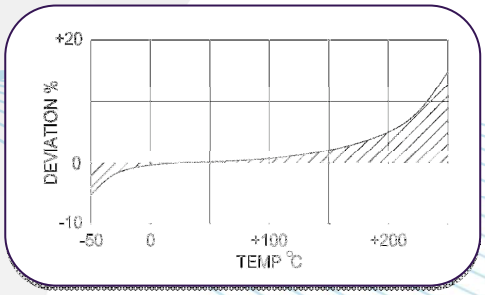


Typical Frequency Response



Conversion Mode	Konic
Charge sensitivity nC/g	7-11
Capacitance pF	26/31
Resonant frequency kHz	4
Cross axis error % max	5
Temperature range °C	-50/+150
Charge sensitivity deviation re 20 °C	-5%@ - 50 +15%@ +150
Frequency Range	
Max continuous accn. G sine	500
case material	s/steel 303 S31
mounting	Base tapped ¼ UNF x 4mm deep
weight gm	400/ 407 (TC)
connector	Microdot skt, 10/32 UNF thd (A/800,T) TNC skt. (A/800, TC)
case seal	Welded, hermetic connector (TNC)

Temperature Response



Options

- Hermetic TNC connector version : ref A/800, TC
- Wideband temperature calibration -50/+150°C

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