DJB Instruments
SENSING ENGINEERING INNOVATION

A/600, A600/T
Micro g Piezoelectric Accelerometer

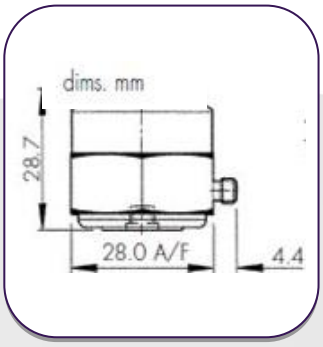
1.2 nC/g nom. 115gm 250ºC max. temp

Ultra high output, multiple shear plate vibration transducer. Shear plate construction provides near total isolation from mechanical inputs other than acceleration, thus safe guarding measurement integrity in applications where vibration is accompanied by high dynamic strain levels. Generalizing, these conditions are prevalent where modal frequencies are low, and are thus associated with vibration surveys of large structures. Transducers exhibiting significant strain response may operate more akin to strain gauges at low frequency excitation and their use is to be discouraged.
A number of parallel shear plates equivalent in total thickness to single plate of charge sensitivity Q and capacitance C, generates charge nQ. Clearly taken to the limit, noise degradation overrides signal increase, hence these products are largely a compromise between signal/noise and mass/size.

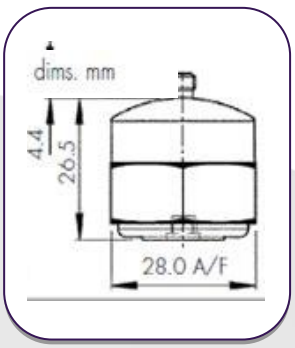
Options:

- Wideband temperature calibration -50/+250.C

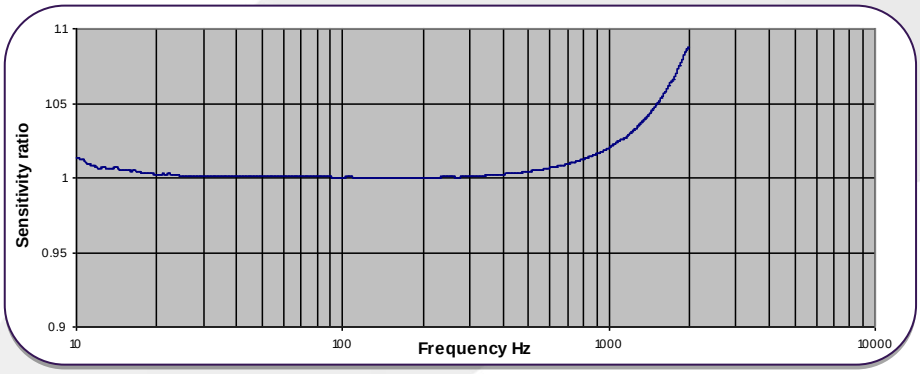
A/600



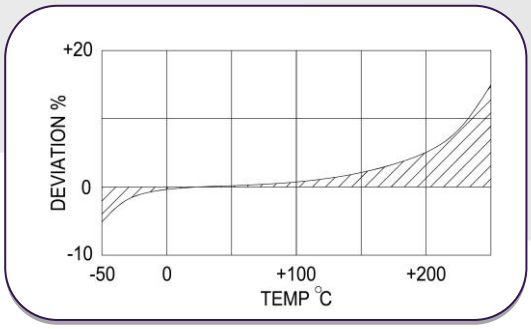
A/600/T



Typical Frequency Response



Temperature Response



	Metric		Imperial	
Charge Sensitivity nom.	0.09nC/(m/s^2)	0.14nC/(m/s^2)	0.9nC/g(m/s^2)	1.4nC/g(m/s^2)
Capacitance nF	6	9	6	9
Resonant frequency kHz	≈8		≈8	
Frequency Response	1Hz – 1kHz ±5% 1Hz – 2kHz ±10%		1Hz – 1kHz ±5% 1Hz – 2kHz ±10%	
Cross axis error % max	5		5	
Temperature range	-50/+250ºC		-58/+482ºF	
Charge Sensitivity Deviation re 20ºC	-5% @ -50ºC +15% @ +250ºC		-5% @ -58ºF +15% @ +482ºF	
Pyro-electric output, g/.C	0.2		0.2	
Pyro-electric corner frequency Hz	0.001		0.001	
Base strain sens gμ strain	10^{-4}		10^{-4}	
Max continuous accn. g sine	6,865m/s^2		700g	
Case material	s/steel 303 S31		s/steel 303 S31	
Mounting	Base tapped 10/32 UNF x 4mm deep		Base tapped 10/32 UNF x 0.16in deep	
Weight	115gm		4.06oz	
Connector	10-32 UNF Microdot skt.		10-32 UNF Microdot skt.	
Case seal	welded		welded	

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A UK company with UK-based manufacturing, assembly and calibration in-house.

bsi. ISO 9001 Quality Management