



## A/107/F, A/107/F/HT Industrial Piezoelectric Accelerometer

80gm 2 pole connector, lightweight version  
100pC/g nom. 300°C max(F)      10pC/g nom. 400°C max(F/HT)

Industrial grade vibration transducers high temperature 10pC/g version is rated to 400°C. Signal output is floating, via 2 pole hermetic connector, thus minimizing common mode interference. Ingress of contaminants into the transducer and/or connector will degrade data. Transducers and cables can be supplied proof pressure tested to 80bar, individually and as assemblies.

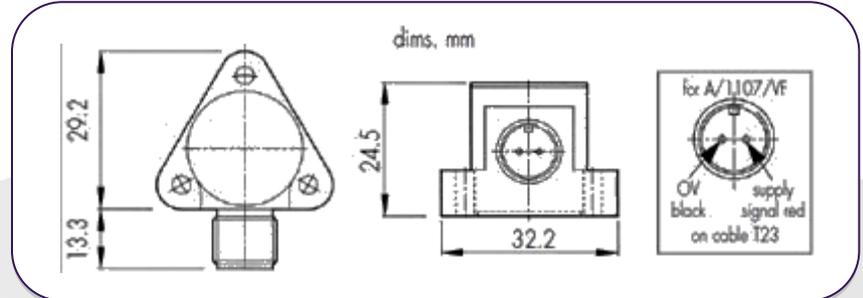
Pressure tested assemblies may be disconnected for ease of installation, subsequently replacing the sealing ring between the connector shells. The HT is proof to 400°C Exposure and is therefore suitable for gas turbine bearing vibration monitoring, with the proviso that a low pass inline filter may be needed to minimize blade passing frequency modulation, which gives rise to spurious phantom low frequency signal generation.

High temperature operation of the HT may be subject to degradation due to increased pyro-electric charge generation, together with significant fall in insulation resistance. Instrumentation bandwidth should be constrained to the minimum needed for measurement integrity. A/107's comprise isolated welded hermetic case. Internal electrical connections are welded. Pressure and thermal cycle tests are recommended for hostile environment applications.

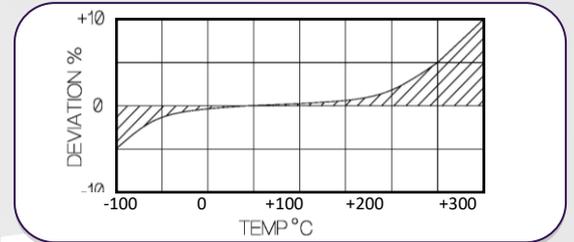
### Options:

- Temperature calibration to 400°C (/HT)
- Proof pressure testing to 80bar
- Voltage O/P version: A/1107/VF (100mV/g)

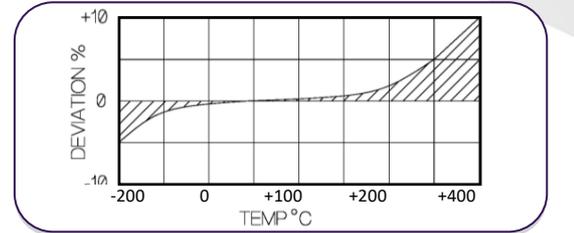
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Temperature Responses A/107/F



A/107/F/HT



	Metric		Imperial	
	A/107/F	A/107/F/HT	A/107/F	A/107/F/HT
Charge Sensitivity pC/g nom.	80/110	10	80/110	10
Capacitance pF	1400/2400	150/400	1400/2400	150/400
Resonant Frequency kHz	18		18	
Cross Axis Error % max	5		5	
Temperature Range	-50/ +300 °C	-50/ +400 °C	-58/ +572°F	-58/ +752°F
Charge Sensitivity Deviation re 20°C/68°F	-5% @ -50°C +15% @ +300°C	-5% @ -50°C +15% @ +400°C	-5% @ -58°F +15% @ +572°F	-5% @ -58°F +40% @ +752°F
Pyro-electric Output, g/°C	0.2		0.2	
Pyro-electric corner frequency Hz	0.002		0.002	
Base strain sens/ strain	0.01		0.01	
Max continuous accn. g sine	9,807m/s <sup>2</sup>		1000	
Case material	s/steel 303 s31	Inconel	s/steel 303 s31	Inconel
Mounting	3 x 3.2mm holes, 25.4mm PCD		3 x 0.13in holes, 1inch PCD	
Weight	80gm		2.82oz	
Case seal	Welded, hermetic		Welded, hermetic	
Size	29.2 x 29.2 x 24.5mm		1.15 x 1.15 x 0.96in	
Connector	2 pole connector 7/16 UNS		2 pole connector 7/16 UNS	

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

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