

## A301/F, A/301/F/HT Industrial Piezoelectric Accelerometer

220pC/g nom. 260°C max (F) 150gm  
25pC/g nom. 400°C max (F/HT) 150gm



High output industrial grade vibration transducers. High temperature (HT) 25pC/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. Transducer 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 a gas turbine bearing vibration monitoring with the provision 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.

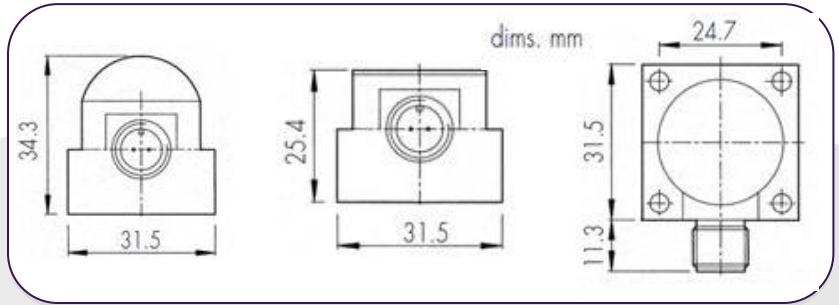
High temperature operation of the HT may subject to degradation due to increased pyro-electric charge generation, together with a significant fall in insulation resistance. Instrumentation bandwidth should be constrained to the minimum needed measurement integrity. A/301's comprises isolated Konic shear sensing element housed in all welded hermetic case. Internal electrical connections are welded.

Pressure and thermal cycle tests are recommended for hostile environment applications.

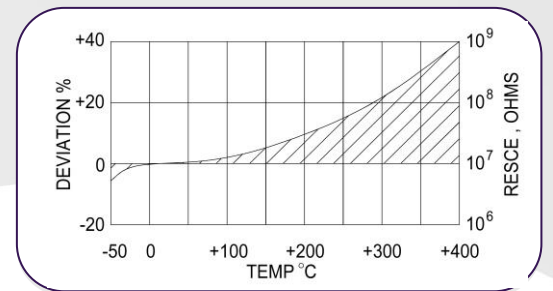
A/301 F/HT

A/301 F

A/301F & HT



### Temperature Response

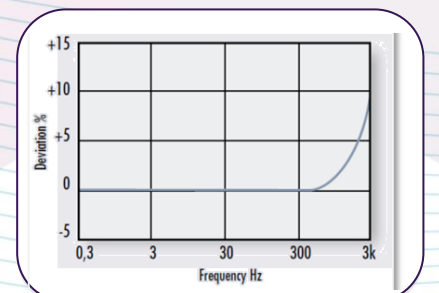


	Metric		Imperial	
	A/301/F	A/301/F/HT	A/301/F	A/301/F/HT
Charge sensitivity nom.	22.43pC/(m/s <sup>2</sup> )	2.55pC/(m/s <sup>2</sup> )	220pC/g	25pC/g
Capacitance pF	1400/2400	300/900	1400/2400	300/900
Resonant frequency kHz	8		8	
Cross axis error % max	5		5	
Temperature range	-50/+260°C	-50/ +400°C	-58/+500°F	-58/ +752°F
Charge sensitivity deviation re 20°C/68°F	-5% @ -50°C +15% @ +260°C	-5% @ -50°C +40% @ +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	0.002		0.002	
Base strain sens/ strain	0.01		0.01	
Max continuous accn. g sine	9,807m/s <sup>2</sup>		1000g	
Case material	s/steel 303 S31 Inconel		s/steel 303 S31 Inconel	
Mounting	4x 3.8mm holes, 35mm PCD		4x 0.15in holes, 1.38in PCD	
Weight	150gm		5.29oz	
Case seal	Welded, hermetic		Welded, hermetic	
Size	31.5 x 34.3 x 24.7mm A/301/F 31.5 x 25.4 x 24.7mm A/301F/HT		1.24 x 1.35 x 0.97in A/301/F 1.24 x 1 x 0.97in A/301F/HT	
Connector	7/16 UNS HT Microdot		7/16 UNS HT Microdot	

### Options

- Close tolerance output: temperature calibration to 400°C (HT)
- Proof pressure testing to 80bar

### Typical Frequency Response



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DJB Iss.1

