Industrial piezo-electric accelerometer

A/301/F
A/301/F/HT

220pC/g, 300°C max (/F) • 25pC/g, 400°C max (/F/HT)
150gm wt. • 2 pole connector

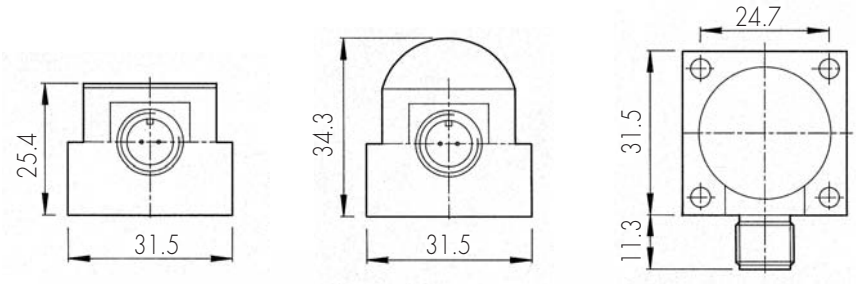
High output industrial grade vibration transducers. /HT 25pC/g version is rated to 400°C. Signal output is floating, via 2 pole hermetic connector, thus minimising common mode interference.
Ingress of contaminants into the transducer and/or connector will degrade data.
Transducers and cables can be supplied 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 420°C exposure and is therefore suitable for a gas turbine bearing vibration monitoring, with the proviso that a low pass inline filter may be needed to minimise 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 a significant fall in insulation resistance. Instrumentation bandwidth should be constrained to the minimum needed for measurement integrity. A/301's comprise isolated KONIC 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

A/301/F/HT

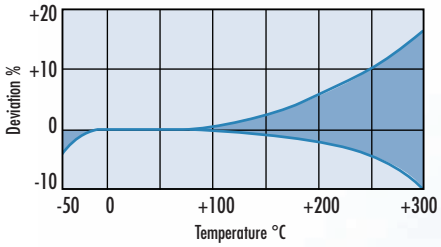
A/301/F A/301/F/HT

dims. mm



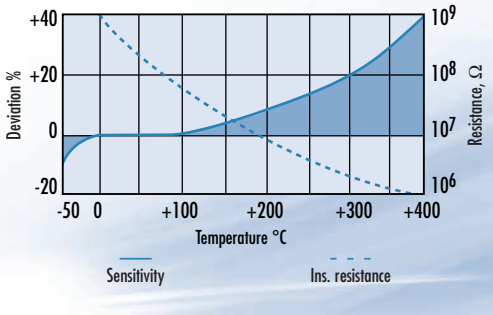
TEMPERATURE RESPONSE

A/301/F



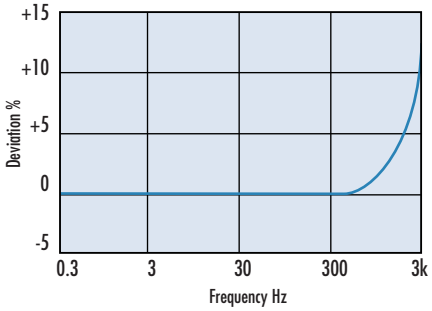
TEMPERATURE RESPONSE

A/301/F/HT



FREQUENCY RESPONSE

A/301/F and A/301/F/HT



CONVERSION MODE	KONIC	
	A/301/F	A/301/F/HT
Charge sensitivity pC/g @ 20°C	190/250	23/31
Capacitance pF (ex cable)	1400/2400	300/900
Resonant frequency kHz	8	
Cross axis error % max	5	
Temperature range °C	-50/+300	-50/+400
Charge sensitivity deviation re 20°C	-5% @ -50°C +15% @ +300°C	-5% @ -50°C +40% @ +400°C
Pyro-electric output, g/°C	0.2	0.2
Pyro-electric corner freq. Hz	0.002	0.002
Base strain sens. g/μ strain	0.01	0.01
Max continuous accn. g sine	1000	
Case material	s/steel 303 S31	inconel
Mounting	4 x 3.8mm ø holes, 35mm PCD	
Weight gm	150	
Connector	2 pole, 7/16 UNS thd., hermetic	
Case seal	welded, hermetic	

options

- close tolerance output
- temperature calibration to 400°C (/HT)
- proof pressure testing to 80bar