Industrial piezo-electric accelerometer

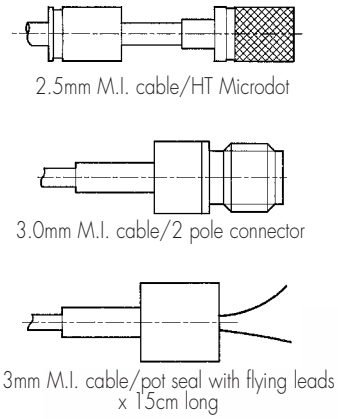
A/52/F
A/52/F/HT

100pC/g, 300°C max (/F) • 12pC/g, 400°C max (/F/HT)
100gm wt. • isolated output hermetic ; integral hardline cable

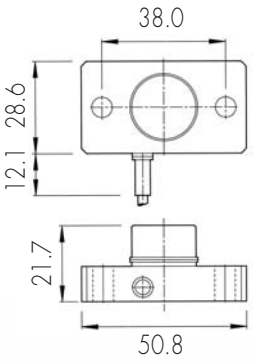
Industrial grade vibration transducers with integral hardline cable, available in two temperature ratings, and suitable for long term monitoring of plant and machinery in environments likely to be deleterious to less robust products. A/52/F's have operated reliably, on plant subjected to continuous use for periods of up to 10 years. This is not fortuitous, but is borne of rigorous, application specific testing related to actual useage. We recommend proof pressure testing and elevated temperature hardening where appropriate to help build in the requisite level confidence.

A/52's are built around the KONIC sensing element, characterised by minimal response to physical inputs other than axial acceleration, and feature all welded construction, including integral hardline cable terminations.

FIG. 1



A/52/F - A/52/F/HT

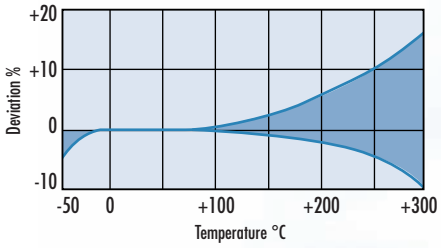


dims. mm

Cable min. bend rad ll		
2.5mm	temp. radius 15mm	perm. radius 7.5mm
3.0mm	temp. radius 18mm	perm. radius 9mm

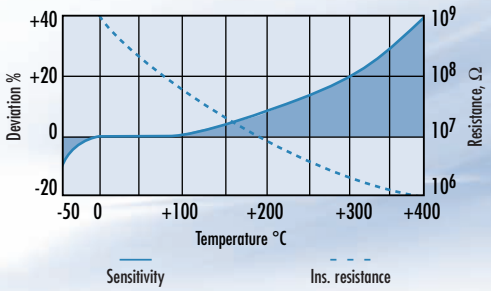
TEMPERATURE RESPONSE

A/52/F



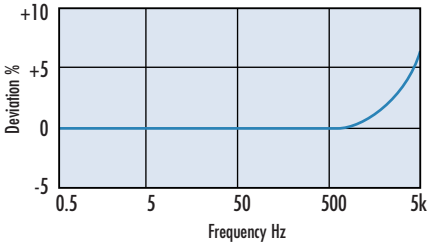
TEMPERATURE RESPONSE

A/52/F/HT



FREQUENCY RESPONSE

A/52/F and A/52/F/HT



CONVERSION MODE	KONIC	
	A/52/F	A/52/F/HT
Charge sensitivity pC/g	90/110	10/13
Capacitance pF (ex cable)	1400/1800	300/900
Resonant frequency kHz	12	
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	2 x 6.4mm ø holes @ 38mm ctrs.	
Weight gm	100	
Case seal	welded, hermetic	

options

- close tolerance output
- temperature calibration to 400°C (/HT)
- proof pressure testing to 100bar
- cable/connector options are shown in Fig.1