



Industrial piezo-electric accelerometer

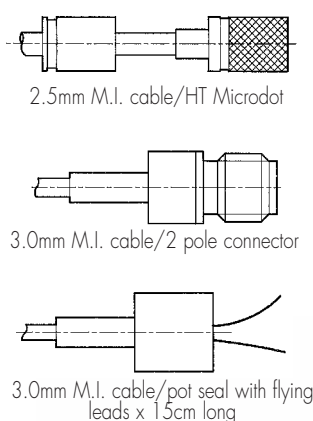
A/81/F A/81/F/HT

230pC/g, 300°C max (/F) • 35pC/g, 400°C max (/F/HT)
150gm wt. • isolated output hermetic ; integral hardline cable

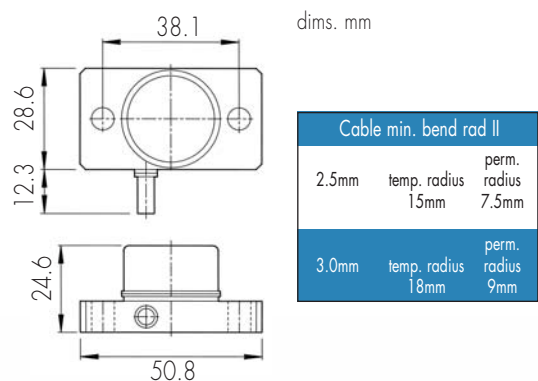
High output, industrial grade accelerometer with integral hardline cable, and available in two temperature ratings. Hermetic construction is proof against degradation under severe operating conditions including high pressure fluid immersion. /F version is suitable for milli g monitoring with appropriate instrumentation.

High temperature vibration measurement may be subject to increased noise level caused by insulation resistance drop and high level of pyro-electric charge generation, necessitating bandwidth limitation. Low level measurement threshold is determined by wide band noise, series and common mode electrical interference. These can be minimised by choice of instrumentation and transducer cabling. Construction comprises electrically isolated KONIC sensing element and all welded case and case/cable seal for maximum measurement integrity and reliability. Proof pressure testing and elevated temperature burn in is recommended where appropriate.

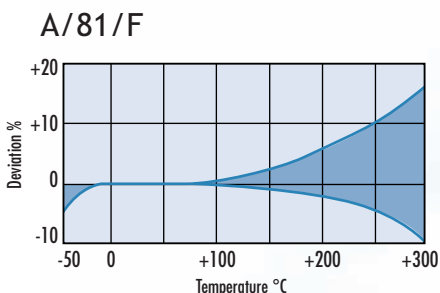
FIG. 1



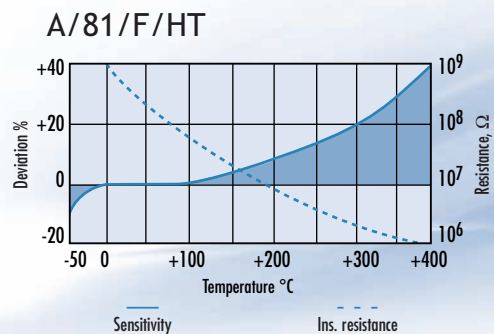
A/81/F - A/81/F/HT



TEMPERATURE RESPONSE

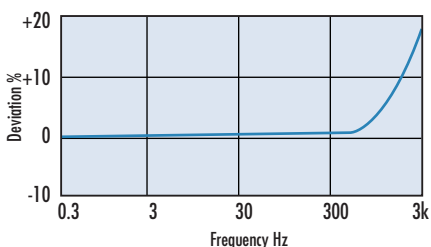


TEMPERATURE RESPONSE



FREQUENCY RESPONSE

A/81/F and A/81/F/HT



CONVERSION MODE	KONIC	
	A/81/F	A/81/F/HT
Charge sensitivity pC/g	210/260	25/45
Capacitance pF (ex cable)	1400/2000	300/900
Resonant frequency kHz	10	
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	0.1	0.1
Pyro-electric corner freq. Hz	0.001	0.001
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 @ 38.1mm ctrs	
Weight gm	150	
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