

## A/81/F, A/81/F/HT Industrial Piezoelectric Accelerometer

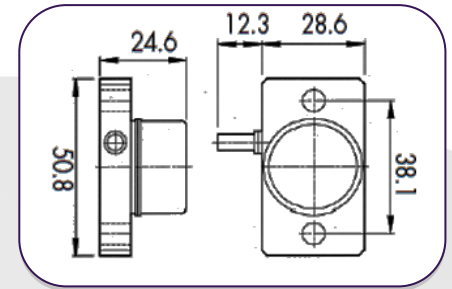
35pC/g nom. 260°C Max temp, 150gm  
230pC/g nom. 400°C Max temp, 150gm



High output industrial grade accelerometer with integral hard-line 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 of electrically isolated Konic shear sensing element and all welded case and case/cable seal maximum measurement integrity and reliability. Proof pressure testing and elevated temperature burn is recommended where appropriate.

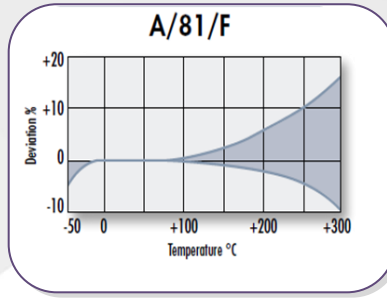
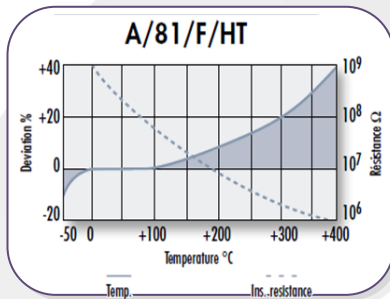
A/81/F – A/81/F, /HT



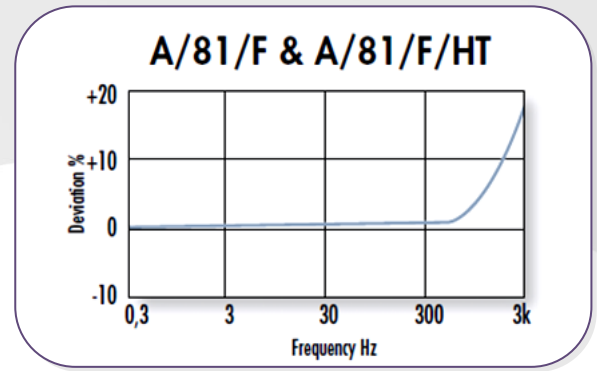
### Options

- Close tolerance output
- Temperature calibration to 400°C (/HT)
- Proof pressure testing to 100bar
- Cable/connector options (fig. 1)

### Temperature Response



### Typical Frequency Response



	Metric		Imperial	
	A/81/F	A/81/F/HT	A/81/F	A/81/F/HT
Charge sensitivity nom.	23.45pC/(m/s <sup>2</sup> )	3.55pC/(m/s <sup>2</sup> )	230pC/g	35pC/g
Capacitance pF	1400/2000	300/900	1400/2000	300/900
Resonant frequency kHz	10		10	
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% @ +500°F	-5% @ -58°F +40% @ +752°F
Pyro-electric output, g/°C	0.1		0.1	
Pyro-electric corner frequency Hz	0.001		0.001	
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	2 x 6.4mm holes @ 38 ctrs		2 x 0.25in holes @ 38 ctrs	
Weight (exc. Cable)	150gm	160gm	5.29oz	5.64oz
Case seal	Welded, hermetic		Welded, hermetic	
Cable	Integral Hardline Cable		Integral Hardline Cable	
Connector	7/16/UNF HT Microdot		7/16/UNF HT Microdot	
Size	50.8 x 29.6 x 24.6mm		2 x 1.17 x 0.97in	

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DJB Iss.1

