

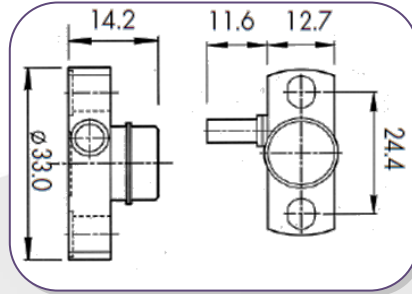


A/53/F, A/53/F/HT Industrial Piezoelectric Accelerometer

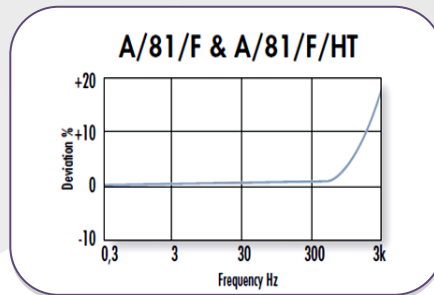
1.7pC/g nom. 260°C Max temp 20gm
12pC/g nom. 400°C Max temp 20gm

Miniature and rugged, this industrial grade accelerometer with integral hard-line cable is suitable for long term vibration monitoring in adverse environments. The transducers are hermetic and are proof up to 100 bar fluid pressure @ 20°C. Isolated signal minimises ground loop interference, however the 2 core cable termination option, being unguarded ground loop induced voltage may need a different charge amplifier interface. The alternative triaxial cable guards signal transmission external to the accelerometer. Choice of cable is somewhat subjective and involves physical and cost trade-offs. High temperature operations (A/53F, HT) are accompanied by significant reduction insulation resistance and by low frequency pyro-electric noise content this may impose a minimum frequency constraint. A/53's have seen extensive long term service in a variety of hostile environments. We recommend thermal burn-in and proof pressure tests where appropriate. Konic shear sensing element, all welded construction, and welded cable termination maximises measurement integrity and reliability.

A/53/F – A/53/F, /HT



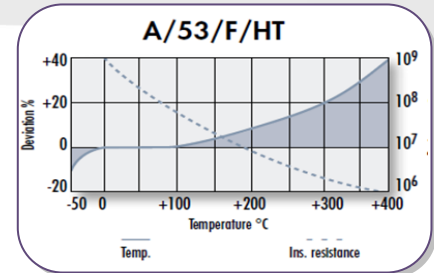
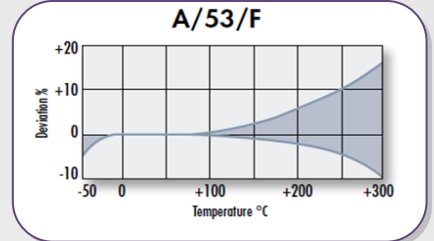
Typical Frequency Response



Options

- Close tolerance output
- Temperature calibration to 400°C (/HT)
- Proof pressure testing to 100bar

Temperature Response



	Metric		Imperial	
	A/53/F	A/53/F/HT	A/53/F	A/53/F/HT
Charge sensitivity nom.	12pC/(m/s ²)	1.7pC/(m/s ²)	12pC/g	1.7pC/g
Capacitance pF	1400/1800	400/900	1400/1800	400/900
Resonant frequency kHz	15		15	
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°C @ +400°C	-5% @ -58°F +15% @ +500°F	-5% @ -58°F +104°F @ +752°F
Pyro-electric output, g/°C	0.1		0.1	
Pyro-electric corner frequency Hz	0.01		0.01	
Base strain sens/ strain	0.002		0.002	
Max continuous accn. g sine	9,807m/s ²		1000g	
Case material	s/steel 303 s31		s/steel 303 s31	
Mounting	2 x 5.2mm holes @ 24.4mm		2 x 0.20in holes @ 0.96in	
Weight exc. cable	20gm		0.71oz	
Case seal	Welded, hermetic		Welded, hermetic	
Cable	Integral Hardline Cable		Integral Hardline Cable	
Connector	7/16/UNF HT Microdot		7/16/UNF HT Microdot	