HS-100T Accelerometer

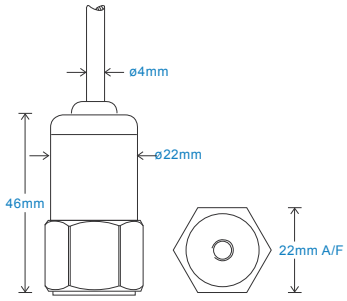
AC acceleration and temperature output via Flame Retardant Cable

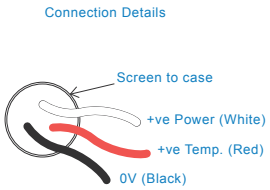
Key Features

- Temperature output
- Low smoke, halogen free cable
- For use with data collector

Industries

Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB
Isolation	Base isolated
Range	see: 'How To Order' table
Temperature Output	10 mV/ºC standard 100°C - Option 140°C
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	106gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Flame Retardant - length to be specified with order
Mounting Threads	see: 'How To Order' table

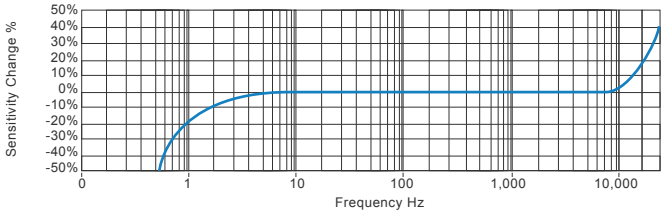
Electrical

Excitation Voltage	18-30 Volts DC
Electrical Noise	0.5mA to 8mA
Current Range	10 - 12 Volts DC
Bias Voltage	2 seconds
Settling Time	200 Ohms max.
Output Impedance	$>10^8$ Ohms at 500 Volts
Case Isolation	

Environmental

Operating Temperature Range	-40 to 100°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

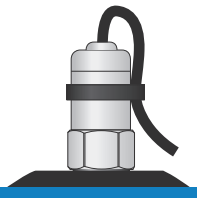
Typical Frequency Response (at 100mV/g)



Applications

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, VAC, Spindles, Machine Tooling, Process Equipment

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



How To Order

Product Prefix
HS - Hansford Sensors

Product Series
100 - Industrial Vibration Sensor

Cable Length
QXX - length specified in metres

H	S	1	0	0	T	X	X	X	X	X	X	X	X	X	X

Extra Options (if required)

F	- Filtered
I	- Intrinsically Safe
L	- 316L Stainless Steel
S	- 90° Side Exit
T	- Temperature Output
Y	- 5% tolerance on sensitivity

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±800g	34kHz	(2,040kcpm)
030	- 30mV/g	±250g	33kHz	(1,980kcpm)
050	- 50mV/g	±160g	32kHz	(1,920kcpm)
100	- 100mV/g	±80g	30kHz	(1,800kcpm)
250	- 250mV/g	±32g	28kHz	(1,680kcpm)
500	- 500mV/g	±16g	26kHz	(1,560kcpm)

Cable/Connector

01	- PUR
03	- Braided
07	- Silicon
15	- Flame Retardant
52	- 3 Pin MS
54	- M12

Mounting Threads

01	- ¼-28" UNF Female
02	- ¼-28" UNF Male
05	- Quick Fit Female
06	- M6 x 1mm Male
08	- M8 x 1.25mm Male
10	- M10 x 1.5mm Male

Hansford Sensors
Excellence in Vibration Monitoring

www.hansfordsensors.com
sales@hansfordsensors.com