HS-105S High Temp. Accelerometer

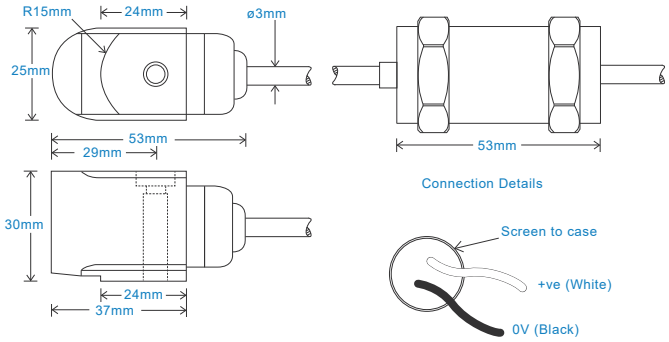
AC output via Low Noise Cable

Key Features

- Includes external charge amplifier
- Optional temperature ranges
- Low noise cable

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
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 35mm long
Weight	185gms (nominal)
Maximum Cable Length	1000 metres
Cable	see: 'How To Order' table - (20 metres
	max between sensor and charge amplifier)
Mounting Threads	see: 'How To Order' table

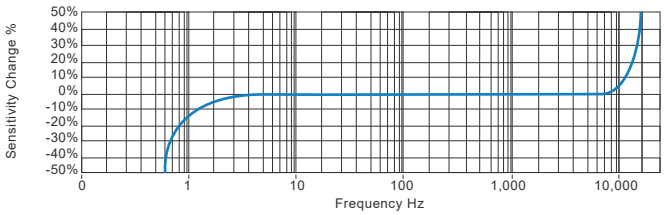
Electrical

Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	$>10^8$ Ohms at 500 Volts

Environmental

Operating Temperature Range	-55°C to see 'How To Order' table for max
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

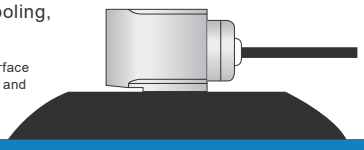
Typical Frequency Response (at 100mV/g)



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
105 - Industrial Vibration Sensor

Cable Length (if integral cable)
QXX/XX - length before/after charge amp, specified in metres

H	S	1	0	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Extra Options (if required)
I - Intrinsically Safe
S - 90° Side Exit
Y - 5% tolerance on sensitivity

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±800g	28kHz	(1,680kcpm)
030	- 30mV/g	±250g	26kHz	(1,560kcpm)
050	- 50mV/g	±160g	24kHz	(1,440kcpm)
100	- 100mV/g	±80g	22kHz	(1,320kcpm)
250	- 250mV/g	±32g	20kHz	(1,200kcpm)
500	- 500mV/g	±16g	18kHz	(1,080kcpm)

Cable
04 - Low Noise (150°C)
05 - Low Noise (250°C)

Connector
02 - Braided
50 - 2 Pin MS

*The above connectors can't be used with Intrinsically Safe

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

Hansford Sensors
Excellence in Vibration Monitoring

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We reserve the right to alter the specification of this product without prior notice

TS123.7