

# HS-105S High Temp. Accelerometer

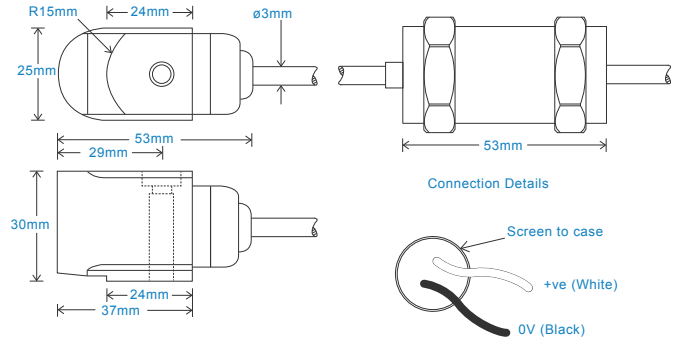
## AC output via Low Noise Cable

### 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 $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$
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

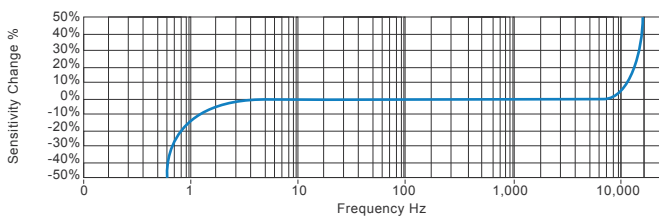
### Electrical

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

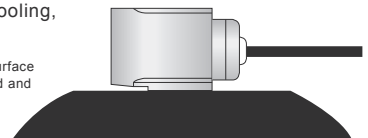
### Typical Frequency Response (at 100mV/g)



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 105 - Industrial Vibration Sensor	<b>Cable Length (if integral cable)</b> QXX/XX - length before/after charge amp, specified in metres													
<b>H</b>	<b>S</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>S</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b> I - Intrinsically Safe RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensitivity		<b>Sensitivity</b> 010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g	<b>Range</b> $\pm 800\text{g}$ $\pm 250\text{g}$ $\pm 160\text{g}$ $\pm 80\text{g}$ $\pm 32\text{g}$ $\pm 16\text{g}$	<b>Resonant Frequency</b> 27kHz (1,620kcpm) 25kHz (1,500kcpm) 23kHz (1,380kcpm) 21kHz (1,260kcpm) 19kHz (1,140kcpm) 17kHz (1,020kcpm)	<b>Cable</b> 04 - Low Noise (150°C) 05 - Low Noise (250°C)	<b>Mounting Threads</b> 02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male									



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We reserve the right to alter the specification of this product without prior notice  
TS123.4

