

# HS-100 Accelerometer

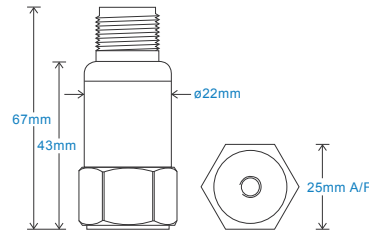
## AC acceleration output via 2 Pin MS Connector

### Key Features

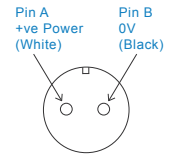
- Most common seller
- For use with data collector
- Customisable features

### Industries

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



### Connection Details



### 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
Weight	125gms (nominal)
Screened Cable Assembly	see: <a href="http://www.hansfordsensors.com">www.hansfordsensors.com</a> for options
Connector	HS-AA004 - non-booted HS-AA053 or HS-0054 - booted
Mounting Threads	see: 'How To Order' table

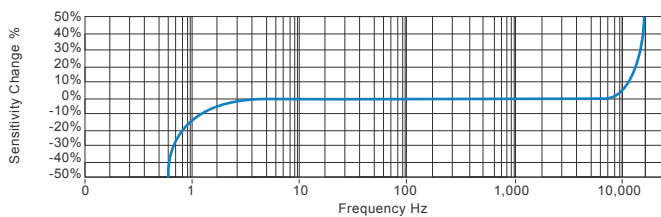
### Electrical

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 to 140°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

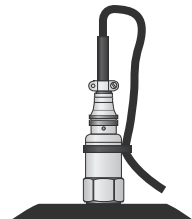
### Typical Frequency Response (at 100mV/g)



### 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	Product Series	Cable Length (if integral cable)													
HS - Hansford Sensors	100 - Industrial Vibration Sensor	QXX - length specified in metres													
<b>H</b>	<b>S</b>	<b>1</b>	<b>0</b>	<b>0</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>X</b>
<b>Extra Options (if required)</b>		<b>Sensitivity</b>	<b>Range</b>	<b>Resonant Frequency</b>		<b>Cable/Connector</b>			<b>Mounting Threads</b>						
F - Filtered	010 - 10mV/g	$\pm 800\text{g}$	28kHz (1,680kcpm)	01 - 1/4-28" UNF Female		01 - PUR			02 - Braided						
I - Intrinsically Safe	030 - 30mV/g	$\pm 250\text{g}$	26kHz (1,560kcpm)	02 - 1/4-28" UNF Male		02 - Braided			05 - Quick Fit Female						
L - 316L Stainless Steel	050 - 50mV/g	$\pm 160\text{g}$	24kHz (1,440kcpm)	06 - M6 x 1mm Male		07 - Silicon			08 - Flame Retardant						
RT - Temperature Output PT100	100 - 100mV/g	$\pm 80\text{g}$	22kHz (1,320kcpm)	08 - M8 x 1.25mm Male		08 - Flame Retardant			50 - 2 Pin MS						
T - Temperature Output	250 - 250mV/g	$\pm 32\text{g}$	20kHz (1,200kcpm)	08 - M8 x 1.25mm Male		50 - 2 Pin MS			54 - M12						
Y - 5% tolerance on sensitivity	500 - 500mV/g	$\pm 16\text{g}$	18kHz (1,080kcpm)	10 - M10 x 1.5mm Male		54 - M12									



[www.hansfordsensors.com](http://www.hansfordsensors.com)  
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We reserve the right to alter the specification of this product without prior notice  
TS001.6

