

# HS-170 Premium Accelerometer

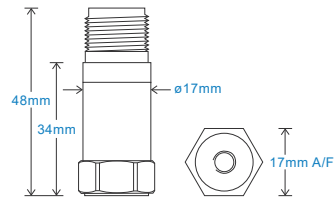
## AC acceleration output via 2 Pin MS Connector

### Key Features

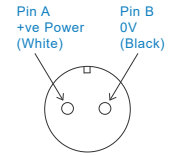
- Compact design
- Premium design
- Customisable features

### 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 14kHz (840kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8 Nm
Weight	52gms (nominal) body only
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

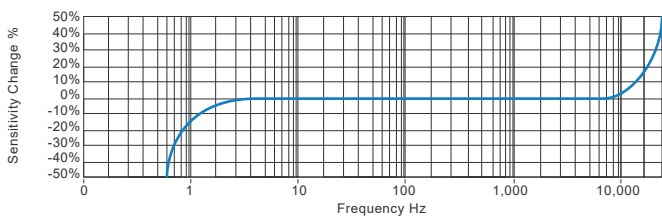
### Electrical

Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	1 second
Output Impedance	200 Ohms max.
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-55 to 150°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

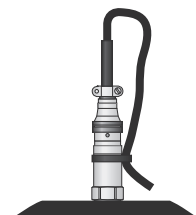
### Typical Frequency Response (at 100mV/g)



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 170 - Compact Premium Industrial Vibration Sensor										
<b>H</b>	<b>S</b>	<b>1</b>	<b>7</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>Extra Options (if required)</b> F - Filtered L - 316L Stainless Steel S - 90° Side Exit 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> 34kHz (2,040kcpm) 32kHz (1,920kcpm) 30kHz (1,800kcpm) 28kHz (1,680kcpm) 26kHz (1,560kcpm) 24kHz (1,440kcpm)	<b>Cable/Connector</b> 02 - Braided 08 - Flame Retardant 50 - 2 Pin MS 54 - M12	<b>Mounting Threads</b> 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male						



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[www.hansfordsensors.com.cn](http://www.hansfordsensors.com.cn)

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