

# HS-170 Premium Accelerometer

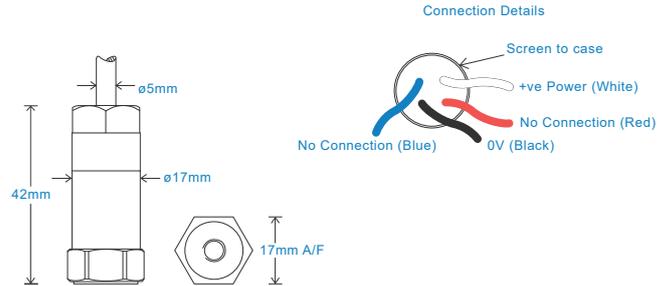
AC acceleration output via HFFR Cable

## Key Features

- Compact design
- Waterproof
- Customisable features

## 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 14kHz (840kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3dB$
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
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Polyolefin HFFR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	100 metres max (10 bar)

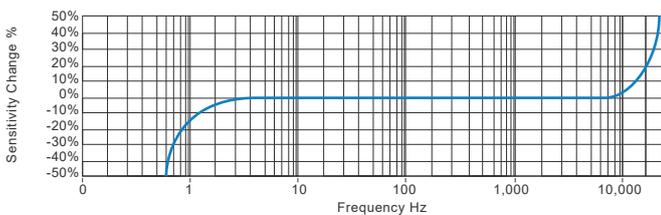
## Electrical

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 130°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

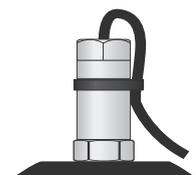
## Typical Frequency Response (at 100mV/g)



## 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>Cable Length (if integral cable)</b> QXX - length specified in metres												
H	S	1	7	0	X	X	X	X	X	X	X	X	X	X
<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> $\pm 800g$ $\pm 250g$ $\pm 160g$ $\pm 80g$ $\pm 32g$ $\pm 16g$	<b>Resonant Frequency</b> 30kHz (1,800kcpm) 28kHz (1,680kcpm) 26kHz (1,560kcpm) 24kHz (1,440kcpm) 22kHz (1,320kcpm) 20kHz (1,200kcpm)	<b>Cable/Connector</b> 01 - PUR 02 - Braided 37 - HFFR 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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We reserve the right to alter the specification of this product without prior notice TS1475

