

# HS-170ST Premium Accelerometer

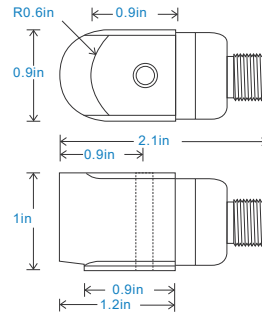
AC acceleration and temperature output via M12 Connector

## Key Features

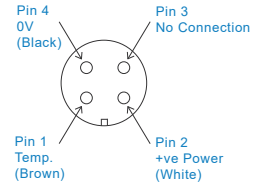
- Compact and premium design
- Temperature output
- Side entry for easy access

## 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 72°F
Frequency Response	120cpm (2Hz) to 840kcpm (14kHz) $\pm 5\%$ 90cpm (1.5Hz) to 960kcpm (16kHz) $\pm 10\%$ 48cpm (0.8Hz) to 1,140kcpm (19kHz) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Temperature Output	10 mV/°C standard 212°F - Option 266°F
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
Weight	4.7 oz. (nominal) body only
Connector	Use booted connector only
Mounting Threads	see: 'How To Order' table

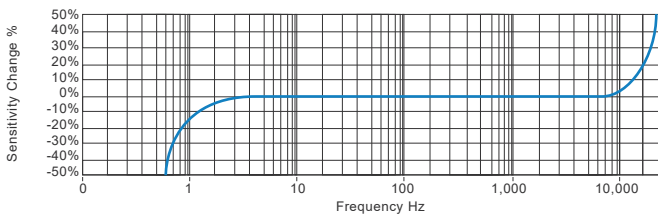
## Electrical

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	-67 to 300°F
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	Product Series	Options													
HS - Hansford Sensors	170 - Compact Premium Industrial Vibration Sensor	H	S	1	7	0	S	T	X	X	X	X	X	X	X
<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	$\pm 800\text{g}$	1,800kcpm (30kHz)	01 - PUR	02 - ¼-28" UNF Male										
L - 316L Stainless Steel	030 - 30mV/g	$\pm 250\text{g}$	1,680kcpm (28kHz)	03 - Braided	06 - M6 x 1mm Male										
S - 90° Side Exit	050 - 50mV/g	$\pm 160\text{g}$	1,560kcpm (26kHz)	07 - Silicon	08 - M8 x 1.25mm Male										
T - Temperature Output	100 - 100mV/g	$\pm 80\text{g}$	1,440kcpm (24kHz)	15 - Flame Retardant											
Y - 5% tolerance on sensitivity	250 - 250mV/g	$\pm 32\text{g}$	1,320kcpm (22kHz)	52 - 3 Pin MS											
	500 - 500mV/g	$\pm 16\text{g}$	1,200kcpm (20kHz)	54 - M12											



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

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