

# HS-170 Premium Accelerometer

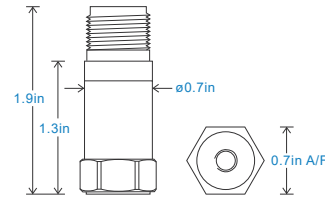
AC acceleration output via 2 Pin MS Connector

## Key Features

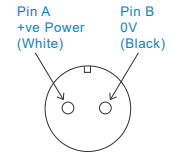
- Compact design
- Premium design
- Customizable features

## 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 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
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Weight	1.8 oz. (nominal) body only
Shielded Cable Assembly	see: <a href="http://www.hansfordsensors.com">www.hansfordsensors.com</a> for options
Connector	HS-AA004 - non-booted HS-AA053 or HS-AA054 - booted
Mounting Threads	see: 'How To Order' table

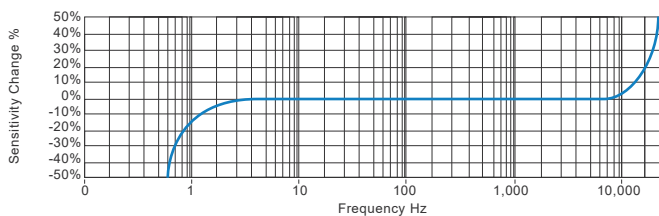
## Electrical

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	-67 to 300°F
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

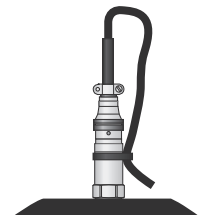
## Typical Frequency Response (at 100mV/g)



## 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											
HS - Hansford Sensors	170 - Compact Premium Industrial Vibration Sensor	H	S	1	7	0	X	X	X	X	X	X
Extra Options (if required)	Sensitivity	Range	Resonant Frequency	Cable/Connector	Mounting Threads							
F - Filtered	010 - 10mV/g	$\pm 800\text{g}$	2,040kcpm (34kHz)	01 - PUR	01 - 1/4-28" UNF Female							
L - 316L Stainless Steel	030 - 30mV/g	$\pm 250\text{g}$	1,920kcpm (32kHz)	02 - Braided	02 - 1/4-28" UNF Male							
S - 90° Side Exit	050 - 50mV/g	$\pm 160\text{g}$	1,800kcpm (30kHz)	07 - Silicon	06 - M6 x 1mm Male							
Y - 5% tolerance on sensitivity	100 - 100mV/g	$\pm 80\text{g}$	1,680kcpm (28kHz)	08 - Flame Retardant	08 - M8 x 1.25mm Male							
	250 - 250mV/g	$\pm 32\text{g}$	1,560kcpm (26kHz)	50 - 2 Pin MS	10 - M10 x 1.5mm Male							
	500 - 500mV/g	$\pm 16\text{g}$	1,440kcpm (24kHz)	54 - M12								



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

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