

# HS-172 Premium Biaxial Accelerometer

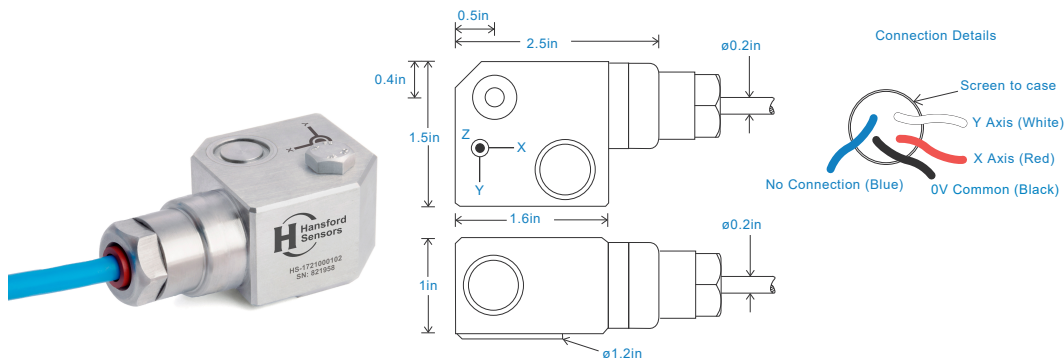
Two AC outputs via PUR cable

## Key Features

- Output via two axes
- For use with data collector
- 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) +3kHz for aluminium version
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 72°F per axes
Frequency Response	120cpm (2Hz) to 600kcpm (10kHz) $\pm 5\%$ 90cpm (1.5Hz) to 720kcpm (12kHz) $\pm 10\%$ 48cpm (0.8Hz) to 900kcpm (15kHz) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel unless specified Aluminium
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
Weight	8.3 oz. (nominal) - Stainless Steel 4 oz. (nominal) - Aluminium
Maximum Cable Length	3,280 ft.
Standard Cable Length	16 ft.
Screened Cable	PUR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	328 ft. max (10 bar)

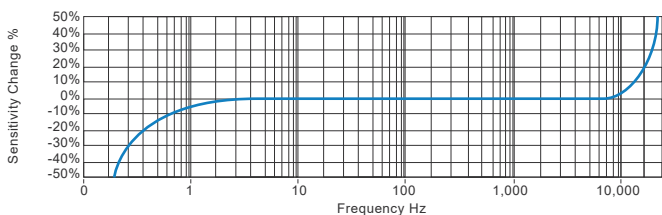
## Electrical

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	-22 to 194°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	172 - Triaxial Industrial Vibration Sensor											
H	S	1	7	2	X	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads		
AL - Aluminium Material		010 - 10mV/g		$\pm 800\text{g}$		1,200kcpm (20kHz)		01 - PUR		02 - 1/4-28" UNF Male		
F - Filtered		030 - 30mV/g		$\pm 250\text{g}$		1,140kcpm (19kHz)				06 - M6 x 1mm Male		
		050 - 50mV/g		$\pm 160\text{g}$		1,080kcpm (18kHz)				08 - M8 x 1.25mm Male		
		100 - 100mV/g		$\pm 80\text{g}$		1,020kcpm (17kHz)						
		250 - 250mV/g		$\pm 32\text{g}$		960kcpm (16kHz)						
		500 - 500mV/g		$\pm 16\text{g}$		900kcpm (15kHz)						



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

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