

# HS-172 Premium Biaxial Accelerometer

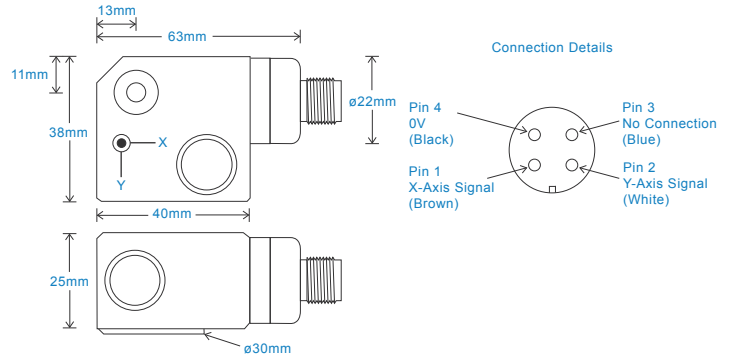
Two AC outputs via M12 Connector

## 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)
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C per axes
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3dB$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel unless specified otherwise
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	235gms (nominal) *if Stainless Steel
Screened Cable Assembly	HS-AC010 - straight
Mounting Threads	see: 'How To Order' table

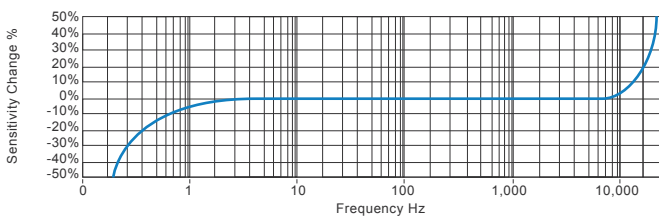
## Electrical

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 130°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

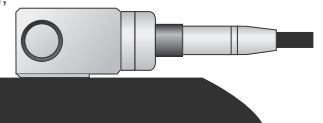
## Typical Frequency Response (at 100mV/g)



## 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										
HS - Hansford Sensors	172 - Biaxial Industrial Vibration Sensor										
<b>H</b>	<b>S</b>	<b>1</b>	<b>7</b>	<b>2</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>		<b>Sensitivity</b>		<b>Range</b>	<b>Resonant Frequency</b>		<b>Connector</b>		<b>Mounting Threads</b>		
AL - Lighter Aluminium Material F - Filtered RT - Temperature Output PT100 T - Temperature Output		010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g		$\pm 800g$ $\pm 250g$ $\pm 160g$ $\pm 80g$ $\pm 32g$ $\pm 16g$	20kHz (1,800kcpm) 19kHz (1,680kcpm) 18kHz (1,560kcpm) 17kHz (1,440kcpm) 16kHz (1,320kcpm) 15kHz (1,200kcpm)		54 - M12		02 - ¼-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male		



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We reserve the right to alter the specification of this product without prior notice  
TS288.6

