

# HS-150S Premium Accelerometer

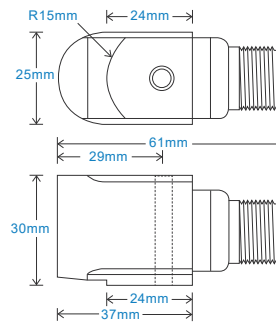
AC acceleration output via 2 Pin MS Connector

## Key Features

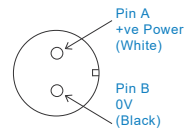
- For use with data collector and online systems
- Side entry for easy access
- Customisable features

## 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 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) $\pm 5\%$ 0.5Hz (30cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.2Hz (12cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$
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	8Nm
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Screened 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

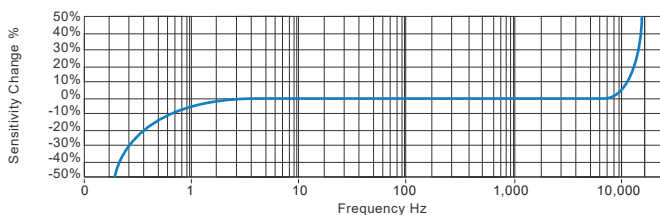
## Electrical

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	-55 to 150°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

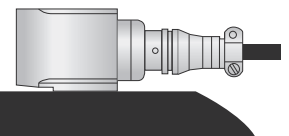
## Typical Frequency Response (at 100mV/g)



## 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

Product Prefix	Product Series										
HS - Hansford Sensors	150 - Premium Industrial Vibration Sensor	H	S	1	5	0	S	X	X	X	X
Extra Options (if required)	Sensitivity	Range	Resonant Frequency	Cable/Connector	Mounting Threads						
F - Filtered	010 - 10mV/g	$\pm 800\text{g}$	27kHz (1,620kcpm)	01 - PUR	02 - 1/4-28" UNF Male						
L - 316L Stainless Steel	030 - 30mV/g	$\pm 250\text{g}$	25kHz (1,500kcpm)	02 - Braided	06 - M6 x 1mm Male						
RT - Temperature Output PT100	050 - 50mV/g	$\pm 160\text{g}$	23kHz (1,380kcpm)	07 - Silicon	08 - M8 x 1.25mm Male						
S - 90° Side Exit	100 - 100mV/g	$\pm 80\text{g}$	21kHz (1,260kcpm)	08 - Flame Retardant							
T - Temperature Output	250 - 250mV/g	$\pm 32\text{g}$	19kHz (1,140kcpm)	50 - 2 Pin MS							
Y - 5% tolerance on sensitivity	500 - 500mV/g	$\pm 16\text{g}$	17kHz (1,020kcpm)	54 - M12							



[www.hansfordsensors.com](http://www.hansfordsensors.com)  
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We reserve the right to alter the specification of this product without prior notice

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