

# HS-100F Accelerometer

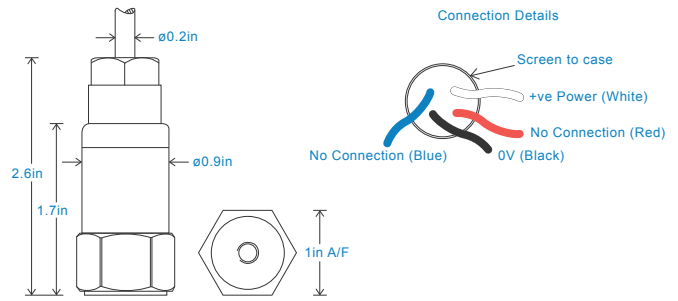
AC acceleration output via PUR Cable

## Key Features

- Filtered output
- For use with data collector
- Customizable 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 ±10% Nominal 80Hz at 72°F
Frequency Response	90cpm (1.5Hz) to 600kcpm (10kHz) ± 5% 30cpm (0.5Hz) to 720kcpm (12kHz) ± 10% 12cpm (0.2Hz) to 900kcpm (15kHz) ± 3dB
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	5.9ft. lbs
Weight	4.4 oz. (nominal)
Maximum Cable Length	3,280 ft.
Standard Cable Length	16 ft.
Shielded Cable	PUR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	328 ft. max (10 bar)

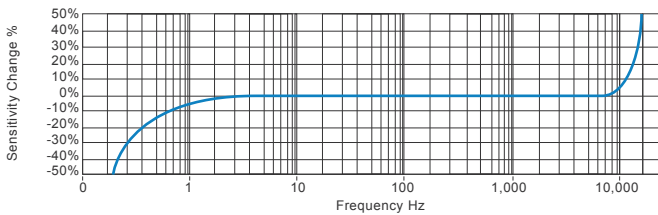
## Electrical

Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts

## Environmental

Operating Temperature Range	-22 to 194°F
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

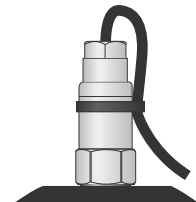
## Typical Frequency Response (at 100mV/g)



## 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 100 - Industrial Vibration Sensor	<b>Cable Length (if integral cable)</b> UXX - length specified in feet												
<b>H</b>	<b>S</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>F</b>	<b>X</b>	<b>X</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> F - Filtered I - Intrinsically Safe L - 316L Stainless Steel RT - Temperature Output PT100 T - Temperature Output Y - 5% tolerance on sensitivity		<b>Sensitivity</b> 010 - 10mV/g ±800g 030 - 30mV/g ±250g 050 - 50mV/g ±160g 100 - 100mV/g ±80g 250 - 250mV/g ±32g 500 - 500mV/g ±16g	<b>Range</b> ±800g ±250g ±160g ±80g ±32g ±16g	<b>Resonant Frequency</b> 1,680kcpm (28kHz) 1,560kcpm (26kHz) 1,440kcpm (24kHz) 1,320kcpm (22kHz) 1,200kcpm (20kHz) 1,080kcpm (18kHz)	<b>Cable/Connector</b> 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12	<b>Mounting Threads</b> 01 - ¼"-28" UNF Female 02 - ¼"-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male								



[www.hansfordsensors.com](http://www.hansfordsensors.com)  
[sales@hansfordsensors.com](mailto:sales@hansfordsensors.com)

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

TS466U.1

