

# HS-100S Accelerometer

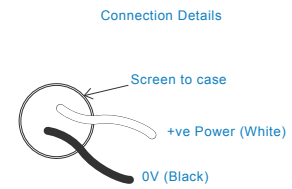
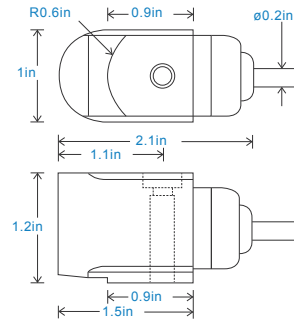
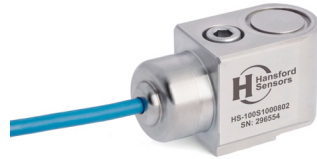
## AC acceleration output via Flame Retardant Cable

### Key Features

- For use with data collector
- Side entry for easy access
- Low smoke, halogen free cable

### 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 72°F
Frequency Response	120cpm (2Hz) to 600kcpm (10kHz) $\pm 5\%$ 90cpm (1.5Hz) to 720kcpm (12kHz) $\pm 10\%$ 48cpm (0.8Hz) to 900kcpm (15kHz) $\pm 3dB$
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
Mounting Bolt provided	see: 'How To Order' table x 1.2in long
Weight	6.5 oz. (nominal) body only
Maximum Cable Length	3,280 ft.
Standard Cable Length	16 ft.
Shielded Cable	Flame Retardant - length to be specified with order
Mounting Threads	see: 'How To Order' table

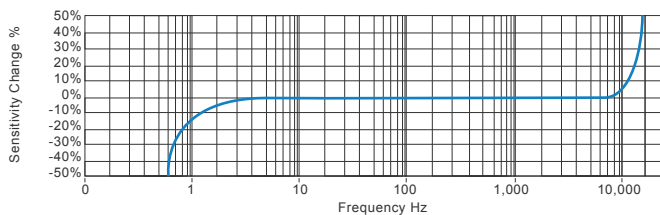
### Electrical

Excitation Voltage:	18-30Volts DC
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	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-40 to 212°F
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

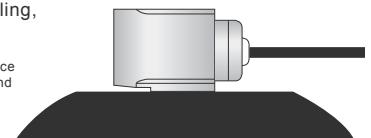
### Typical Frequency Response (at 100mV/g)



### 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</b> UXX - length specified in feet												
<b>H</b>	<b>S</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>S</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 L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensitivity		<b>Sensitivity</b> 010 - 10mV/g $\pm 800g$ 030 - 30mV/g $\pm 250g$ 050 - 50mV/g $\pm 160g$ 100 - 100mV/g $\pm 80g$ 250 - 250mV/g $\pm 32g$ 500 - 500mV/g $\pm 16g$	<b>Range</b> $\pm 800g$ $\pm 250g$ $\pm 160g$ $\pm 80g$ $\pm 32g$ $\pm 16g$	<b>Resonant Frequency</b> 1,620kcpm (27kHz) 1,500kcpm (25kHz) 1,380kcpm (23kHz) 1,260kcpm (21kHz) 1,140kcpm (19kHz) 1,020kcpm (17kHz)	<b>Cable/Connector</b> 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12	<b>Mounting Threads</b> 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  
TS086U.5

