

# HS-104S Low Power Accelerometer

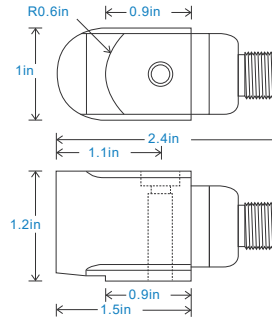
AC acceleration output via M12 Connector

## Key Features

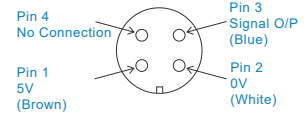
- Low voltage
- Ultra low power consumption
- Side entry for easy access

## 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 72°F
Frequency Response	18cpm (0.3Hz) to 600kcpm (10kHz) $\pm 10\%$
Isolation	Base isolated
Range	see: 'How To Order' table @ 5V power
Transverse Sensitivity	Less than 5%
Amplitude Linearity	$\pm 1\%$

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
Weight	4.4 oz. (nominal)
Shielded Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

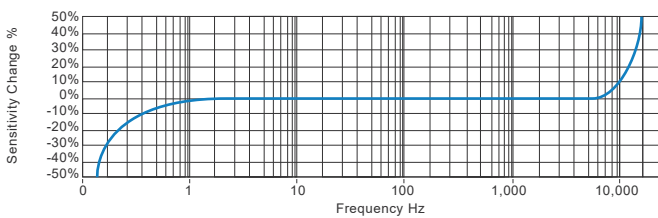
## Electrical

Electrical Noise	< 500 $\mu$ g
Power Requirements	5V nominal (other voltages 1.8 to 24V on request)
Current Consumption	100 $\mu$ A nominal at 5V supply (60 $\mu$ A at 1.8V)
Bias Voltage	50% of supply voltage
Settling Time	1 second
Output Impedance	100 Ohms max.
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts

## Environmental

Operating Temperature Range	-58 to 257°F
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

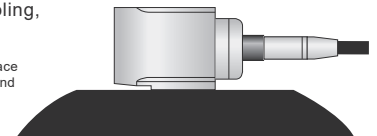
## Typical Frequency Response (at 100mV/g)



## 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 104 - Low Power Vibration Sensor										
<b>H S 1 0 4 S X X X X X X 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	<b>Sensitivity</b> 010 - 10mV/g $\pm 200g$ 030 - 30mV/g $\pm 66g$ 050 - 50mV/g $\pm 40g$ 100 - 100mV/g $\pm 20g$ 250 - 250mV/g $\pm 8g$ 500 - 500mV/g $\pm 4g$	<b>Range</b> $\pm 200g$ $\pm 66g$ $\pm 40g$ $\pm 20g$ $\pm 8g$ $\pm 4g$	<b>Resonant Frequency</b> 1,500kcpm (25kHz) 1,500kcpm (25kHz) 1,500kcpm (25kHz) 1,500kcpm (25kHz) 1,500kcpm (25kHz) 1,500kcpm (25kHz)	<b>Cable/Connector</b> 01 - PUR 03 - Braided 07 - Silicon 13 - Flame Retardant 52 - 3 Pin MS 54 - M12	<b>Mounting Threads</b> 02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm 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  
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