

# HS-104S Low Power Accelerometer

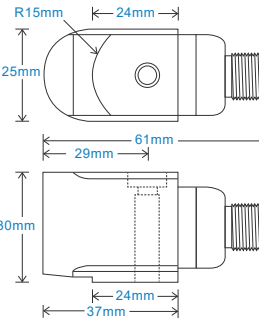
## AC acceleration output via M12 Connector

### Key Features

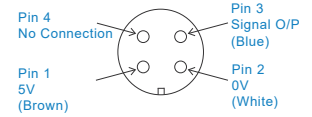
- Low voltage
- Ultra low power consumption
- Side entry for easy access

### 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 22°C
Frequency Response	0.3Hz (18cpm) to 10kHz (600kcpm) $\pm 10\%$
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	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	185gms (nominal)
Screened Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

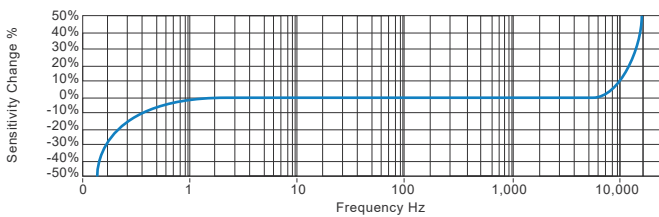
### Electrical

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	-50 to 125°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

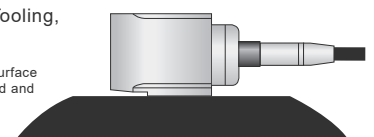
### Typical Frequency Response (at 100mV/g)



### 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	Product Code											
HS - Hansford Sensors	104 - Low Power Vibration Sensor	H	S	1	0	4	S	X	X	X	X	X	X
<b>Extra Options (if required)</b>	<b>Sensitivity</b>	<b>Range</b>	<b>Resonant Frequency</b>	<b>Cable/Connector</b>	<b>Mounting Threads</b>								
F - Filtered	010 - 10mV/g	$\pm 200g$	25kHz (1,500kcpm)	01 - PUR	02 - 1/4-28" UNF Male								
L - 316L Stainless Steel	030 - 30mV/g	$\pm 66g$	25kHz (1,500kcpm)	03 - Braided	06 - M6 x 1mm Male								
RT - Temperature Output PT100	050 - 50mV/g	$\pm 40g$	25kHz (1,500kcpm)	07 - Silicon	07 - M8 x 1.25mm Male								
S - 90° Side Exit	100 - 100mV/g	$\pm 20g$	25kHz (1,500kcpm)	13 - Flame Retardant									
T - Temperature Output	250 - 250mV/g	$\pm 8g$	25kHz (1,500kcpm)	52 - 3 Pin MS									
	500 - 500mV/g	$\pm 4g$	25kHz (1,500kcpm)	54 - M12									



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

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