# **HS-104S Low Power Accelerometer**

AC acceleration output via 3 Pin MS Connector

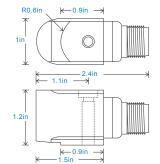
#### **Key Features**

- Low voltage
- Ultra low power consumption
- Customisable features



Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





## Connection Details



#### **Technical Performance**

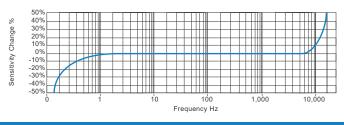
Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 72°F
Frequency Response	18cpm (0.3Hz) to 600kcpm (10kHz) ± 10%
Isolation	Base isolated
Range	see: 'How To Order' table @ 5V power
Transverse Sensitivity	Less than 5%
Amplitude Linearity	±1%

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Weight	6.5 oz. (nominal) body only
Screened Cable Assembly	see: www.hansfordsensors.com for options
Connector	HS-AA005 - non-booted
	HS-AA068 or HS-AA069 - booted
Mounting Threads	see: 'How To Order' table

#### Electrical

Electrical Noise	< 500µg
Power Requirements	5V nominal (other voltages 1.8 to 24V on request)
Current Consumption	100μA nominal at 5V supply (60μA 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

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



Applications

Environmental

Sealing Maximum Shock

EMC

**Operating Temperature Range** 

Mechanical

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.)



CE

UK CA

-58 to 257°F

EN61326-1:2013

IP68

5000g

#### How To Order

Product Prefix Product Series   HS - Hansford Sensors 104 - Low Power Vibration Sensor										Cable Length (If integral cable) QXX - length specified in metres				
H S 1	0	4	S	X	X	X	X	X	X	X	X	X	X	
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output		030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±200g ±66g ±40g ±20g ±8g ±4g	Resona 25kHz 25kHz 25kHz 25kHz 25kHz 25kHz	nt Freque (1,500kg (1,500kg (1,500kg (1,500kg (1,500kg (1,500kg	pm) pm) pm) pm) pm)	01 - PU 03 - Br 07 - Si 13 - Fl	aided licon ame Retar Pin MS		02 - ¼ 06 - M	<b>ing Threa</b> -28" UNF 6 x 1mm M 8 x 1.25m	Male ⁄Iale	



www.hansfordsensors.com sales@hansfordsensors.com

We reserve the right to alter the specification of this product without prior notice \$\$T\$895U.3