HS-104 Low Power Accelerometer

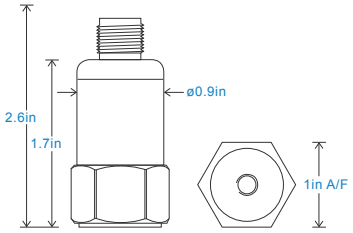
AC acceleration output via M12 Connector

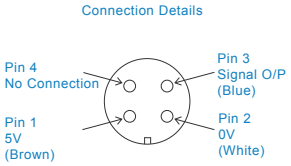
Key Features

- Low voltage
- Ultra low power consumption
- 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°C
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%

Mechanical

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

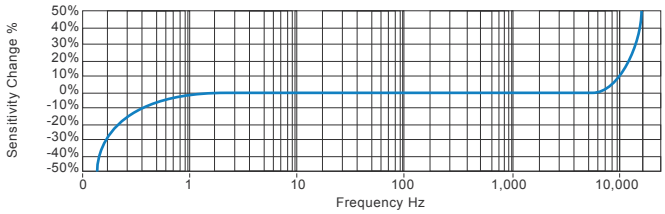
Electrical

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	>10^8 Ohms at 500 Volts

Environmental

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

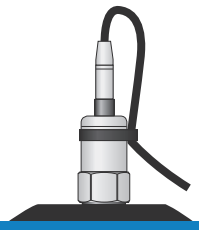
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
104 - Low Power Vibration Sensor

Cable Length (if integral cable)
UXX - length specified in feet

H	S	1	0	4	X	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

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±200g	1,500kcpm	(25kHz)
030	- 30mV/g	±66g	1,500kcpm	(25kHz)
050	- 50mV/g	±40g	1,500kcpm	(25kHz)
100	- 100mV/g	±20g	1,500kcpm	(25kHz)
250	- 250mV/g	±8g	1,500kcpm	(25kHz)
500	- 500mV/g	±4g	1,500kcpm	(25kHz)

Cable/Connector
01 - PUR
03 - Braided
07 - Silicon
15 - Flame Retardant
52 - 3 Pin MS
54 - M12

Mounting Threads
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

Hansford Sensors
Excellence in Vibration Monitoring

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