

HS-104 Low Power Accelerometer

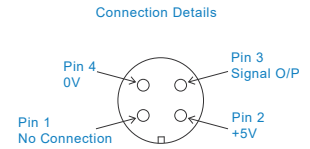
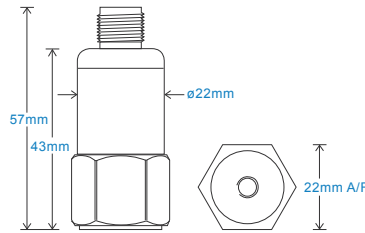
AC acceleration output via M12 Connector

Key Features

- Low voltage
- Ultra low power consumption
- Customisable 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 $\pm 10\%$ 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
Weight	106gms (nominal)
Screened Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

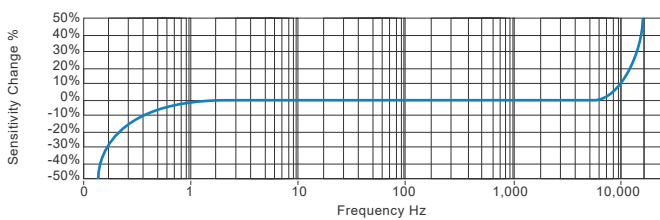
Electrical

Electrical Noise	< 500 μ g
Power Requirements	5V nominal (other voltages 1.8 to 24V on request)
Current Consumption	100 μ A nominal at 5V supply (60 μ A at 1.8V)
Bias Voltage	50% of supply voltage
Settling Time	1 second
Output Impedance	100 Ohms max.
Case Isolation	>10 ⁹ Ohms at 500 Volts

Environmental

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

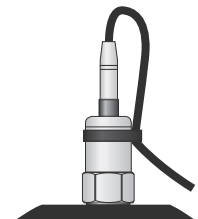
Typical Frequency Response (at 100mV/g)



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	Cable Length (if integral cable)												
HS - Hansford Sensors	104 - Low Power Vibration Sensor	QXX - length specified in metres												
H	S	1	0	4	X	X	X	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range	Resonant Frequency		Cable/Connector			Mounting Threads				
F - Filtered		010 - 10mV/g		± 200 g	25kHz (1,500kcpm)		01 - PUR			01 - 1/4-28" UNF Female				
L - 316L Stainless Steel		030 - 30mV/g		± 66 g	25kHz (1,500kcpm)		03 - Braided			02 - 1/4-28" UNF Male				
RT - Temperature Output PT100		050 - 50mV/g		± 40 g	25kHz (1,500kcpm)		07 - Silicon			05 - Quick Fit Female				
S - 90° Side Exit		100 - 100mV/g		± 20 g	25kHz (1,500kcpm)		13 - Flame Retardant			06 - M6 x 1mm Male				
T - Temperature Output		250 - 250mV/g		± 8 g	25kHz (1,500kcpm)		52 - 3 Pin MS			08 - M8 x 1.25mm Male				
		500 - 500mV/g		± 4 g	25kHz (1,500kcpm)		54 - M12			10 - M10 x 1.5mm Male				



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We reserve the right to alter the specification of this product without prior notice
TS229.9

