

HS-104T Low Power Accelerometer

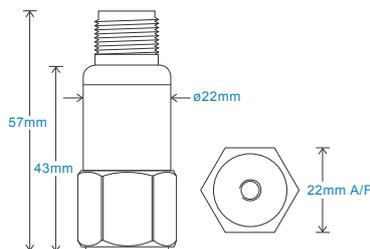
AC acceleration and temperature output via M12 Connector

Key Features

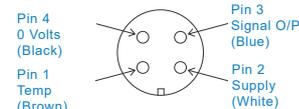
- Low voltage
- Ultra low power consumption
- Temperature output
- Customisable features

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	$\pm 1\%$
Temperature Output	-11 mV/°C standard 100°C - Option 150°C 3.3 volts supply min - output 0°C 2.1 volts 10°C 1.99 volts

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Weight	106gms (nominal) body only
Screened Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

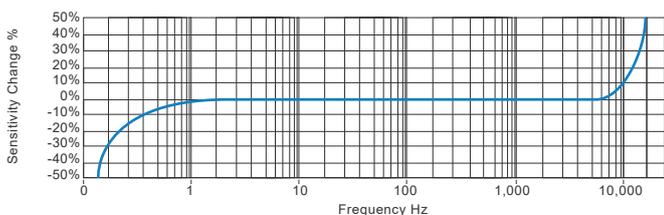
Electrical

Electrical Noise	< 500µg
Power Requirements	5V nominal (for other voltages see 'how to order' table)
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	-50 to 125°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

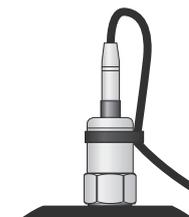
Typical Frequency Response (at 100mV/g)



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 HS - Hansford Sensors	Product Series 104 - Low Power Vibration Sensor	Supply Voltage To be specified min 3.3 max 24 DC volts
H	S	1
0	4	T
X	X	X
V	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 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 $\pm 4g$	Range $\pm 200g$ $\pm 66g$ $\pm 40g$ $\pm 20g$ $\pm 8g$ $\pm 4g$
	Resonant Frequency 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm)	Cable/Connector 01 - PUR 54 - M12
	Mounting Threads 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male	



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We reserve the right to alter the specification of this product without prior notice
TS797.4

