

HS-104 Low Power Accelerometer

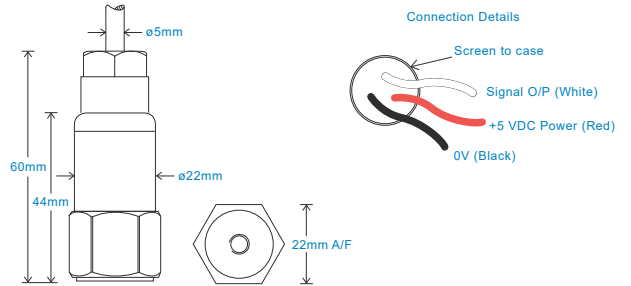
AC acceleration output via Silicon Cable

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)
Mounting Threads	see: 'How To Order' table
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Silicon - length to be specified with order
Submersible Depth	100 metres max (10 bar)

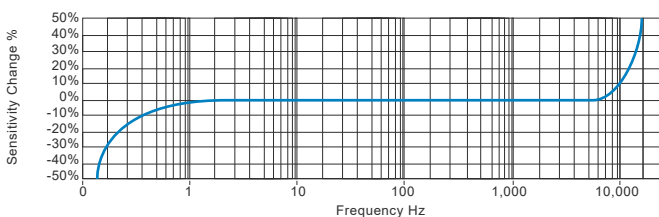
Electrical

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	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

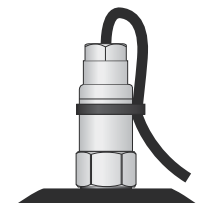
Typical Frequency Response (at 100mV/g)



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) QXX - length specified in metres												
H	S	1	0	4	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 010 - 10mV/g 025 - 25mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g	Range ± 200 g ± 80 g ± 66 g ± 40 g ± 20 g ± 8 g ± 4 g	Resonant Frequency 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm) 25kHz (1,500kcpm)	Cable/Connector 01 - PUR 03 - Braided 07 - Silicon 13 - Flame Retardant 52 - 3 Pin MS 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

TS859.2

