HS-104T Low Power Accelerometer

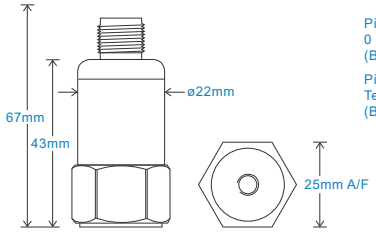
AC acceleration and temperature output via M12 Connector

Key Features

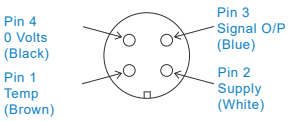
- Low voltage
- Ultra low power consumption
- Temperature output
- Customisable features

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 ±10%
	Nominal 80Hz at 22°C
Frequency Response	0.3Hz (18cpm) to 10kHz (600kcpm) ± 10%
Isolation	Base isolated
Range	see: 'How To Order' table @ 5V power
Transverse Sensitivity	Less than 5%
Amplitude Linearity	±1%
Temperature Output	11 mV/ºC 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	125gms (nominal) body only
Screened Cable Assembly	HS-AC010 - straight
	HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

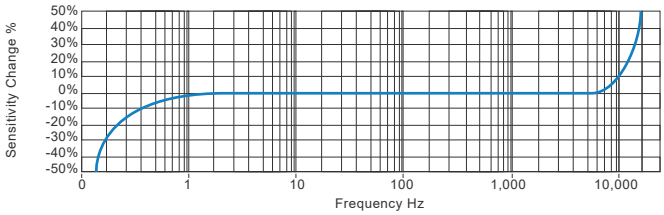
Electrical

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 125ºC
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

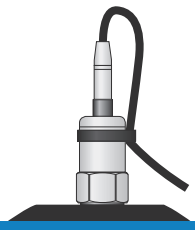
Typical Frequency Response (at 100mV/g)



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	X	X	X	X	V	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	25kHz (1,500kcpm)
030 - 30mV/g	±66g	25kHz (1,500kcpm)
050 - 50mV/g	±40g	25kHz (1,500kcpm)
100 - 100mV/g	±20g	25kHz (1,500kcpm)
250 - 250mV/g	±8g	25kHz (1,500kcpm)
500 - 500mV/g	±4g	25kHz (1,500kcpm)

Cable/Connector
01 - PUR
03 - Braided
07 - Silicon
13 - 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

T: 150 210 98804
www.hansfordsensors.com.cn
汉施弗德传感器（上海）有限公司