

HS-100S Accelerometer

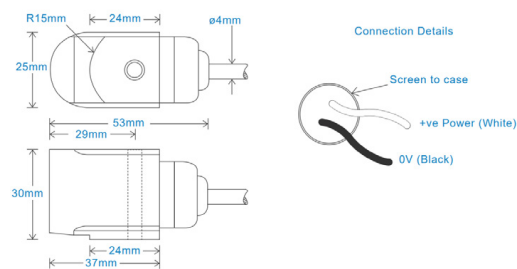
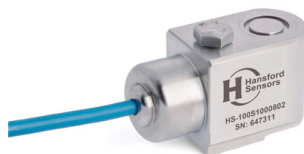
AC acceleration output via Flame Retardant Cable

Key Features

- For use with data collector
- Side entry for easy access
- 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	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Flame Retardant - length to be specified with order
Screened Cable Assembly	see: www.hansfordsensors.com for options
Connector	n/a
Mounting Threads	see: 'How To Order' table x 30mm long
Submersible Depth	n/a

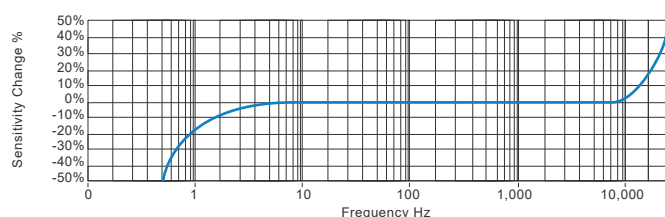
Electrical

Excitation Voltage:	18-30Volts DC
Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max
Case Isolation	$>10^8$ Ohms at 500 Volts

Environmental

Operating Temperature Range	-40 to 100°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

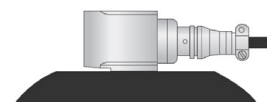
Typical Frequency Response (at 100mV/g)



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										
HS - Hansford Sensors	100 - Industrial Vibration Sensor	H	S	1	0	0	S	X	X	X	X
Extra Options (If required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
F - Filtered		010 - 10mV/g		$\pm 800\text{g}$		34kHz (2,040kcpm)		01 - PUR		02 - 1/4-28" UNF Male	
I - Intrinsically Safe		030 - 30mV/g		$\pm 250\text{g}$		33kHz (1,980kcpm)		02 - Braided		06 - M6 x 1mm Male	
RT - Temperature Output PT110		050 - 50mV/g		$\pm 160\text{g}$		32kHz (1,920kcpm)		08 - Flame Retardant		08 - M8 x 1.25mm Male	
T - Temperature Output		100 - 100mV/g		$\pm 80\text{g}$		30kHz (1,800kcpm)		50 - 2 Pin MS			
Y - 5% tolerance on sensitivity		250 - 250mV/g		$\pm 32\text{g}$		28kHz (1,680kcpm)		54 - M12			
		500 - 500mV/g		$\pm 16\text{g}$		26kHz (1,560kcpm)					