# **HS-100S Accelerometer**

AC acceleration output via Silicon Cable

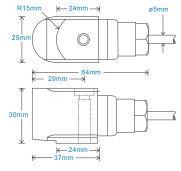
### **Key Features**

- · For use with data collector
- Side entry for easy access
- Waterproof



Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





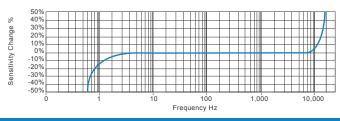
Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal)
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Silicon - length to be specified with order
Transverse Sensitivity	Less than 5%	Mounting Threads	see: 'How To Order' table
		Submersible Depth	100 metres max (10 bar)

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-50 to 140°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	2 seconds	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts		

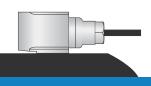
#### Typical Frequency Response (at 100mV/g)



#### 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.)



CE

R

#### How To Order

Product Prefix   Product Series     HS - Hansford Sensors   100 - Industrial Vibration Sensor											f integral ecified in r		
H S 1	0	0	S	X	X	X	X	X	X	X	X	X	X
Extra Options (if required)   F - Filtered   L - 316L Stainless Steel   RT - Temperature Output PT   S - 90° Side Exit   T - Temperature Output PT   Y - 5% tolerance on sensiti	-100	030 - 050 - 100 - 250 -	tivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kd (1,500kd (1,380kd (1,260kd (1,140kd (1,020kd	:pm) :pm) :pm) :pm) :pm)	01 - Pl 02 - Br 07 - Si 08 - Fl	aided licon ame Reta Pin MS		02 - ¼ 06 - M	t <b>ing Threa</b> -28" UNF 6 x 1mm M 8 x 1.25m	Male Aale



## www.hansfordsensors.com sales@hansfordsensors.com

We reserve the right to alter the specification of this product without prior notice TS011.7