

# HS-100FRT Accelerometer

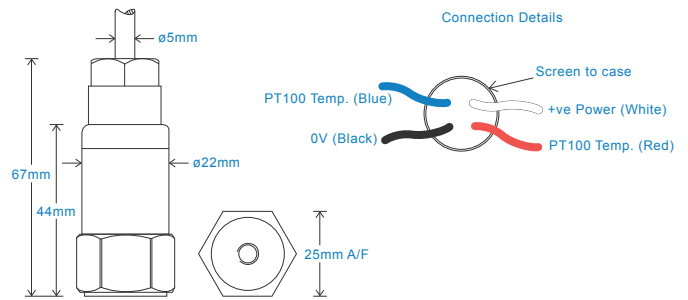
## AC acceleration and PT100 temperature output via PUR Cable

### Key Features

- Temperature output PT100
- Filtered output
- Waterproof and resistant to oil

### 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	1.5Hz (90cpm) to 10kHz (600kcpm) $\pm 5\%$ 0.5Hz (30cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.2Hz (12cpm) to 15kHz (900kcpm) $\pm 3dB$
Isolation	Base isolated
Range	see: 'How To Order' table
Temperature Output	PT100 (100 Ohms)
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	125gms (nominal)
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	PUR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	100 metres max (10 bar)

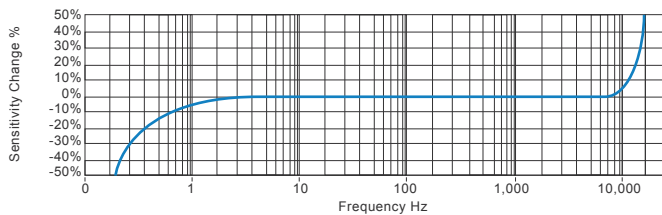
### Electrical

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	-30 to 90°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

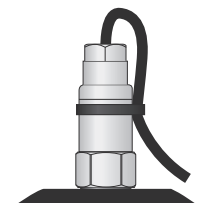
### Typical Frequency Response (at 100mV/g)



### 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	Product Series	Cable Length (if integral cable)													
HS - Hansford Sensors	100 - Industrial Vibration Sensor	QXX - length specified in metres													
<b>H</b>	<b>S</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>F</b>	<b>R</b>	<b>T</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b>		<b>Sensitivity</b>		<b>Range</b>		<b>Resonant Frequency</b>		<b>Cable/Connector</b>			<b>Mounting Threads</b>				
F - Filtered		010 - 10mV/g		$\pm 800g$		27kHz (1,620kcpm)		01 - PUR			01 - 1/4-28" UNF Female				
L - 316L Stainless Steel		030 - 30mV/g		$\pm 250g$		25kHz (1,500kcpm)		03 - Braided			02 - 1/4-28" UNF Male				
RT - Temperature Output PT100		050 - 50mV/g		$\pm 160g$		23kHz (1,380kcpm)		07 - Silicon			05 - Quick Fit Female				
S - 90° Side Exit		100 - 100mV/g		$\pm 80g$		21kHz (1,260kcpm)		15 - Flame Retardant			06 - M6 x 1mm Male				
Y - 5% tolerance on sensitivity		250 - 250mV/g		$\pm 32g$		19kHz (1,140kcpm)		52 - 3 Pin MS			08 - M8 x 1.25mm Male				
		500 - 500mV/g		$\pm 16g$		17kHz (1,020kcpm)		54 - M12			10 - M10 x 1.5mm Male				



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

TS455.4

