

# HS-422ST Accelerometer

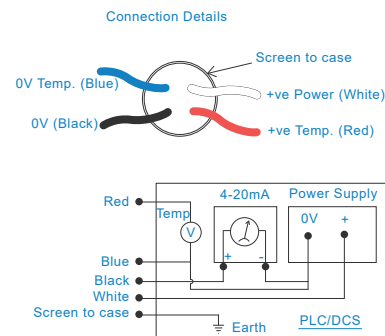
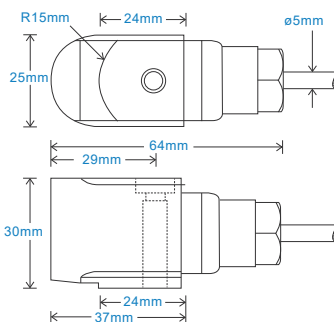
## 4-20mA acceleration and temperature output via PUR Cable

### Key Features

- Temperature output
- Waterproof
- Resistant to oil

### Industries

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



### Technical Performance

Mounted Base Resonance	10kHz min
Acceleration Ranges	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response	10Hz (600cpm) to 5kHz (300kcpm) $\pm 5\%$ - ISO10816
Isolation	Base isolated
Range	see: 'How To Order' table
Temperature Output	10mV/°C - 0-1V proportional to 0-100°C (to convert this to 4-20mA use the HS-540 module)
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	185gms (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)

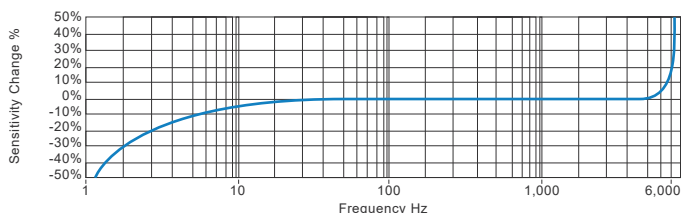
### Electrical

Current Output	4-20mA DC proportional to acceleration
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	1 second
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts

### Environmental

Operating Temperature Range	-25 to 90°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

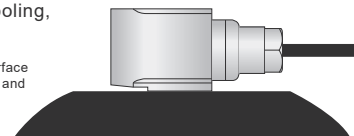
### Typical Frequency Response



### 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 422 - Industrial Vibration Sensor						Cable Length (if integral cable) QXX - length specified in metres							
H	S	4	2	2	S	T	X	X	X	X	X	X	X	X	X
<b>Extra Options (if required)</b> F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output P - Peak Range PP - Peak to Peak Range							<b>Acceleration Range (RMS unless specified)</b> 001 - 0-1g 002 - 0-2g 005 - 0-5g 010 - 0-10g 100 - 0-100g			<b>Cable/Connector</b> 01 - PUR 54 - M12		<b>Mounting Threads</b> 02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male			



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We reserve the right to alter the specification of this product without prior notice  
TS497.4

