

HS-100T Accelerometer

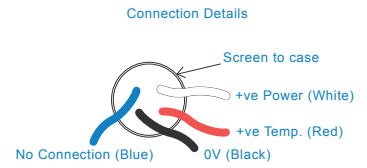
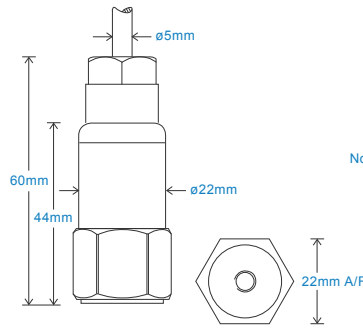
AC acceleration and temperature output via PUR Cable

Key Features

- Temperature output
- For use with data collector
- Waterproof
- 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 ±10% Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) ± 5% 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Temperature Output | 10 mV/°C standard 90°C |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|---|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Compression |
| Mounting Torque | 8Nm |
| Weight | 106gms (nominal) body only |
| 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) |

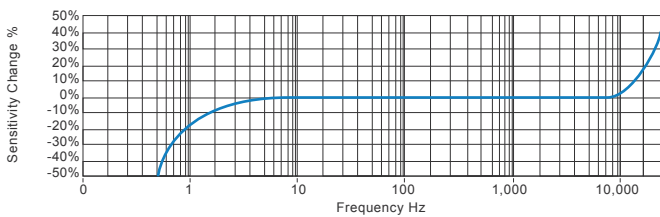
Electrical

| | |
|--------------------|------------------------------------|
| Excitation Voltage | 18-30 Volts 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 | -30 to 90°C |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

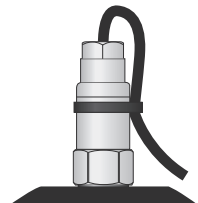
Typical Frequency Response (at 100mV/g)



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 HS - Hansford Sensors | Product Series 100 - Industrial Vibration Sensor | Cable Length QXX - length specified in metres |
| H S 1 0 0 T X X X X X X X X X X X | | |
| Extra Options (if required) F - Filtered I - Intrinsically Safe L - 316L Stainless Steel S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensitivity | Sensitivity 010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g | Range ±800g ±250g ±160g ±80g ±32g ±16g |
| Resonant Frequency 34kHz (2,040kcpm) 33kHz (1,980kcpm) 32kHz (1,920kcpm) 30kHz (1,800kcpm) 28kHz (1,680kcpm) 26kHz (1,560kcpm) | Cable/Connector 01 - PUR 03 - Braided 07 - Silicon 15 - Flame Retardant 52 - 3 Pin MS 54 - M12 | Mounting Threads 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male |



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We reserve the right to alter the specification of this product without prior notice
TS190.6

