

HS-100S Accelerometer

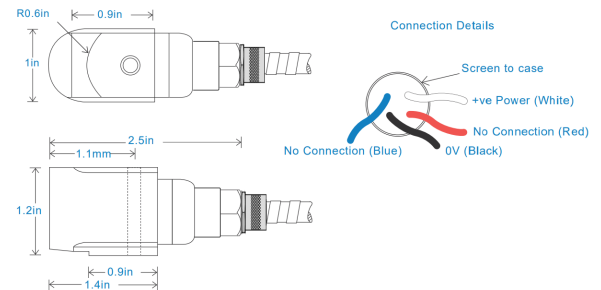
AC acceleration output via 4 Core PUR Cable with Removable Stainless Steel Conduit

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 72°F |
| Frequency Response | 120cpm (2Hz) to 600kcpm (10kHz) $\pm 5\%$ 90cpm (1.5Hz) to 720kcpm (12kHz) $\pm 10\%$ 48cpm (0.8Hz) to 900kcpm (15kHz) $\pm 3\text{dB}$ |
| 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 | 5.9ft. Lbs |
| Mounting Bolt provided | see: 'How To Order' table x 1.2in long |
| Weight | 7.2 oz. (nominal) body only |
| Maximum Cable Length | 3,280 ft. |
| Standard Cable Length | 16 ft. |
| Screened Cable | PUR - 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 1.2in long |

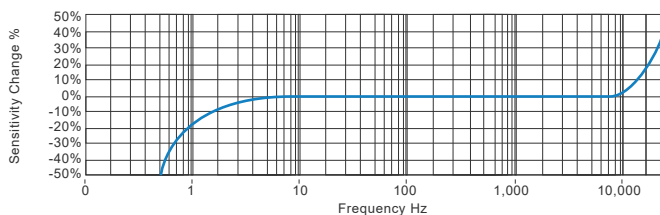
Electrical

| | |
|--------------------|---------------------------|
| 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

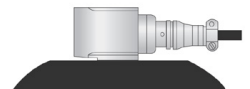
| | |
|-----------------------------|----------------|
| Operating Temperature Range | -40 to 212°F |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

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 | | | | | | | | | | | |
|---------------------------------|-----------------------------------|-------------------|--------------------|---|-----------------------|---|---|---|---|---|---|---|
| HS - Hansford Sensors | 100 - Industrial Vibration Sensor | H | S | 1 | 0 | 0 | X | X | X | X | X | X |
| Extra Options (if required) | Sensitivity | Range | Resonant Frequency | Cable/Connector | Mounting Threads | | | | | | | |
| F - Filtered | 010 - 10mV/g | $\pm 800\text{g}$ | 27kHz (1,620kcpm) | 01C - 4 Core PUR Cable with removable Stainless Steel Conduit | 02 - 1/4-28" UNF Male | | | | | | | |
| I - Intrinsically Safe | 030 - 30mV/g | $\pm 250\text{g}$ | 25kHz (1,500kcpm) | 07C - 3 Core Silicon Cable with removable Stainless Steel Conduit | 06 - M6 x 1mm Male | | | | | | | |
| RT - Temperature Output PT110 | 050 - 50mV/g | $\pm 160\text{g}$ | 23kHz (1,380kcpm) | | 08 - M8 x 1.25mm Male | | | | | | | |
| T - Temperature Output | 100 - 100mV/g | $\pm 80\text{g}$ | 21kHz (1,260kcpm) | | | | | | | | | |
| Y - 5% tolerance on sensitivity | 250 - 250mV/g | $\pm 32\text{g}$ | 19kHz (1,140kcpm) | | | | | | | | | |
| | 500 - 500mV/g | $\pm 16\text{g}$ | 17kHz (1,020kcpm) | | | | | | | | | |