

HS-105 High Temp. Accelerometer

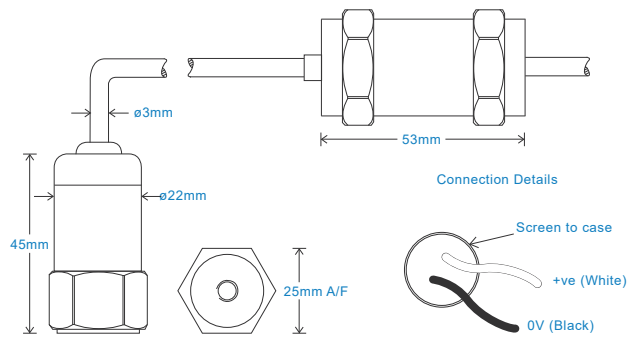
AC output via Low Noise Cable

Key Features

- Includes external charge amplifier
- Optional temperature ranges
- Low noise cable

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 | 2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3dB$ |
| 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 | 8Nm |
| Weight | 125gms (nominal) |
| Maximum Cable Length | 1000 metres |
| Cable | see: 'How To Order' table - (20 metres max between sensor and charge amplifier) |
| Mounting Threads | see: 'How To Order' table |

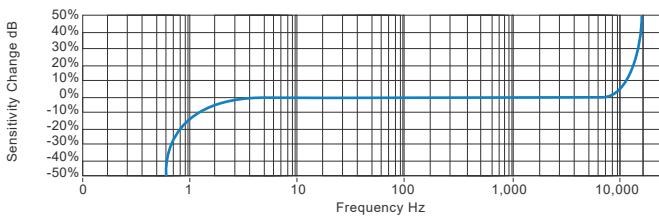
Electrical

| | |
|------------------|----------------------------|
| 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 | -55°C to see 'How To Order' table for max |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

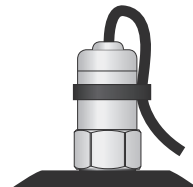
Typical Frequency Response (at 100mV/g)



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 105 - Industrial Vibration Sensor | Cable Length (if integral cable) QXX/XX - length before/after charge amp, specified in metres | | | | | | | | | | | | | | | | |
| H | S | 1 | 0 | 5 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Extra Options (if required) I - Intrinsic Safe 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 $\pm 800g$ $\pm 250g$ $\pm 160g$ $\pm 80g$ $\pm 32g$ $\pm 16g$ | Resonant Frequency 28kHz (1,680kcpm) 26kHz (1,560kcpm) 24kHz (1,440kcpm) 22kHz (1,320kcpm) 20kHz (1,200kcpm) 18kHz (1,080kcpm) | Cable 04 - Low Noise (150°C) 05 - Low Noise (250°C) | Connector 02 - Braided 50 - 2 Pin MS *The above connectors can't be used with Intrinsic Safe | 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
TS014.7

