

HS-160 Accelerometer

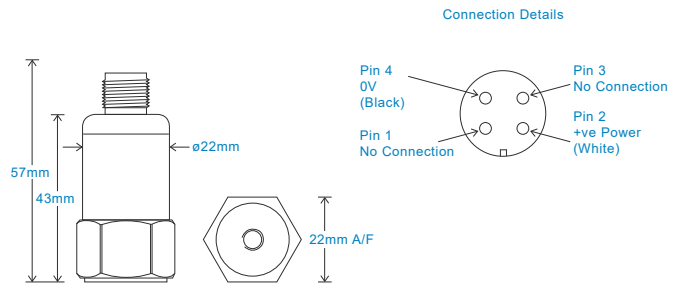
AC velocity output via M12 Connector

Key Features

- For use with data collector
- AC velocity output
- 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 22°C |
| Frequency Response | 3Hz (180cpm) to 4.5kHz (270kcpm) $\pm 10\%$ 2Hz (120cpm) to 6kHz (360kcpm) $\pm 3\text{dB}$ |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|---|
| Case Material | 316L Stainless Steel |
| Sensing Element/Construction | PZT/Compression |
| Mounting Torque | 8Nm |
| Weight | 106gms (nominal) body only |
| Screened Cable Assembly | HS-AC010 - straight HS-AC011 - right angle |
| Mounting Threads | see: 'How To Order' table |

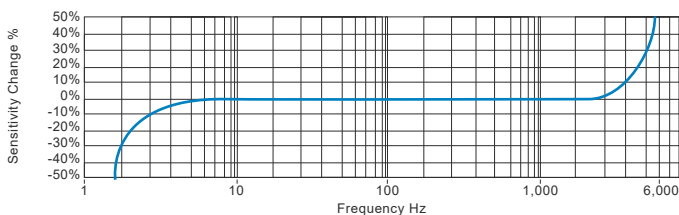
Electrical

| | |
|------------------|---------------------------|
| 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 to 140°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

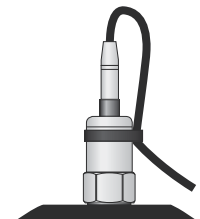
Typical Frequency Response



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 160 - Industrial Vibration Sensor | | | | | | | | | | |
|--|---|---|---|-----------------------------------|---|--|---|--|---|---|---|
| H | S | 1 | 6 | 0 | X | X | X | X | X | X | X |
| Extra Options (if required) F - Filtered RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensitivity | | Sensitivity 004 - 4mV/mm/s 1000mm/s 025 - 25mV/mm/s 250mm/s (other sensitivities available on request) | | Range (pk) 1000mm/s 250mm/s | | Resonant Frequency 22kHz (1,320kcpm) 22kHz (1,320kcpm) | | Cable/Connector 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 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 | |