

HS-420 Accelerometer

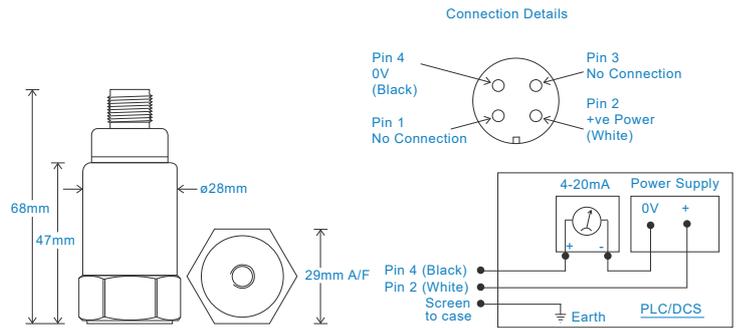
4-20mA velocity output via M12 Connector

Key Features

- For use with PLC/DCS systems
- Customisable features

Industries

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



Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | 5kHz min |
| Velocity Ranges | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816 |
| Isolation | Base isolated |
| Range | 50g peak |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|---|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Compression |
| Mounting Torque | 8Nm |
| Weight | 150gms (nominal) body only |
| Screened Cable Assembly | HS-AC010 - straight HS-AC011 - right angle |
| Mounting Threads | see: 'How To Order' table |

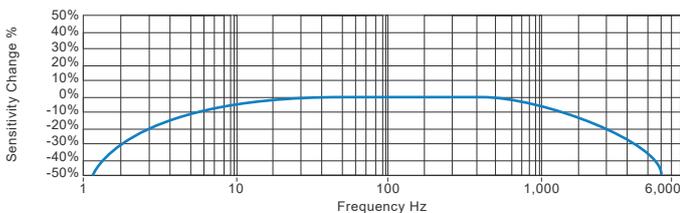
Electrical

| | |
|------------------|---|
| Current Output | 4-20mA DC proportional to Velocity Range |
| Supply Voltage | 15-30 Volts DC (for 4-20mA) |
| Settling Time | 2 seconds |
| Output Impedance | Loop Resistance 600 Ohms max. at 24 Volts |
| Case Isolation | $>10^8$ Ohms at 500 Volts |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -25 to 90°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

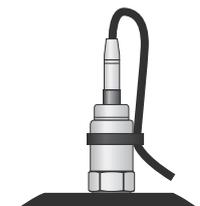
Typical Frequency Response



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 420 - Industrial Vibration Sensor | | | | | | | | | | |
| H | S | 4 | 2 | 0 | X | X | X | X | X | X | X |
| Extra Options (if required) | | | | | Velocity Range (RMS unless specified) | | | Cable/Connector | | | Mounting Threads |
| F - Filtered | P - Peak Range | | 010 - 0-10 mm/sec | | | 01 - PUR | | | 01 - 1/4-28" UNF Female | | |
| I - Intrinsically Safe | PP - Peak to Peak Range | | 020 - 0-20 mm/sec | | | 02 - Braided | | | 02 - 1/2-28" UNF Male | | |
| L - 316L Stainless Steel | | | | 025 - 0-25 mm/sec | | | 07 - Silicon | | | 05 - Quick Fit Female | |
| RT - Temperature Output PT100 | | | | 050 - 0-50 mm/sec | | | 08 - Flame Retardant | | | 06 - M6 x 1mm Male | |
| S - 90° Side Exit | | | | 100 - 0-100 mm/sec | | | 50 - 2 Pin MS | | | 08 - M8 x 1.25mm Male | |
| T - Temperature Output | | | | | | | 54 - M12 | | | 10 - M10 x 1.5mm Male | |



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

TS029.8

