

HS-421S Accelerometer

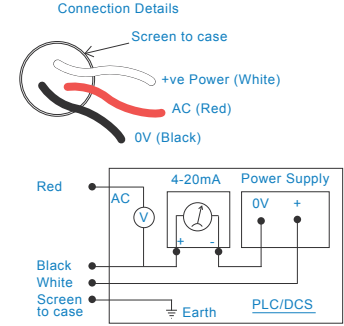
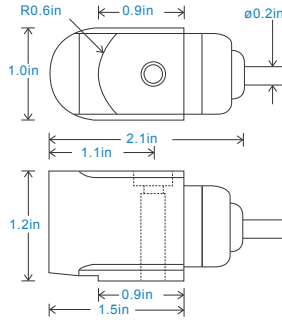
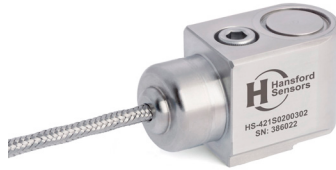
4-20mA velocity and AC acceleration output via Braided Cable

Key Features

- Unique output
- For use with PLC/DCS systems and data collectors
- Side entry for easy access

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 72°F |
| Frequency Response | 600cpm (10Hz) to 60kcpm (1kHz) $\pm 5\%$ - ISO10816 |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|---|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 5.9ft. lbs |
| Mounting Bolt Provided | see: 'How To Order' table x 1.4in long |
| Weight | 6.5 oz. (nominal) |
| Maximum Cable Length | 3,280 ft. |
| Standard Cable Length | 16 ft. |
| Shielded Cable | Braided - length to be specified with order |
| Mounting Threads | see: 'How To Order' table |

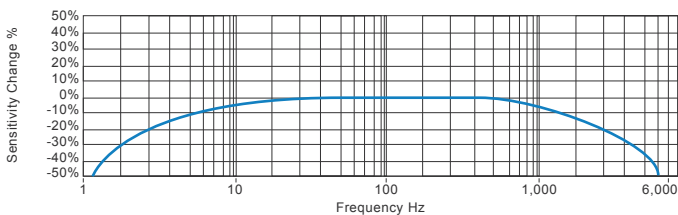
Electrical

| | |
|------------------|--|
| Outputs | 4-20mA DC current proportional to Range and AC acceleration |
| Bias Voltage | 3 Volts DC (nominal) |
| Supply Voltage | 15-30 Volts DC (for 4-20mA) |
| Settling Time | 1 second |
| Output Impedance | Loop Resistance 600 Ohms max. at 24 Volts |
| Case Isolation | $>10^8$ Ohms at 500 Volts |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -13 to 194°F |
| Sealing | IP65 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

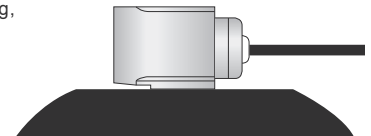
Typical Frequency Response



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 421 - Industrial Vibration Sensor | | | | Cable Length (if integral cable) UXX - length specified in feet | | | | | | | | | |
|--|---|---|---|---|---|--|---|--|---|--|---|---|---|---|--|
| H | S | 4 | 2 | 1 | S | X | X | X | X | X | X | X | X | X | |
| Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output | | U - Imperial Range UP - Imperial Peak Range UPP - Imperial Peak to Peak Range | | | | Velocity Range (RMS unless specified) 012 - 0-½ IPS 025 - 0-1 IPS 050 - 0-2 IPS 100 - 0-4 IPS | | Sensitivity 25mV/g 25mV/g 25mV/g 25mV/g | | Range ±80g ±80g ±80g ±80g | | Cable/Connector 01 - PUR 03 - Braided 07 - Silicon 15 - Flame Retardant 52 - 3 Pin MS 54 - M12 | | Mounting Threads 02 - ¼-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male | |



www.hansfordsensors.com
sales@hansfordsensors.com

We reserve the right to alter the specification of this product without prior notice
TS324U.6

