# HS-150 Premium Accelerometer

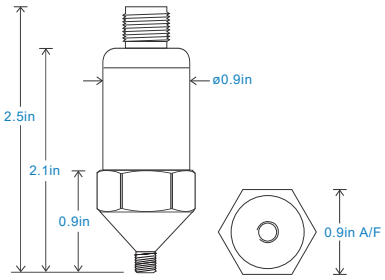
## AC acceleration output via M12 Connector with Conical Mounting

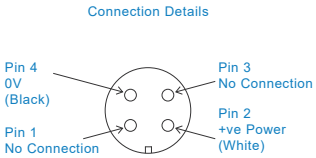
### Key Features

- For use with data collector
- Premium design
- M8 Conical Mounting

### 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 ±10% |
| | Nominal 80Hz at 72°F |
| Frequency Response | 90cpm (1.5Hz) to 600kcpm (10kHz) ± 5% |
| | 30cpm (0.5Hz) to 720kcpm (12kHz) ± 10% |
| | 12cpm (0.2Hz) to 900kcpm (15kHz) ± 3dB |
| 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 |
| Weight | 4.9 oz. (nominal) body only |
| Screened Cable Assembly | HS-AC010 - straight |
| | HS-AC011 - right angle |
| Mounting Threads | M8 Conical Base |

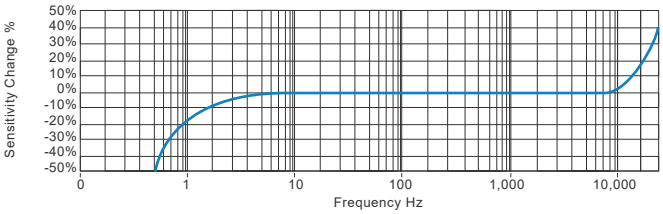
## Electrical

| | |
|---|---|
| Excitation Voltage: | 18-30Volts DC |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 1 second |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >$10^8$ Ohms at 500 Volts |

## Environmental

| | |
|---|---|
| Operating Temperature Range | -67 to 300°F |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

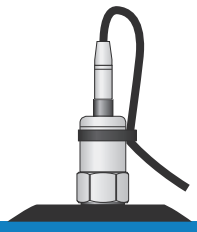
## Typical Frequency Response (at 100mV/g)




## 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 | Product Series | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HS - Hansford Sensors | 150 - Premium Industrial Vibration Sensor | | | | | | | | | | | |
| **H** | **S** | **1** | **5** | **0** | **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
Y - 5% tolerance on sensitivity

| Sensitivity | Range | Resonant Frequency |
|---|---|---|
| 010 - 10mV/g | ±800g | 2,040kcpm (34kHz) |
| 030 - 30mV/g | ±250g | 1,980kcpm (33kHz) |
| 050 - 50mV/g | ±160g | 1,920kcpm (32kHz) |
| 100 - 100mV/g | ±80g | 1,800kcpm (30kHz) |
| 250 - 250mV/g | ±32g | 1,680kcpm (28kHz) |
| 500 - 500mV/g | ±16g | 1,560kcpm (26kHz) |

**Cable/Connector**
50 - 2 Pin MS
54 - M12

**Mounting Threads**
19 - M8 Conical Base

Hansford Sensors
*Excellence in Vibration Monitoring*

www.hansfordsensors.com
sales@hansfordsensors.com



TS1168U.2