# HS-170 Premium Accelerometer

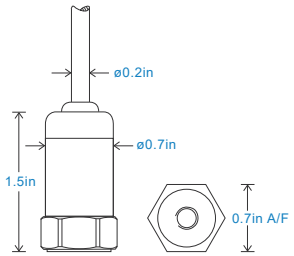
## AC acceleration output via Flame Retardant Cable

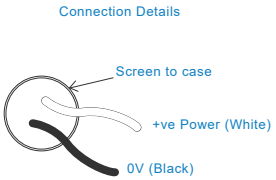
### Key Features

- Compact design
- Premium design
- Customizable 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 ±10% |
| | Nominal 80Hz at 72°F |
| Frequency Response | 120cpm (2Hz) to 840kcpm (14kHz) ± 5% |
| | 90cpm (1.5Hz) to 960kcpm (16kHz) ± 10% |
| | 48cpm (0.8Hz) to 1,140kcpm (19kHz) ± 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 | 1.8 oz. (nominal) body only |
| Maximum Cable Length | 3,280 ft. |
| Standard Cable Length | 16 ft. |
| Sheilded Cable | Flame Retardant - length to be specified with order |
| Mounting Threads | see: 'How To Order' table |

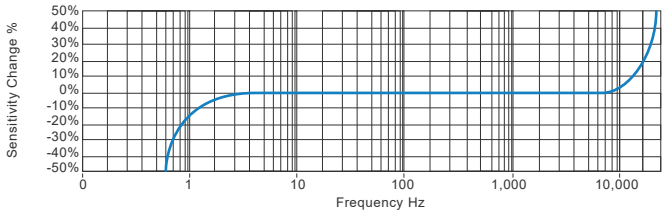
## Electrical

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

## Environmental

| | |
|---|---|
| Operating Temperature Range | -40 to 212°F |
| Sealing | IP65 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

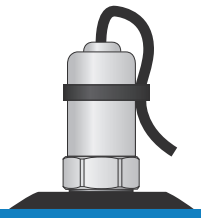
## Typical Frequency Response (at 100mV/g)




## 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**
170 - Compact Premium Industrial Vibration Sensor

**Cable Length (if integral cable)**
UXX - length specified in feet

| H | S | 1 | 7 | 0 | X | X | X | X | X | X | X | X | X | X | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Extra Options (if required)**
F - Filtered
L - 316L Stainless Steel
S - 90° Side Exit
Y - 5% tolerance on sensitivity

| Sensitivity | Range | Resonant Frequency |
|---|---|---|
| 010 - 10mV/g | ±800g | 2,040kcpm (34kHz) |
| 030 - 30mV/g | ±250g | 1,920kcpm (32kHz) |
| 050 - 50mV/g | ±160g | 1,800kcpm (30kHz) |
| 100 - 100mV/g | ±80g | 1,680kcpm (28kHz) |
| 250 - 250mV/g | ±32g | 1,560kcpm (26kHz) |
| 500 - 500mV/g | ±16g | 1,440kcpm (24kHz) |

**Cable/Connector**
02 - Braided
08 - Flame Retardant
50 - 2 Pin MS
54 - M12

**Mounting Threads**
01 - ¼-28" UNF Female
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male
10 - M10 x 1.5mm Male

Hansford Sensors
Excellence in Vibration Monitoring

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