

HS-170 Premium Accelerometer

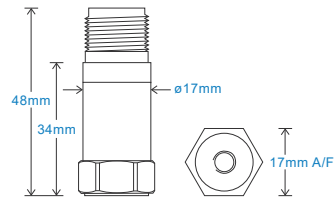
AC acceleration output via 2 Pin MS Connector

Key Features

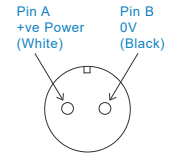
- Compact design
- Premium design
- Customisable features

Industries

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



Connection Details



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 | 2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3dB$ |
| 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 | 8 Nm |
| Weight | 52gms (nominal) body only |
| Screened Cable Assembly | see: www.hansfordsensors.com for options |
| Connector | HS-AA004 - non-booted HS-AA053 or HS-AA054 - booted |
| Mounting Threads | see: 'How To Order' table |

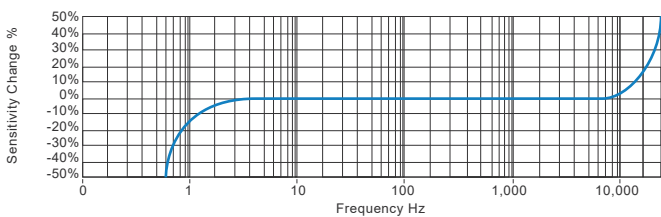
Electrical

| | |
|------------------|---------------------------|
| 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 | -55 to 150°C |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

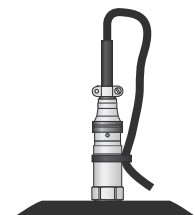
Typical Frequency Response (at 100mV/g)



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 | | | | | | | | | | |
| H | S | 1 | 7 | 0 | 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 010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g | Range $\pm 800g$ $\pm 250g$ $\pm 160g$ $\pm 80g$ $\pm 32g$ $\pm 16g$ | Resonant Frequency 34kHz (2,040kcpm) 32kHz (1,920kcpm) 30kHz (1,800kcpm) 28kHz (1,680kcpm) 26kHz (1,560kcpm) 24kHz (1,440kcpm) | 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 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male | | | | |



**Distributor
in Egypt**

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We reserve the right to alter the specification of this product without prior notice TS049.16

