# **HS-160S Accelerometer**

AC velocity output via Silicon Cable

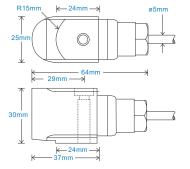
#### **Key Features**

- Waterproof
- AC velocity output
- Side entry for easy access

#### 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)     |
|------------------------|--|
| Mounted base Resonance | see now to Order table (noninal)       |
| Sensitivity            | see: 'How To Order' table ±10%         |
|                        | Nominal 80Hz at 22°C                   |
| Frequency Response     | 3Hz (180cpm) to 4.5kHz (270kcpm) ± 10% |
|                        | 2Hz (120cpm) to 6kHz (360kcpm) ± 3dB   |
| Isolation              | Base isolated                          |
| Range                  | see: 'How To Order' table              |
| Transverse Sensitivity | Less than 5%                           |
|                        |  |

| Mechanical                   |   |
|------------------------------|---|
| Case Material                | Stainless Steel                             |
| Sensing Element/Construction | PZT/Compression                             |
| Mounting Torque              | 8Nm   |
| Mounting Bolt Provided       | see: 'How To Order' table x 30mm long       |
| Weight                       | 185gms (nominal) body only                  |
| Maximum Cable Length         | 1000 metres                                 |
| Standard Cable Length        | 5 metres                                    |
| Screened Cable               | Silicon - length to be specified with order |
| Mounting Threads             | see: 'How To Order' table                   |
| Submersible Depth            | 100 metres max (10 bar)                     |
|                              |   |

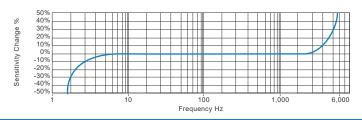
#### Electrical

| Excitation Voltage | 18-30Volts DC                      |
|--------------------|------------------------------------|
| Electrical Noise   | 0.1mg max                          |
| Current Range      | 0.5mA to 8mA                       |
| Bias Voltage       | 10 - 12 Volts DC                   |
| Settling Time      | 2 seconds                          |
| Output Impedance   | 200 Ohms max.                      |
| Case Isolation     | >10 <sup>8</sup> Ohms at 500 Volts |
|                    |                                    |

# Environmental

Operating Temperature Range Sealing Maximum Shock EMC -50 to 140°C IP68 5000g EN61326-1:2013

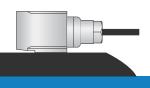
## Typical Frequency Response



#### 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<br>HS - Hansford Sensors  | roduct Series<br>60 - Industrial Vibration Senso              |     |  |   |   |                  | f integral<br>ecified in r                                 |              |
|--|---|-----|--|---|---|------------------|--|--------------|
| H S 1  | 60S>  | X X | X X  | X   | X | X                | X  | X            |
| Extra Options (if required)<br>F - Filtered<br>L - 316L Stainless Steel<br>RT - Temperature Output P1<br>S - 90° Side Exit<br>T - Temperature Output<br>Y - 5% tolerance on sensit | 004 - 4mV/mm/s 100<br>0 025 - 25mV/mm/s 25<br>(other sensitiv |     | 01 - F<br>om) 02 - E<br>om) 07 - S<br>08 - F | araided<br>allicon<br>ame Retai<br>Pin MS |   | 02 - ¼<br>06 - M | t <b>ing Threa</b><br>-28" UNF  <br>6 x 1mm M<br>8 x 1.25m | Male<br>Male |



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