

# HS-130 Series Vibration Sensor

Compact, AC General Purpose Accelerometer



## Typical Applications

- Proven use in vibration monitoring for offline applications using commercially available data collectors and online monitoring systems in the fields of Building Services, Civil Engineering, Paper and Pulp, Mining, Metals Manufacture, Utilities, Automotive, Water and Waste Treatment, Pharmaceutical, Aerospace, etc.
- **Protecting...**  
Fans, Motors, Pumps, Compressors, Centrifuges, Conveyers, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, HVAC, Spindles, Machine Tooling, Process Equipment and many more.

## Technical Performance

|                        |   |
|------------------------|---|
| Mounted Base Resonance | 22 kHz (nominal)  |
| Sensitivity            | 100 mV/g $\pm 10\%$ Nominal 80 Hz at 22 °C              |
| Frequency Response     | 2 Hz to 10 kHz $\pm 5\%$<br>0.8 Hz to 15 kHz $\pm 3$ dB |
| Isolation              | Base isolated   |
| Measurement Range      | $\pm 80$ g  |
| Transverse Sensitivity | Less than 5%  |

## Electrical

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

## Environmental

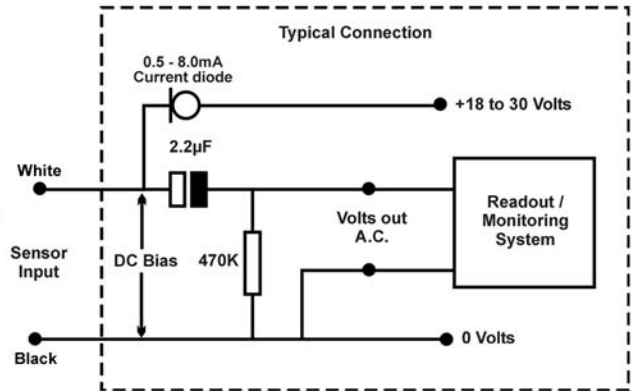
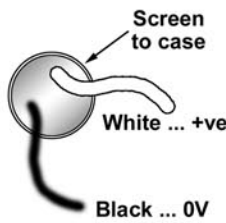
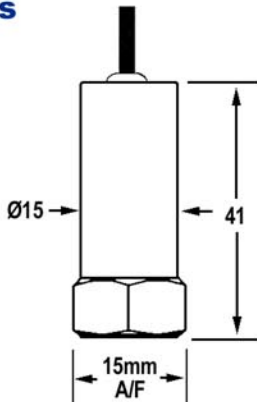
|                             |                  |
|-----------------------------|------------------|
| Operating Temperature Range | -55 to 140 °C    |
| Sealing                     | IP65             |
| Maximum Shock               | 5000 g           |
| Emissions                   | EN61000-6-4:2001 |
| Immunity                    | EN61000-6-2:1999 |

## Mechanical

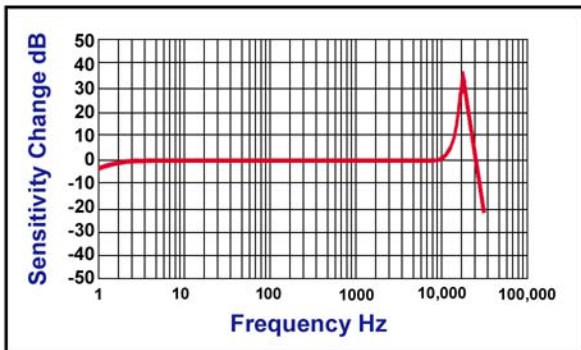
|                              |  |
|------------------------------|--|
| Case Material                | Stainless Steel  |
| Sensing Element/Construction | PZT/Compression  |
| Mounting Torque              | 8 Nm   |
| Weight                       | 30 gms (nom)   |
| Maximum Cable length         | 1000 metres  |
| Standard Cable length        | 5 metres   |
| Mounting Threads             | See 'How to order' table   |
| Options                      | Intrinsically safe, connector, cable length, various mounts, other sensitivities |

# HS-130 Series Vibration Sensor

## Dimensions



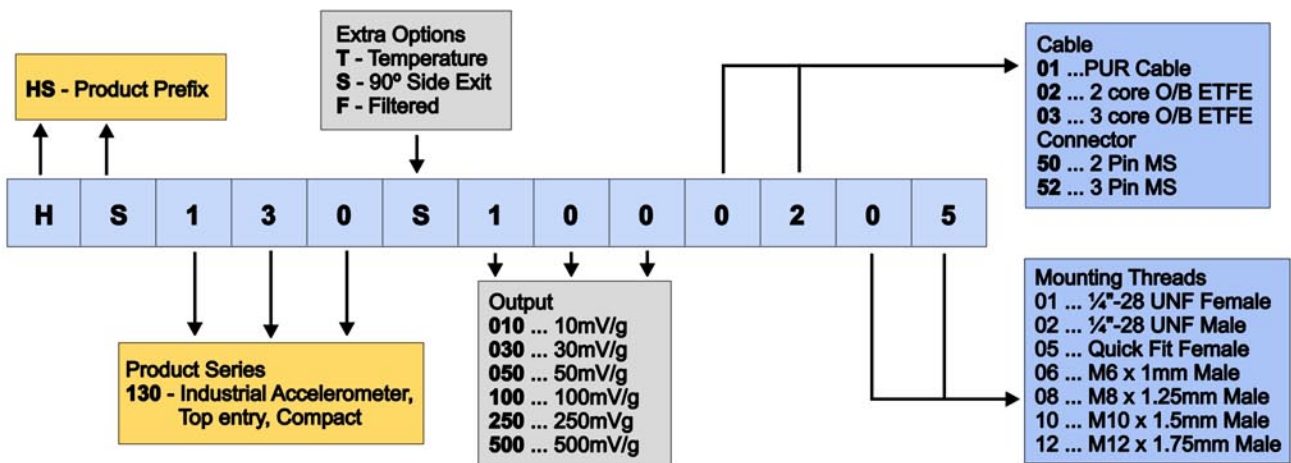
## Frequency Response



Mounting of sensor to achieve good repeatable readings. 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



Please contact our Sales Office for information on sensor accessories (mounting studs, etc) and multichannel switch boxes.