# HS-172R Premium Biaxial Accelerometer

Two AC outputs via M12 Connector

# **Key Features**

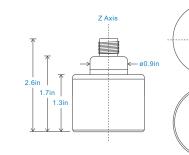
Industries

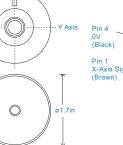
- · Output via two axies
- · For use with data collector
- Customisable features

Water, Pharmaceutical

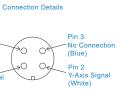
Building services, Pulp and Paper,

Mining, Metals, Utilities, Automotive,





X Axis



#### **Technical Performance** М a D П

| Mounted Base Resonance | see 'How To Order' table (nominal)       |   |
|------------------------|--|---|
|                        | +3kHz for aluminium version              | ; |
| Sensitivity            | see: 'How To Order' table ±10%           |   |
|                        | Nominal 80Hz at 72°F per axies           | , |
| Frequency Response     | 120cpmÁÇGP: Dto 600kcpmÁÇF€∖ P: D± 5%    |   |
|                        | 90cpmÁÇFĚ P: Dto 720kcpmÁÇFG P: D± 10%   | ; |
|                        | 48cpmÁÇ€È P: Dto 900kcpmÁÇFÍ ∖ P: D± 3dB |   |
| Isolation              | Base isolated                            |   |
| Range                  | see: 'How To Order' table                |   |
| Transverse Sensitivity | Less than 5%                             |   |
|                        |  |   |

# Mechanical

| Case Material                | Stainless Steel unless specified Aluminium |
|------------------------------|--|
| Sensing Element/Construction | PZT/Shear                                  |
| Mounting Torque              | 5.9ft. lbs                                 |
| Weight                       | 6.8 oz. (nominal) - Stainless Steel        |
|                              | 3.5 oz. (nominal) - Aluminium              |
| Screened Cable Assembly      | HS-AC010 - straight                        |
| Mounting Threads             | see: 'How To Order' table                  |
|                              |  |

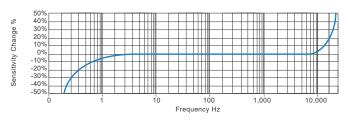
| Electrical       |                                    |
|------------------|------------------------------------|
| Electrical Noise | 0.1mg max                          |
| Current Range    | 0.5mA to 8mA                       |
| Bias Voltage     | 10 - 12 Volts DC                   |
| Settling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

# Environmental

**Operating Temperature Range** Sealing Maximum Shock EMC

| -67 to 300°l  | F |
|---------------|---|
| IP6           | 7 |
| 5000          | g |
| EN61326-1:201 | 3 |

# 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

|  | oduct Series<br>2 - Biaxial Industrial Vibrati   | on Sensor   |  |                             |   |
|--|--|---|--|-----------------------------|---|
| H S 1 7  | 2 R  | X X   | XX   | X X X                       | _   |
| Extra Options (if required)<br>R - Round Design<br>AL - Aluminium Material<br>F - Filtered | Sensitivity   010 - 10mV/g   030 - 30mV/g   050 - 50mV/g   100 - 100mV/g   250 - 250mV/g   500 - 500mV/g | Range Resona   ±800g 1,200kg   ±250g 1,140kg   ±160g 1,080kg   ±80g 1,020kg   ±32g 960kg   ±16g 900kg | cpm (19kHz)<br>cpm (18kHz)<br>cpm (17kHz)<br>cpm (16kHz) | Cable/Connector<br>54 - M12 | Mounting Threads<br>01 - ½-28" UNF Female<br>02 - ½-28" UNF Male<br>06 - M6 x 1mm Male<br>08 - M8 x 1.25mm Male |



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We reserve the right to alter the specification of this product without prior notice TS1054U.4

