HS-172R Premium Biaxial Accelerometer
Two AC outputs via M12 Connector

Key Features
• Output via two axes
• For use with data collector
• Customisable features

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

Technical Performance
Mounted Base Resonance
see ‘How To Order’ table (nominal)
+3kHz for aluminium version
Nominal 80Hz at 22°C per axes

Sensitivity
see: ‘How To Order’ table ±10%
Nominal 80Hz at 22°C per axes

Frequency Response
2Hz (120cpm) to 10kHz (800kcpm) ± 5%
1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%
0.8Hz (48cpm) to 15kHz (900kcpm) ± 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
8Nm

Mounting Bolt Provided
see: ‘How To Order’ table x 30mm long

Weight
194gms (nominal) - Stainless Steel
100gms (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
>10⁸ Ohms at 500 Volts

Operating Temperature Range
-55 to 150°C

Sealing
IP67

Maximum Shock
500g

EMC
EN61326-1:2013

Environmental

Operating Temperature Range
-55 to 150°C

Sealing
IP67

Maximum Shock
500g

EMC
EN61326-1:2013

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
172 - Biaxial Industrial Vibration Sensor

Example Order:
HS-17 R X X X X X X

Extra Options (if required)
R - Round Design
AL - Aluminium Material
F - Filtered

Sensitivity
010 - 10mV/g ± 800g
030 - 30mV/g ± 250g
050 - 50mV/g ± 160g
100 - 100mV/g ± 80g
250 - 250mV/g ± 32g
500 - 500mV/g ± 16g

Resonant Frequency
20kHz (1,800kcpm)
19kHz (1,830kcpm)
18kHz (1,550kcpm)
17kHz (1,440kcpm)
16kHz (1,320kcpm)
15kHz (1,200kcpm)

Cable/Connector
54 - M12

Mounting Threads
01 - ¼-28” UNF Female
02 - ¼-28” UNF Male
06 - M6 x 1.25mm Male
08 - M8 x 1.25mm Male

www.hansfordsensors.com
sales@hansfordsensors.com

We reserve the right to alter the specification of this product without prior notice
TS1054.1