

# HS-173 Premium Triaxial Accelerometer

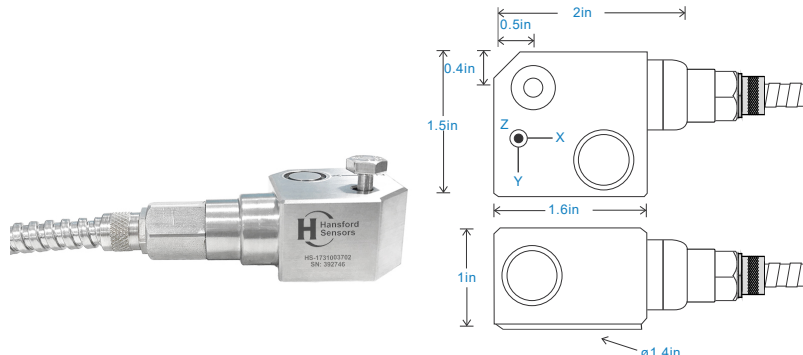
## AC acceleration output via 4 Core Polyolefin HFFR with Protective Conduit

### Key Features

- Output via three axes
- For use with data collector
- Resistant to oil

### 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
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 72°F per axes
Frequency Response	120cpm (2Hz) to 600kcpm (10kHz) $\pm 5\%$ 90cpm (1.5Hz) to 720kcpm (12kHz) $\pm 10\%$ 48cpm (0.8Hz) to 900kcpm (15kHz) $\pm 3\text{dB}$
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
Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
Weight	8.3 oz. (nominal) - Stainless Steel 4 oz. (nominal) - Aluminium
Maximum Cable Length	3,280 ft.
Standard Cable Length	16 ft.
Screened Cable	Polyolefin HFFR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Mounting Stud	HS-AS226, HS-AS221 or HS-AS222
Submersible Depth	328 ft. max (10 bar)

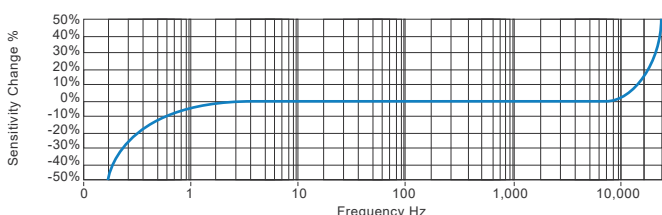
### Electrical

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	-67 to 266°F
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

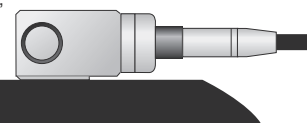
### Typical Frequency Response (at 100mV/g)



### 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	Product Series										
HS - Hansford Sensors	173 - Triaxial Industrial Vibration Sensor										
H	S	1	7	3	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
AL - Aluminium Material F - Filtered		010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g		$\pm 800\text{g}$ $\pm 250\text{g}$ $\pm 160\text{g}$ $\pm 80\text{g}$ $\pm 32\text{g}$ $\pm 16\text{g}$		1,200kcpm (20kHz) 1,140kcpm (19kHz) 1,080kcpm (18kHz) 1,020kcpm (17kHz) 960kcpm (16kHz) 900kcpm (15kHz)		37C - 4 Core Polyolefin HFFR with Protective Conduit		02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male	



[www.hansfordsensors.com](http://www.hansfordsensors.com)  
[sales@hansfordsensors.com](mailto:sales@hansfordsensors.com)

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

TS988U.5

