

# HS-183 Premium Triaxial Accelerometer

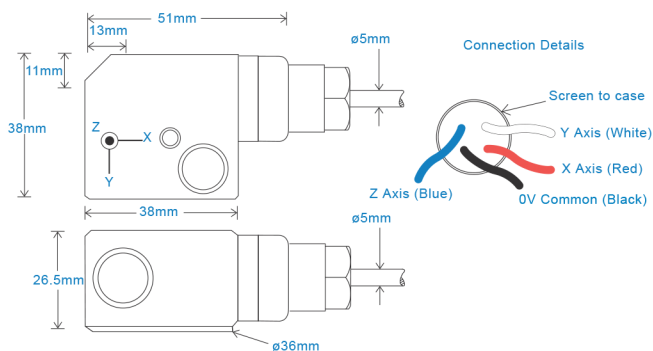
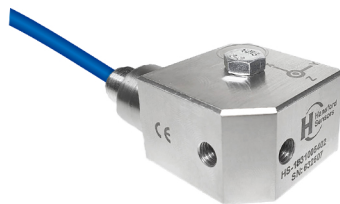
Three AC outputs via 4 Core HFFR

## Key Features

- Output via three axes
- Three way mounting option
- 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)
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C per axes
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3dB$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 27mm long
Weight	235gms (nominal) - Stainless Steel
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
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	100 metres max (10 bar)

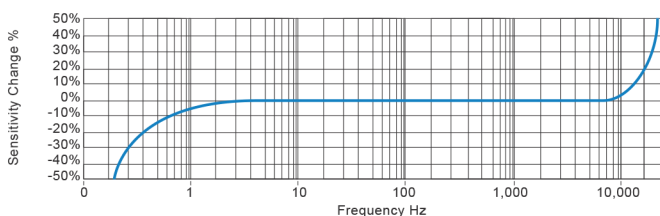
## Electrical

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	-55 to 140°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

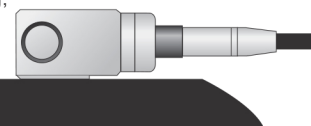
## Typical Frequency Response (at 100mV/g)



## 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		183 - Premium Triaxial Accelerometer									
H	S	1	8	3	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
F - Filtered		010 - 10mV/g		±800g		20kHz (1,200kcpm)		37 - 4 Core		02 - ¼-28" UNF Male	
		030 - 30mV/g		±250g		19kHz (1,140kcpm)		Polyolefin HFFR		06 - M6 x 1mm Male	
		050 - 50mV/g		±160g		18kHz (1,080kcpm)					
		100 - 100mV/g		±80g		17kHz (1,020kcpm)					
		250 - 250mV/g		±32g		16kHz (960kcpm)					
		500 - 500mV/g		±16g		15kHz (900kcpm)					