

# HS-173 Premium Triaxial Accelerometer

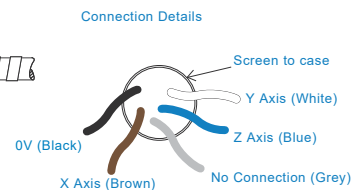
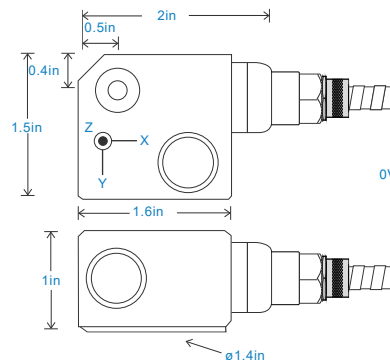
## AC Acceleration Output via 5 Core PTFE Cable with Protective Conduit

### Key Features

- For use with data collector
- Protective Conduit
- 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 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
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
Weight-Sensor Only	8.3 oz. (nominal) - Stainless Steel
Maximum Cable Length	3,280 ft.
Standard Cable Length	16 ft.
Screened Cable	PTFE Cable - 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)
Conduit Material	Stainless Steel
Conduit Length	Conduit Length is approx. 0.5m shorter than the cable

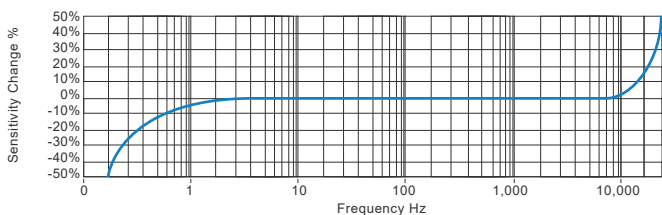
### Electrical

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 300°F
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

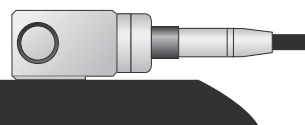
### Typical Frequency Response (at 100mV/g)



### 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	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads		
F - Filtered		010 - 10mV/g		±800g		1,200kcpm (20kHz)		38 - 5 Core PTFE Cable		02 - ¼-28" UNF Male		
H - High Temperature		030 - 30mV/g		±250g		1,140kcpm (19kHz)		38C - 5 Core PTFE Cable		06 - M6 x 1mm Male		
T - Temperature Output		050 - 50mV/g		±160g		1,080kcpm (18kHz)		with Protective conduit.		08 - M8 x 1.25mm Male		
		100 - 100mV/g		±80g		1,020kcpm (17kHz)						
		250 - 250mV/g		±32g		960kcpm (16kHz)						
		500 - 500mV/g		±16g		900kcpm (15kHz)						



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

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