

# IE-173R Premium Triaxial Accelerometer

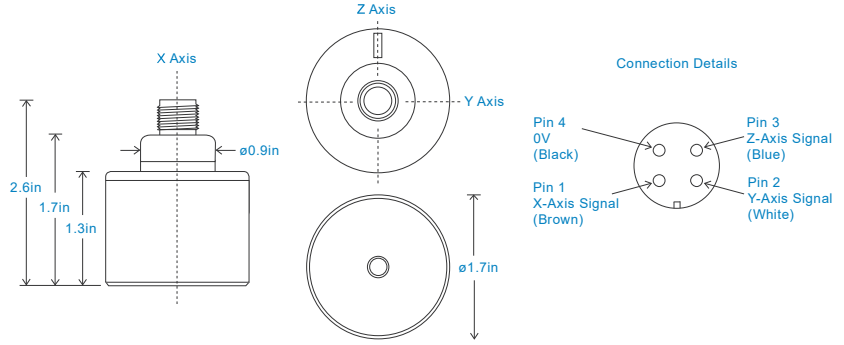
## Three AC outputs via M12 Connector

### Key Features

- Output via three 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
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 72°F per axis
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
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
Mounting Stud	HS-AS226, HS-AS221 or HS-AS222

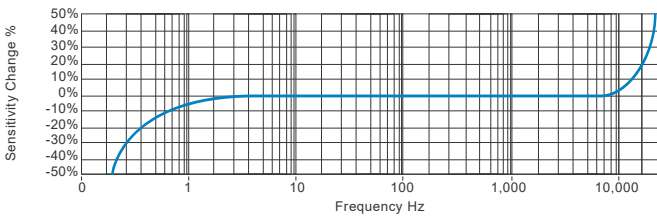
### Electrical

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	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

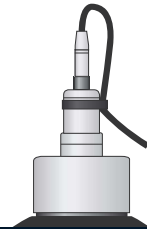
### Typical Frequency Response (at 100mV/g)



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 173 - Triaxial Industrial Vibration Sensor																					
<b>I</b> <b>E</b> <b>1</b> <b>7</b> <b>3</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b> <b>X</b>																						
<b>Extra Options (if required)</b> R - Round Design AL - Aluminium Material F - Filtered	<table border="1"> <tr> <td><b>Sensitivity</b></td> <td><b>Range</b></td> <td><b>Resonant Frequency</b></td> </tr> <tr> <td>010 - 10mV/g</td> <td><math>\pm 800\text{g}</math></td> <td>1,200kcpm (20kHz)</td> </tr> <tr> <td>030 - 30mV/g</td> <td><math>\pm 250\text{g}</math></td> <td>1,140kcpm (19kHz)</td> </tr> <tr> <td>050 - 50mV/g</td> <td><math>\pm 160\text{g}</math></td> <td>1,080kcpm (18kHz)</td> </tr> <tr> <td>100 - 100mV/g</td> <td><math>\pm 80\text{g}</math></td> <td>1,020kcpm (17kHz)</td> </tr> <tr> <td>250 - 250mV/g</td> <td><math>\pm 32\text{g}</math></td> <td>960kcpm (16kHz)</td> </tr> <tr> <td>500 - 500mV/g</td> <td><math>\pm 16\text{g}</math></td> <td>900kcpm (15kHz)</td> </tr> </table>	<b>Sensitivity</b>	<b>Range</b>	<b>Resonant Frequency</b>	010 - 10mV/g	$\pm 800\text{g}$	1,200kcpm (20kHz)	030 - 30mV/g	$\pm 250\text{g}$	1,140kcpm (19kHz)	050 - 50mV/g	$\pm 160\text{g}$	1,080kcpm (18kHz)	100 - 100mV/g	$\pm 80\text{g}$	1,020kcpm (17kHz)	250 - 250mV/g	$\pm 32\text{g}$	960kcpm (16kHz)	500 - 500mV/g	$\pm 16\text{g}$	900kcpm (15kHz)
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We reserve the right to alter the specification of this product without prior notice TS692U.8

