

# HS-160 Accelerometer

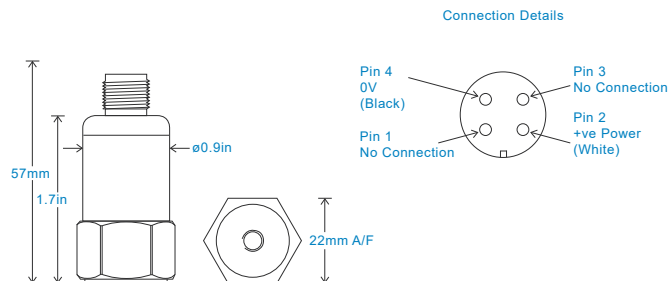
## AC velocity output via M12 Connector

### Key Features

- For use with data collector
- AC velocity output
- Customizable 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
Frequency Response	180cpm (3Hz) to 270kcpm (4.5kHz) $\pm 10\%$ 120cpm (2Hz) to 360kcpm (6kHz) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	316L Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	5.9ft. lbs
Weight	3.7 oz. (nominal) body only
Shielded Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

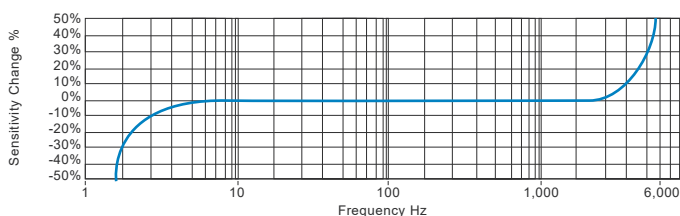
### Electrical

Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-67 to 284°F
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

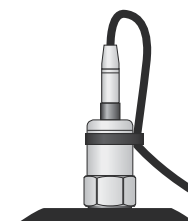
### Typical Frequency Response



### 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		160 - Industrial Vibration Sensor										
H	S	1	6	0	X	X	X	X	X	X	X	
Extra Options (if required)				Sensitivity		Range (pk)		Resonant Frequency		Cable/Connector		Mounting Threads
F - Filtered				004 - 100mV/in/s		40 IPS		1,320kcpm (22kHz)		01 - PUR		01 - ¼-28" UNF Female
RT - Temperature Output PT100				025 - 625mV/in/s		10 IPS		1,320kcpm (22kHz)		02 - Braided		02 - ¼-28" UNF Male
S - 90° Side Exit										07 - Silicon		05 - Quick Fit Female
T - Temperature Output										08 - Flame Retardant		06 - M6 x 1mm Male
Y - 5% tolerance on sensitivity										50 - 2 Pin MS		08 - M8 x 1.25mm Male
										54 - M12		10 - M10 x 1.5mm Male