

# HS-160 Accelerometer

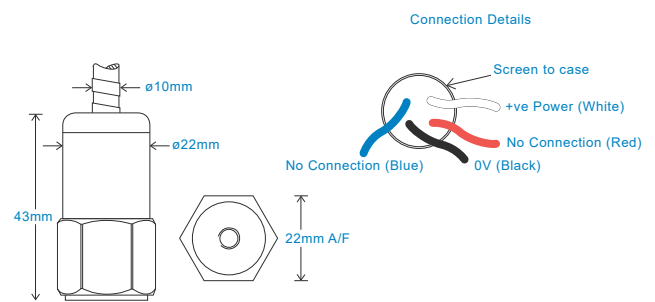
## AC velocity output via FEP Cable with Protective Conduit

### Key Features

- For use with data collector
- AC velocity output
- Protective Conduit

### 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
Frequency Response	3Hz (180cpm) to 4.5kHz (270kcpm) $\pm 10\%$ 2Hz (120cpm) to 6kHz (360kcpm) $\pm 3\text{dB}$
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	8Nm
Weight	106gms (nominal) body only
Maximum Cable Length	1000 metres
Standard cable Length	5 metres
Mounting Threads	see: 'How To Order' table
Conduit Material	304 Stainless Steel
Conduit Length	Conduit Length is approx. 0.5m shorter than the cable

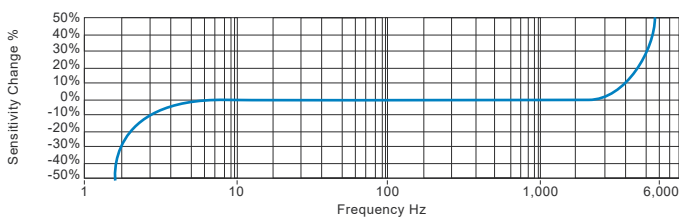
### Electrical

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

### Environmental

Operating Temperature Range	-55 to 140°C
Sealing	IP65
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 HS - Hansford Sensors		Product Series 160 - Industrial Vibration Sensor				Cable Length (if integral cable) QXX - length specified in metres									
H	S	1	6	0	X	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensitivity		Sensitivity		Range (pk)		Resonant Frequency		Cable/Connector 30C - FEP with Protective Conduit				Mounting Threads 02 - ¼-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male			
		004 - 4mV/mm/s		1000mm/s		22kHz (1,320kcpm)									
		025 - 25mV/mm/s		250mm/s		22kHz (1,320kcpm)									
		(other sensitivities available on request)													