

# HS-160S Accelerometer

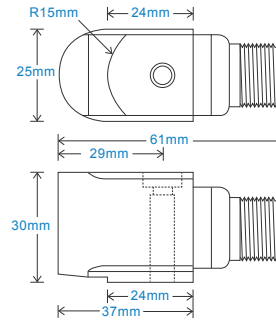
## AC velocity output via 2 Pin MS Connector

### Key Features

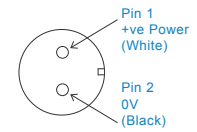
- For use with data collector
- AC velocity output
- Side entry for easy access

### Industries

Building services, Pulp and Paper,  
Mining, Metals, Utilities, Automotive,  
Water, Pharmaceutical



### Connection Details



### 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) $\pm 3dB$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	185gms (nominal)
Screened Cable Assembly	see: <a href="http://www.hansfordsensors.com">www.hansfordsensors.com</a> for options
Connector	HS-AA004 - non-booted HS-AA053 or HS-0054 - booted
Mounting Threads	see: 'How To Order' table

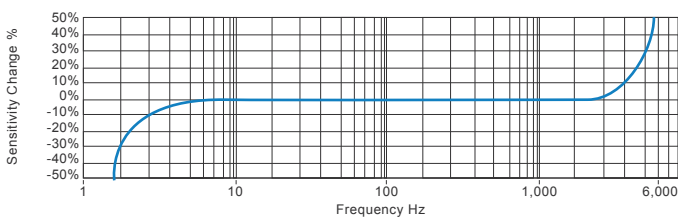
### Electrical

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

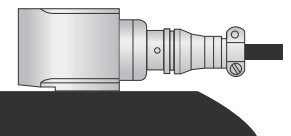
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 160 - Industrial Vibration Sensor	<b>Cable Length (if integral cable)</b> QXX - length specified in metres												
H	S	1	6	0	S	X	X	X	X	X	X	X	X	X
<b>Extra Options (if required)</b> F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensitivity		<b>Sensitivity</b> 004 - 4mV/mm/s 1000mm/s 025 - 25mV/mm/s 250mm/s  (other sensitivities available on request)	<b>Range (pk)</b> 22kHz (1,320kcpm) 22kHz (1,320kcpm)	<b>Resonant Frequency</b>	<b>Cable/Connector</b> 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12	<b>Mounting Threads</b> 02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male								



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We reserve the right to alter the specification of this product without prior notice  
TS133.5

