

# HS-165 High Temp. Velocity Sensor

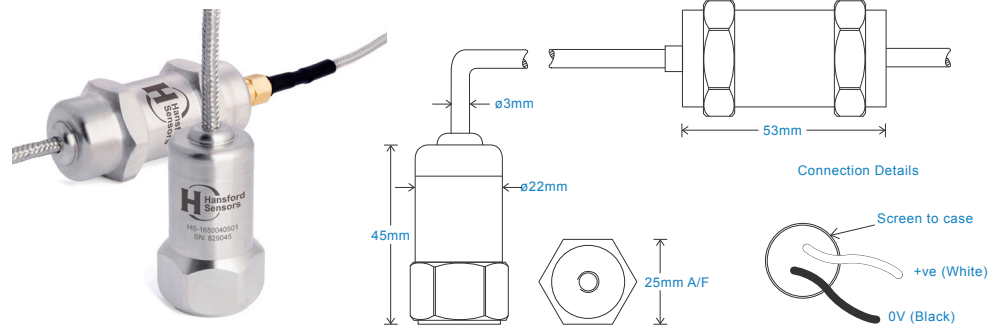
## AC velocity output via Low Noise Cable

### Key Features

- Includes external charge amplifier
- Optional temperature ranges
- Low noise cable

### 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	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	125gms (nominal)
Maximum Cable Length	1000 metres
Cable	see: 'How To Order' table - (20 metres max between sensor and charge amplifier)
Mounting Threads	see: 'How To Order' table

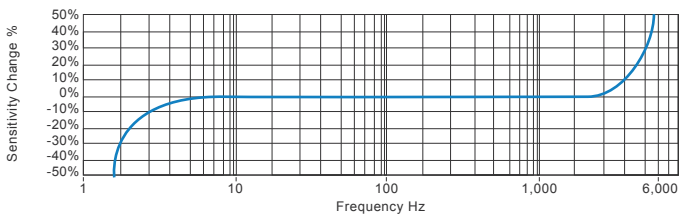
### Electrical

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°C to see 'How To Order' table for max charge amp: -55 to 85°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

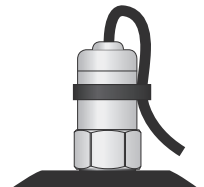
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 165 - Premium Industrial Velocity Sensor	<b>Cable Length (if integral cable)</b> QXX/XX - length before/after charge amp, specified in metres													
H	S	1	6	5	X	X	X	X	X	X	X	X	X	X	X
<b>Sensitivity</b> 004 - 4mV/mm/s 1000mm/s (other sensitivities available on request)					<b>Range (pk)</b> 1000mm/s <b>Resonant Frequency</b> 22kHz (1,320kcpm)					<b>Cable</b> 04 - Low Noise (150°C) 05 - Low Noise (250°C)			<b>Mounting Threads</b> 01 - ¼-28" UNF Female 02 - ¼-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male		



www.hansfordsensors.com  
sales@hansfordsensors.com

We reserve the right to alter the specification of this product without prior notice  
TS706.1

