

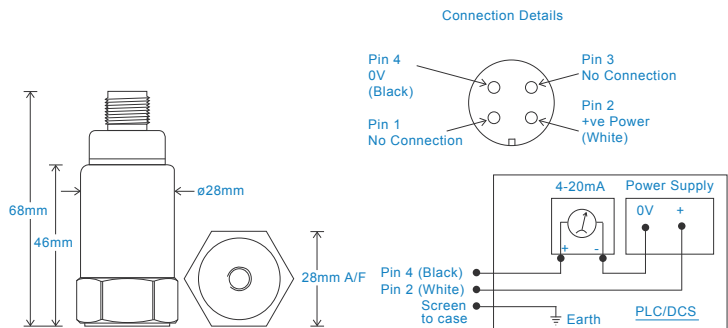
## 4-20mA velocity output via M12 Connector

## Key Features

- For use with PLC/DCS systems
- Customisable features

## Industries

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



## Technical Performance

Mounted Base Resonance	5kHz min
Velocity Ranges	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response	10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816
Isolation	Base isolated
Range	50g peak
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal)
Screened Cable Assembly	HS-AC010 - straight
	HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

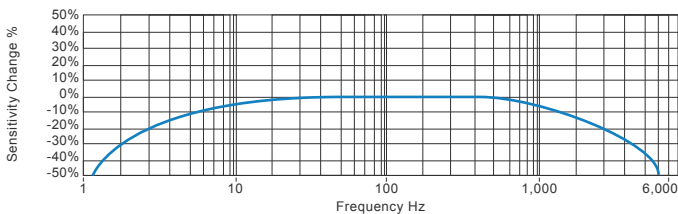
## Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts

## Environmental

Operating Temperature Range	-25 to 90°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

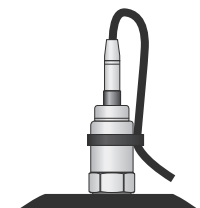
## Typical Frequency Response



## 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

**Product Prefix**  
HS - Hansford Sensors

**Product Series**  
420 - Industrial Vibration Sensor

**Cable Length (if integral cable)**  
QXX - length specified in metres

**Product Code Structure:**  
H S 4 2 0 X X X X X X X X X X X X

**Extra Options (if required)**  
F - Filtered  
I - Intrinsically Safe  
L - 316L Stainless Steel  
RT - Temperature Output PT100  
S - 90° Side Exit  
T - Temperature Output  
P - Peak Range  
PP - Peak to Peak Range

**Velocity Range (RMS unless specified)**  
010 - 0-10 mm/sec  
020 - 0-20 mm/sec  
025 - 0-25 mm/sec  
050 - 0-50 mm/sec  
100 - 0-100 mm/sec

**Cable/Connector**  
01 - PUR  
02 - Braided  
07 - Silicon  
08 - Flame Retardant  
50 - 2 Pin MS  
54 - M12

**Mounting Threads**  
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