

# HS-421 Accelerometer

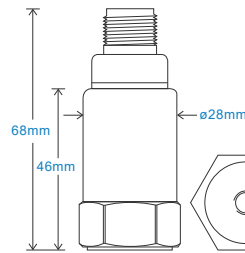
4-20mA velocity and AC acceleration output via 3 Pin MS Connector

## Key Features

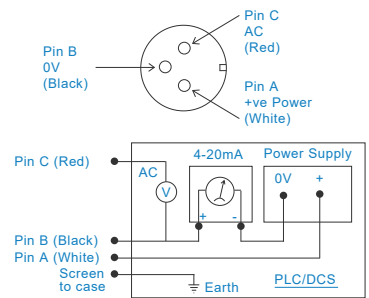
- Unique output
- For use with PLC/DCS systems and data collectors
- Customisable features

## Industries

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



Connection Details



## Technical Performance

Mounted Base Resonance	5kHz min
Velocity Ranges	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response: 4-20mA	10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816
Frequency Response: AC	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ - ISO10816
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	150gms (nominal) body only
Screened Cable Assembly	see: <a href="http://www.hansfordsensors.com">www.hansfordsensors.com</a> for options
Connector	HS-AA005 - non-booted HS-AA068 or HS-AA069 - booted
Mounting Threads	see: 'How To Order' table

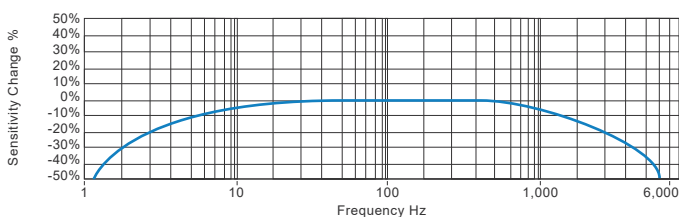
## Electrical

Outputs	4-20mA DC current proportional to Range and AC acceleration
Bias Voltage	3 Volts DC (nominal)
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	$>10^8$ Ohms at 500 Volts

## Environmental

Operating Temperature Range	-25 to 120°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

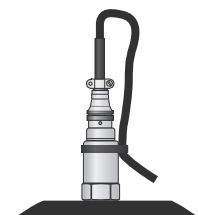
## Typical Frequency Response (4-20mA signal)



## 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		421 - Industrial Vibration Sensor										
H	S	4	2	1	X	X	X	X	X	X	X	
Extra Options (if required)					Velocity Range (RMS unless specified)			Sensitivity		Cable/Connector		Mounting Threads
F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output					P - Peak Range PP - Peak to Peak Range			Range		01 - PUR 03 - Braided 07 - Silicon 15 - Flame Retardant 52 - 3 Pin MS 54 - M12		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



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We reserve the right to alter the specification of this product without prior notice  
TS102.11

