

# HS-421 Accelerometer

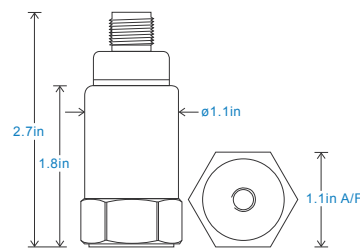
## 4-20mA velocity and AC acceleration output via M12 Connector

### Key Features

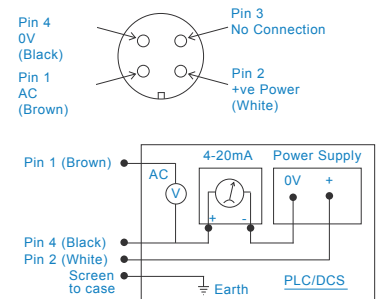
- Unique output
- For use with PLC/DCS systems and data collectors
- Customizable features

### 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 72°F
Frequency Response	600cpm (10Hz) to 60kcpm (1kHz) $\pm 5\%$ - 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	5.9ft. lbs
Weight	5.2 oz. (nominal)
Shielded Cable Assembly	HS-AC010 - straight
	HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

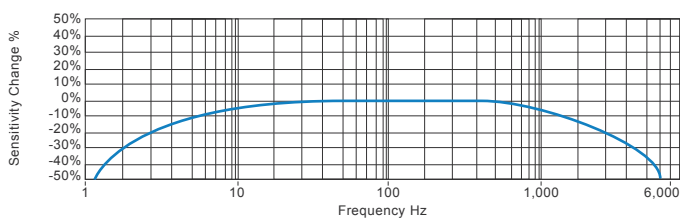
### Electrical

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	-13 to 194°F
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

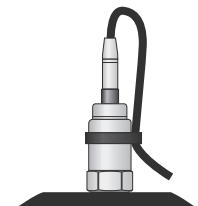
### Typical Frequency Response



### 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 421 - Industrial Vibration Sensor					Cable Length (if integral cable) UXX - length specified in feet							
H	S	4	2	1	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output		U - Imperial Range UP - Imperial Peak Range UPP - Imperial Peak to Peak Range		Velocity Range (RMS unless specified) 012 - 0-½ IPS 025 - 0-1 IPS 050 - 0-2 IPS 100 - 0-4 IPS		Sensitivity 100mV/g 100mV/g 50mV/g 50mV/g		Range $\pm 30g$ $\pm 30g$ $\pm 60g$ $\pm 60g$		Cable/Connector 01 - PUR 03 - Braided 07 - Silicon 15 - Flame Retardant 52 - 3 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		



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We reserve the right to alter the specification of this product without prior notice  
TS030U.4

