

# HS-421T Accelerometer

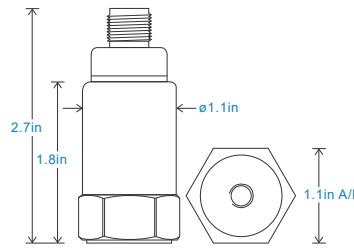
4-20mA velocity, AC acceleration and temperature output via M12 Connector

## Key Features

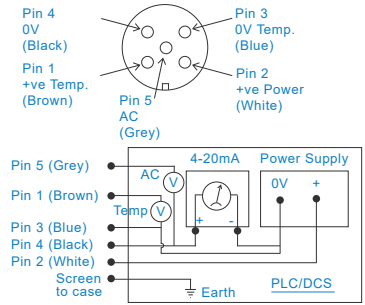
- Unique output
- For use with PLC/DCS systems and data collectors
- Temperature output

## 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
Temperature Output	10mV/°C - 0-1V proportional to 32-212°F (to convert this to 4-20mA use the HS-540 module)
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) body only
Shielded Cable Assembly	HS-AC303 - straight HS-AC032 - right angle
Mounting Threads	see: 'How To Order' table

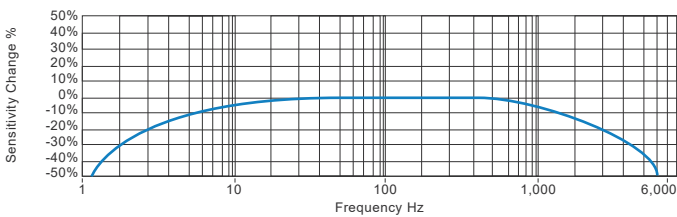
## Electrical

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

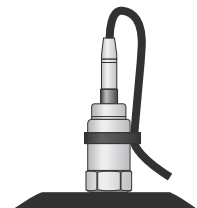
## Typical Frequency Response



## 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 421 - Industrial Vibration Sensor													
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>			
<b>Extra Options (if required)</b> F - Filtered L - 316L Stainless Steel S - 90° Side Exit T - Temperature Output		U - Imperial Range UP - Imperial Peak Range UPP - Imperial Peak to Peak Range		<b>Velocity Range (RMS unless specified)</b> 012 - 0-1/2 IPS 025 - 0-1 IPS 050 - 0-2 IPS 100 - 0-4 IPS			<b>Sensitivity</b> 100mV/g 100mV/g 50mV/g 50mV/g		<b>Range</b> $\pm 30g$ $\pm 30g$ $\pm 60g$ $\pm 60g$		<b>Cable/Connector</b> 53 - M12 (5 Pin)		<b>Mounting Threads</b> 01 - 1/4-28" UNF Female 02 - 1/4-28" 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  
TS375U.6