

HS-421 Accelerometer

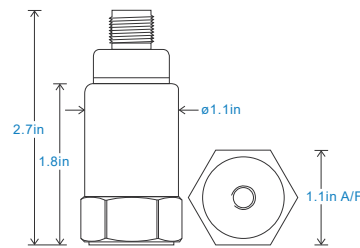
4-20mA velocity and AC acceleration output via M12 Connector

Key Features

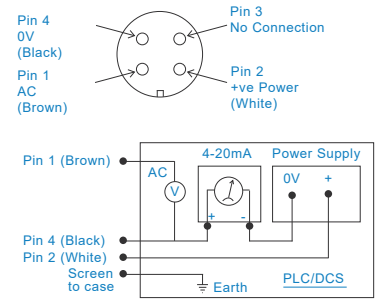
- Unique output
- For use with PLC/DCS systems and data collectors
- Customizable features

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: 4-20mA	600cpm (10Hz) to 60kcpm (1kHz) $\pm 5\%$ - ISO10816
Frequency Response: AC	120cpm (2Hz) to 600kcpm (10kHz) $\pm 5\%$ - 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) body only
Shielded Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

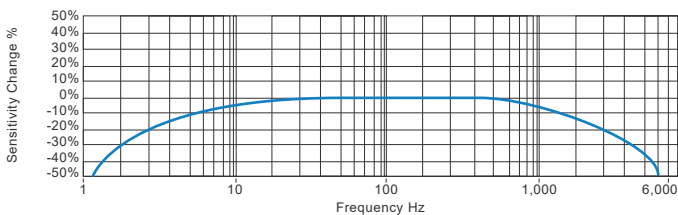
Electrical

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 248°F
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

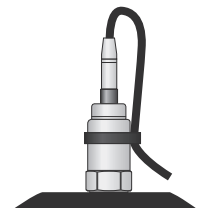
Typical Frequency Response (4-20mA signal)



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)		U - Imperial Range		UP - Imperial Peak Range		UPP - Imperial Peak to Peak Range		Velocity Range (RMS unless specified)		Sensitivity	
F - Filtered								012 - 0-1/2 IPS		100mV/g	
L - 316L Stainless Steel								025 - 0-1 IPS		100mV/g	
RT - Temperature Output PT100								050 - 0-2 IPS		50mV/g	
S - 90° Side Exit								100 - 0-4 IPS		50mV/g	
T - Temperature Output										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 - 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
TS030U.8

