

HS-421 Accelerometer

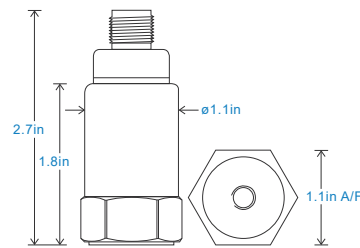
4-20mA velocity and AC acceleration output via M12 Connector

Key Features

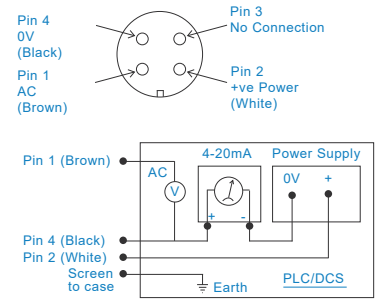
- Unique output
- For use with PLC/DCS systems and data collectors
- Customizable features

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) body only
Shielded Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

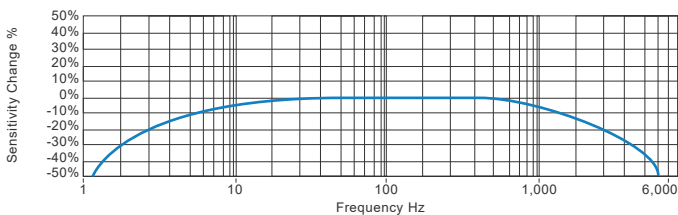
Electrical

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

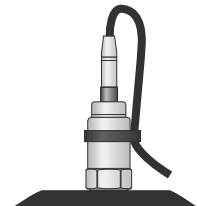
Typical Frequency Response



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	
										±30g	
										±30g	
										±60g	
										±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	



www.hansfordsensors.com
sales@hansfordsensors.com

We reserve the right to alter the specification of this product without prior notice
TS030U.6

