

HS-421S Accelerometer

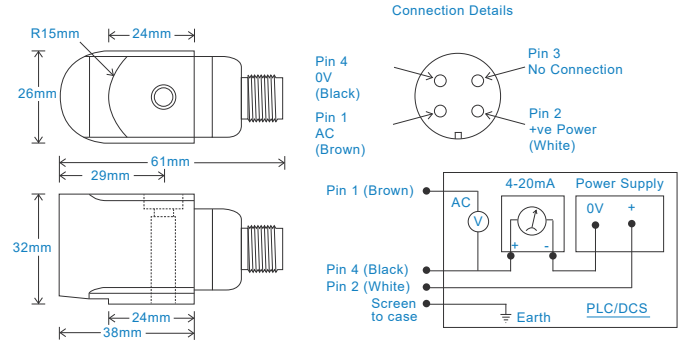
4-20mA velocity and AC acceleration output via M12 Connector

Key Features

- Unique output
- For use with PLC/DCS systems and data collectors
- Side entry for easy access

Industries

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



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/Shear
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 35mm long
Weight	185gms (nominal) body only
Screened Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

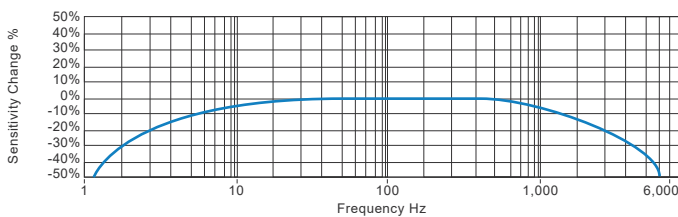
Electrical

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	1 second
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	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

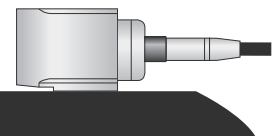
Typical Frequency Response (4-20mA signal)



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	S	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	P - Peak Range	PP - Peak to Peak Range	Velocity Range (RMS unless specified)	Sensitivity	Range	Cable/Connector	Mounting Threads
									010 - 0-10 mm/sec	100mV/g	$\pm 80g$	01 - PUR	02 - 1/4-28" UNF Male
									020 - 0-20 mm/sec	100mV/g	$\pm 80g$	03 - Braided	06 - M6 x 1mm Male
									025 - 0-25 mm/sec	100mV/g	$\pm 80g$	07 - Silicon	08 - M8 x 1.25mm Male
									050 - 0-50 mm/sec	100mV/g	$\pm 80g$	15 - Flame Retardant	
									100 - 0-100 mm/sec	100mV/g	$\pm 80g$	52 - 3 Pin MS	
												54 - M12	



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We reserve the right to alter the specification of this product without prior notice
TS323.11

