HS-420d Accelerometer

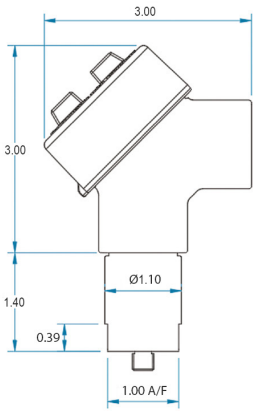
4-20mA Velocity output with Ex d Terminal Head

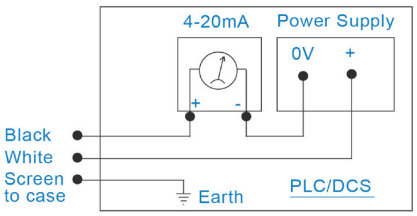
Key Features

- For use with Terminal Head
- Customizable features

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 ±10%
	Nominal 80Hz at 22°C
Frequency Response	10Hz (600cpm) to 1kHz (60kcpm) ± 5% - ISO10816
Isolation	Base isolated
Range	50g peak
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	3.5 oz. (nominal) body only
Cable Connections	Screw Terminals
Mounting Threads	see: 'How To Order' table
Terminal Head Cable Exit	M16

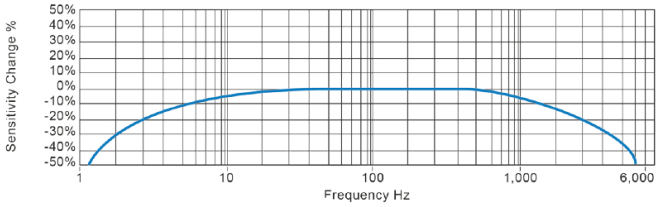
Electrical

Current Output	4-20mA DC proportional to Velocity Range
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	See Certificate
EMC	EN61326-3-1:2017
Sealing	IP68

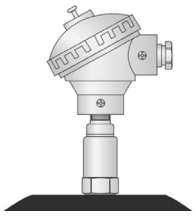
Typical Frequency Response



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.)



Certifications

Hansford Sensors
Excellence in Vibration Monitoring

www.hansfordsensors.com
sales@hansfordsensors.com

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

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4-20mA Velocity output with Ex d Terminal Head

Ex tb Requirements

Certificate number	ExVeritas 24ATEX1830X	Certified Temperature Range	Tamb -20 °C to +75/90/100 °C
Certificate details: Group II	EX II 2G Ex db IIC T6/5/4 Gb		
500V Isolation	Units Will Pass A 500V Isolation Test		
Standards Applied to Product	EN IEC 60079-0:2018 EN 60079-31:2014 IEC 60079-0 Edition 7 2017 IEC 60079-31:2023		

How To Order

Product Prefix		Product Series												
HS - Hansford Sensors		420 - Industrial Vibration Sensor												
H	S	4	2	0	d	X	X	X	X	X	-	X	X	X	X

Extra Options (if required)
d - Ex d Terminal head
L - 316L Stainless Steel
F - Filtered
T - Temperature Output
P - Peak Range
PP - Peak to Peak Range

Velocity Range (RMS unless specified)
010 - 0-1g
020 - 0-2g
050 - 0-5g
100 - 0-10g

Mounting Threads
08 - M8 x 1.25 mm Male
60 - 1/4-18 NPT

Cable Glands
67 - M16 Ex d

Cable / Connector
01 - PUR
08 - FR

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