HS-420S Accelerometer
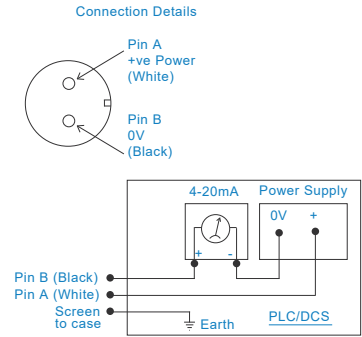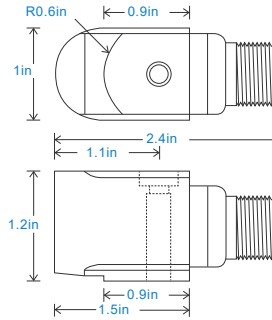## 4-20mA velocity output via 2 Pin MS Connector

Key Features
• For use with PLC/DCS systems
• Side entry for easy access
• Customizable features

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

Connection Details

Pin A +ve Power (White)
Pin B 0V (Black)

4-20mA | Power Supply
0V | +

Pin B (Black)
Pin A (White)
Screen to case
Earth
PLC/DCS

R0.6in   0.9in
1in
2.4in
1.1in
1.2in
0.9in
1.5in

Technical Performance

Mounted Base Resonance	5kHz min
Velocity Ranges	see: 'How To Order' table ±10%
	Nominal 80Hz at 72°F
Frequency Response	600cpm (10Hz) to 60kcpm (1kHz) ± 5% - ISO10816
Isolation	Base isolated
Range	50g peak
Transverse Sensitivity	Less than 5%

Mechanical

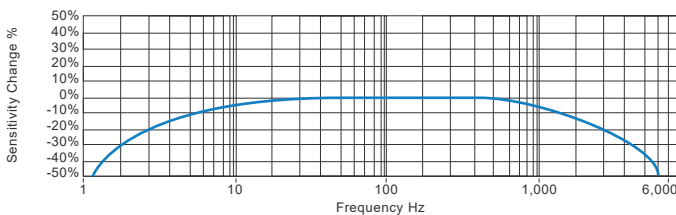|	
Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
Weight	6.5 oz. (nominal) body only
Sheilded Cable Assembly	see: www.hansfordsensors.com for options
Connector	HS-AA004 - non-booted
	HS-AA053 or HS-AA054 - booted
Mounting Threads	see: 'How To Order' table

Electrical

Current Output	4-20mA DC proportional to Velocity Range
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

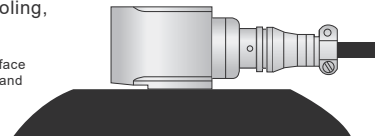|	
Operating Temperature Range	-13 to 248°F
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

Typical Frequency Response

Sensitivity Change % vs Frequency Hz

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
HS - Hansford Sensors

Product Series
420 - Industrial Vibration Sensor

H S 4 2 0 S X 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
U   - Imperial Range
UP - Imperial Peak Range
UPP - Imperial Peak to Peak Range

Velocity Range
(RMS unless specified)
012 - ½ IPS
025 - 1 IPS
050 - 2 IPS
100 - 4 IPS

Cable/Connector
01 - PUR
02 - Braided
07 - Silicon
08 - Flame Retardant
50 - 2 Pin MS
54 - M12

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

Hansford Sensors
Excellence in Vibration Monitoring

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

TS230U.8

CE UKCA