

HS-423 Series Vibration Sensor

Submersible, Good Resistance to Oil, Dual Output - 4-20mA 'g' and AC



Typical Applications

- Low cost on-line means of monitoring with the capability of interfacing direct into PLC, BMS or any 4-20mA input module.
Proven use in vibration monitoring for offline applications using commercially available data collectors.
- **Protecting...**
Fans, Motors, Pumps, Compressors, Centrifuges, Conveyers, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, HVAC, Spindles, Machine Tooling, Process Equipment and many more.

Technical Performance

Mounted Base Resonance	10 kHz min.
Acceleration Ranges	0-1 to 0-100 g RMS \pm 10%
	Nominal 80 Hz at 22 °C
Frequency Response	10 Hz to 5 kHz \pm 3dB
Isolation	Base isolated
Measurement Range	150 g peak
Transverse Sensitivity	Less than 5%

Electrical

Output Current	4-20 mA DC proportional to 'g' and AC g for data collectors
Supply Voltage	15 - 30 Volts DC (for 4-20 mA)
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	-25 to 90 °C
Sealing	IP65
Maximum Shock	5000 g
Emissions	EN61000-6-4:2007
Immunity	EN61000-6-2:2005

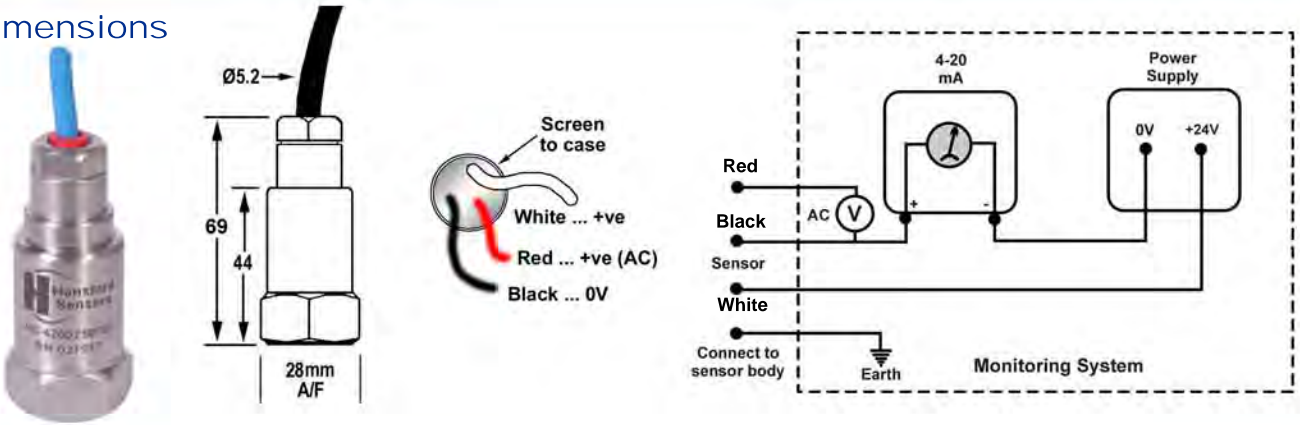
Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8 Nm
Weight	135 gms (nom)
Maximum Cable length	1000 metres
Standard Cable	PUR Screened - length to be specified with order
Mounting Threads	See 'How to order' table
Options	Ranges, connector, other cable lengths

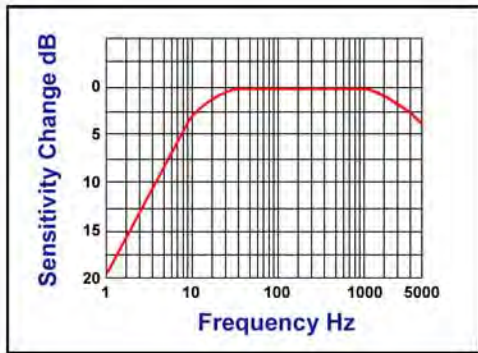
PRODUCT DATA

HS-423 Series Vibration Sensor

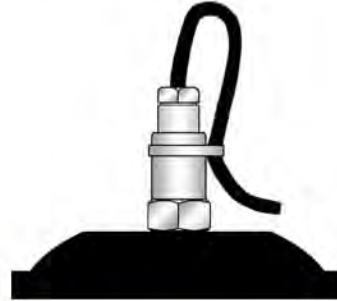
Dimensions



Frequency Response



Mounting of sensor to achieve good repeatable readings. 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

HS - Product Prefix

Extra Options
F - Filtered

Cable
01 ... PUR

Product Series

- 420 - 4-20mA Velocity Output (mm/s)
- 421 - 4-20mA Velocity (mm/s) and AC Output
- 422 - 4-20mA Acceleration (g^r RMS)
- 423 - 4-20mA Acceleration (g^r RMS) and AC Output

For 420 Series & 421 Series

VELOCITY RANGE

- 010 ... 0-10 mm/sec RMS
- 020 ... 0-20 mm/sec RMS
- 025 ... 0-25 mm/sec RMS
- 050 ... 0-50 mm/sec RMS
- 100 ... 0-100 mm/sec RMS

For 421 Series only

AC (SENSITIVITY)

- 100 mV/g
- 100 mV/g
- 100 mV/g
- 50 mV/g
- 50 mV/g

For 422 Series & 423 Series

ACCELERATION RANGE

- 001 ... 0-1 g RMS
- 002 ... 0-2 g RMS
- 005 ... 0-5 g RMS
- 010 ... 0-10 g RMS
- 100 ... 0-100 g RMS

For 423 Series only

AC (SENSITIVITY)

- 100 mV/g
- 100 mV/g
- 100 mV/g
- 50 mV/g

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
- 12 ... M12 x 1.75mm Male

Please contact our Sales Office for information on sensor accessories (mounting studs, etc) and multichannel switch boxes.