

HS-423I Intrinsically Safe Accelerometer

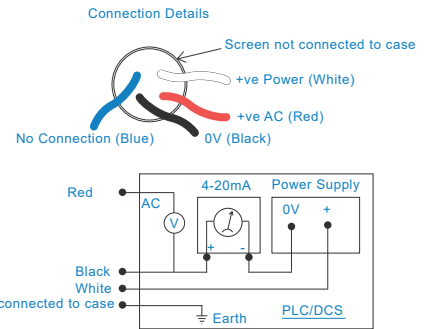
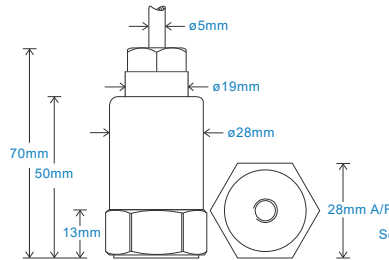
4-20mA acceleration and AC acceleration output via PUR Cable

Key Features

- Intrinsically Safe with European approval
- For use with PLC/DCS systems and data collectors
- Waterproof and resistant to oil

Industries

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



Technical Performance

| | |
|----------------------------|--|
| Mounted Base Resonance | 10kHz min |
| Acceleration Ranges | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response: 4-20mA | 10Hz (600cpm) to 5kHz (300kcpm) $\pm 5\%$ - 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/Compression |
| Mounting Torque | 8Nm |
| Weight | 135gms (nominal) body only |
| Maximum Cable Length | 1000 metres |
| Standard Cable Length | 5 metres |
| Screened Cable | PUR - length to be specified with order |
| Mounting Threads | see: 'How To Order' table |
| Submersible Depth | 100 metres max. (10 bar) |

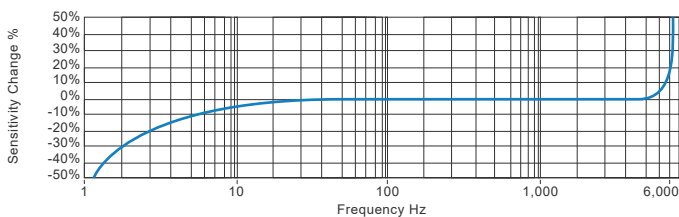
Electrical

| | |
|------------------|--|
| Current Output | 4-20mA DC current proportional to acceleration 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 | see: attached certification details |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

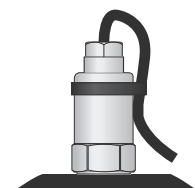
Typical Frequency Response (4-20mA signal)



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.)



Certifications



T: 150 210 98804
www.hansfordsensors.com.cn
 汉施弗德传感器（上海）有限公司



HS-423I Intrinsically Safe Accelerometer

4-20mA acceleration and AC acceleration output via PUR Cable

Intrinsically Safe Requirements

| | | | |
|-------------------------------|---|----------------------|--|
| Maximum Cable Length | See website: www.hansfordsensors.com.cn | Barrier: 4-20mA loop | 1x Pepperl + Fuchs Galvanic Isolator KFD2-STC5-Ex1 (HS-AA154) |
| Certificate details: Group II | IECEX BAS08.0034X Baseefa08ATEX0086X ⓂII 1GD Ex ia IIC T6 Ga Ex ia IIIC T80°C IP65 Da (-40°C ≤ Ta ≤ +55°C) | Barrier: AC output | 1 x MTL Zener Barrier MTL7787+ (HS-AA022) 1x Pepperl + Fuchs Galvanic Isolator KFD2-VR-Ex1.19 (HS-AA155) 1 x MTL Zener Barrier MTL7764+ (HS-AA023) |
| Certificate details: Group II | ⓂII 1GD Ex ia IIC T4 Ga Ex ia IIIC T130°C IP65 Da (-40°C ≤ Ta ≤ +105°C) | Terminal Parameters | Ui = Vmax = 28V Ii = Imax = 115mA Pi = 0.856W |
| Terminal Parameters | Ui = 28V, Ii = 115mA, Pi = 0.856W Group II | Notes: | Special conditions of safe use for Group II dust. The free end of the cable on the integral cable version of the apparatus must be terminated in an appropriately certified dust-proof enclosure. The unit has no serviceable parts. |
| 500V Isolation | Units Will Pass A 500V Isolation Test | | |
| Certified Temperature Range | Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +55°C) (Gas) Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +105°C) (Gas) Ex ia IIIC T80°C IP65 Da (-40°C ≤ Ta ≤ +55°C) (Dust) Ex ia IIIC T130°C IP65 Da (-40°C ≤ Ta ≤ +105°C) (Dust) | | |

How To Order

