Three AC outputs via M12 Connector

Key Features

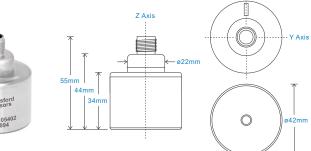
Industries

- · Output via three axes
- · For use with data collector
- Customisable features

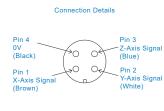
Water, Pharmaceutical

Building services, Pulp and Paper,

Mining, Metals, Utilities, Automotive,



X Axis



Stainless Steel unless specified Aluminium

194gms (nominal) - Stainless Steel 100gms (nominal) - Aluminium HS-AC010 - straight

see: 'How To Order' table

| Technical Performance | | Mechanical |
|------------------------|--|------------------------------|
| Mounted Base Resonance | see 'How To Order' table (nominal) | Case Material |
| | +3kHz for aluminium version | Sensing Element/Construction |
| Sensitivity | see: 'How To Order' table ±10% | Mounting Torque |
| | Nominal 80Hz at 22°C per axies | Weight |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) ± 5% | |
| | 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% | Screened Cable Assembly |
| | 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB | Mounting Threads |
| Isolation | Base isolated | |
| Range | see: 'How To Order' table | |
| Transverse Sensitivity | Less than 5% | |
| | | |

| Electrical | |
|------------------|------------------------------------|
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 1 second |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

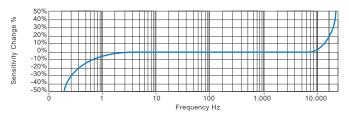
Environmental

Operating Temperature Range Sealing Maximum Shock EMC

| -55 to 150°C |
|----------------|
| IP67 |
| 5000g |
| EN61326-1:2013 |

PZT/Shear 8Nm

Typical Frequency Response (at 100mV/g)



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 173 - Tri | | dustrial Vib | ration Se | nsor | | | | | | |
|--|----------------------|----------------------------------|---|--|---|---|--------------------------------------|------------------|-----------------------|----|---|
| H S 1 | 7 | 3 | X | X | X | X | X | X | X | X | |
| Extra Options (if required) R - Round Design AL - Aluminium Material F - Filtered | | 030 - 050 - 100 - 250 - | tivity - 10mV/g - 30mV/g - 50mV/g - 100mV/g - 250mV/g - 500mV/g | Range ±800g ±250g ±160g ±80g ±32g ±16g | Resona 20kHz 19kHz 18kHz 17kHz 16kHz 15kHz | nt Freque (1,800kg (1,680kg (1,560kg (1,440kg (1,320kg (1,200kg | spm) spm) spm) spm) spm) | Cable/ 54 - M | Connecto 12 | or | Mounting Threads 01 - ¼-28" UNF Fema 02 - ¼-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Ma |



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We reserve the right to alter the specification of this product without prior notice TS692.4

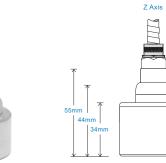
HS-173R Premium Triaxial Accelerometer AC acceleration output via 4 Core Screened FEP Cable with Protective Conduit

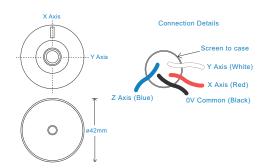
Key Features

- · Output via three axes
- For use with data collector
- Resistant to oil Protective Conduit

Industries

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





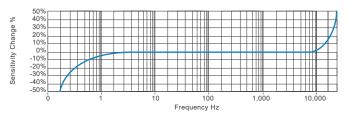
| Technical Performance | | Mechanical | |
|------------------------|--|--------------------------------|--|
| Mounted Base Resonance | see 'How To Order' table (nominal) | Case Material | Stainless Steel |
| Sensitivity | see: 'How To Order' table ±10% | Sensing Element/Construction | PZT/Shear |
| | Nominal 80Hz at 22°C per axies | Mounting Torque | 8Nm |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) ± 5% | Weight | 194gms (nominal) - Stainless Steel |
| | 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% | Maximum Cable Length | 1000 metres |
| | 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB | Standard Cable Length | 5 metres |
| Isolation | Base isolated | Screened Cable 4 Core Screened | I FEP- length to be specified with order |
| Range | see: 'How To Order' table | Mounting Threads | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% | Submersible Depth | 100 metres max (10 bar) |
| | | | |
| | | | |

| Electrical | |
|------------------|------------------------------------|
| | |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 1 second |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

EMC

Sealing Maximum Shock

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Operating Temperature Range

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.)



-55 to 150°C

EN61326-1:2013

IP68

5000g

How To Order

| Product Prefix HS - Hansford Sensors | Product Series 173 - Triaxial Industrial Vib | ration Sensor | | | |
|---|--|---|---|--|--|
| H S 1 | 7 3 R | X X | x x | x x x | |
| Extra Options (if required) F - Filtered R - Round Design | Sensitivity 010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g | Range Resona ±800g 20kHz ±250g 19kHz ±160g 18kHz ±80g 17kHz ±32g 16kHz ±16g 15kHz | Int Frequency (1,800kcpm) (1,680kcpm) (1,560kcpm) (1,440kcpm) (1,320kcpm) (1,200kcpm) | Cable/Connector 42C - 4 Core Screened FEP Cable with Protective Conduit | Mounting Threads 01 - ¼-28" UNF Fer 02 - ¼-28" UNF Mai 06 - M6 x 1mm Maid 08 - M8 x 1.25mm M |



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We reserve the right to alter the specification of this product without prior notice TS1071.1

HS-173RHT Premium Triaxial Accelerometer AC Acceleration and Temperature Output via 5 Core PTFE Cable

Key Features

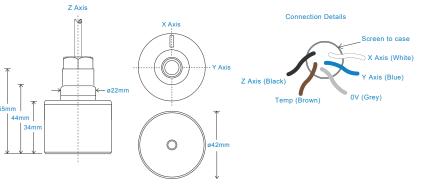
· High Temperature

- For use with data collector
- · Output via three axies

Industries

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





Technical Performance

| Mounted Base Resonance | see 'How To Order' table (nominal) | Case Material | Stainless Steel |
|------------------------|--|------------------------------|--|
| Sensitivity | see: 'How To Order' table ±10% | Sensing Element/Construction | PZT/Shear |
| | Nominal 80Hz at 22°C per axies | Mounting Torque | 8Nm |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) ± 5% | Weight | 194gms (nominal) - Stainless Steel |
| | 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% | Maximum Cable Length | 1000 metres |
| | 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB | Standard Cable Length | 5 metres |
| Isolation | Base isolated | Screened Cable | PTFE Cable - length to be specified with order |
| Range | see: 'How To Order' table | Mounting Threads | see: 'How To Order' table |
| Temperature Output | 10 mV/ºC - 150°C | Submersible Depth | 100 metres max (10 bar) |
| Transverse Sensitivity | Less than 5% | | |
| - | | | |
| | | | |

| _ | | ct | ri. | cal | |
|---|---|----|-----|-----|--|
| | C | ωı | | Jai | |

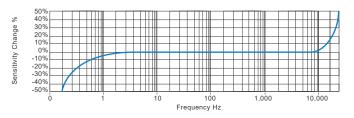
| Electrical Noise | 0.1mg max |
|------------------|------------------------------------|
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 1 second |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Environmental

Mechanical

| Operating Temperature Range |
|-----------------------------|
| Sealing |
| Maximum Shock |
| EMC |
| |

Typical Frequency Response (at 100mV/g)



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.)



-55 to 150°C IP68 5000g

EN61326-1:2013

How To Order

| Product Prefix HS - Hansford Sensors | Product Series 173 - Triaxial Industrial | Vibration Sensor | | | | | | |
|---|--|---|--|-----------------|--|---------|---------------------------------|---|
| H S 1 | 7 3 R | . H 1 | r x x | XX | X | X | X | X |
| Extra Options (if required) F - Filtered R - Round Design H - High Temperature T - Temperature Output | Sensitivity 010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g | Range Reso ±800g 20kH: ±250g 19kH: ±160g 18kH: ±80g 17kH: ±32g 16kH: ±16q 15kH: | z (1,680kcpm) z (1,560kcpm) z (1,440kcpm) z (1,320kcpm) | 38 - 5 38C - | Connector Core PTFE 5 Core PTFI rotective col | E Cable | 01 - ¼-2 02 - ¼-2 06 - M6 | ng Threads 18" UNF Fem 18" UNF Male 1.25mm M |



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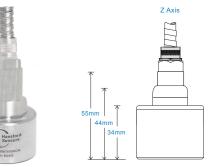
AC Acceleration and Temperature Output via 5 Core PTFE Cable with Protective Conduit

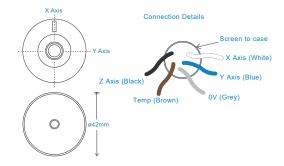
Key Features

- High Temperature
- For use with data collector
- Protective Conduit

Industries

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





Technical Performance Mechanical Mounted Base Resonance see 'How To Order' table (nominal) Case Material Stainless Steel Sensitivity see: 'How To Order' table ±10% Sensing Element/Construction PZT/Shear Nominal 80Hz at 22°C per axies Mounting Torque 8Nm 2Hz (120cpm) to 10kHz (600kcpm) ± 5% Weight 194gms (nominal) - Stainless Steel Frequency Response Maximum Cable Length 1000 metres 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% Standard Cable Length 5 metres 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB Isolation Base isolated Screened Cable PTFE Cable - length to be specified with order see: 'How To Order' table Mounting Threads see: 'How To Order' table Range 10 mV/°C - 150°C Submersible Depth 100 metres max (10 bar) Temperature Output Transverse Sensitivity **Conduit Material** Stainless Steel Less than 5% Conduit Length Conduit Length is approx. 0.5m shorter than the cable

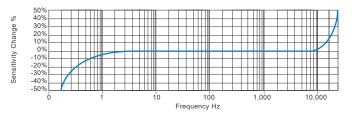
| Electrical | |
|------------------|------------------------------------|
| | |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 1 second |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |
| | |

Maximum Shock

Sealing

EMC

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Operating Temperature Range

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.)



-55 to 150°C

EN61326-1:2013

IP68

5000g

How To Order

| Product Prefix HS - Hansford Sensors | Product Series 173 - Triaxial Industrial Vibration S | Sensor | | |
|---|---|--|--|---|
| H S 1 | 7 3 R H | тхх | x x x | x x x |
| Extra Options (if required) F - Filtered R - Round Design H - High Temperature T - Temperature Output | Sensitivity Range 010 -10mV/g ±800g 030 -30mV/g ±250g 050 -50mV/g ±160g 100 -100mV/g ±80g 250 -250mV/g ±16g 500 -500mV/g ±16g | Resonant Frequency 20kHz (1,800kcpm) 19kHz (1,680kcpm) 18kHz (1,560kcpm) 17kHz (1,440kcpm) 16kHz (1,320kcpm) 16kHz (1,200kcpm) | Cable/Connector 38 - 5 Core PTFE Cable 38C - 5 Core PTFE Cable with Protective conduit. | Mounting Threads 01 - ½-28" UNF Female 02 - ½-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male |



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Three AC outputs via M12 Connector

Key Features

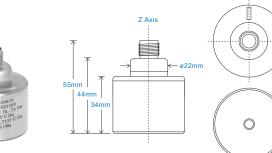
• Intrinsically Safe with European, USA

- and Australian approvals

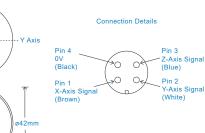
 Output via three axies
- For use with data collector
- Customisable features

Industries

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



X Axis



Stainless Steel unless specified Aluminium

194gms (nominal) - Stainless Steel 100gms (nominal) - Aluminium

see: attached certification details

PZT/Shear 8Nm

IP67

5000g

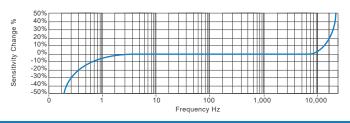
EN61326-1:2013

HS-AC010 - straight see: 'How To Order' table

| Technical Performance | | Mechanical |
|------------------------|--|------------------------------|
| Mounted Base Resonance | see 'How To Order' table (nominal) | Case Material |
| | +3kHz for aluminium version | Sensing Element/Construction |
| Sensitivity | see: 'How To Order' table ±10% | Mounting Torque |
| | Nominal 80Hz at 22°C per axies | Weight |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) ± 5% | |
| | 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% | Screened Cable Assembly |
| | 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB | Mounting Threads |
| Isolation | Base isolated | |
| Range | see: 'How To Order' table | |
| Transverse Sensitivity | Less than 5% | |
| | | |

| Electrical | |
|------------------|------------------------------------|
| | |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 1 second |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Maximum Shock

Sealing

EMC

Operating Temperature Range

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





This product is certified in accordance with UL 60079-0, 6th Ed, Rev. July 26, 2013 UL 60079-11, 6th Ed. Rev. September 6, 2013 CAN/CSA C22.2 No. 60079-0:15 Rev. October 2015 CAN/CSA C22.2 No. 60079-11:14 UL 913, 8th Ed. Rev. October 16, 2015



SGS 710318

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We reserve the right to alter the specification of this product without prior notice TS922.5

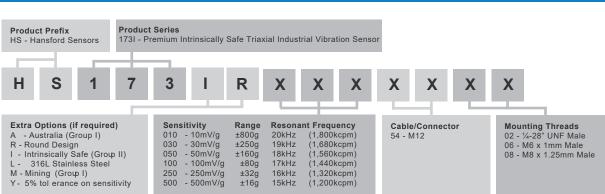
Three AC outputs via M12 Connector

| Intrincically | 1 Safa Da | quirements |
|---------------|-----------|------------|
| Inumsican | / Sale ne | quirements |

| · · · · · · · · · · · · · · · · · · · | | | |
|---------------------------------------|--|-----------------------------|---|
| Certificate details: Group II and III | IECEx 18.0082X | Certified Temperature Range | Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +69°C) (Gas) |
| · · · · · | Baseefa18ATEX0130X | | Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +104°C) (Gas) |
| | ال 🕼 🕼 🕼 | Ex | ia IIIB T102°C Da (-55°C ≤ Ta ≤ +69°C) (Dust) |
| | Ex ia II T6T4 | Ex | ia IIIB T131°C Da (-55°C ≤ Ta ≤ +98°C) (Dust) |
| | Ex ia IIIC T135ºC Da | | ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust) |
| | Ex ia IIIB T102ºCT131ºC Da | | Ex ia I Ma (-55°C ≤ Ta ≤ +104°C) (Dust) |
| | | | |
| Certificate details: Group I | IECEx 18.0082X | Australia Approval Group I | IECEx ExTC 18.0032X |
| | Baseefa18ATEX0130X | | Ex ia I Ma |
| | ۵ I M 1 | | (-55°C ≤ Ta ≤ +104°C) |
| | Ex ia I Ma | | |
| | Ex ia IIIC T110°CT145°C Da | US/Canada Approvals | Certificate No. SGSNA/19/BAS/00005 |
| | | | CI I, II, III, Div 1, 2 Gr A-G T* |
| Terminal Parameters Connector | Ui = 28V, Ii = 93mA, Pi = 0.65W | | CI I Zn 0 AEx ia IIC T6T4 Ga |
| | Ci = 3.6nF | | CI II Zn 20 AEx ia IIIC T135°C Da |
| | Li= 0 | | Ex ia IIC T6T4 Ga |
| | | | Ex ia IIIC T135°C Da |
| | | | |
| 500V Isolation | Units Will Pass A 500V Isolation Test | | Or |
| | | | |
| Standards Applied to Product | EN IEC 60079-0:2018 | | CI I, II, III, Div 1, 2 Gr A-D G and F T* |
| | EN 60079-11:2012 | | CI I Zn 0 AEx ia IIC T6…T4 Ga |
| | | | CI II Zn 20 AEx ia IIIC T135⁰C Da |
| | IEC 60079-0 Edition 7 2017 | | CI II Zn 20 AEx ia IIIB T102°C…T131°C Da |
| | IEC 60079-11 Edition 6 2011 | | Ex ia IIC T6T4 Ga |
| | | | Ex ia ⅢC T135ºC Da |
| Barrier | 1 x Pepperl + Fuchs Galvanic Isolator | | Ex ia IIIB T102°CT131°C Da |
| | KFD2-VR4-Ex1.26 (BAS02ATEX7206) | | |
| 1 x MTL Zene | er Barrier MTL7728+ (BAS01ATEX7217) | Control Drawing | M06-088-A |
| | or Pepperl + Fuchs Zener Barrier | - | |
| Z728 (BA | S01ATEX7005) or any other barrier that | | |
| | conforms with the terminal parameters | | |
| | | | |

Special conditions of use: When a sensor is supplied with integral cable, this must be terminated in an enclosure providing at least degree of protection IP20. Note: If the equipment is to be used in unusual environments or aggressive substances are likely to be encountered, contact the manufacturer to discuss suitability.

How To Order





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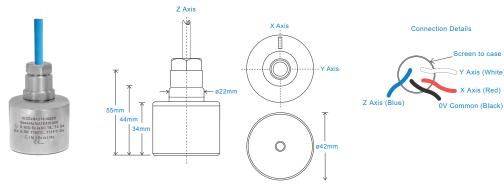
Three AC outputs via PUR cable

Key Features

- Intrinsically Safe with European, USA and Australian approvals
- Output via three axies
- For use with data collector



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



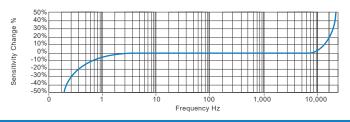
Technical Performance

| Mounted Base Resonance | see 'How To Order' table (nominal) | Case Material |
|------------------------|--|-------------------------|
| Sensitivity | see: 'How To Order' table ±10% | Sensing Element/Constru |
| | Nominal 80Hz at 22°C per axies | Mounting Torque |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) ± 5% | Weight |
| | 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% | Maximum Cable Length |
| | 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB | Standard Cable Length |
| Isolation | Base isolated | Screened Cable |
| Range | see: 'How To Order' table | Mounting Threads |
| Transverse Sensitivity | Less than 5% | Submersible Depth |
| | | |
| | | |

| Case Material | Stainless Steel |
|------------------------------|---|
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 194gms (nominal) - Stainless Steel |
| Maximum Cable Length | See certificate |
| 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 | | Environmental |
|------------------|------------------------------------|-----------------------------|
| Electrical Noise | 0.1mg max | Operating Temperature Range |
| Current Range | 0.5mA to 8mA | Sealing |
| Bias Voltage | 10 - 12 Volts DC | Maximum Shock |
| Settling Time | 1 second | EMC |
| Output Impedance | 200 Ohms max. | |
| Case Isolation | >10 ⁸ Ohms at 500 Volts | |

Typical Frequency Response (at 100mV/g)



Applications

US

710318

Mechanical

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.)



see: attached certification details

IP68

5000g

EN61326-1:2013

Certifications





This product is certified in accordance with UL 60079-0, 6th Ed, Rev. July 26, 2013 UL 60079-11, 6th Ed. Rev. September 6, 2013 CAN/CSA C22.2 No. 60079-0:15 Rev. October 2015 CAN/CSA C22.2 No. 60079-11:14 UL 913, 8th Ed. Rev. October 16, 2015



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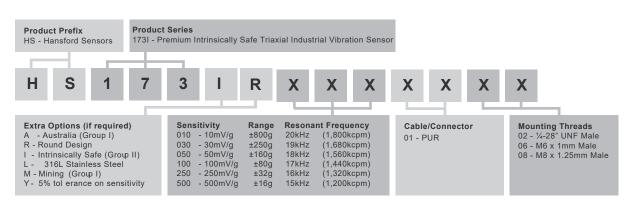
Three AC outputs via PUR cable

Intrinsically Safe Requirements

| Certificate details: Group II and III | IECExBAS 18.0082X | Certified Temperature Range Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +69°C) (Gas) |
|---------------------------------------|---|--|
| | Baseefa18ATEX0130X | Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +104°C) (Gas) |
| | 🐵 II 1GD | Ex ia IIIB T102°C Da (-55°C ≤ Ta ≤ +69°C) (Dust) |
| | Ex ia II T6T4 | Ex ia IIIB T131°C Da (-55°C ≤ Ta ≤ +98°C) (Dust) |
| | Ex ia IIIC T135°C Da | Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust) |
| | Ex ia IIIB T102ºCT131ºC Da | Ex ia I Ma (-55°C ≤ Ta ≤ +104°C) (Dust) |
| | | |
| Certificate details: Group I | IECEx 18.0082X | Australia Approval Group I IECEx ExTC 18.0032X |
| | Baseefa18ATEX0130X | Ex ia I Ma |
| | الا العام | (-55°C ≤ Ta ≤ +104°C) |
| | Ex ia I Ma | |
| | Ex ia IIIC T110°CT145°C Da | US/Canada Approvals Certificate No. SGSNA/19/BAS/00005 |
| | | CI I, II, III, Div 1, 2 Gr A-G T* |
| Terminal Parameters 10m of cable | Ui = 28V, Ii = 93mA, Pi = 0.65W | CI I Zn 0 AEx ia IIC T6T4 Ga |
| | Ci = 7.4nF | CI II Zn 20 AEx ia IIIC T135°C Da |
| | Li= 7.2µH | Ex ia IIC T6T4 Ga |
| | | Ex ja IIIC T135°C Da |
| Terminal Parameters 92m of cable | Ui = 28V, Ii = 93mA, Pi = 0.65W | |
| | Ci = 38.3nF | Or |
| | Li= 66µH | |
| | | CI I, II, III, Div 1, 2 Gr A-D G and F T* |
| 500V Isolation | Units Will Pass A 500V Isolation Test | CI I Zn 0 AEx ia IIC T6T4 Ga |
| | | CI II Zn 20 AEx ia IIIC T135°C Da |
| Standards Applied to Product | EN IEC 60079-0:2018 | CI II Zn 20 AEx ia IIIB T102°CT131°C Da |
| | EN 60079-11:2012 | Ex ia IIC T6T4 Ga |
| | | Ex ia IIIC T135°C Da |
| | IEC 60079-0 Edition 7 2017 | Ex ja IIIB T102°CT131°C Da |
| | IEC 60079-11 Edition 6 2011 | |
| | | Control Drawing M06-088-A |
| Barrier | 1 x Pepperl + Fuchs Galvanic Isolator | |
| | KFD2-VR4-Ex1.26 (BAS02ATEX7206) | |
| 1 x MTL Zene | r Barrier MTL7728+ (BAS01ATEX7217) | |
| | or Pepperl + Fuchs Zener Barrier | |
| Z728 (BAS | S01ATEX7005) or any other barrier that | |
| | conforms with the terminal parameters | |
| | | |

Special conditions of use: When a sensor is supplied with integral cable, this must be terminated in an enclosure providing at least degree of protection IP20. Note: If the equipment is to be used in unusual environments or aggressive substances are likely to be encountered, contact the manufacturer to discuss suitability.

How To Order





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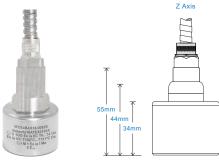
Three AC outputs via PUR cable with Protective Conduit

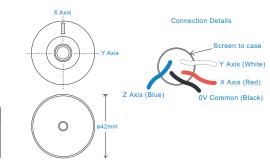
Key Features

- Intrinsically Safe with European, USA and Australian approvals
- Output via three axies
- For use with data collector
 Protective Conduit

Industries

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



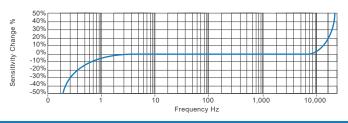


Technical Performance

| rechnical renormance | | Mechanical | |
|------------------------|--|------------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) | Case Material | Stainless Steel |
| Sensitivity | see: 'How To Order' table ±10% | Sensing Element/Construction | PZT/Shear |
| | Nominal 80Hz at 22°C per axies | Mounting Torque | 8Nm |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) ± 5% | Weight | 194gms (nominal) - Stainless Steel |
| | 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% | Maximum Cable Length | See certificate |
| | 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB | Standard Cable Length | 5 metres |
| Isolation | Base isolated | Screened Cable | PUR - length to be specified with order |
| Range | see: 'How To Order' table | Mounting Threads | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% | Submersible Depth | 100 metres max (10 bar) |
| | | | |
| | | | |

| Electrical | |
|------------------|------------------------------------|
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 1 second |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Maximum Shock

Sealing

EMC

Operating Temperature Range

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.)



see: attached certification details

IP68

5000g

EN61326-1:2013

Certifications





This product is certified in accordance with UL 60079-0, 6th Ed, Rev. July 26, 2013 UL 60079-11, 6th Ed. Rev. September 6, 2013 CAN/CSA C22.2 No. 60079-0:15 Rev. October 2015 CAN/CSA C22.2 No. 60079-11:14 UL 913, 8th Ed. Rev. October 16, 2015



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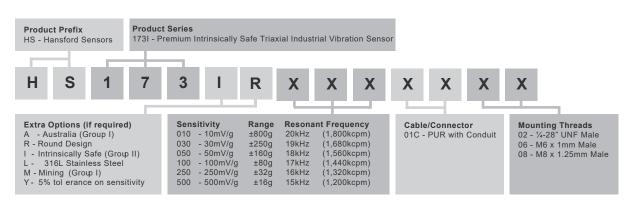


Three AC outputs via PUR cable with Protective Conduit

Intrinsically Safe Requirements Certificate details: Group II and III IECExBAS 18.0082X Certified Temperature Range Ex ia IIC T6 Ga (-55°C \leq Ta \leq +69°C) (Gas) Ex ia IIC T4 Ga (-55°C \leq Ta \leq +104°C) (Gas) Baseefa18ATEX0130X 🖾 II 1GD Ex ia IIIB T102°C Da (-55°C ≤ Ta ≤ +69°C) (Dust) Ex ia II T6..T4 Ex ia IIIB T131°C Da (-55°C ≤ Ta ≤ +98°C) (Dust) Ex ia IIIC T135°C Da Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust) Ex ia IIIB T102°C...T131°C Da Ex ia I Ma (-55°C \leq Ta \leq +104°C) (Dust) Certificate details: Group I IECEx 18.0082X Australia Approval Group I IECEx ExTC 18.0032X Baseefa18ATEX0130X Ex ia I Ma $(-55^{\circ}C \le Ta \le +104^{\circ}C)$ ⟨€x⟩I M 1 Ex ia I Ma US/Canada Approvals Ex ia IIIC T110°C..T145°C Da Certificate No. SGSNA/19/BAS/00005 CI I, II, III, Div 1, 2 Gr A-G T* Terminal Parameters 10m of cable Ui = 28V, Ii = 93mA, Pi = 0.65W CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIC T135°C Da Ci = 7.4nFLi= 7.2µH Ex ia IIC T6...T4 Ga Ex ia IIIC T135°C Da Terminal Parameters 92m of cable Ui = 28V, Ii = 93mA, Pi = 0.65W Ci = 38.3nF Li= 66µH CI I, II, III, Div 1, 2 Gr A-D G and F T* Units Will Pass A 500V Isolation Test 500V Isolation CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIC T135°C Da Standards Applied to Product EN IEC 60079-0:2018 CI II Zn 20 AEx ia IIIB T102°C...T131°C Da Ex ia IIC T6...T4 Ga EN 60079-11:2012 Ex ia IIIC T135°C Da IEC 60079-0 Edition 7 2017 Ex ia IIIB T102°C...T131°C Da IEC 60079-11 Edition 6 2011 Control Drawing M06-088-A Barrie 1 x Pepperl + Fuchs Galvanic Isolator KFD2-VR4-Ex1.26 (BAS02ATEX7206) 1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217) or Pepperl + Fuchs Zener Barrier Z728 (BAS01ATEX7005) or any other barrier that conforms with the terminal parameters

Special conditions of use: When a sensor is supplied with integral cable, this must be terminated in an enclosure providing at least degree of protection IP20 Note: If the equipment is to be used in unusual environments or aggressive substances are likely to be encountered, contact the manufacturer to discuss suitability.

How To Order





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Or