



Hansford Sensors
Excellence in Vibration Monitoring

Compact Product Guide
Accelerometers and Accessories

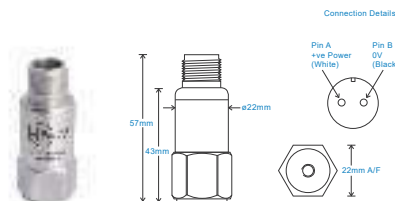


HS-100 Accelerometer

AC Acceleration Output

Cable and Connector Options

2 Pin MS (50)



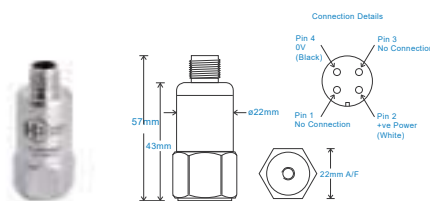
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
 Connector HS-AA004 - non-booted
 HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -55 to 140°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

M12 Connector (54)



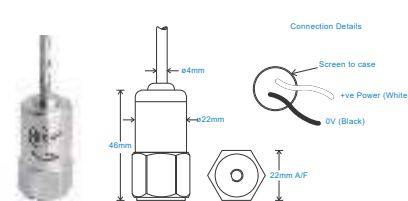
Cable/Connector

Screened Cable HS-AC010 - straight
 HS-AC011 - right angle

Environmental

Operating Temperature Range -55 to 140°C
 Sealing IP67
 Maximum Shock 5000g
 EMC EN61326-1:2013

Braided Cable (02)



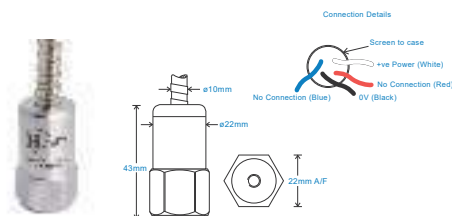
Cable/Connector

Screened Cable Braided
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 140°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

FEP Cable with Protective Conduit (30C)



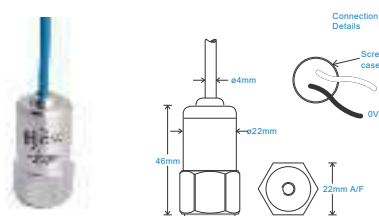
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 140°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Flame Retardant Cable (08)



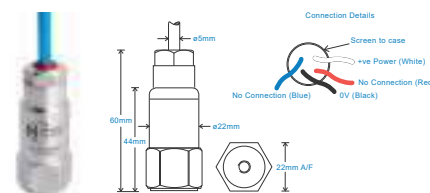
Cable/Connector

Screened Cable Flame Retardant
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -40 to 100°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

PUR Cable (01)



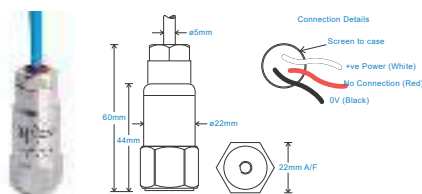
Cable/Connector

Screened Cable PUR
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -30 to 90°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

Silicon Cable (07)



Cable/Connector

Screened Cable Silicon
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -50 to 140°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | See 'How To Order' table (nominal) |
| Sensitivity | See: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$ |
| 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 | 106gms (nominal) body only |
| Mounting Threads | See: 'How To Order' table |

HS-100 Accelerometer

AC Acceleration Output

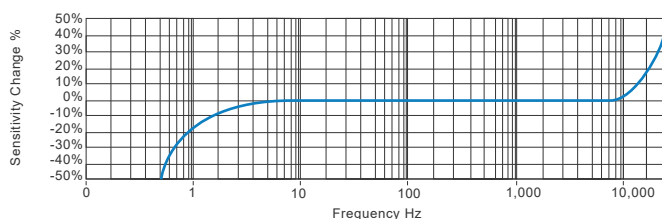
Electrical

| | |
|---------------------|------------------------------------|
| Excitation Voltage: | 18-30Volts DC |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Industries

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

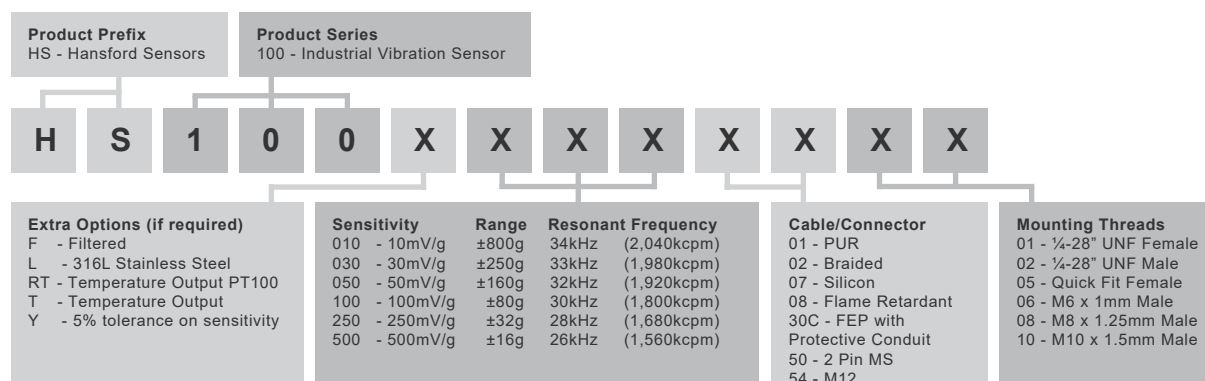
Typical Frequency Response (at 100mV/g)



Applications

Fans, Motors, Pumps, Compressors,
Centrifuges, Conveyors, Air Handlers,
Gearboxes, Rolls, Dryers, Presses,
Cooling, VAC, Spindles, Machine Tooling,
Process Equipment

How To Order



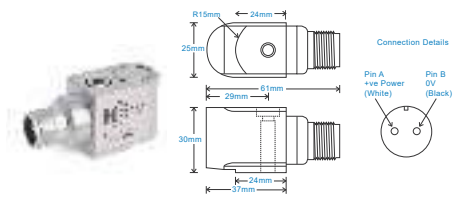
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-100S Accelerometer

AC Acceleration Output-Side Entry

Cable and Connector Options

2 Pin MS (50)



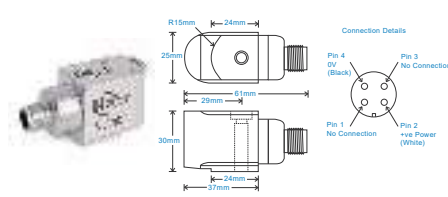
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Connector HS- AA004 - non-booted
HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -55 to 140°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

M12 Connector (54)



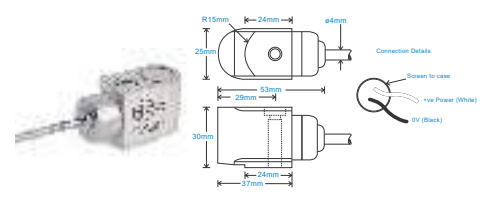
Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range -55 to 140°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Braided Cable (02)



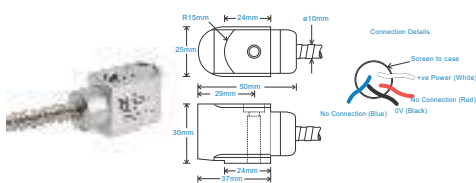
Cable/Connector

Screened Cable Braided
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 140°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

FEP Cable with Protective Conduit (30C)



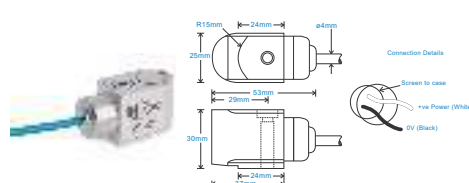
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 140°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Flame Retardant Cable (08)



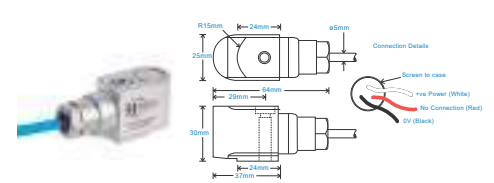
Cable/Connector

Screened Cable Flame Retardant
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -40 to 100°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Silicon Cable (07)



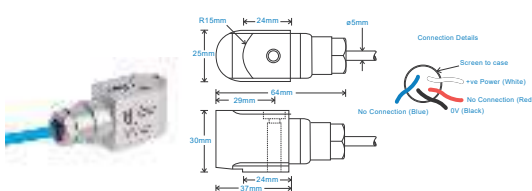
Cable/Connector

Screened Cable Silicon
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -50 to 140°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -30 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | See 'How To Order' table (nominal) |
| Sensitivity | See: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3dB$ |
| 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 | 185gms (nominal) body only |
| Mounting Threads | See: 'How To Order' table |

HS-100S Accelerometer

AC Acceleration Output-Side Entry

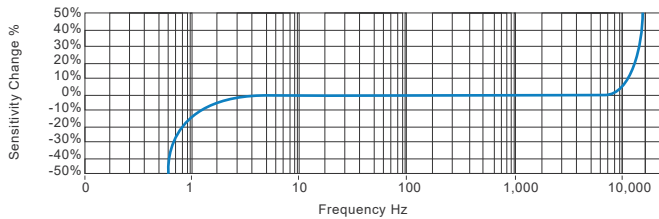
Electrical

| | |
|---------------------|------------------------------------|
| Excitation Voltage: | 18-30Volts DC |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Industries

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

Typical Frequency Response (at 100mV/g)

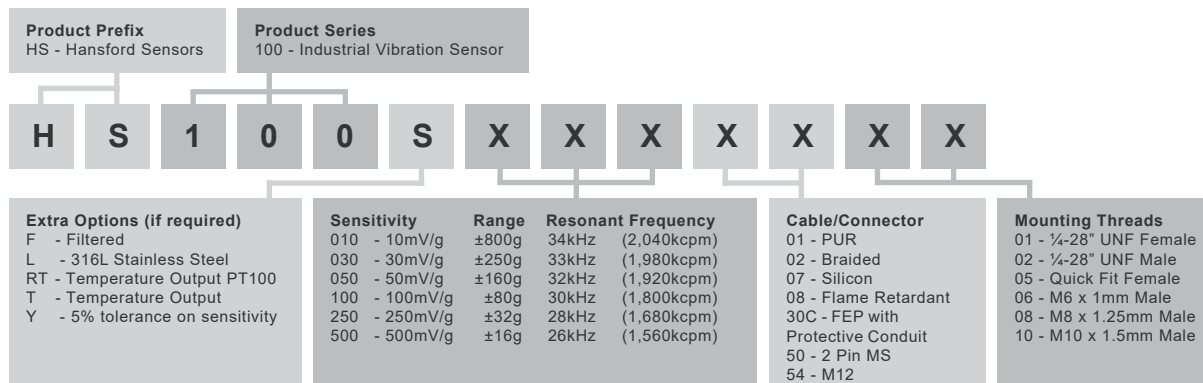


Applications

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

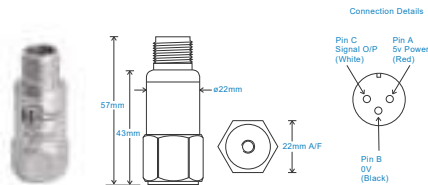


Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

AC Acceleration Output

Cable and Connector Options

3 Pin MS Connector (52)



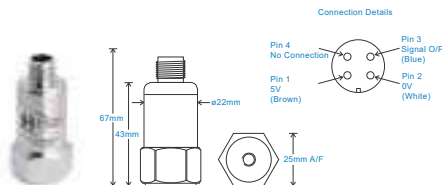
Cable/Connector

| | |
|-----------|---|
| Connector | HS-AA004-non-booted HS-AA053 or HS-0054-booted |
|-----------|---|

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -50 to 125°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

M12 Connector (54)



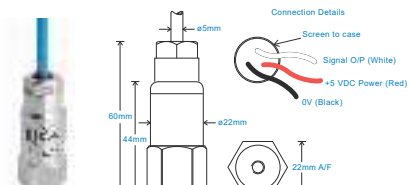
Cable/Connector

| | |
|-----------|---|
| Connector | HS-AC010 - straight HS-AC011 - right angle |
|-----------|---|

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -50 to 125°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Silicon Cable (07)



Cable/Connector

| | |
|-----------------------|-------------|
| Screened Cable | Silicon |
| Maximum cable length | 1000 metres |
| Standard cable length | 5 metres |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -50 to 125°C |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Technical Performance

| | |
|------------------------------------|--|
| Mounted Base Resonance Sensitivity | see 'How To Order' table (nominal) see: 'How To Order' table $\pm 10\%$ |
| Frequency Response | Nominal 80Hz at 22°C 0.3Hz (18cpm) to 10kHz (600kcpm) $\pm 10\%$ |
| Isolation | Base isolated |
| Range | see: 'How To Order' table @ 5V power |
| Transverse Sensitivity | Less than 5% |
| Amplitude Linearity | $\pm 1\%$ |

Mechanical

| | |
|------------------------------|---------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 125gms (nominal) |
| Mounting Threads | see: 'How To Order' table |

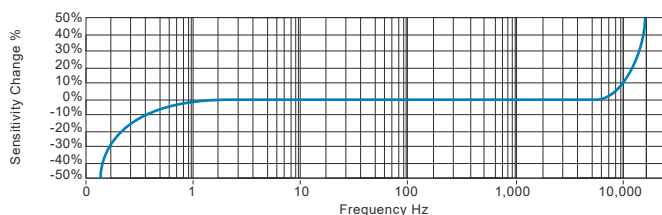
Electrical

| | |
|---------------------|---|
| Electrical Noise | < 500µg |
| Power Requirements | 5V nominal (other voltages 1.8 to 24V on request) |
| Current Consumption | 100µA nominal at 5V supply (60µA at 1.8V) |
| Bias Voltage | 50% of supply voltage |
| Settling Time | 1 second |
| Output Impedance | 100 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Industries

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

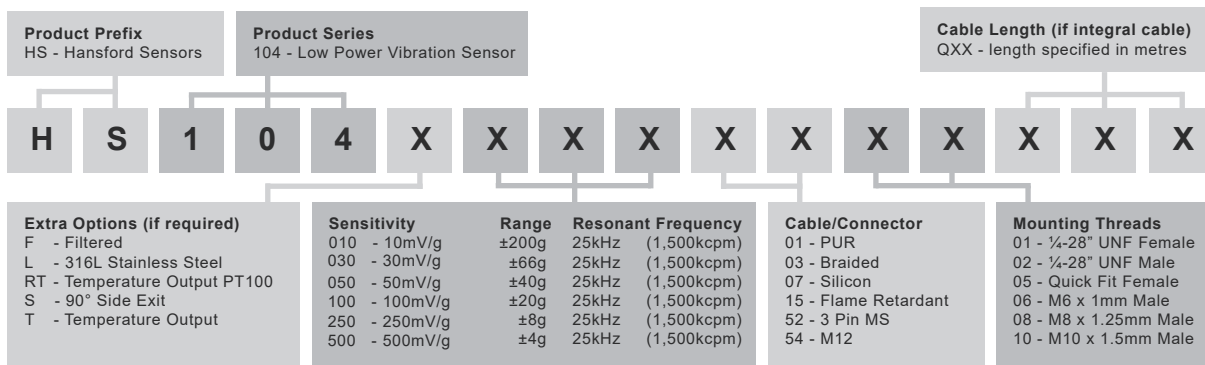
Typical Frequency Response (at 100mV/g)



Applications

Fans, Motors, Pumps, Compressors,
Centrifuges, Conveyors, Air Handlers,
Gearboxes, Rolls, Dryers, Presses,
Cooling, VAC, Spindles, Machine Tooling,
Process Equipment

How To Order



Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-104S Low Power Accelerometer

AC Acceleration Output

Cable and Connector Options

3 Pin MS Connector (52)

Cable/Connector

ConnectorHS-AA004-non-booted
HS-AA053 or HS-0054-booted

Environmental

Operating Temperature Range-50 to 125°C
SealingIP67
Maximum Shock5000g
EMCEN61326-1:2013

M12 Connector (54)

Cable/Connector

ConnectorHS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range-50 to 125°C
SealingIP67
Maximum Shock5000g
EMCEN61326-1:2013

| Technical Performance | | Mechanical | |
|------------------------|---|------------------------------|---------------------------|
| Mounted Base Resonance | see 'How To Order' table (nominal) | Case Material | Stainless Steel |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ | Sensing Element/Construction | PZT/Shear |
| | Nominal 80Hz at 22°C | Mounting Torque | 8Nm |
| Frequency Response | 0.3Hz (18cpm) to 10kHz (600kcpm) $\pm 10\%$ | Weight | 125gms (nominal) |
| Isolation | Base isolated | Mounting Threads | see: 'How To Order' table |
| Range | see: 'How To Order' table @ 5V power | | |
| Transverse Sensitivity | Less than 5% | | |
| Amplitude Linearity | $\pm 1\%$ | | |

| Electrical | | Industries | |
|---------------------|---|--|--|
| Electrical Noise | < 500 μ g | Building services, Pulp and Paper, | |
| Power Requirements | 5V nominal (other voltages 1.8 to 24V on request) | Mining, Metals, Utilities, Automotive, | |
| Current Consumption | 100 μ A nominal at 5V supply (60 μ A at 1.8V) | Water, Pharmaceutical | |
| Bias Voltage | 50% of supply voltage | | |
| Settling Time | 1 second | | |
| Output Impedance | 100 Ohms max. | | |
| Case Isolation | >10 ⁸ Ohms at 500 Volts | | |

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

How To Order

Product Prefix
HS - Hansford Sensors

Product Series
104 - Low Power Vibration Sensor

Cable Length (if integral cable)
QXX - length specified in metres

H

S

1

0

4

S

X

X

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

Sensitivity
010 - 10mV/g
030 - 30mV/g
050 - 50mV/g
100 - 100mV/g
250 - 250mV/g
500 - 500mV/g

Range
 ± 200 g
 ± 66 g
 ± 40 g
 ± 20 g
 ± 8 g
 ± 4 g

Resonant Frequency
25kHz (1,500kcpm)
25kHz (1,500kcpm)
25kHz (1,500kcpm)
25kHz (1,500kcpm)
25kHz (1,500kcpm)
25kHz (1,500kcpm)

Cable/Connector
01 - PUR
03 - Braided
07 - Silicon
13 - Flame Retardant
52 - 3 Pin MS
54 - M12

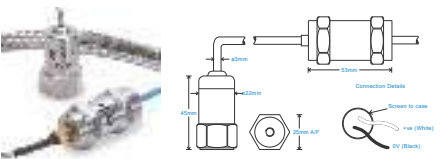
Mounting Threads
02 - 1/4-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

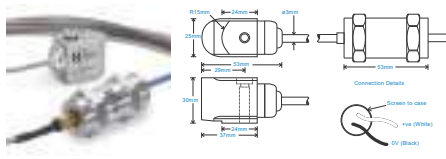
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-105 High Temp. Accelerometer

AC Output via Low Noise Cable

Cable and Connector Options

| HS-105 | |
|--|--|
|  | |
| Cable/Connector | |
| Cable | 04 - Low Noise (150°C) 05 - Low Noise (250°C) |
| Weight | |
| 125gms (nominal) | |

| HS-105S | |
|--|--|
|  | |
| Cable/Connector | |
| Cable | 04 - Low Noise (150°C) 05 - Low Noise (250°C) |
| Weight | |
| 185gms (nominal) | |

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3dB$ |
| 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 | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | $>10^8$ Ohms at 500 Volts |

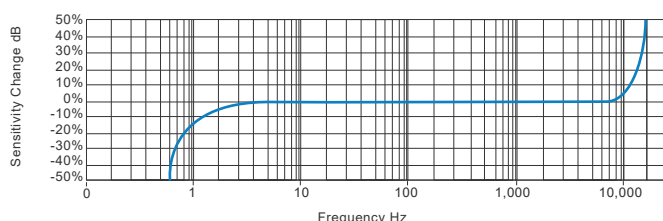
Mechanical

| | |
|------------------------------|--|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Compression |
| Mounting Torque | 8Nm |
| Weight | 125gms (nominal) |
| Maximum Cable Length | 1000 metres |
| Cable | see: 'How To Order' table - (20 metres max between sensor and charge amplifier) |
| Mounting Threads | see: 'How To Order' table |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -55°C to see 'How To Order' table for max |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

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

Industries

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

How To Order

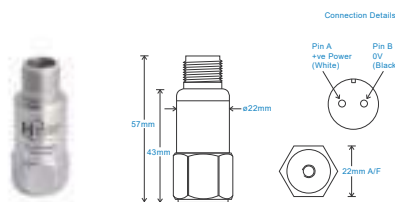
| Product Prefix | | Product Series | | | | | | Cable Length (if integral cable) | | | | | | | |
|---------------------------------|---|-----------------------------------|---|-------|---|--------------------|---|--|---|-----------------------|---|---|---|---|---|
| HS - Hansford Sensors | | 105 - Industrial Vibration Sensor | | | | | | QXX/XX - length before/after charge amp, specified in metres | | | | | | | |
| H | S | 1 | 0 | 5 | X | X | X | X | X | X | X | X | X | X | X |
| Extra Options (if required) | | Sensitivity | | Range | | Resonant Frequency | | Cable | | Mounting Threads | | | | | |
| I - Intrinsically Safe | | 010 - 10mV/g | | ±800g | | 28kHz (1,680kcpm) | | 04 - Low Noise (150°C) | | 01 - ¼-28" UNF Female | | | | | |
| RT - Temperature Output PT100 | | 030 - 30mV/g | | ±250g | | 26kHz (1,560kcpm) | | 05 - Low Noise (250°C) | | 02 - ¼-28" UNF Male | | | | | |
| S - 90° Side Exit | | 050 - 50mV/g | | ±160g | | 24kHz (1,440kcpm) | | | | 05 - Quick Fit Female | | | | | |
| T - Temperature Output | | 100 - 100mV/g | | ±80g | | 22kHz (1,320kcpm) | | | | 06 - M6 x 1mm Male | | | | | |
| Y - 5% tolerance on sensitivity | | 250 - 250mV/g | | ±32g | | 20kHz (1,200kcpm) | | | | 08 - M8 x 1.25mm Male | | | | | |
| | | 500 - 500mV/g | | ±16g | | 18kHz (1,080kcpm) | | | | 10 - M10 x 1.5mm Male | | | | | |

HS-150 Premium Accelerometer

AC Acceleration Output

Cable and Connector Options

2 Pin MS (50)



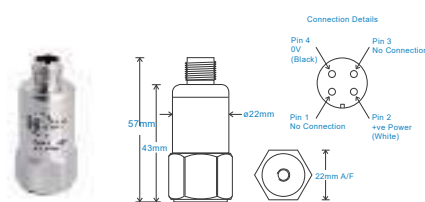
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Connector HS-AA004 - non-booted
HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -55 to 150°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

M12 Connector (54)



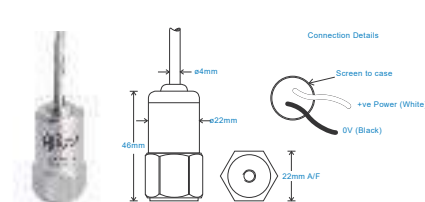
Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range -55 to 150°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Braided Cable (02)



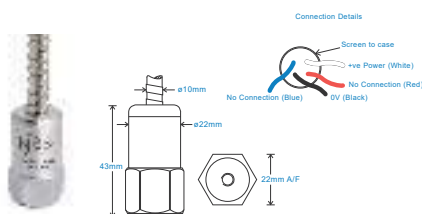
Cable/Connector

Screened Cable Braided
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 150°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

FEP Cable with Protective Conduit (30C)



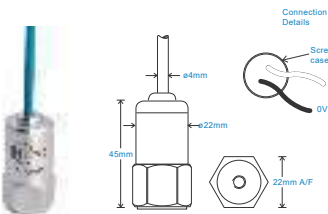
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 150°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Flame Retardant Cable (08)



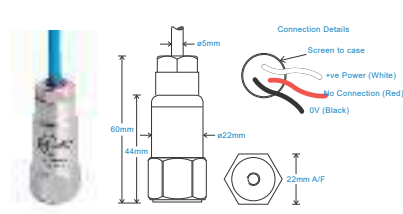
Cable/Connector

Screened Cable Flame Retardant
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -40 to 100°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Silicon Cable (07)



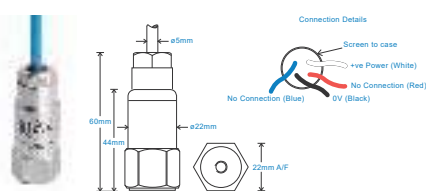
Cable/Connector

Screened Cable Silicon
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -50 to 150°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -30 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 1.5Hz (90cpm) to 10kHz (600kcpm) $\pm 5\%$ 0.5Hz (30cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.2Hz (12cpm) to 15kHz (900kcpm) $\pm 3dB$ |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|----------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 106gms (nominal) body only |
| Mounting Threads | see: 'How To Order' table |

HS-150 Premium Accelerometer

AC Acceleration Output

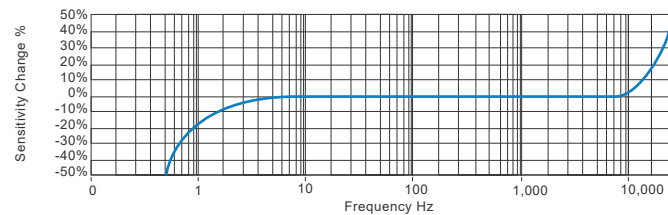
Electrical

| | |
|---------------------|------------------------------------|
| Excitation Voltage: | 18-30Volts DC |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Industries

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

Typical Frequency Response (at 100mV/g)

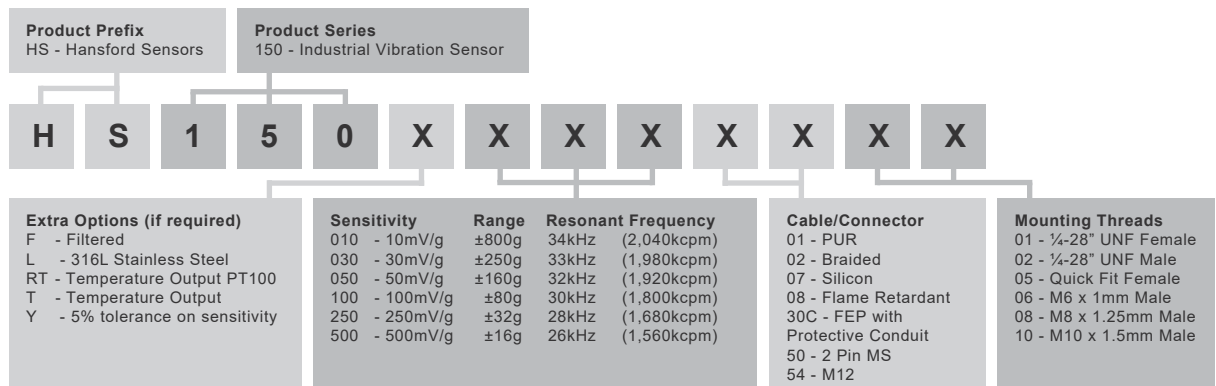


Applications

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



Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

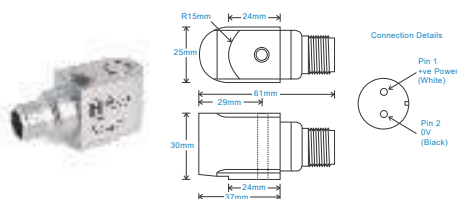


HS-150S Premium Accelerometer

AC Acceleration Output-Side Entry

Cable and Connector Options

2 Pin MS (50)



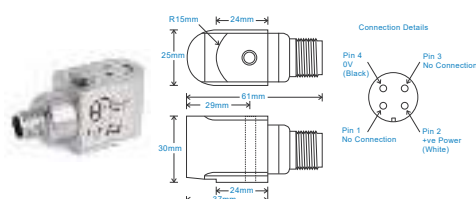
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
 Connector HS-AA004 - non-booted
 HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -55 to 150°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

M12 Connector (54)



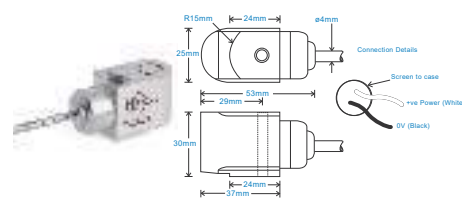
Cable/Connector

Screened Cable HS-AC010 - straight
 HS-AC011 - right angle

Environmental

Operating Temperature Range -55 to 150°C
 Sealing IP67
 Maximum Shock 5000g
 EMC EN61326-1:2013

Braided Cable (02)



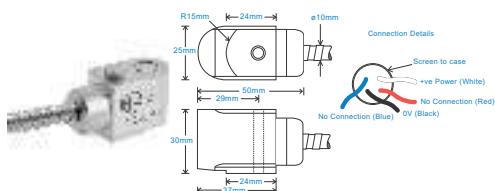
Cable/Connector

Screened Cable Braided
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 150°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

FEP Cable with Protective Conduit (30C)



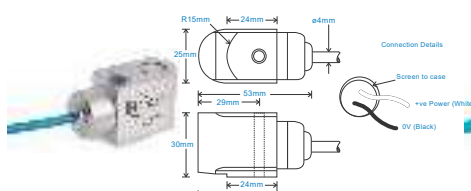
Cable/Connector

Screened Cable FEP - length to be specified with order
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -30 to 150°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Flame Retardant Cable (08)



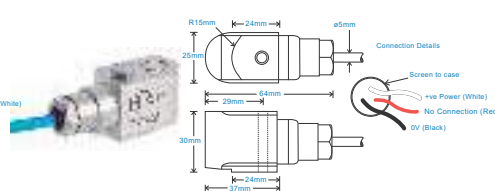
Cable/Connector

Screened Cable Flame Retardant
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 100°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Silicon Cable (07)



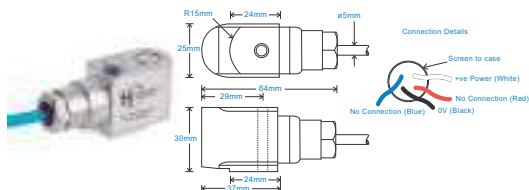
Cable/Connector

Screened Cable Silicon
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -50 to 150°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -30 to 90°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | See 'How To Order' table (nominal) |
| Sensitivity | See: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 1.5Hz (90cpm) to 10kHz (600kcpm) $\pm 5\%$ 0.5Hz (30cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.2Hz (12cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$ |
| Isolation | Base isolated |
| Range | See: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|----------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 205gms (nominal) body only |
| Mounting Threads | See: 'How To Order' table |

HS-150S Premium Accelerometer

AC Acceleration Output-Side Entry

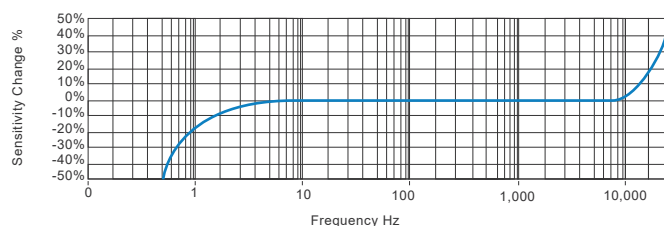
Electrical

| | |
|---------------------|------------------------------------|
| Excitation Voltage: | 18-30Volts DC |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Industries

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

Typical Frequency Response (at 100mV/g)

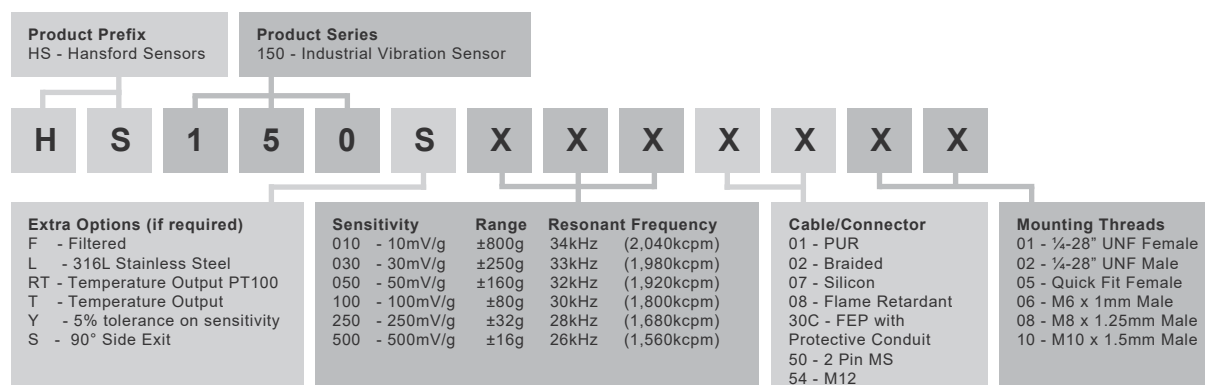


Applications

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



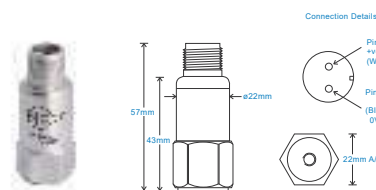
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-160 Accelerometer

AC Velocity Output

Cable and Connector Options

2 Pin MS (50)



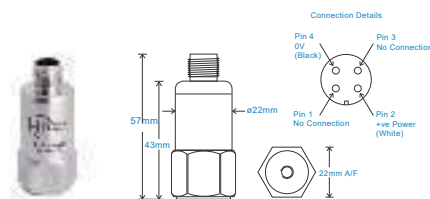
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Connector HS-AA004 - non-booted
HS-AA053 or HS-0054 - boot

Environmental

Operating Temperature Range -55 to 140°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

M12 Connector (54)



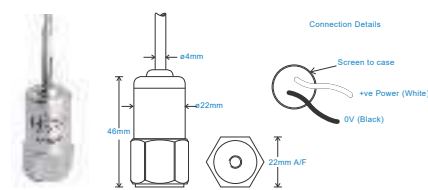
Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range -55 to 140°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Braided Cable (02)



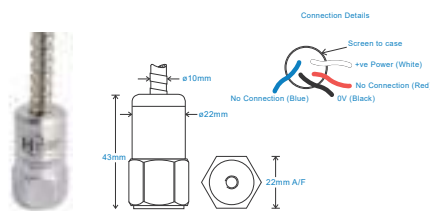
Cable/Connector

Screened Cable Braided
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 140°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

FEP Cable with Protective Conduit (30C)



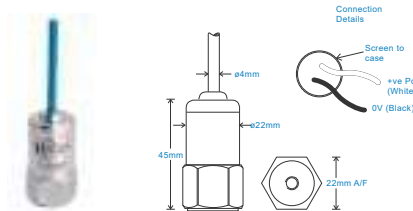
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 140°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Flame Retardant Cable (08)



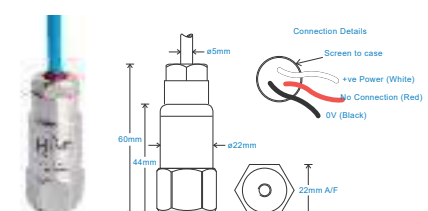
Cable/Connector

Screened Cable Flame Retardant
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -40 to 100°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Silicon Cable (07)



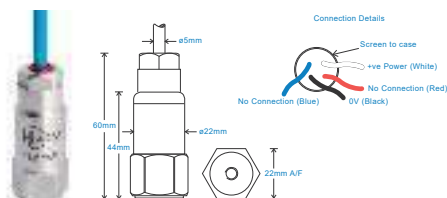
Cable/Connector

Screened Cable Silicon
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -50 to 140°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -30 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 3Hz (180cpm) to 4.5kHz (270kcpm) $\pm 10\%$ 2Hz (120cpm) to 6kHz (360kcpm) $\pm 3\text{dB}$ Base isolated |
| Isolation | see: 'How To Order' table |
| 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 | 106gms (nominal) body only |
| Mounting Threads | see: 'How To Order' table |
| Submersible Depth | 100 metres max (10 bar) |

HS-160 Accelerometer

AC Velocity Output

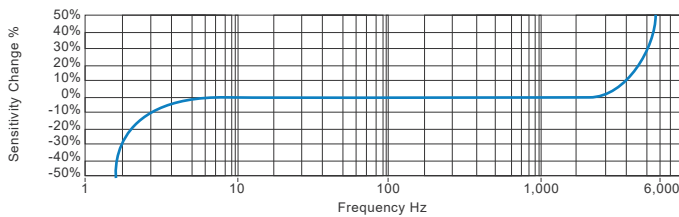
Electrical

| | |
|---------------------|------------------------------------|
| Excitation Voltage: | 18-30Volts DC |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Industries

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

Typical Frequency Response (at 100mV/g)

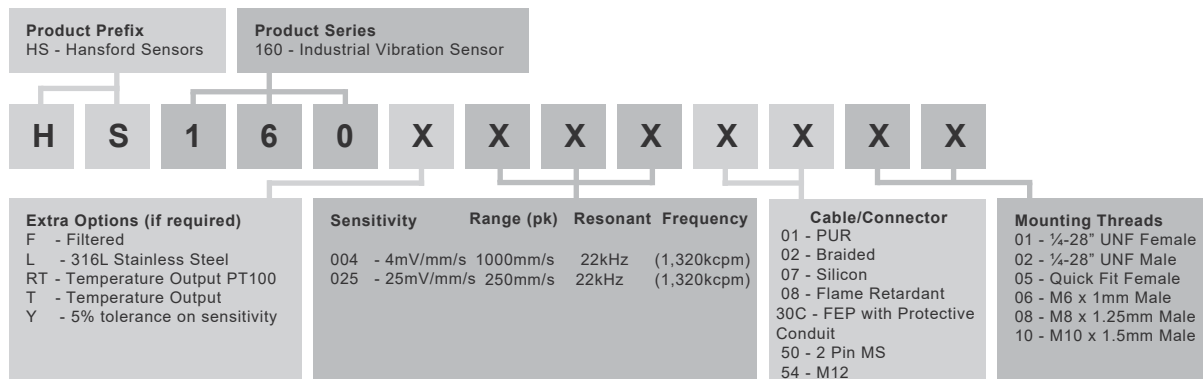


Applications

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



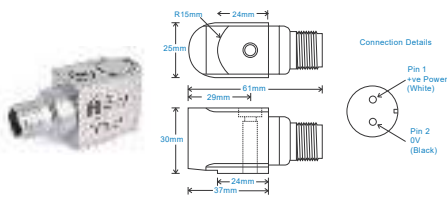
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-160S Accelerometer

AC Velocity Output-Side Entry

Cable and Connector Options

2 Pin MS (50)



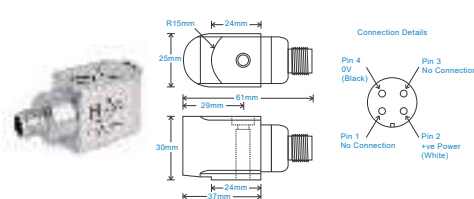
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
 Connector HS-AA004 - non-booted
 HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -55 to 140°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

M12 Connector (54)



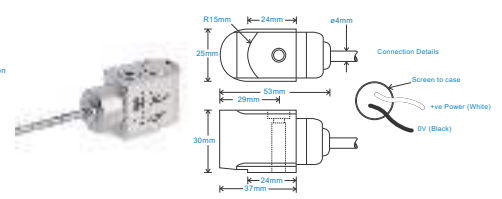
Cable/Connector

Screened Cable HS-AC010 - straight
 HS-AC011 - right angle

Environmental

Operating Temperature Range -55 to 140°C
 Sealing IP67
 Maximum Shock 5000g
 EMC EN61326-1:2013

Braided Cable (02)



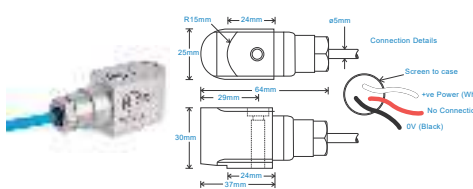
Cable/Connector

Screened Cable Braided
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 140°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Silicon Cable (07)



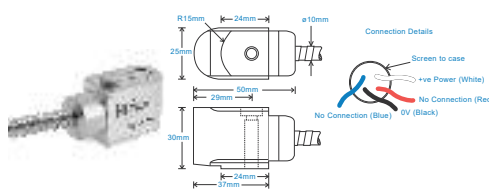
Cable/Connector

Screened Cable Silicon
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -50 to 140°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

FEP Cable with Protective Conduit (30C)



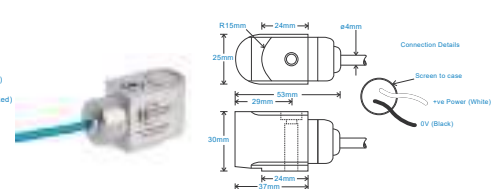
Cable/Connector

Screened Cable FEP - length to be specified with order
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -55 to 140°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Flame Retardant Cable (08)



Cable/Connector

Screened Cable Flame Retardant
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -40 to 100°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | See 'How To Order' table (nominal) |
| Sensitivity | See: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 3Hz (180cpm) to 4.5kHz (270kcpm) $\pm 10\%$ 2Hz (120cpm) to 6kHz (360kcpm) $\pm 3\text{dB}$ |
| 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 | 185gms (nominal) body only |
| Mounting Threads | See: 'How To Order' table |

HS-160S Accelerometer

AC Velocity Output-Side Entry

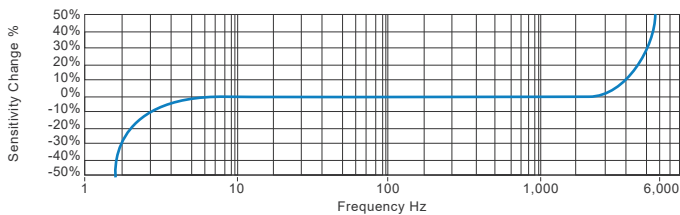
Electrical

| | |
|---------------------|------------------------------------|
| Excitation Voltage: | 18-30Volts DC |
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Industries

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

Typical Frequency Response (at 100mV/g)

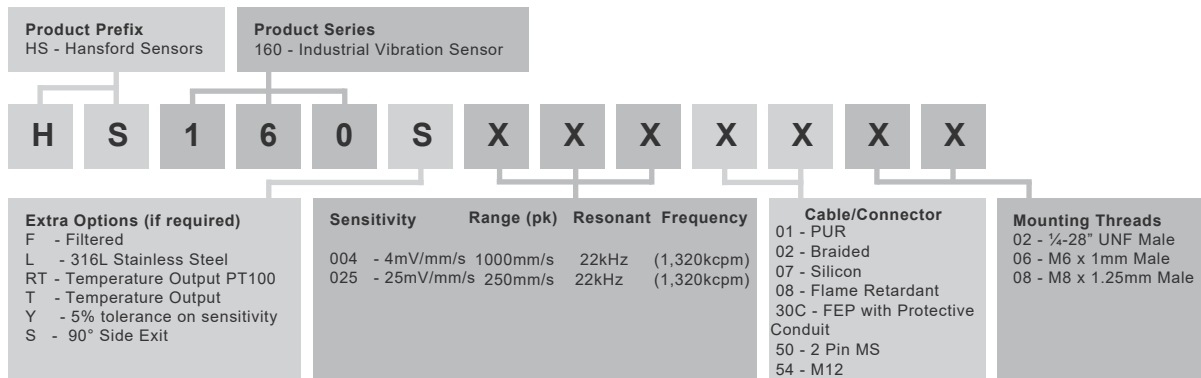


Applications

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



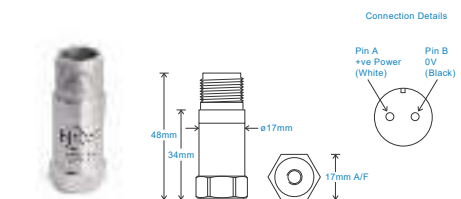
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-170 Premium Accelerometer

AC Acceleration Output

Cable and Connector Options

2 Pin MS (50)



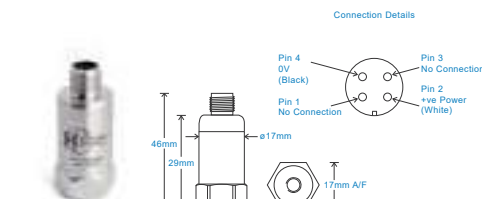
Cable/Connector

| | |
|----------------|---|
| Screened Cable | see: www.hansfordsensors.com for options |
| Connector | HS-AA004 - non-booted HS-AA053 or HS-0054 - booted |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 150°C |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

M12 Connector (54)



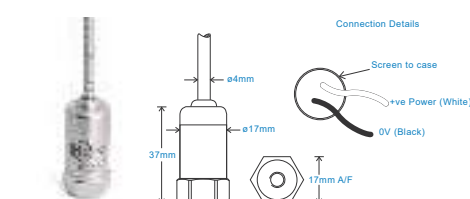
Cable/Connector

| | |
|-----------|---------------------------|
| Connector | Use booted connector only |
|-----------|---------------------------|

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 150°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Braided Cable (02)



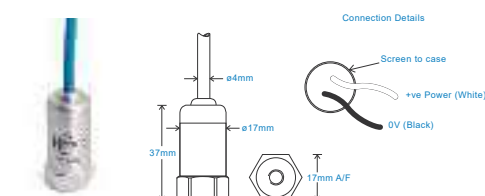
Cable/Connector

| | |
|-----------------------|-------------|
| Screened Cable | Braided |
| Maximum cable length | 1000 metres |
| Standard cable length | 5 metres |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 150°C |
| Sealing | IP65 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Flame Retardant Cable (08)



Cable/Connector

| | |
|-----------------------|-----------------|
| Screened Cable | Flame Retardant |
| Maximum cable length | 1000 metres |
| Standard cable length | 5 metres |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -40 to 100°C |
| Sealing | IP65 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$ |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|---------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 52gms (nominal) body only |
| Mounting Threads | see: 'How To Order' table |

HS-170 Premium Accelerometer

AC Acceleration Output

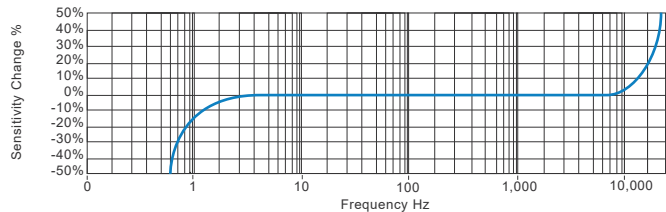
Electrical

| | |
|------------------|------------------------------------|
| 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 |

Industries

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

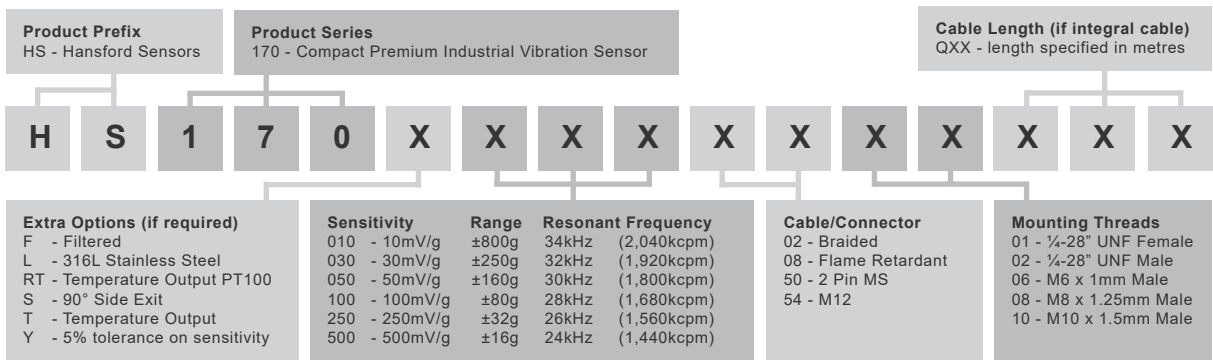
Typical Frequency Response (at 100mV/g)



Applications

Fans, Motors, Pumps, Compressors,
Centrifuges, Conveyors, Air Handlers,
Gearboxes, Rolls, Dryers, Presses,
Cooling, VAC, Spindles, Machine
Tooling, Process Equipment

How To Order



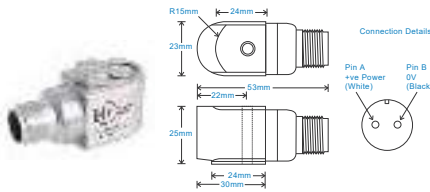
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-170S Premium Accelerometer

AC Acceleration Output-Side Entry

Cable and Connector Options

2 Pin MS (50)



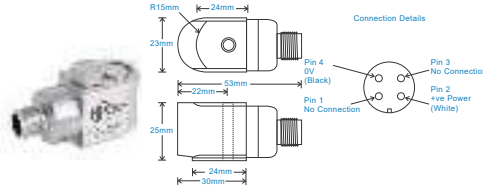
Cable/Connector

Connector Use booted connector only

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 150°C |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

M12 Connector (54)



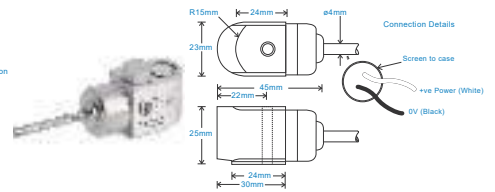
Cable/Connector

Connector Use booted connector only

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 150°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Braided Cable (02)



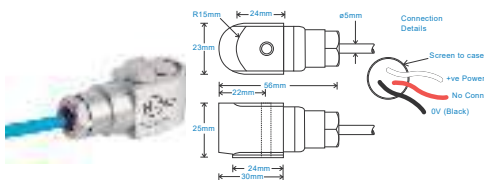
Cable/Connector

| | |
|-----------------------|-------------|
| Screened Cable | Braided |
| Maximum cable length | 1000 metres |
| Standard cable length | 5 metres |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 150°C |
| Sealing | IP65 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Silicon Cable (07)



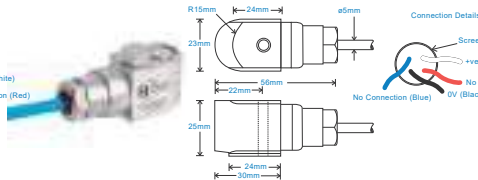
Cable/Connector

| | |
|-----------------------|-------------|
| Screened Cable | Silicon |
| Maximum cable length | 1000 metres |
| Standard cable length | 5 metres |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 150°C |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

PUR Cable (01)



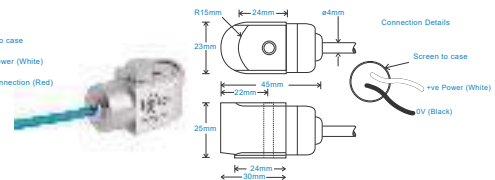
Cable/Connector

| | |
|-----------------------|---|
| Screened Cable | PUR - length to be specified with order |
| Maximum cable length | 1000 metres |
| Standard cable length | 5 metres |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -30 to 90°C |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Flame Retardant Cable (08)



Cable/Connector

| | |
|-----------------------|-----------------|
| Screened Cable | Flame Retardant |
| Maximum cable length | 1000 metres |
| Standard cable length | 5 metres |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -40 to 100°C |
| Sealing | IP65 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | See 'How To Order' table (nominal) |
| Sensitivity | See: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 14kHz (840kcpm) $\pm 10\%$ 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$ |
| Isolation | Base isolated |
| Range | See: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|----------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 135gms (nominal) body only |
| Mounting Threads | See: 'How To Order' table |

HS-170S Premium Accelerometer

AC Acceleration Output-Side Entry

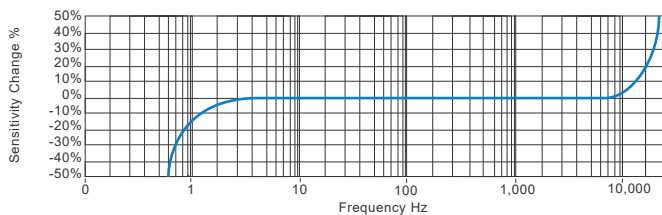
Electrical

| | |
|------------------|------------------------------------|
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

Industries

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

Typical Frequency Response (at 100mV/g)

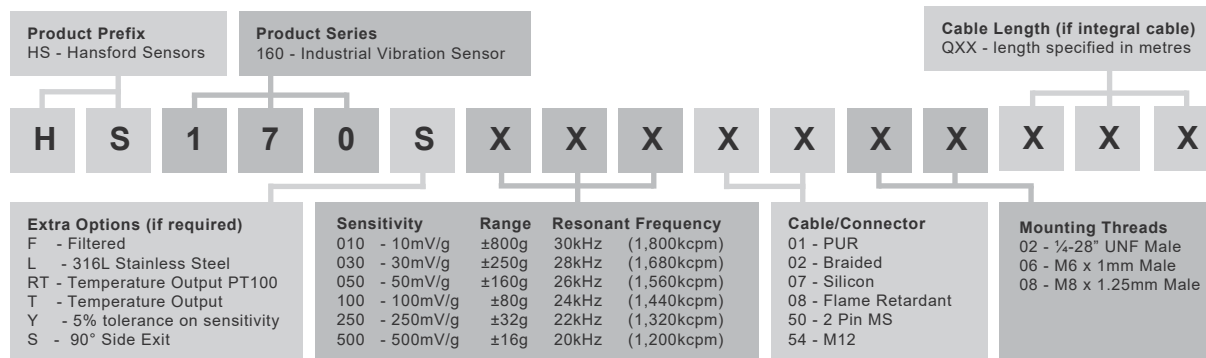


Applications

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



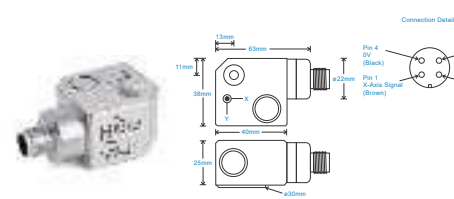
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS Premium Multi-Axial Accelerometers

AC Output

Cable and Connector Options

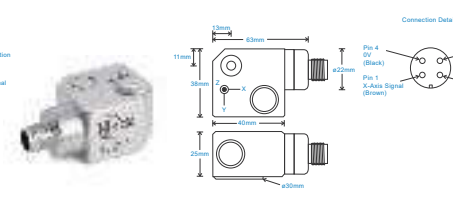
HS-172 Biaxial



| Cable/Connector | |
|-----------------|---------------------|
| Screened Cable | HS-AC010 - Straight |

| Environmental | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 130°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

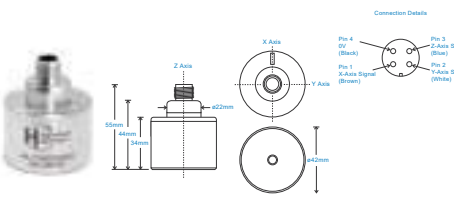
HS-173 Triaxial



| Cable/Connector | |
|-----------------|---------------------|
| Screened Cable | HS-AC010 - Straight |

| Environmental | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 130°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

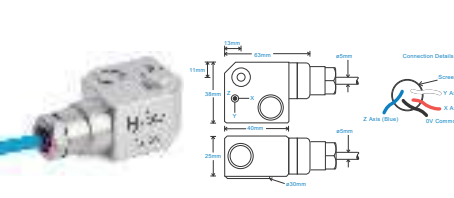
HS-173R Triaxial



| Cable/Connector | |
|-----------------|---------------------|
| Screened Cable | HS-AC010 - Straight |

| Environmental | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 130°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

HS-173 Triaxial PUR



| Cable/Connector | |
|-----------------|---------------------|
| Screened Cable | HS-AC010 - Straight |

| Environmental | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 130°C |
| Sealing | IP67 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) +3kHz for aluminium version |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C per axes |
| Frequency Response | 2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$ |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|--|
| Case Material | Stainless Steel unless specified Aluminium |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Mounting Bolt Provided | see: 'How To Order' table x 30mm long |
| Mounting Threads | see: 'How To Order' table |

HS Premium Multi-Axial Accelerometers

AC Output

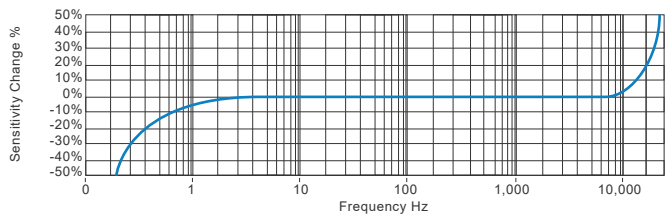
Electrical

| | |
|------------------|------------------------------------|
| 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 |

Industries

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

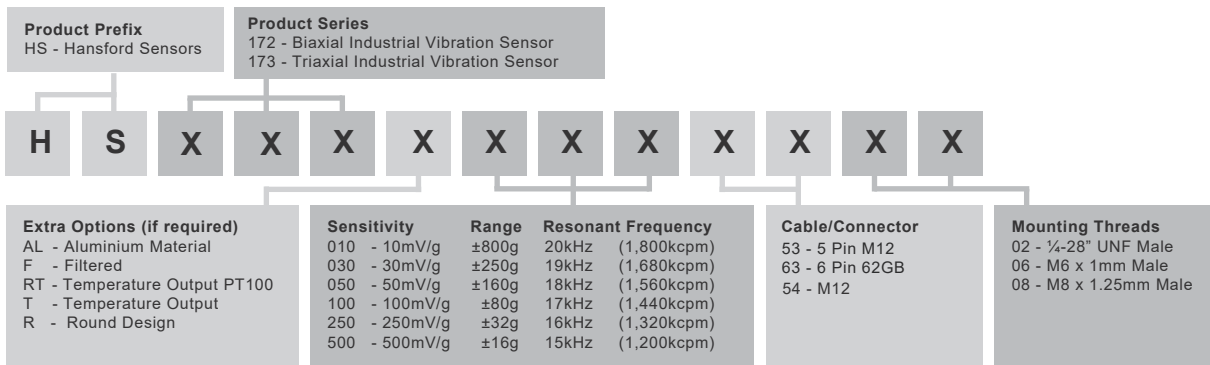
Typical Frequency Response (at 100mV/g)



Applications

Fans, Motors, Pumps, Compressors,
Centrifuges, Conveyors, Air Handlers,
Gearboxes, Rolls, Dryers, Presses,
Cooling, VAC, Spindles, Machine
Tooling, Process Equipment

How To Order



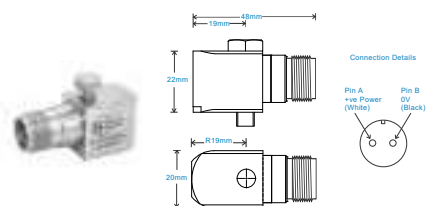
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-180 Premium Accelerometers

AC Acceleration Output

Cable and Connector Options

2 Pin MS (50)



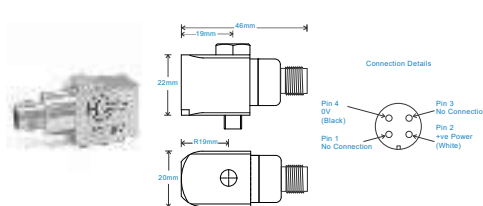
Cable/Connector

Connector HS- AA004-non booted
HS-AA053 or HS-AA054

Environmental

Operating Temperature Range -55 to 130°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

M12 Connector (54)



Cable/Connector

Screened Cable HS- AC010 - Straight

Environmental

Operating Temperature Range -55 to 130°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$ |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |

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 |

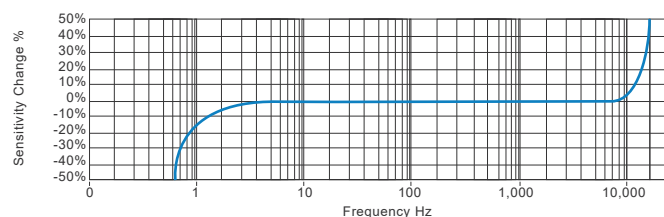
Mechanical

| | |
|------------------------------|---------------------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Mounting Bolt Provided | see: 'How To Order' table x 27mm long |
| Weight | 87gms (nominal) body only |
| Mounting Threads | see: 'How To Order' table |

Industries

Automotive, Machine Tools, OEM

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

How To Order

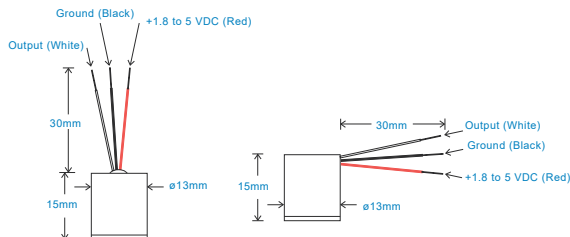
| Product Prefix | Product Series | | | | | | | | | | |
|--|---|-------------------------------|---|---------------------------------------|---|--|---|---------------------------|---|---|---|
| HS - Hansford Sensors | 180 - Compact Premium Industrial Vibration Sensor | | | | | | | | | | |
| H | S | 1 | 8 | 0 | S | X | X | X | X | X | X |
| Extra Options (if required) | | Sensitivity | | Range | | Resonant Frequency | | Cable/Connector | | Mounting Threads | |
| F - Filtered L - 316L Stainless Steel S - 90° Side Exit Y - 5% tolerance on sensitivity | | 010 - 10mV/g 100 - 100mV/g | | $\pm 800\text{g}$ $\pm 80\text{g}$ | | 30kHz (1,800kcpm) 24kHz (1,440kcpm) | | 50 - 2 Pin MS 54 - M12 | | 02 - 1/4-28" UNF Male 06 - M6 x 1mm Male | |

Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS Accelerometer Capsules

AC Acceleration Output

HS-004 Low Power Capsule



Mechanical

| | |
|------------------------------|-----------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Weight | 18gms (nominal) |

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 0.3Hz (18cpm) to 15kHz (900kcpm) ± 3 dB |
| Isolation | Base isolated |
| Range | see: 'How To Order' table @ 5V power |
| Transverse Sensitivity | Less than 5% |
| Broadband Resolution | <500 μ g |
| Amplitude Linearity | $\pm 1\%$ |

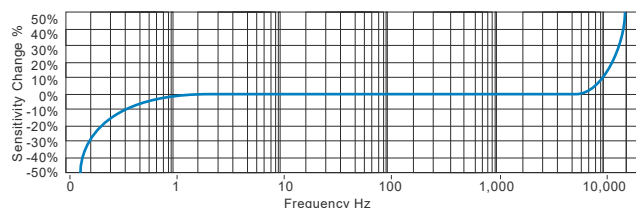
Electrical

| | |
|---------------------|---|
| Electrical Noise | <<500 μ g |
| Power Requirements | see: 'How To Order' table |
| Current Consumption | 100 μ A nominal at 5V supply (60 μ A at 1.8V) |
| Bias Voltage | 50% of supply voltage |
| Settling Time | 1 second |
| Output Impedance | 100 Ohms max. |
| Case Isolation | >108 Ohms at 500 Volts |

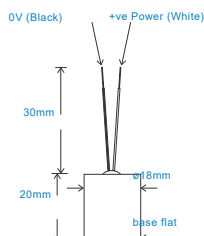
Environmental

| | |
|-----------------------------|-------------------|
| Operating Temperature Range | -40 to 120°C |
| Sealing | IP55 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |
| Electromagnetic Sensitivity | 150 μ g/gauss |

Typical Frequency Response (at 100mV/g)



HS-050 Accelerometer Capsule



Mechanical

| | |
|------------------------------|-----------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Compression |
| Weight | 34gms (nominal) |

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 1.5Hz (90cpm) to 15kHz (900kcpm) $\pm 5\%$ 0.5Hz (30cpm) to 17kHz (1,020kcpm) $\pm 10\%$ 0.2Hz (12cpm) to 20kHz (1,200kcpm) ± 3 dB |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

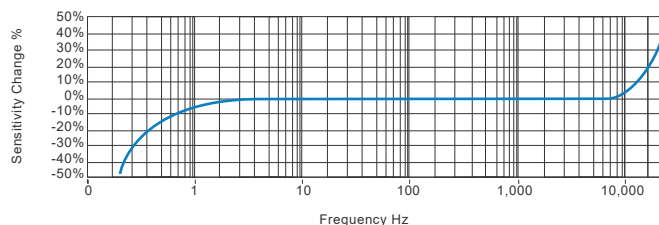
Electrical

| | |
|------------------|------------------------|
| 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 Ohms at 500 Volts |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -40 to 120°C |
| Sealing | IP55 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

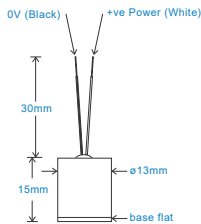
Typical Frequency Response (at 100mV/g)



HS Accelerometer Capsules

AC Acceleration Output

HS-070 Premium Accelerometer Capsule



Mechanical

| | |
|------------------------------|-----------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Weight | 13gms (nominal) |

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 1.5Hz (90cpm) to 14kHz (840kcpm) $\pm 5\%$ 0.5Hz (30cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.2Hz (12cpm) to 19kHz (1,140kcpm) $\pm 3dB$ |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

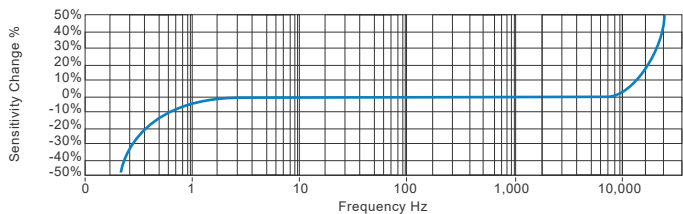
Electrical

| | |
|------------------|------------------------|
| 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 | >108 Ohms at 500 Volts |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -55 to 130°C |
| Sealing | IP55 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

Typical Frequency Response (at 100mV/g)

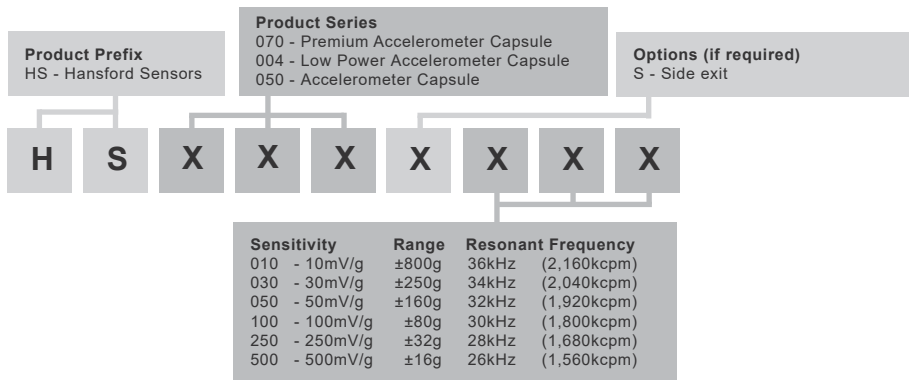


Applications

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



Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

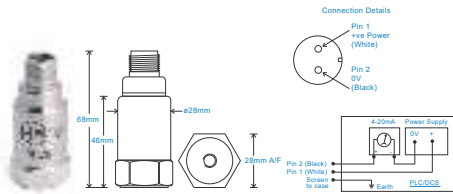


HS-420 Accelerometer

4-20mA Velocity Output

Cable and Connector Options

2 Pin MS (50)



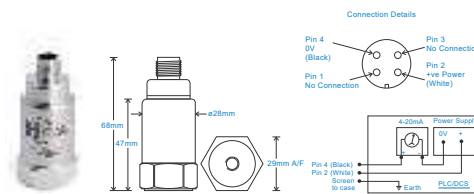
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Connector HS-AA004 - non-booted
HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -25 to 120°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

M12 Connector (54)



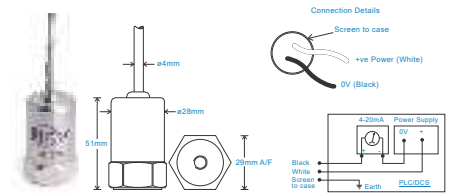
Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range -25 to 120°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Braided Cable (02)



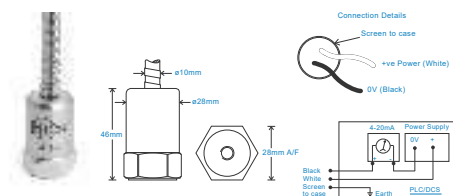
Cable/Connector

Screened Cable Braided
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 120°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

FEP Cable with Protective Conduit (30C)



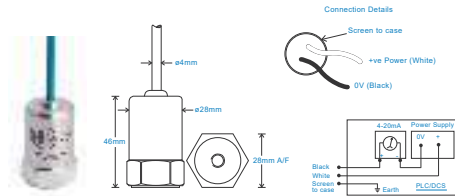
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 120°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Flame Retardant Cable (08)



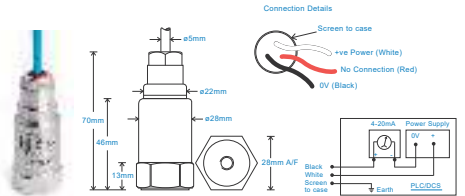
Cable/Connector

Screened Cable Flame Retardant
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Silicon Cable (07)



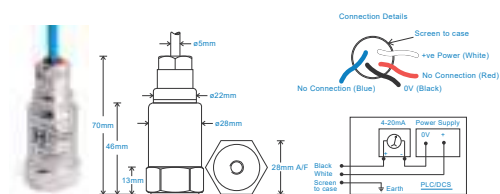
Cable/Connector

Screened Cable Silicon
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 120°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | 5kHz min |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - 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 | 150gms (nominal) body only |
| Mounting Threads | see: 'How To Order' table |

HS-420 Accelerometer

4-20mA Velocity Output

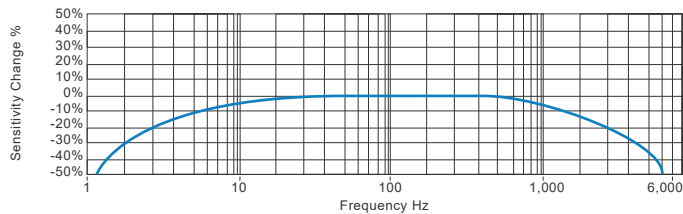
Electrical

| | |
|------------------|---|
| 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 |

Industries

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

Typical Frequency Response (at 100mV/g)

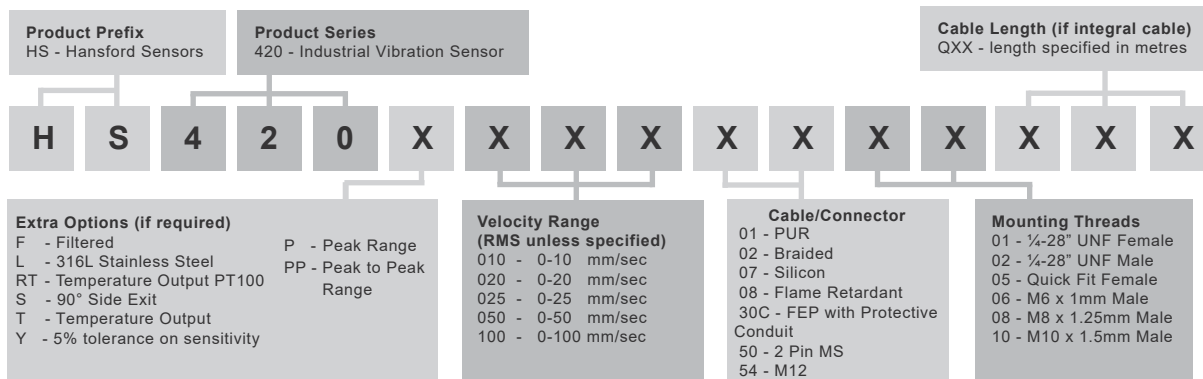


Applications

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



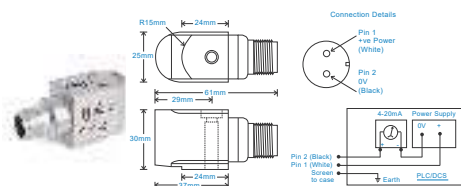
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-420S Accelerometer

4-20mA Velocity Output-Side Entry

Cable and Connector Options

2 Pin MS (50)



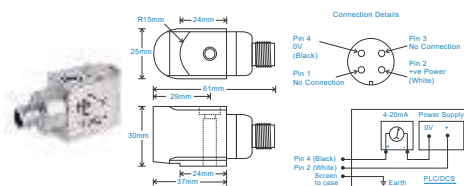
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
 Connector HS-AA004 - non-booted
 HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -25 to 120°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

M12 Connector (54)



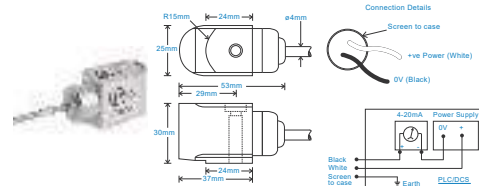
Cable/Connector

Screened Cable HS-AC010 - straight
 HS-AC011 - right angle

Environmental

Operating Temperature Range -25 to 120°C
 Sealing IP67
 Maximum Shock 5000g
 EMC EN61326-1:2013

Braided Cable (02)



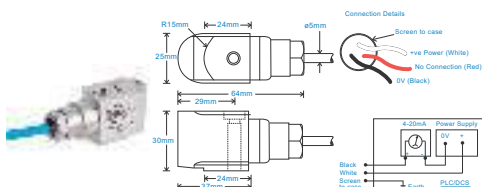
Cable/Connector

Screened Cable Braided
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 120°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Silicon Cable (07)



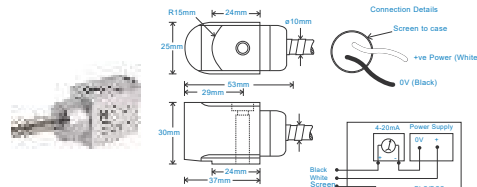
Cable/Connector

Screened Cable Silicon
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 120°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

FEP Cable with Protective Conduit (30C)



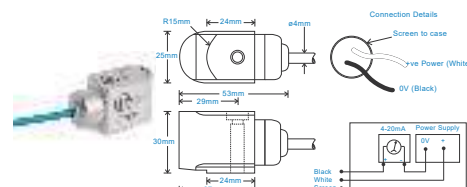
Cable/Connector

Screened Cable FEP - length to be specified with order
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 120°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Flame Retardant Cable (08)



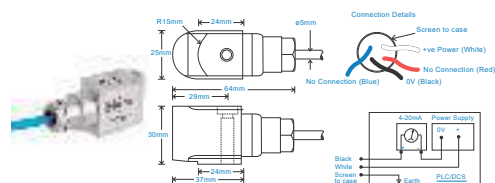
Cable/Connector

Screened Cable Flame Retardant
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | 5kHz min |
| Velocity Ranges | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816 |
| Isolation | Base isolated |
| Range | 50g peak |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|----------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 185gms (nominal) body only |
| Mounting Threads | See: 'How To Order' table |

HS-420S Accelerometer

4-20mA Velocity Output-Side Entry

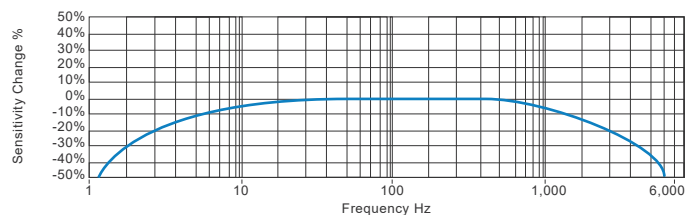
Electrical

| | |
|------------------|---|
| 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 |

Industries

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

Typical Frequency Response (at 100mV/g)

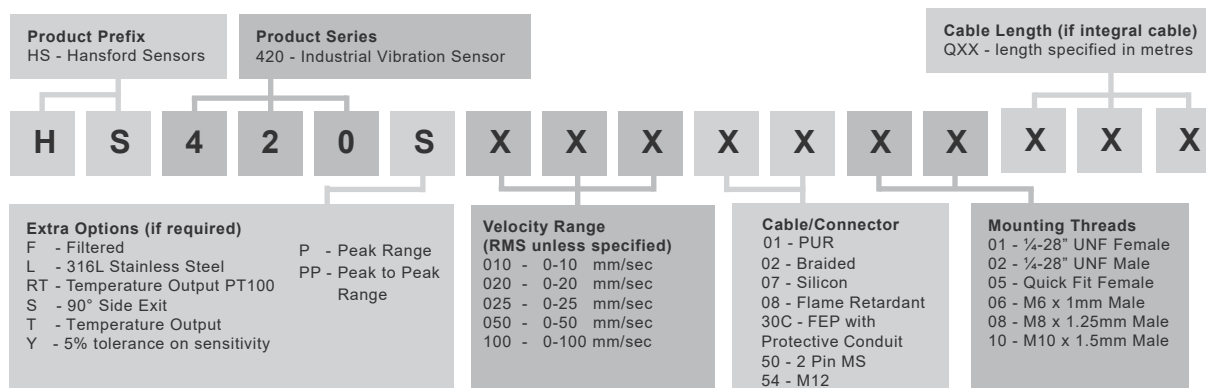


Applications

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



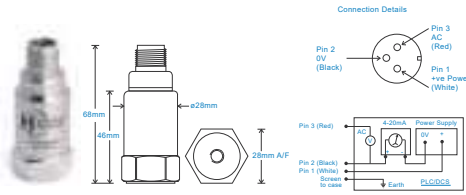
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-421 Accelerometer

4-20mA Velocity and AC Acceleration Output

Cable and Connector Options

3 Pin MS (52)



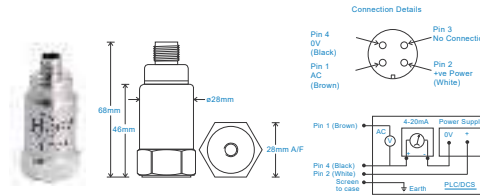
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Connector HS-AA005 - non-booted
HS-AA068 or HS-0069 - booted

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

M12 Connector (54)



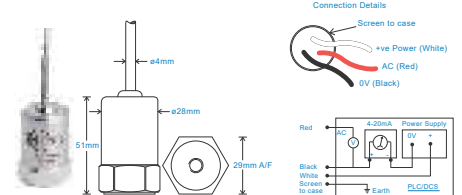
Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Braided Cable (03)



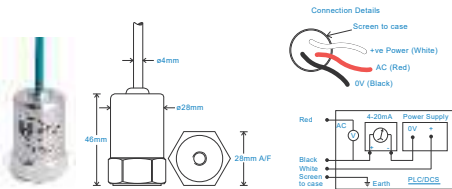
Cable/Connector

Screened Cable Braided
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Flame Retardant Cable (15)



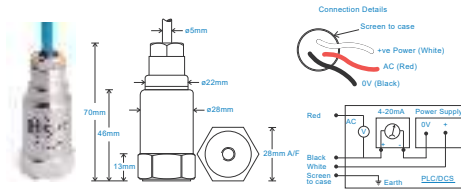
Cable/Connector

Screened Cable Flame Retardant
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Silicon Cable (07)



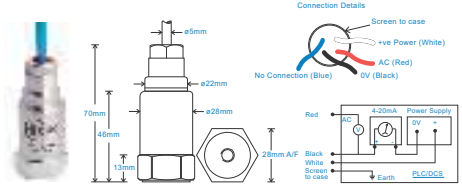
Cable/Connector

Screened Cable Silicon
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | 5kHz min |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - 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 | 150gms (nominal) body only |
| Mounting Threads | see: 'How To Order' table |
| Submersible Depth | 100 metres max (10 bar) |

HS-421 Accelerometer

4-20mA Velocity and AC Acceleration Output

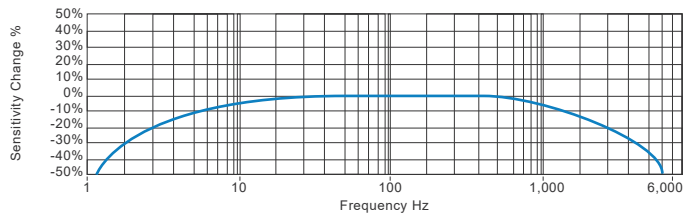
Electrical

| | |
|------------------|---|
| Outputs | 4-20mA DC current proportional to Range 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 |

Industries

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

Typical Frequency Response (at 100mV/g)

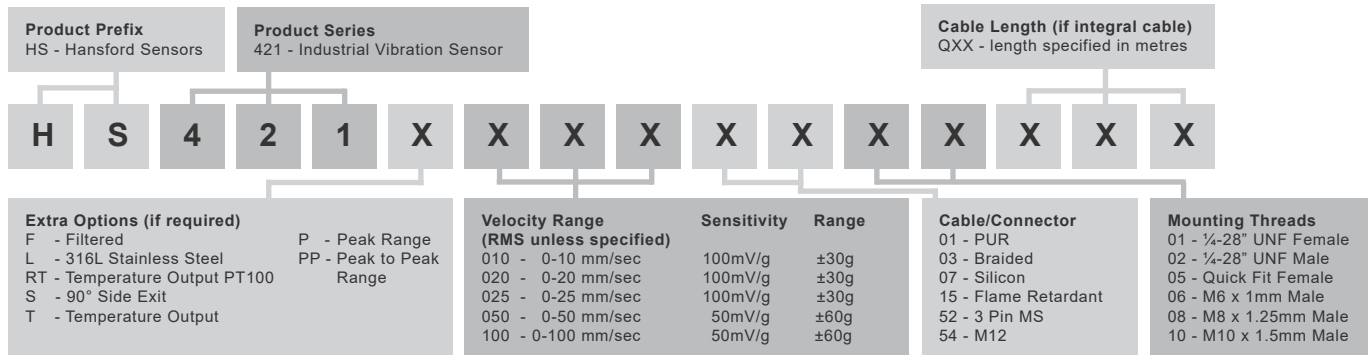


Applications

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



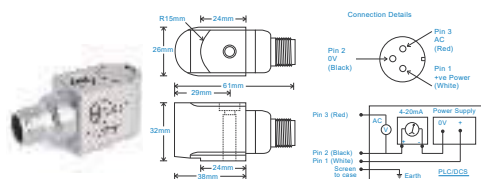
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-421S Accelerometer

4-20mA Velocity and AC Acceleration Output-Side Entry

Cable and Connector Options

3 Pin MS (52)



Cable/Connector

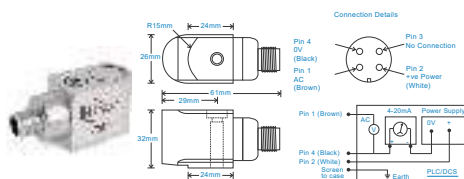
Screened Cable see: www.hansfordsensors.com for options

Connector HS-AA010 - straight
HS-AA011 - right angle

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

M12 Connector (54)



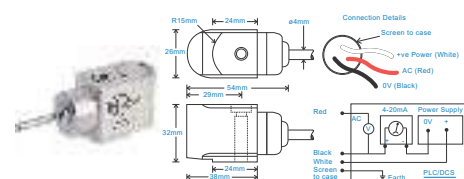
Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Braided Cable (03)



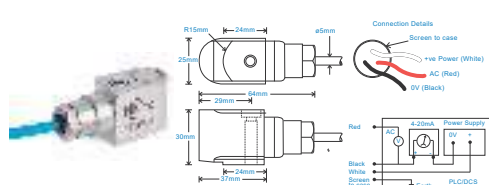
Cable/Connector

Screened Cable Braided
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Silicon Cable (07)



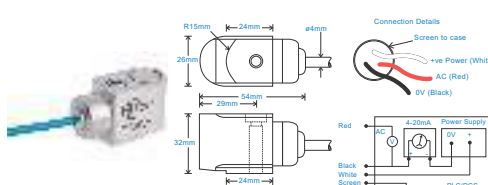
Cable/Connector

Screened Cable Silicon
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Flame Retardant Cable (15)



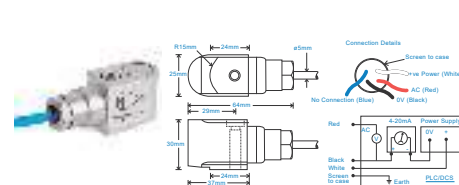
Cable/Connector

Screened Cable Flame Retardant
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | 5kHz min |
| Velocity Ranges | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816 |
| Isolation | Base isolated |
| Range | See: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|----------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 185gms (nominal) body only |
| Mounting Threads | See: 'How To Order' table |

HS-421S Accelerometer

4-20mA Velocity and AC Acceleration Output-Side Entry

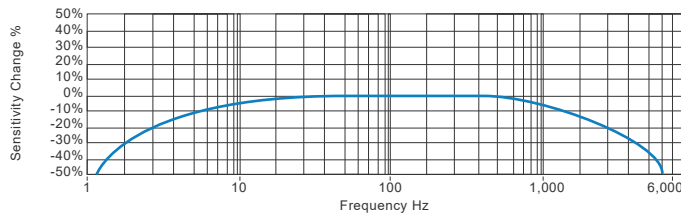
Electrical

| | |
|------------------|---|
| Outputs | 4-20mA DC current proportional to Range and AC acceleration |
| Bias Voltage | 3 Volts DC (nominal) |
| 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 |

Industries

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

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 Series 421 - Industrial Vibration Sensor | | | | | Cable Length (if integral cable) QXX - length specified in metres | | | | | | | |
|---|---|---|---|---|---|--|--|---|--|---|---|---|--|---|
| H | S | 4 | 2 | 1 | S | X | X | 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 P - Peak Range PP - Peak to Peak Range | | | | | | Velocity Range (RMS unless specified) 010 - 0-10 mm/sec 020 - 0-20 mm/sec 025 - 0-25 mm/sec 050 - 0-50 mm/sec 100 - 0-100 mm/sec | | Sensitivity 100mV/g 100mV/g 100mV/g 50mV/g 50mV/g | Range ±30g ±30g ±30g ±60g ±60g | Cable/Connector 01 - PUR 03 - Braided 07 - Silicon 15 - Flame Retardant 52 - 3 Pin MS 54 - M12 | | | Mounting Threads 01 - ¼-28" UNF Female 02 - ¼-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male | |

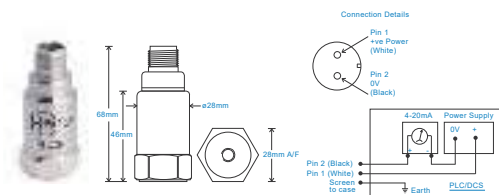
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-422 Accelerometer

4-20mA Acceleration Output

Cable and Connector Options

2 Pin MS (50)



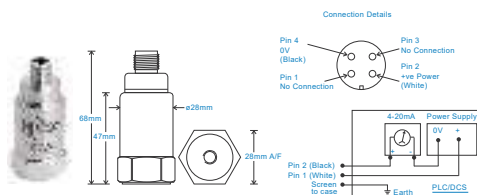
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
Connector HS-AA004 - non-booted
HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

M12 Connector (54)



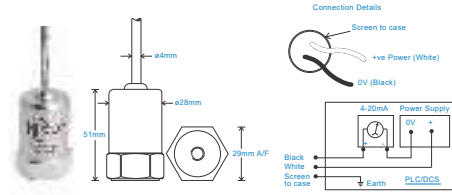
Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Braided Cable (02)



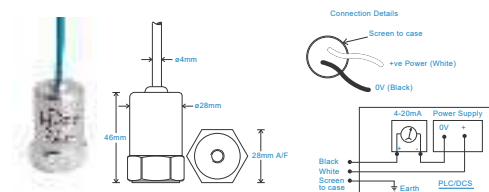
Cable/Connector

Screened Cable Braided
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Flame Retardant Cable (08)



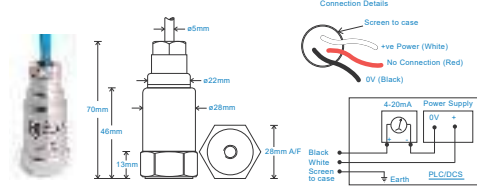
Cable/Connector

Screened Cable Flame Retardant
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Silicon Cable (07)



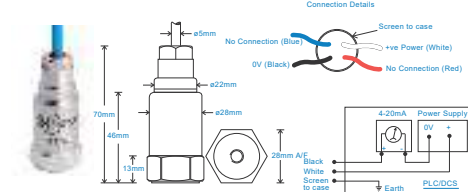
Cable/Connector

Screened Cable Silicon
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | 10kHz min |
| Acceleration Ranges | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 5kHz (300kcpm) $\pm 5\%$ - 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 | 150gms (nominal) body only |
| Mounting Threads | see: 'How To Order' table |
| Submersible Depth | 100 metres max (10 bar) |

HS-422 Accelerometer

4-20mA Acceleration Output

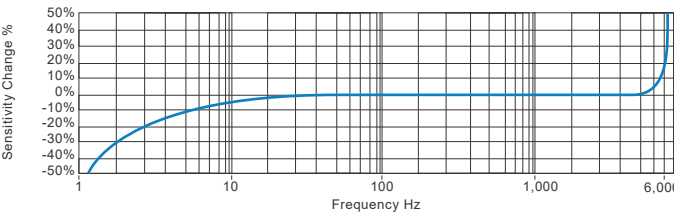
Electrical

| | |
|------------------|---|
| Current Output | 4-20mA DC proportional to acceleration |
| 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 |

Industries

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

Typical Frequency Response (at 100mV/g)

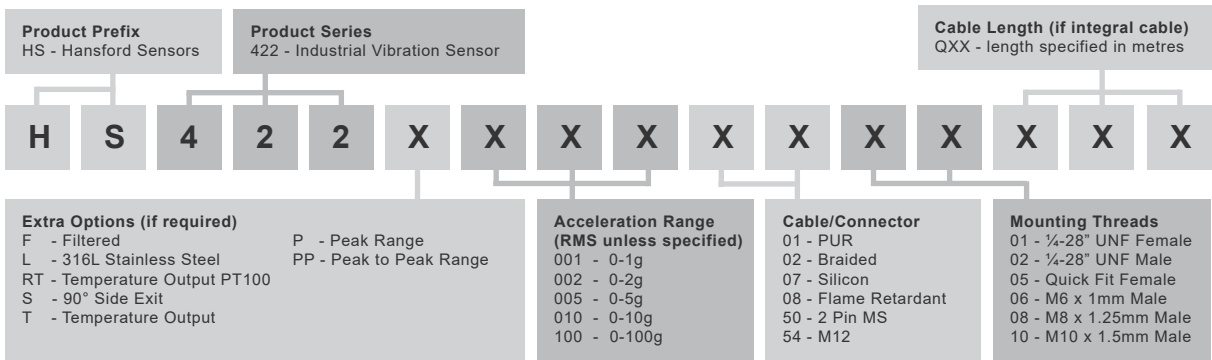


Applications

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



Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

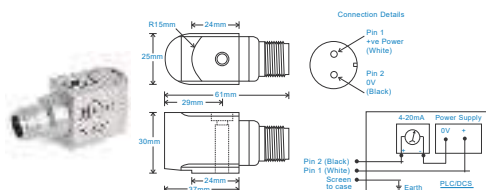


HS-422S Accelerometer

4-20mA Acceleration Output-Side Entry

Cable and Connector Options

2 Pin MS (50)



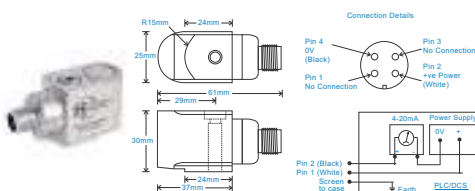
Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
 Connector HS- AA004- non-booted
 HS-AA053 or HS-0054 - booted

Environmental

Operating Temperature Range -25 to 90°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

M12 Connector (54)



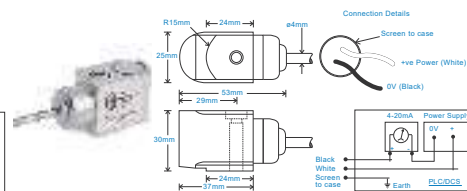
Cable/Connector

Screened Cable HS-AC010 - straight
 HS-AC011 - right angle

Environmental

Operating Temperature Range -25 to 90°C
 Sealing IP67
 Maximum Shock 5000g
 EMC EN61326-1:2013

Braided Cable (02)



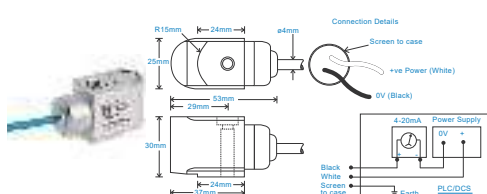
Cable/Connector

Screened Cable Braided
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

Flame Retardant Cable (08)



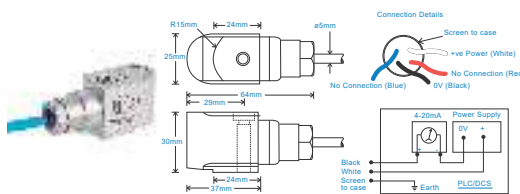
Cable/Connector

Screened Cable Flame Retardant
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
 Sealing IP65
 Maximum Shock 5000g
 EMC EN61326-1:2013

PUR Cable (01)



Cable/Connector

Screened Cable PUR
 Maximum cable length 1000 metres
 Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
 Sealing IP68
 Maximum Shock 5000g
 EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | 10kHz min |
| Acceleration Ranges | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 5kHz (300kcpm) $\pm 5\%$ - ISO1081 |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

Mechanical

| | |
|------------------------------|----------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Mounting Torque | 8Nm |
| Weight | 185gms (nominal) body only |
| Mounting Threads | See: 'How To Order' table |

HS-422S Accelerometer

4-20mA Acceleration Output-Side Entry

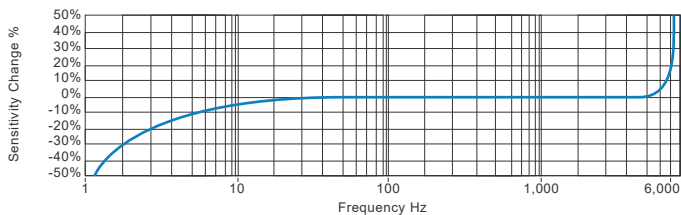
Electrical

| | |
|------------------|---|
| Current Output | 4-20mA DC proportional to acceleration |
| 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 |

Industries

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

Typical Frequency Response (at 100mV/g)

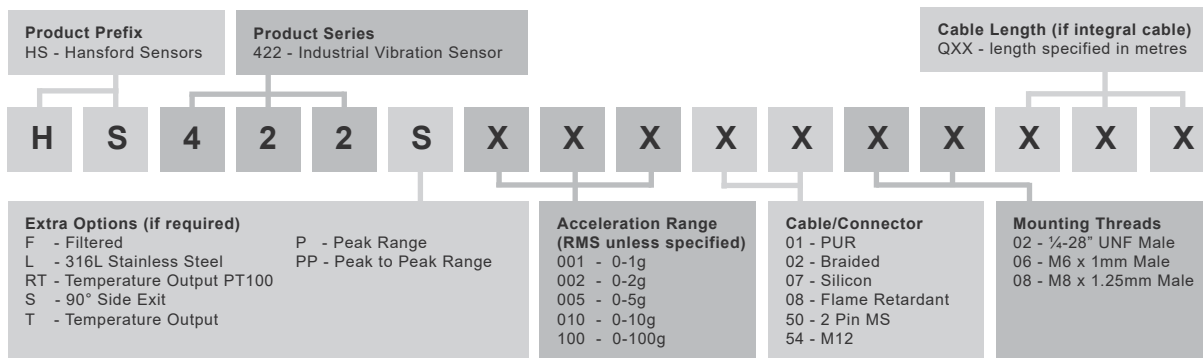


Applications

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



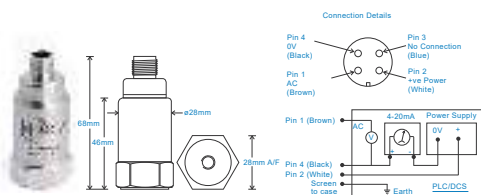
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-423 Accelerometer

4-20mA Acceleration and AC Acceleration Output

Cable and Connector Options

M12 Connector (54)



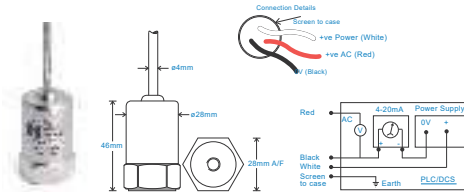
Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP67
Maximum Shock 5000g
EMC EN61326-1:2013

Braided Cable (03)



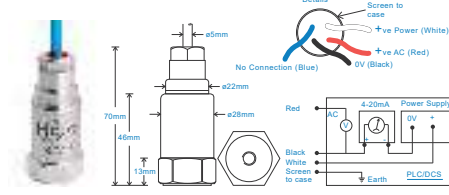
Cable/Connector

Screened Cable Braided
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

PUR Cable (01)



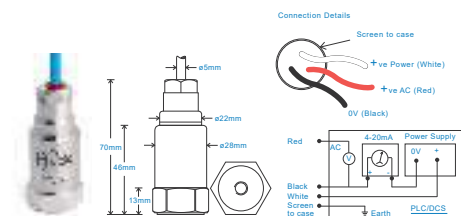
Cable/Connector

Screened Cable PUR
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Silicon Cable (07)



Cable/Connector

Screened Cable Silicon
Maximum cable length 1000 metres
Standard cable length 5 metres

Environmental

Operating Temperature Range -25 to 90°C
Sealing IP68
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|--|
| Mounted Base Resonance | 10kHz min |
| Acceleration Ranges | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 5kHz (300kcpm) $\pm 5\%$ - 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 |
| Mounting Threads | see: 'How To Order' table |
| Submersible Depth | 100 metres max (10 bar) |

HS-423 Accelerometer

4-20mA Acceleration and AC Acceleration Output

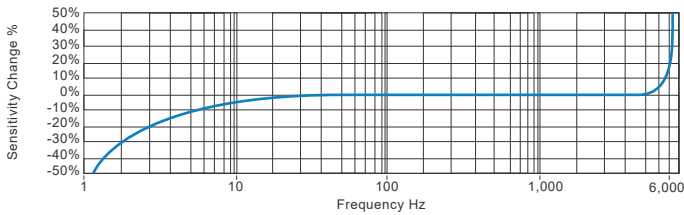
Electrical

| | |
|------------------|--|
| 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 |

Industries

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

Typical Frequency Response (at 100mV/g)

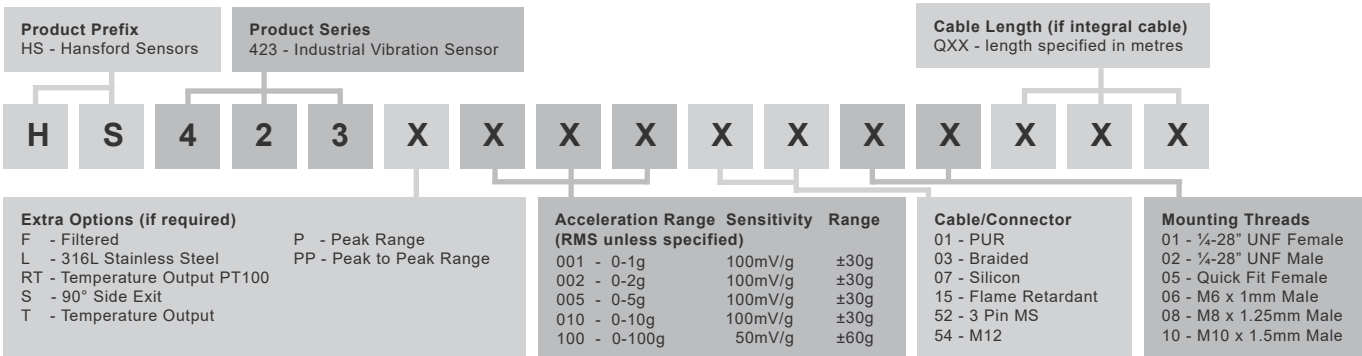


Applications

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

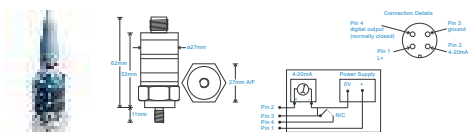


Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-429 Vibration Trip

Cable and Connector Options

M12 Connector (54)



Cable/Connector

Screened Cable HS-AC010 - straight
HS-AC011 - right angle

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -25 to 80°C |
| Sealing | IP67 |
| Maximum Shock | 100g |
| EMC | EN61326-1:2013 |
| Reverse Policy | Protected |
| MTBF | 510 years |

Technical Performance

| | |
|---------------------|--|
| Velocity Ranges | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816 |
| False Trigger Delay | Adjustable up to 60 seconds |
| Trip Setting | Fully adjustable |

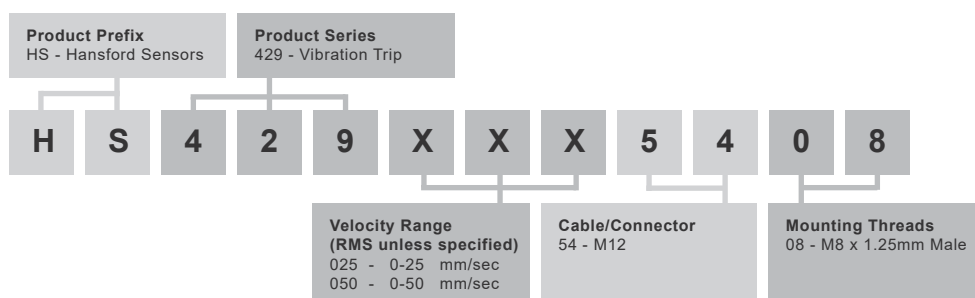
Mechanical

| | |
|---------------------|-----------------------------------|
| Case Material | Stainless Steel 316L/Plastic |
| Mounting Torque | 15Nm |
| Weight | 116gms (nominal) |
| Mounting Threads | M8 x 1.25mm male |
| Supporting Products | AA102 - Protective plastic casing |

Electrical

| | |
|---------------------|--|
| Current Output | 4-20mA DC proportional to Velocity Range |
| Supply Voltage | 18-32 Volts DC |
| Switching Output | NC, PNP up to 500mA |
| Display OK LED | Green |
| Trip LED | Yellow |
| Current Consumption | 18-30volts DC at 50mA |

How To Order



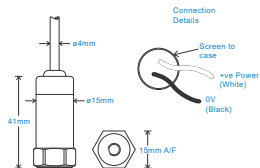
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.



AC acceleration output via Flame Retardant Cable

Cable and Connector Options

Flame Retardant (08)



Cable/Connector

| | |
|----------------------|-----------------|
| Screened Cable | Flame Retardant |
| Maximum cable length | 1000 metres |

Environmental

| | |
|-----------------------------|----------------|
| Operating Temperature Range | -40 to 100°C |
| Sealing | IP65 |
| Maximum Shock | 100g |
| EMC | EN61326-1:2013 |

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ |
| | Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$ |
| | 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ |
| | 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$ |
| Isolation | Base isolated |
| Range | see: 'How To Order' table |
| Transverse Sensitivity | Less than 5% |

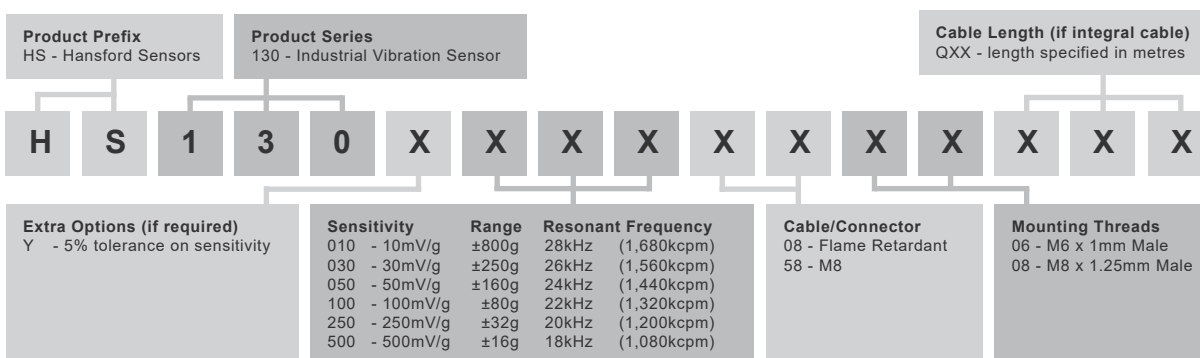
Mechanical

| | |
|------------------------------|---------------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Compression |
| Mounting Torque | 8Nm |
| Weight | 30gms (nominal) body only |
| Standard Cable Length | 5 metres |
| Mounting Threads | see: 'How To Order' table |

Electrical

| | |
|------------------|------------------------------------|
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | >10 ⁸ Ohms at 500 Volts |

How To Order



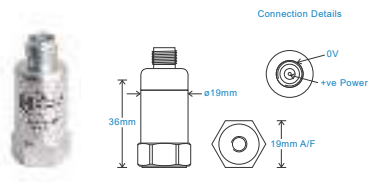
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-102 Accelerometer

AC acceleration output via TNC Connector

Cable and Connector Options

TNC Connector (55)



Cable/Connector

Connector TNC

Environmental

Operating Temperature Range -55 to 90°C
Sealing IP65
Maximum Shock 5000g
EMC EN61326-1:2013

Technical Performance

| | |
|------------------------|---|
| Mounted Base Resonance | see 'How To Order' table (nominal) |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C |
| Frequency Response | 2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$ |
| Isolation | Base non-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 | 50gms (nominal) |
| Mounting Threads | see: 'How To Order' table |

Electrical

| | |
|------------------|---------------------------|
| Electrical Noise | 0.1mg max |
| Current Range | 0.5mA to 8mA |
| Bias Voltage | 10 - 12 Volts DC |
| Settling Time | 2 seconds |
| Output Impedance | 200 Ohms max. |
| Case Isolation | $>10^8$ Ohms at 500 Volts |

How To Order

| Product Prefix | Product Series | | | | | | | | | | |
|---------------------------------|-----------------------------------|---------------|---|-------------------|---|--------------------|---|-----------|---|-------------------------|---|
| HS - Hansford Sensors | 102 - Industrial Vibration Sensor | | | | | | | | | | |
| H | S | 1 | 0 | 2 | X | X | X | X | X | X | X |
| Extra Options (if required) | | Sensitivity | | Range | | Resonant Frequency | | Connector | | Mounting Threads | |
| F - Filtered | | 010 - 10mV/g | | $\pm 800\text{g}$ | | 26kHz (1,560kcpm) | | 55 - TNC | | 01 - 1/4-28" UNF Female | |
| I - Intrinsically Safe | | 030 - 30mV/g | | $\pm 250\text{g}$ | | 24kHz (1,440kcpm) | | | | 02 - 1/4-28" UNF Male | |
| RT - Temperature Output PT100 | | 050 - 50mV/g | | $\pm 160\text{g}$ | | 22kHz (1,320kcpm) | | | | 06 - M6 x 1mm Male | |
| S - 90° Side Exit | | 100 - 100mV/g | | $\pm 80\text{g}$ | | 20kHz (1,200kcpm) | | | | 08 - M8 x 1.25mm Male | |
| T - Temperature Output | | 250 - 250mV/g | | $\pm 32\text{g}$ | | 18kHz (1,080kcpm) | | | | 10 - M10 x 1.5mm Male | |
| Y - 5% tolerance on sensitivity | | 500 - 500mV/g | | $\pm 16\text{g}$ | | 16kHz (960kcpm) | | | | | |

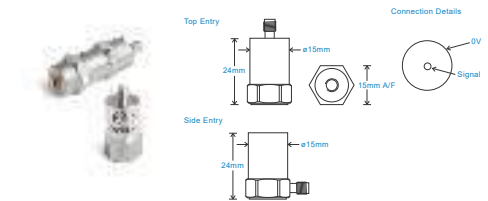
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-140 Charge Output Accelerometer

AC acceleration output via Microdot Connector

Cable and Connector Options

Microdot Connector (57)



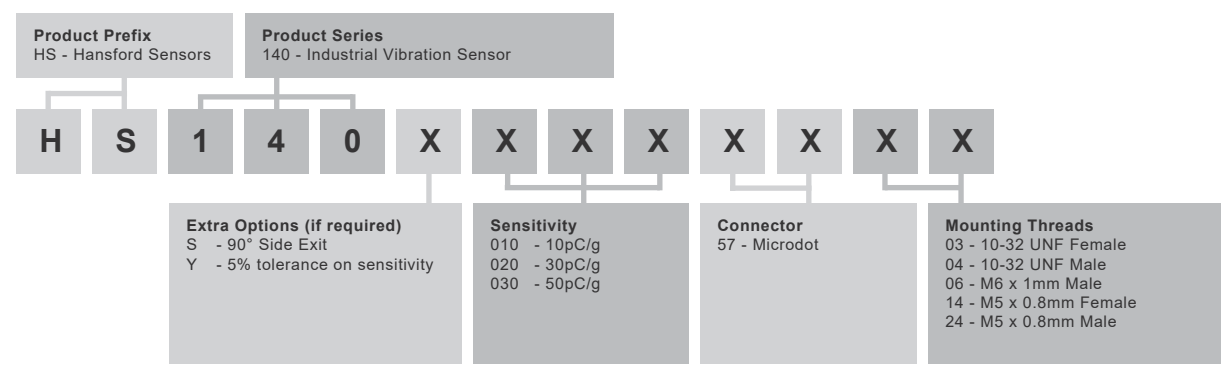
| Cable/Connector | |
|-----------------------------|----------------|
| Screened Cable Assembly | AC015 |
| Maximum Cable length | 10 meters |
| Mating Connector | Microdot |
| Environmental | |
| Operating Temperature Range | -55 to 250°C |
| Sealing | IP65 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

| Technical Performance | | Mechanical | |
|------------------------|---|------------------------------|---------------------------------|
| Mounted Base Resonance | 32kHz (nominal) | Case Material | Stainless Steel |
| Sensitivity | see: 'How To Order' table $\pm 10\%$ | Sensing Element/Construction | PZT/Compression |
| | Nominal 80Hz at 22°C | Mounting Torque | 3Nm |
| Frequency Response | 2Hz (120cpm) to 12kHz (720kcpm) $\pm 5\%$ | Weight | 24gms (nominal) body only |
| | - dependant on charge amplifie | Mounting Threads | see: 'How To Order' table |
| Isolation | Base non-isolated | Radiation Resistant | Select as an option if required |
| Range | $\pm 800g$ | | |
| Transverse Sensitivity | Less than 5% | | |
| Amplitude Linearity | $\pm 1\%$ | | |

Electrical

| | |
|------------------|-------------------------|
| Capacitance | 450 pF nom. |
| Charge Amplifier | External unit required: |
| | HS-CA002 - standard |
| | HS-CA001 - velocity |

How To Order



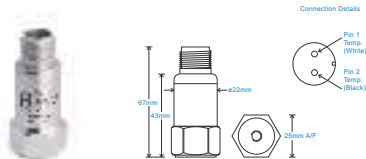
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-200 Temperature Sensor

only PT100 temperature output via 2 Pin MS Connector

Cable and Connector Options

2 Pin MS Connector (50)



Cable/Connector

Screened Cable see: www.hansfordsensors.com for options
 Connector HS-AA004 - non-booted

HS-AA053 or HS-0054 booted

Environmental

Operating Temperature Range see: How to order table
 Sealing IP68
 EMC EN61326-1:2013

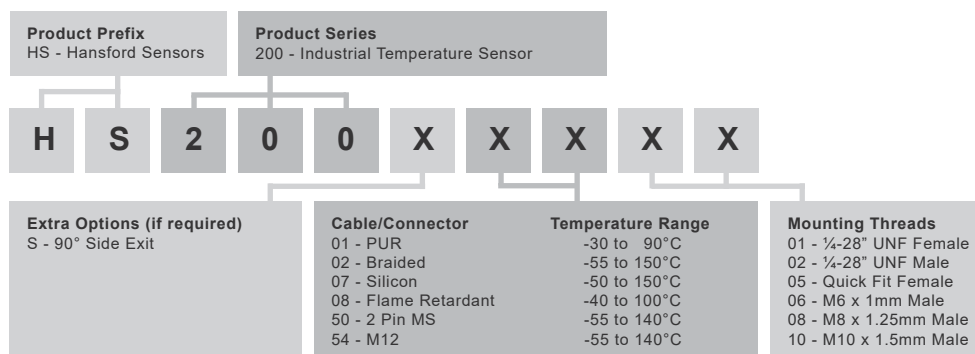
Technical Performance

Temperature Output PT100 (100 Ohms)
 Isolation Base isolated

Mechanical

Case Material Stainless Steel
 Mounting Torque 8Nm
 Weight 125gms (nominal)
 Mounting Threads see: 'How To Order' table

How To Order



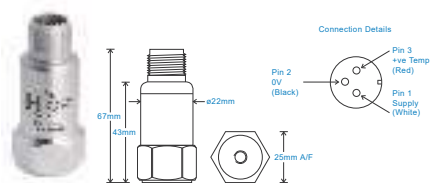
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-210 Temperature Sensor

Only Temperature Output

Cable and Connector Options

3 Pin MS Connector (52)



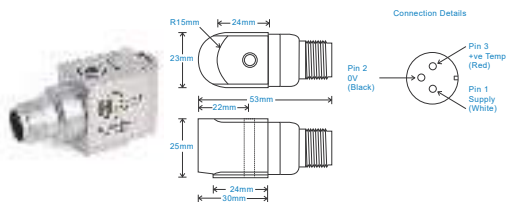
Cable/Connector

Connector HS-AA005-non-booted
HS-AA068 or HS-0069-booted

Environmental

Operating Temperature Range -55 to see: 'How To Order' table for max
Sealing IP68
EMC EN61326-1:2013

3 Pin MS Connector (52)



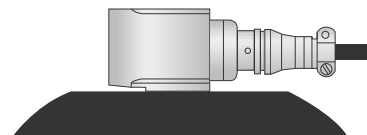
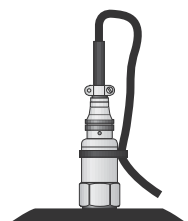
Cable/Connector

Connector HS-AA005-non-booted
HS-AA068 or HS-0069-booted

Environmental

Operating Temperature Range -55 to see: 'How To Order' table for max
Sealing IP68
EMC EN61326-1:2013

Mounting Options



Technical Performance

Temperature Output 10 mV/°C standard 100°C - Option 150°C
Isolation Base isolated

Mechanical

Case Material Stainless Steel
Mounting Torque 8Nm
Mounting Bolt provided see: 'How To Order' table x 30mm long
Weight 125gms (nominal)
Screened Cable Assembly see: www.hansfordsensors.com for options
Connector HS-AA005 - non-booted
HS-AA068 or HS-0069 - boot
Mounting Threads see: 'How To Order' table

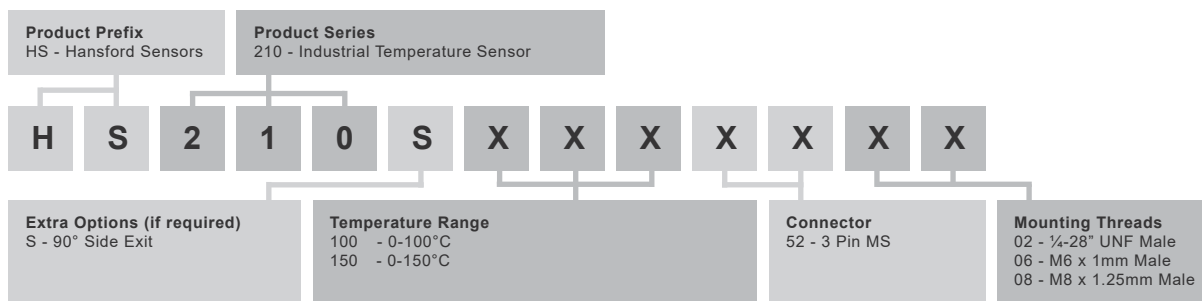
Electrical

Operating Voltage 4-30 VDC

Environmental

Operating Temperature Range -55 to see: 'How To Order' table for max
Sealing IP68
EMC EN61326-1:2013

How To Order



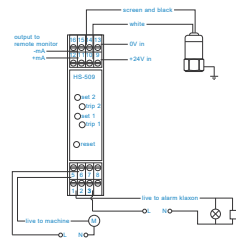
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS Vibration Modules

HS-509

Key Features

- Fully configurable
- Delay start-up
- Dual relays
- Various inputs
- Relay inhibit



Technical Performance

| | |
|--------------------|---|
| Input | 4-20mA from HS-420 |
| Power Requirements | 16 to 30 VDC (HS-570 Power Supply Module) |
| Maximum Current | 120 mA |

Mechanical

| | |
|----------------|------------------------------|
| Case Material | Plastic |
| Mounting | DIN Rail TS35 (Top Hat) |
| Dimensions | 114.5 x 99 x 22.5 mm (HxDxW) |
| Connections | Screw Clamp |
| Conductor Size | 0.5 to 4.0 mm |
| Weight | 140 gms (nom) |

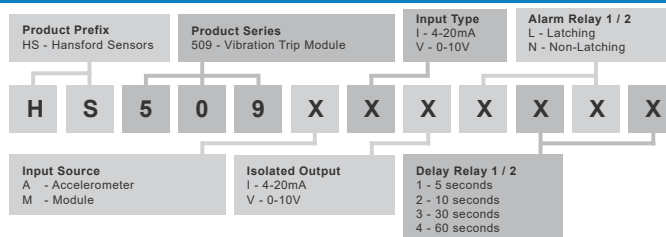
Electrical

| | |
|--------------|--|
| Set Points | Dual relays (front panel programmable) |
| Relay Rating | 3 Amps at 240 Volts AC |
| Relay Status | N/O or N/C |
| | Latching / Non Latching |
| Relay Delays | 5, 10, 30, 60 secs (selectable) |
| Outputs | 4-20 mA or 0-10 Volts DC |
| Reset | Internal push button, external voltage |

Environmental

| | |
|--------------------------------|----------------|
| Operating Temperature Range | 0 to 55°C |
| Installation Category (IEC664) | II |
| Equipment Class (IEC536) | III |
| EMC | EN61326-1:2013 |

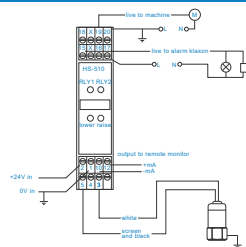
How To Order



HS-510

Key Features

- Fully configurable
- Delay start-up
- Dual relays
- Various inputs
- Relay inhibit



Technical Performance

| | |
|-----------------------|--|
| Input | 0-10VDC or 4-20mA from HS-420 or HS-530, HS-535 or HS-556 |
| Power Requirements | 16 to 30 VDC (HS-570 Power Supply Module) |
| Maximum Current | 120 mA |
| Display Range Options | 0-100 mm/sec (programmable) 0-100g (programmable) 0-100 °C |
| Display | 3½ digit (Green LED) |

Mechanical

| | |
|----------------|------------------------------|
| Case Material | Plastic |
| Mounting | DIN Rail TS35 (Top Hat) |
| Dimensions | 114.5 x 99 x 22.5 mm (HxDxW) |
| Connections | Screw Clamp |
| Conductor Size | 0.5 to 4.0 mm |
| Weight | 140 gms (nom) |

Electrical

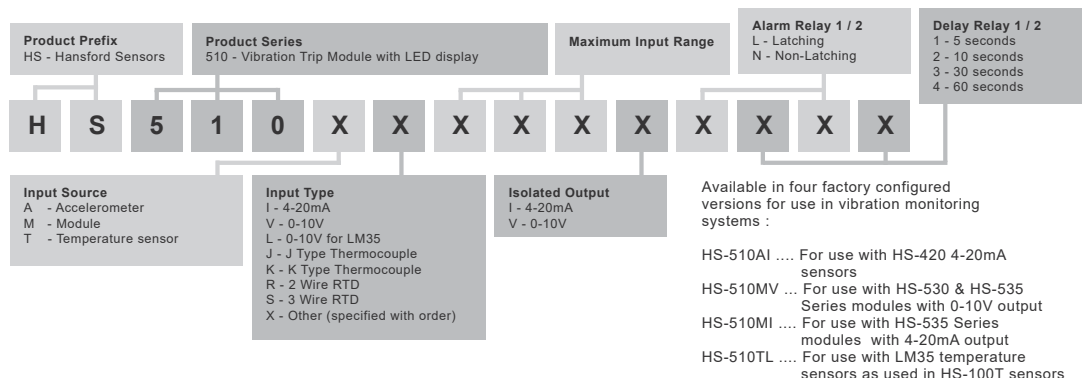
| | |
|--------------|--|
| Set Points | Dual relays (front panel programmable) |
| Relay Rating | 3 Amps at 240 Volts AC |
| Relay Status | N/O or vN/C |
| | Latching / Non Latching |
| Relay Delays | Up to 1200 secs |
| Outputs | 4-20 mA or 0-10 Volts DC |

Environmental

| | |
|--------------------------------|----------------|
| Operating Temperature Range | 0 to 55°C |
| Installation Category (IEC664) | II |
| Equipment Class (IEC536) | III |
| EMC | EN61326-1:2013 |

HS Vibration Modules

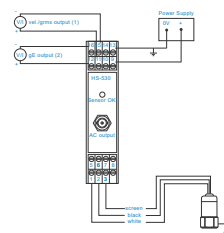
How To Order



HS-530

Key Features

- Enveloped 'g' Output
- RMS Velocity Output
- 0-10V Outputs for PLCs
- Buffered Acceleration Output (for Data Collection)
- TDX OK Function
- DIN Rail Mounted



Technical Performance

| | |
|------------------|--|
| Input | 100 mV/g constant current accelerometer (other sensitivities available) |
| Frequency Range | 10 Hz to 10 kHz (-3dB) |
| Output 1 | Input Filters 500 Hz to 10 kHz (-3dB) 2-pole Butterworth |
| Output 2 | Post-Envelope Filter 10 Hz to 1 kHz (-3dB) 2-pole Butterworth |
| Velocity Filters | 10 Hz to 1 kHz (-3dB) 2-pole Butterworth |

Mechanical

| | |
|----------------|--|
| Case Material | Plastic |
| Mounting | DIN Rail TS35 (Top Hat) |
| Dimensions | 134 x 99 x 22.5 mm (H x D x W) including BNC |
| Connections | Screw Clamp |
| Conductor Size | 0.5 to 4.0 mm |
| Weight | 140 gms (nom) |

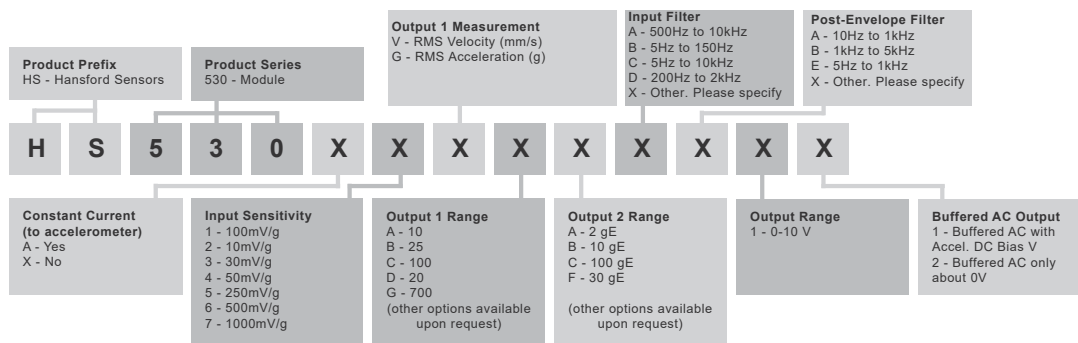
Electrical

| | |
|----------------|--|
| Power Input | +24 V DC at 50 mA (HS-570 Power Supply Module) |
| Output 1 | 0-10 VDC = 0-20 mm/s rms Velocity (other ranges available) |
| Output 2 | 0-10 VDC = 0-10 gE (other ranges available) |
| Output 3 (BNC) | Buffered acceleration output with DC bias voltage (nom. 12 VDC) AC only about 0 V on request |
| Output 4 | Buffered gE AC output with 9 VDC Ref. Voltage |
| TDX OK | Transducer OK. Outputs held at 0 V if in fault |

Environmental

| | |
|--------------------------------|----------------|
| Operating Temperature Range | 0 to 55°C |
| Installation Category (IEC664) | II |
| Equipment Class (IEC536) | III |
| EMC | EN61326-1:2013 |

How To Order



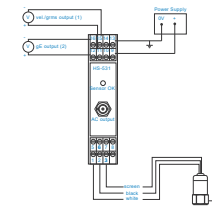
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS Vibration Modules

HS-531

Key Features

- Enveloped 'g' Output
- RMS Velocity Output
- 0-10V Outputs for PLC
- Buffered Acceleration Output (for Data Collection)
- TDX OK Function
- DIN Rail Mounted



Technical Performance

| | |
|------------------|--|
| Input | 500 mV/g constant current accelerometer |
| Frequency Range | 0.3 Hz to 2 kHz |
| gE Filters | Input Filters 200 Hz to 2 kHz (-3dB) 2-pole Butterworth Post-Envelope Filter 4 Hz to 100 Hz (-3dB) 2-pole Butterworth |
| Velocity Filters | 0.3 Hz to 3 Hz (-3dB) 2-pole Butterworth |

Mechanical

| | |
|----------------|--|
| Case Material | Plastic |
| Mounting | DIN Rail TS35 (Top Hat) |
| Dimensions | 134 x 99 x 22.5 mm (HxDxW) including BNC |
| Connections | Screw Clamp |
| Conductor Size | 0.5 to 4.0 mm |
| Weight | 140 gms (nom) |

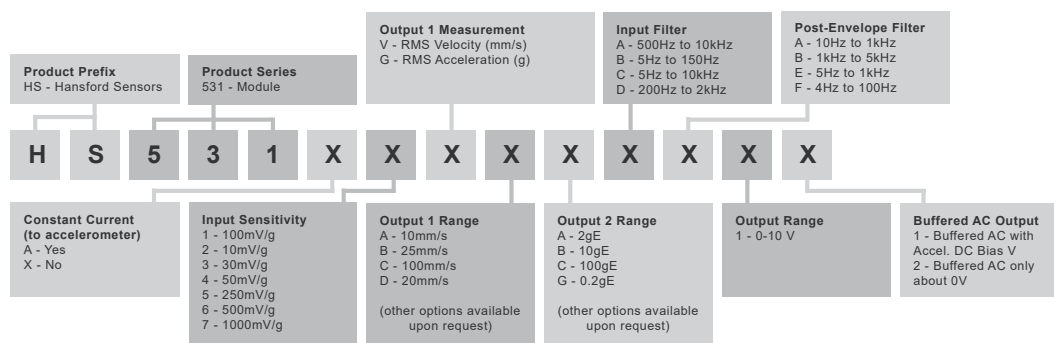
Electrical

| | |
|--------------------|---|
| Power Input | +24 VDC at 25 mA (from HS-570 Power Supply Module) |
| Output 1 | 0-10 VDC = 0-6000 mm/s rms Velocity |
| Output 2 | 0-10 VDC = 0-0.2 gE (other ranges available) |
| Output 3 (via BNC) | Buffered acceleration output with DC bias voltage (nom. 12 VDC) AC only about 0 V on request |
| Output 4 | Buffered gE AC output with 9 VDC Ref. Voltage |
| TDX OK | Transducer OK. Outputs held at 0 V if in fault |

Environmental

| | |
|--------------------------------|----------------|
| Operating Temperature Range | 0 to 55°C |
| Installation Category (IEC664) | II |
| Equipment Class (IEC536) | III |
| EMC | EN61326-1:2013 |

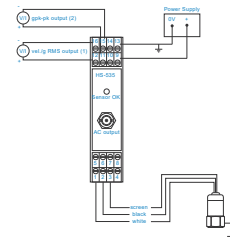
How To Order



HS-535

Key Features

- Din Rail Mounted
- TDX OK Function
- RMS Velocity Output
- Peak 'g' Output
- 0-10V and 4-20mA Outputs for PLCs
- Buffered Acceleration output (for data collection)
- Displacement peak or peak to peak
- Converts AC input to multiple outputs



Technical Performance

| | |
|----------------------|---|
| Input | 100 mV/g constant current accelerometer |
| G (RMS) | 10Hz to 5kHz |
| Frequency Range | 2 Hz to 10 kHz (-3dB) |
| G pk-pk Filters | 10Hz to 1.5 kHz or 3.5 kHz or 5 kHz (-3dB) 2-pole Butterworth. Set by internal links |
| Velocity Filters | 10Hz to 1kHz (-3dB) 2-pole Butterworth |
| Displacement Filters | 10Hz to 40Hz (-3dB) 2-pole Butterworth |

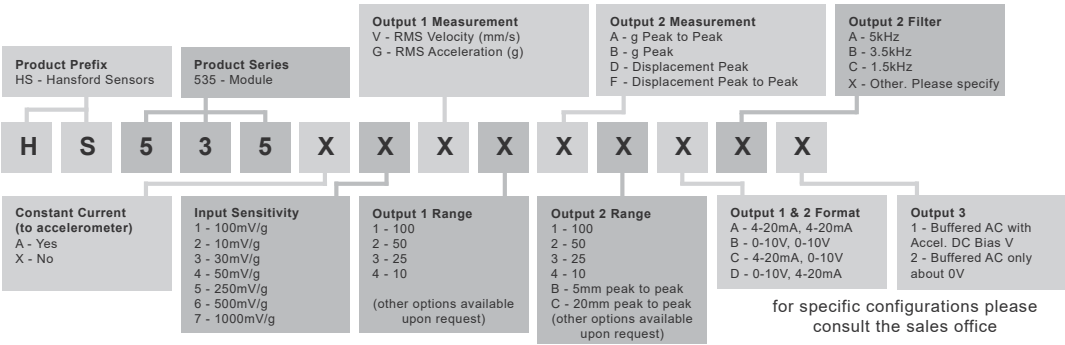
Mechanical

| | |
|----------------|--|
| Case Material | Plastic |
| Mounting | DIN Rail TS35 (Top Hat) |
| Dimensions | 134 x 99 x 22.5 mm (H x D x W) including BNC |
| Connections | Screw Clamp |
| Conductor Size | 0.5 to 4.0 mm |
| Weight | 140 gms (nom) |

HS Vibration Modules

| Electrical | | | Environmental | |
|----------------|--|--|--------------------------------|----------------|
| Power Input | +24 V DC at 50 mA (HS-570 Power Supply Module) | | Operating Temperature Range | 0 to 55°C |
| Output 1 | 0-10 VDC or 4-20 mA = velocity or g RMS. Set by internal link. | | Installation Category (IEC664) | II |
| Output 2 | 0-10 VDC or 4-20 mA = g pk or pk to pk or displacement, see 'How To Order' table. Set by internal links | | Equipment Class (IEC536) | III |
| Output 3 (BNC) | Buffered accel. Output with DC bias voltage (nom. 12 VDC) | | EMC | EN61326-1:2013 |
| | AC only about 0 V optional - on request | | | |
| TDX OK | Transducer OK. Outputs 1 & 2 held at 0 V or 2 mA when in fault | | | |

How To Order

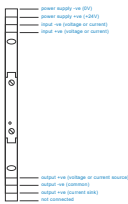


Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.

HS-540

Key Features

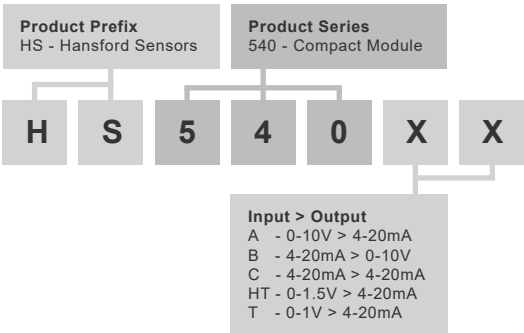
- Converts 0-10V to 4-20m or 4-20ma to 0-10V
- Isolate
- Din Rail Mounted
- Compact design



| Technical Performance | | | Mechanical | |
|-------------------------|-----------------|--|----------------|-----------------------------|
| Input | 0-10V or 4-20mA | | Case Material | Plastic |
| Output | 4-20mA or 0-10V | | Mounting | DIN Rail TS35 (Top Hat) |
| Output Linearity Error | ±0.03% typical | | Dimensions | 102 x 93 x 7 mm (H x D x W) |
| Temperature Coefficient | ±100 ppm/°C | | Connections | Screw Clamp |
| | | | Conductor Size | 0.5 to 4.0 mm |
| | | | Weight | 60 gms (nom) |

| Electrical | | | Environmental | |
|-------------------|--|--|--------------------------------|----------------|
| Power Input | +24 V DC at 50 mA (HS-570 Power Supply Module) | | Operating Temperature Range | 0 to 55°C |
| Supply Current | 30mA max. | | Installation Category (IEC664) | II |
| Input Impedance | 500 KOhms | | Equipment Class (IEC536) | III |
| Isolation Voltage | 1 KV | | EMC | EN61326-1:2013 |

How To Order

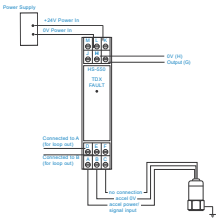


HS Vibration Modules

HS-550

Key Features

- Provides power for constant current accelerometers
- 3 Gain Settings
- TDX OK Indicator
- DIN Rail Mounted

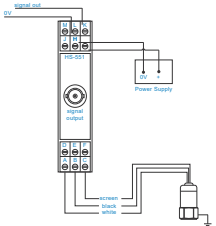


| Technical Performance | | Mechanical | |
|--------------------------------|---|--------------------------------|--------------------------|
| Power Input | 24 VDC \pm 10% @ 20 mA max. | Case Material | Plastic |
| Accelerometer Driving Voltage | 22.5 VDC | Mounting | DIN Rail TS35 (Top Hat) |
| Accelerometer Constant Current | 4 mA or 10 mA selectable via link | Dimensions | 100 x 75 x 24 mm (HxDxW) |
| Maximum Output | \pm 9 V at x1 gain \pm 5 V at 10 gain \pm 4.5 V at x100 gain | Connections | Screw Clamp |
| Voltage Gain | x1, x10, x100 selectable via DIL switch | Conductor Size | 0.5 to 4.0 mm |
| | | Weight | 76 gms (nom) |
| Electrical | | Environmental | |
| Frequency Response | 1 Hz to 120 KHz -3db at x1 gain 1 Hz to 50 KHz -3db at x10 gain 1 Hz to 10 KHz -3db at 100 gain | Operating Temperature Range | 0 to 55°C |
| Broadband Noise (1-10 KHz) | 70 μ V rms at x1 gain 650 μ V rms at x10 gain 3 mV rms at x100 gain | EMC | EN61326-1:2013 |
| Fault Indication | Red LED 5 V > Vbias > 15 V | Installation Category (IEC664) | II |
| | | Equipment Class (IEC536) | III |

HS-551

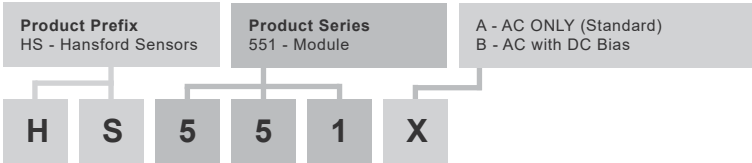
Key Features

- Provides power for constant current accelerometers
- TDX OK Indicator
- AC mV/g output via BNC for data collection and analysis



| Technical Performance | | Mechanical | |
|--------------------------------|---|--------------------------------|--|
| Power Input | 24 VDC \pm 10% @ 5 mA max. | Operating Temperature Range | 0 to 55°C |
| Accelerometer Driving Voltage | 22.5 VDC | EMC | EN61326-1:2013 |
| Accelerometer Constant Current | 3.5 mA | Installation Category (IEC664) | II |
| Frequency Response | 1 Hz to 100 kHz \pm 3db | Equipment Class (IEC536) | III |
| Electrical | | Environmental | |
| Outputs | mV AC via BNC or Screw Terminals (0 VDC bias) mV AC + Accel. DC bias via screw terminals | Case Material | Plastic |
| Sensitivity | Nom. 100 mV/g or as stated on the Accelerometer Calibration Sheet | Mounting | DIN Rail TS35 (Top Hat) |
| | | Dimensions | 100 x 75 x 24 mm (HxDxW) including BNC |
| | | Connections | Screw Clamp |
| | | Conductor Size | 0.5 to 4.0 mm |
| | | Weight | 76 gms (nom) |

How To Order



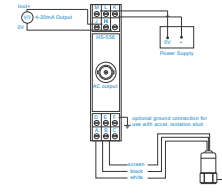
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS Vibration Modules

HS-556

Key Features

- Industrial Accelerometer input
- 4-20mA Velocity or 'g' output
- Low pass filter
- Din Rail Mounted
- Buffered Accelerometer output (for data collection) via BNC



Technical Performance

| | |
|---|---|
| Input | 100 mV/g constant current accelerometer (other sensitivities available) |
| Acceleration Range or Velocity Range | To be specified |
| Frequency Range | 2 Hz to 10 kHz (-3 dB) - ISO 10816 |
| Filters | Velocity version: 10 Hz to 1 kHz (-3dB) 2-pole Butterworth 'g' version: 10 Hz to 5 kHz (-3dB) 2-pole Butterworth |

Mechanical

| | |
|----------------|--|
| Case Material | Plastic |
| Mounting | DIN Rail TS35 (Top Hat) |
| Dimensions | 120 x 75 x 23 mm (HxDxW) including BNC |
| Connections | Screw Clamp |
| Conductor Size | 0.5 to 4.0 mm |
| Weight | 80 gms (nom) |

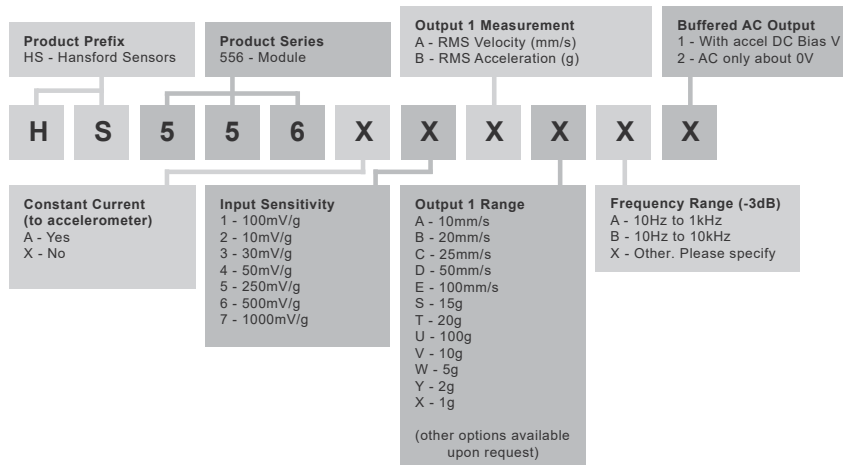
Electrical

| | |
|-------------|--|
| Power Input | 24 V DC @ 50 mA (from HS-570 Power Supply Module) |
| Output 1 | Velocity version: 4-20 mA = 0-25 mm/s rms 'g' version: 4-20 mA = 0-5 g rms Max. load resistance = 500 Ohms |
| Output 2 | Buffered accel. Output with DC bias voltage (nom 12 VDC) AC only about 0 V on request |

Environmental

| | |
|--------------------------------|----------------|
| Operating Temperature Range | 0 to 55°C |
| Installation Category (IEC664) | II |
| Equipment Class (IEC536) | III |
| EMC | EN61326-1:2013 |

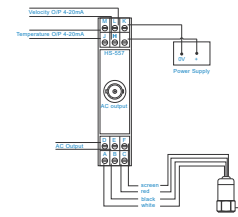
How To Order



HS-557

Key Features

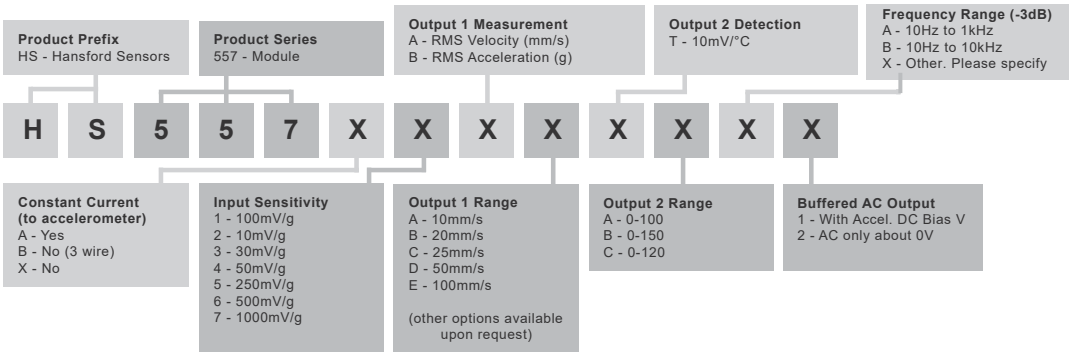
- Industrial Accelerometer input
- 4-20mA Velocity or 'g' output
- Low pass filter
- Din Rail Mounted
- Buffered Accelerometer output (for data collection) via BNC and screw terminals
- Temperature Input
- 4-20mA Temperature Output



HS Vibration Modules

| Technical Performance | | | Mechanical | |
|-----------------------|--|--|--------------------------------|--|
| Input 1 | Temperature Sensor PT100 or 10 mV/°C | | Case Material | Plastic |
| Acceleration Range | To be specified | | Mounting | DIN Rail TS35 (Top Hat) |
| or Velocity Range | To be specified | | Dimensions | 120 x 75 x 23 mm (HxDxW) including BNC |
| Frequency Range | 2 Hz to 10 kHz (-3 dB) - ISO 10816 | | Connections | Screw Clamp |
| Filters | Velocity version: 10 Hz to 1 kHz (-3dB) 2-pole Butterworth | | Conductor Size | 0.5 to 4.0 mm |
| | 'g' version: 10 Hz to 5 kHz (-3dB) 2-pole Butterworth | | Weight | 80 gms (nom) |
| | | | | |
| Electrical | | | Environmental | |
| Power Input | 24 V DC @ 70 mA (from HS-570 Power Supply Module) | | Operating Temperature Range | 0 to 55°C |
| Output 1 | Velocity version: 4-20 mA = 0-25 mm/s rms | | EMC | EN61326-1:2013 |
| | 'g' version: 4-20 mA = 0-5 g rms | | Installation Category (IEC664) | II |
| | Max. load resistance = 500 Ohms | | Equipment Class (IEC536) | III |
| Output 2 | Temperature 4-20 mA = 0-100 °C (others available) | | | |
| Output 3 | Buffered accel. Output with DC bias voltage (nom 12 VDC) | | | |
| | AC only about 0 V on request | | | |

How To Order

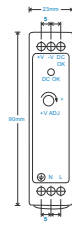


HS-570 Power Supply Modules

HS-570-20

Key Features

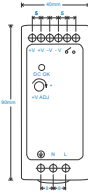
- Isolated Mains Power Supply
- For use with all HS-500 series
- Short circuit protected
- Capable of powering up to 8 modules
- Weight- 190 gms (nom)



HS-570-40

Key Features

- Isolated Mains Power Supply
- For use with all HS-500 series
- Capable of powering up to 12 modules
- Weight-300 gms (nom)



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

TS888.1

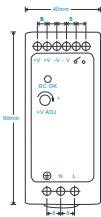


HS-570 Power Supply Modules

HS-570-60

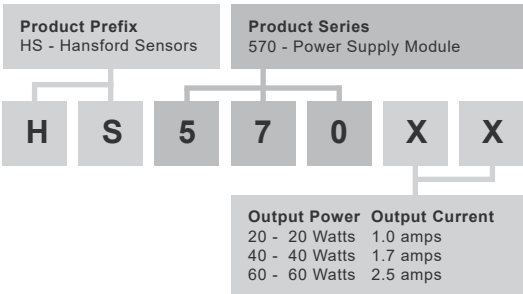
Key Features

- Isolated Mains Power Supply
- For use with all HS-500 series
- Short circuit protected
- Capable of powering up to 20 modules
- Weight-330gms (nom)



| Technical Performance | | Electrical | |
|-----------------------|-------------------------|-----------------------------|---|
| Input Voltage Range | 85 to 264 Volts AC | Output Power | see: 'How To Order' table |
| Output Voltage Range | 24 Volts DC | Output Current | see: 'How To Order' table |
| | | Overload Protection | Constant current protection, recovers automatically after fault condition is removed |
| Mechanical | | Environmental | |
| Case Material | Plastic | Operating Temperature Range | -20 to 70 °C |
| Mounting | DIN Rail TS35 (Top Hat) | Relative Humidity | 20 to 90% RH |
| Dimensions | see: diagram | Emmision | EN55011, EN55022 (CISPR22), EN61204-3 Class B, EN61000-3-2, -3 |
| Connections | Screw Clamp | Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-1, EN61204-3, light industry level, criteria A |
| Conductor Size | 0.5 to 4.0 mm | Safety Standards | UL508, TUV EN60950-1 approved, NEC class 2 / LPS compliant |

How To Order



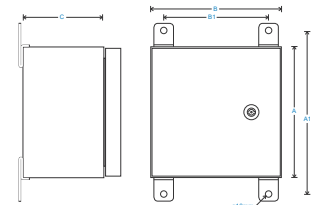
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS Enclosures

HS-SE Switching

Key Features

- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via one connector

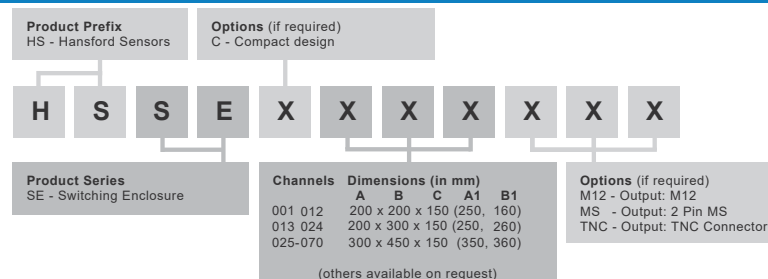


dimensions to be specified in 'how to order' table

Technical Performance

| | | | |
|----------------|--|-------------|--|
| Inputs | Via accelerometer | Termination | Din rail terminals wired to switch |
| Output | BNC as standard (alternatives can be specified in 'How To Order' table) | Door | Twist Handle |
| Mounting Board | Engraved traffolyte panel (customisable upon request) | Glanding | Glands supplied but not fitted |
| Material | Mild Steel painted RAL 7042 as standard (alternatives can be specified in options of 'How To Order' table) | | Holes are punched for: Single input M12 - ϕ 3.5-7mm cable Single input M20 - ϕ 7-13mm multi-core cable Multi input M20 - 3 x ϕ 5.3mm |
| Dimensions | see: 'How To Order' table | Labelling | Channel locations - other labelling available upon request |
| Sealing | IP66 | Mounting | supplied are 4 x Brackets |
| | | EMC | EN61326-1:2013 |

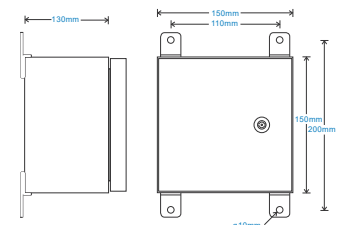
How To Order



HS-SEC Switching

Key Features

- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via one connector
- Compact design
- Stainless Steel

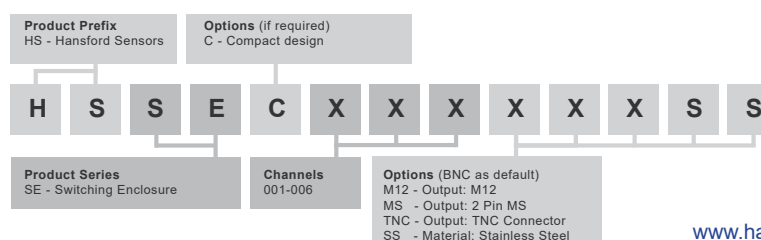


dimensions to be specified in 'how to order' table

Technical Performance

| | | | |
|----------------|--|-----------|--|
| Inputs | Via accelerometer | Door | Twist Handle |
| Output | BNC as standard (alternatives can be specified in 'How To Order' table) | Glanding | Glands supplied but not fitted |
| Mounting Board | Engraved traffolyte panel (customisable upon request) | | Holes are punched for: Single input M12 - ϕ 3.5-7mm cable Single input M20 - ϕ 7-13mm multi-core cable Multi input M20 - 3 x ϕ 5.3mm |
| Material | 304 Stainless Steel (to be specified in options of 'How To Order' table) | Labelling | Channel locations - other labelling available upon request |
| Dimensions | see: 'How To Order' table | Mounting | supplied are 2 x Brackets |
| Sealing | IP66 | EMC | EN61326-1:2013 |
| Termination | Din rail terminals wired to switch | | |

How To Order

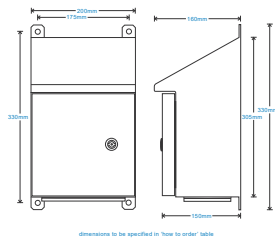


HS Enclosures

HS-SE-SR Compact Switching

Key Features

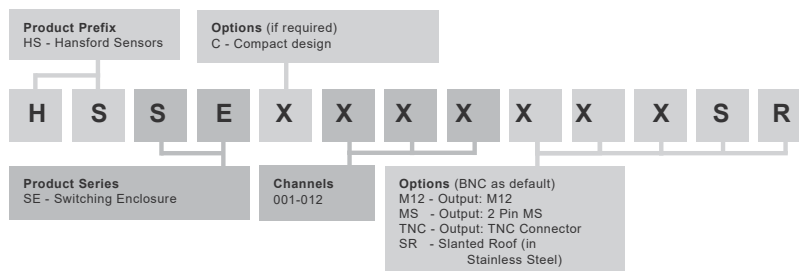
- Protective roof to stop dust and dirt settling
- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via one connector



Technical Performance

| | | | |
|----------------|--|-------------|---|
| Inputs | Via accelerometer | Termination | Din rail terminals wired to switch |
| Output | BNC as standard (alternatives can be specified in 'How To Order' table) | Door | Twist Handle |
| Mounting Board | Engraved traffolyte panel (customisable upon request) | Glanding | Glands supplied but not fitted |
| Material | Mild Steel painted RAL 7042 as standard (alternatives can be specified in options of 'How To Order' table) | | Holes are punched for: Single input M12 - \varnothing 3.5-7mm cable Single input M20 - \varnothing 7-13mm multi-core cable Multi input M20 - 3 x \varnothing 5.3mm |
| Dimensions | see: 'How To Order' table | Labelling | Channel locations - other labelling available upon request |
| Sealing | IP66 | Mounting | supplied are 4 x Brackets |
| | | EMC | EN61326-1:2013 |

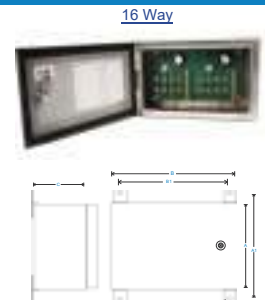
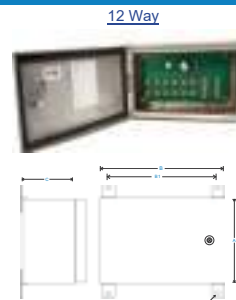
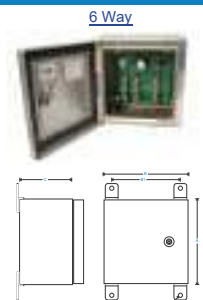
How To Order



HS-SESSMMO

Key Features

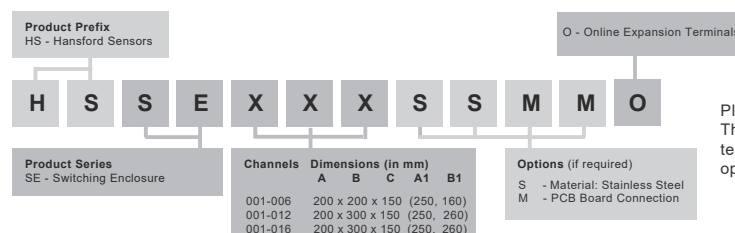
- Continuous BNC and 2 Pin MS connector
- Multiple Outputs via one connector
- Terminals for online expansion
- Provides a terminal to take readings from accelerometers via a portable data-collector



Technical Performance

| | | | |
|----------------|------------------------------|-----------|---|
| Inputs | Via accelerometer | Door | Lock and polyamide key |
| Output | BNC and 2 Pin MS as standard | Glanding | Glands supplied but not fitted |
| Mounting Board | PCB Panel | | Holes are punched for: Single input M12 - \varnothing 3.5-7mm cable Single input M20 - \varnothing 7-13mm multi-core cable Multi input M20 - 3 x \varnothing 5.3mm |
| Material | 304 Stainless Steel | Labelling | Channel locations - other labelling available upon request |
| Termination | Quick-release terminal | Mounting | supplied are 4 x Brackets |
| Dimensions | see: 'How To Order' table | EMC | EN61326-1:2013 |
| Sealing | IP66 | | |

How To Order



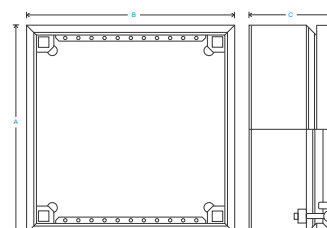
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS Enclosures

HS-JE Junction

Key Features

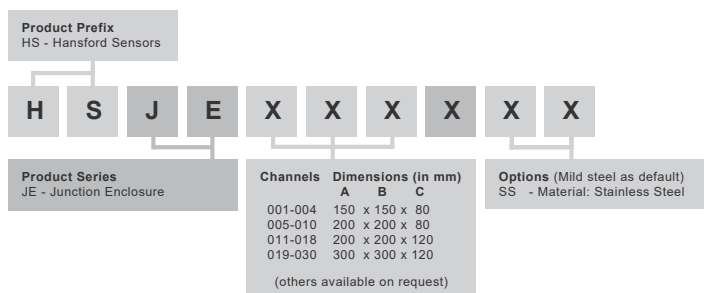
- Accelerometer cable glanding
- Ease of installation
- Flexible combination



Technical Performance

| | | | |
|-----------------------------|--|--|--|
| Inputs | Accelerometer cabling | Glanding | Glands supplied but not fitted |
| Output | Multi-core glanding | | Holes are punched for: |
| Material | Mild Steel painted RAL 7042 as standard (alternatives can be specified in options of 'How To Order' table) | Single input M12 - \varnothing 3.5-7mm cable | Single input M20 - \varnothing 7-13mm multi-core cable |
| Dimensions | see: 'How To Order' table | Multi input M20 - 3 x \varnothing 5.3mm | Channel locations - other |
| Sealing | IP66 | Labelling | labelling available upon request |
| Termination | Klippon Type | Mounting | supplied are 4 x Brackets |
| Operating Temperature Range | -20 to 130°C | EMC | EN61326-1:2013 |

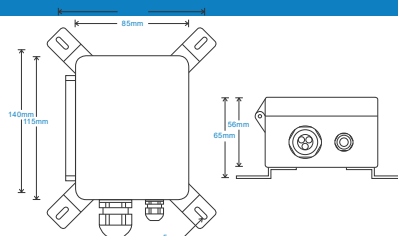
How To Order



HS-DE Diecast

Key Features

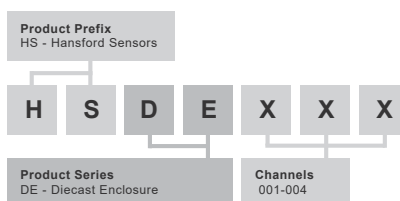
- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connector



Technical Performance

| | | | |
|-------------|------------------------------|--|--|
| Inputs | Via accelerometer | Glanding | Glands supplied but not fitted |
| Output | BNC | | Holes are punched for: |
| Material | Powdercoated Black Aluminium | Single input M12 - \varnothing 3.5-7mm cable | Single input M20 - \varnothing 7-13mm multi-core cable |
| Dimensions | see: diagram | Multi input M20 - 3 x \varnothing 5.3mm | Channel locations - other |
| Sealing | IP55 | Mounting | supplied are 4 x Brackets |
| Termination | Industrial connectors | EMC | EN61326-1:2013 |
| Door | Single latch closing | | |

How To Order



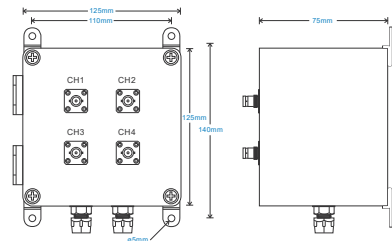
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS Enclosures

HS-BE BNC

Key Features

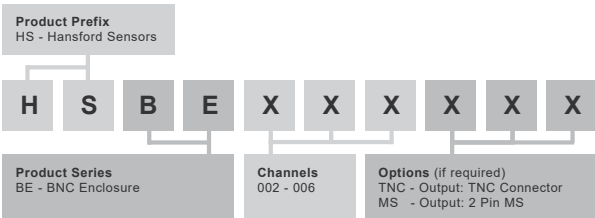
- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connectors



Technical Performance

| | | | |
|-------------|---|-----------|--|
| Inputs | Via accelerometer | Glanding | Glands supplied and fitted |
| Output | BNC as standard (alternatives can be specified in 'How To Order' table) | Labelling | Holes are punched for: Single input M12 - \varnothing 3.5-7mm cable |
| Material | Polycarbonate | Mounting | Screen printed channel identification |
| Dimensions | see: diagram | EMC | supplied are 4 x Brackets |
| Sealing | IP55 | | EN61326-1:2013 |
| Termination | PCB Mounted Screw Terminal | | |
| Door | Hinged | | |

How To Order

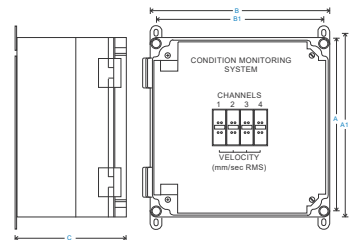


Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-580 Module

Key Features

- Isolated Mains Power Supply
- For use with all HS-500 Series
- Short Circuit Protected
- Safety to UL1310 Class II
- Polycarbonate

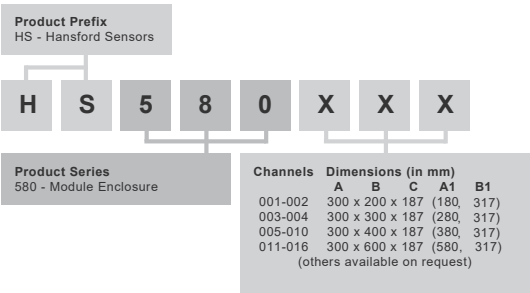


Technical Performance

| | | | |
|----------------------|---------------------------|--------------------------------|-----------------------|
| Input Voltage Range | 85 to 260 VAC | Operating Temperature Range | 0 to 55°C |
| Output Voltage Range | 24 VDC | Sealing | IP66 (excluding fans) |
| Output Power | 2 Amps | Cooling | Two fans |
| Case Material | Polycarbonate | Relative Humidity | 20 to 90% RH |
| Mounting | DIN Rail TS35 (Top Hat) | EMC | EN61326-1:2013 |
| Dimensions | see: 'How To Order' table | Installation Category (IEC664) | II |
| Connections | Screw Clamp | Equipment Class (IEC536) | III |
| Conductor Size | 0.5 to 4.0mm | | |
| Weight | 260gms (nominal) | | |

Environmental

How To Order



Accessories
HS-590 - Flashing Beacon & Siren Module
HS-591 - Flashing Beacon
HS-592 - Siren Module

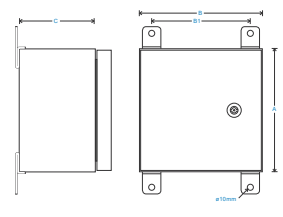


HS Enclosures

HS-CE Connection

Key Features

- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connector

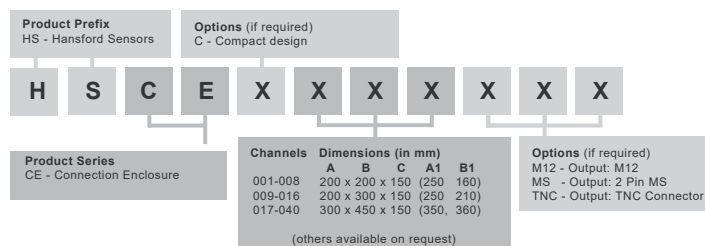


dimensions to be specified in 'How to order' table

Technical Performance

| | | | |
|----------------|--|-------------|--|
| Inputs | Via accelerometer | Termination | Klippon Type |
| Output | BNC as standard (alternatives can be specified in 'How To Order' table) | Door | Twist Handle |
| Mounting Board | Engraved traffolyte panel (customisable upon request) | Glanding | Glands supplied but not fitted |
| Material | Mild Steel painted RAL 7042 as standard (alternatives can be specified in options of 'How To Order' table) | | Holes are punched for: Single input M12 - ø3.5-7mm cable Single input M20 - ø7-13mm multi-core cable Multi input M20 - 3 x ø5.3mm |
| Dimensions | see: 'How To Order' table | Labelling | Channel locations - other labelling available upon request |
| Sealing | IP66 | Mounting | supplied are 4 x Brackets |
| | | EMC | EN61326-1:2013 |

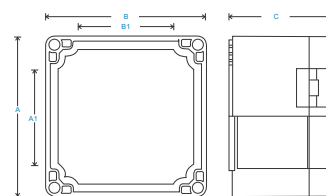
How To Order



HS-CE Connection

Key Features

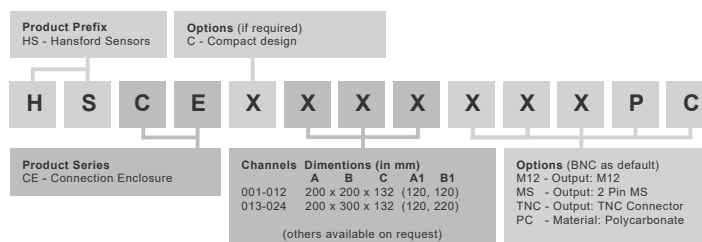
- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connector



Technical Performance

| | | | |
|----------------|---|-----------|--|
| Inputs | Via accelerometer | Door | Catches |
| Output | BNC as standard (alternatives can be specified in 'How To Order' table) | Glanding | Glands supplied but not fitted |
| Mounting Board | Engraved traffolyte panel (customisable upon request) | | Holes are punched for: Single input M12 - ø3.5-7mm cable Single input M20 - ø7-13mm multi-core cable Multi input M20 - 3 x ø5.3mm |
| Material | Polycarbonate (to be specified in options of 'How To Order' table) | Labelling | Channel locations - other labelling available upon request |
| Dimensions | see: 'How To Order' table | Mounting | supplied are 4 x Brackets |
| Sealing | IP66 | | |
| Termination | Klippon Type | | |

How To Order



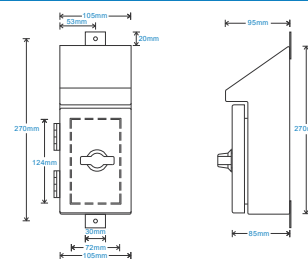
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS Enclosures

HS-CESC-SR Connection

Key Features

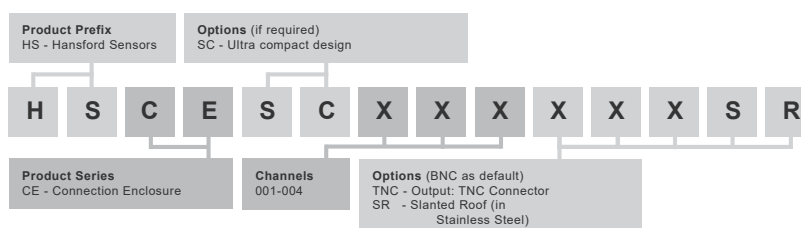
- Protective roof to stop dust and dirt settling
- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connector
- Compact design



Technical Performance

| | | | |
|----------------|--|--|--|
| Inputs | Via accelerometer | Door | Twist handle |
| Output | BNC as standard (alternatives can be specified in 'How To Order' table) | Glanding | Glands supplied but not fitted |
| Mounting Board | PCB Panel (customisable upon request) | Holes are punched for: Single input M12 - $\varnothing 3.5$ -7mm cable Single input M20 - $\varnothing 7$ -13mm multi-core cable Multi input M20 - 3 x $\varnothing 5.3$ mm | |
| Material | 304 Stainless Steel (to be specified in options of 'How To Order' table) | Labelling | Channel locations - other labelling available upon request |
| Dimensions | see: diagram | Mounting | supplied are 2 x Brackets |
| Sealing | IP66 | EMC | EN61326-1:2013 |
| Termination | PCB Mounted | | |

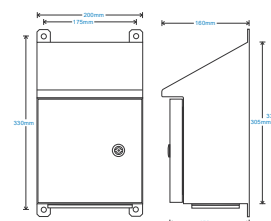
How To Order



HS-CE-SR Connection

Key Features

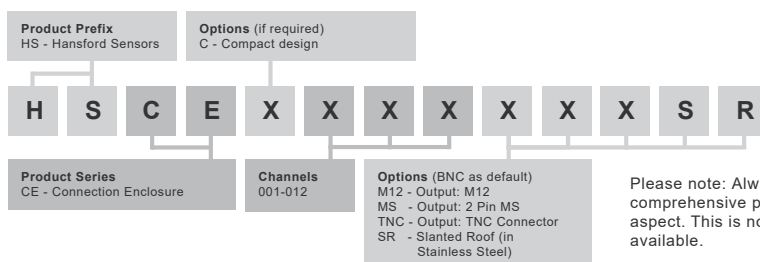
- Protective roof to stop dust and dirt settling
- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connectors



Technical Performance

| | | | |
|----------------|--|--|--|
| Inputs | Via accelerometer | Door | Lock and polyamide key |
| Output | BNC as standard (alternatives can be specified in 'How To Order' table) | Glanding | Glands supplied but not fitted |
| Mounting Board | Engraved traffolyte panel (customisable upon request) | Holes are punched for: Single input M12 - $\varnothing 3.5$ -7mm cable Single input M20 - $\varnothing 7$ -13mm multi-core cable Multi input M20 - 3 x $\varnothing 5.3$ mm | |
| Material | 304 Stainless Steel (to be specified in options of 'How To Order' table) | Labelling | Channel locations - other labelling available upon request |
| Dimensions | see: diagram | Mounting | supplied are 4 x Brackets |
| Sealing | IP65 | EMC | EN61326-1:2013 |
| Termination | Klippon Type | | |

How To Order



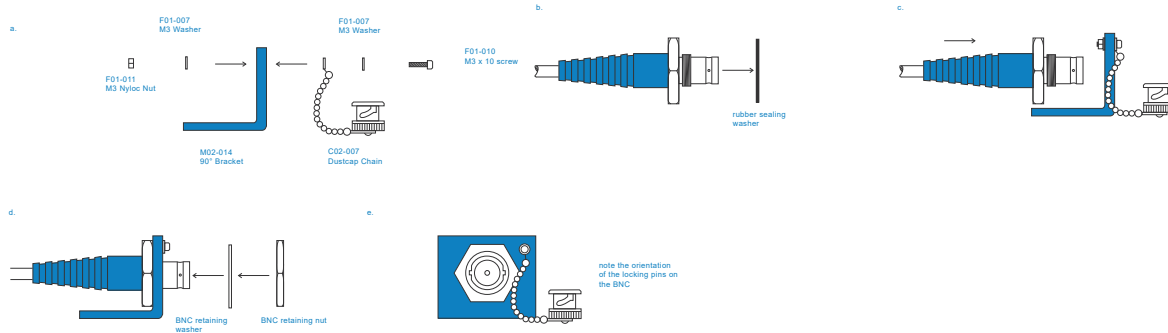
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS Brackets

90° BNC Bulkhead Socket

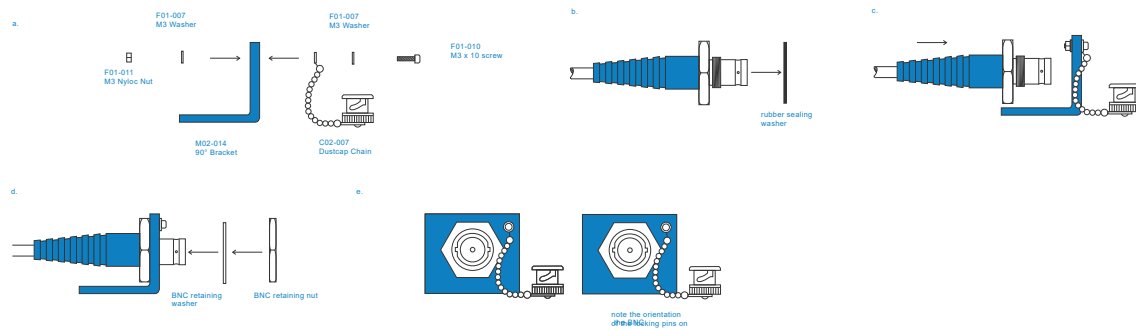
HS-AA002

Product Components



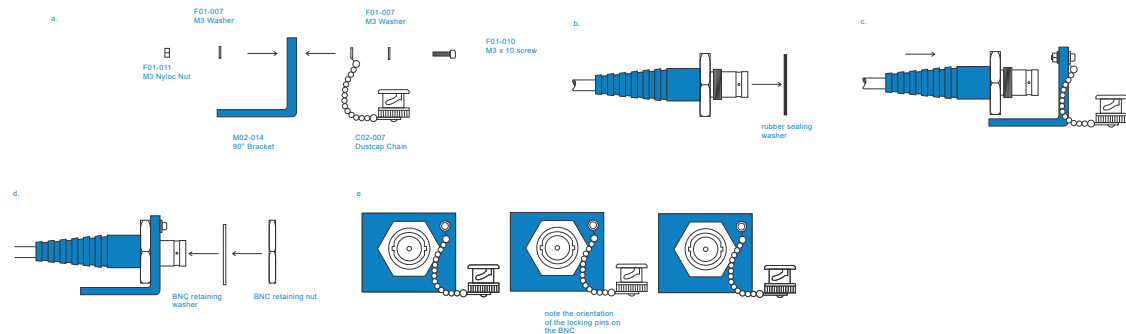
HS-AA002-1-2

Product Components

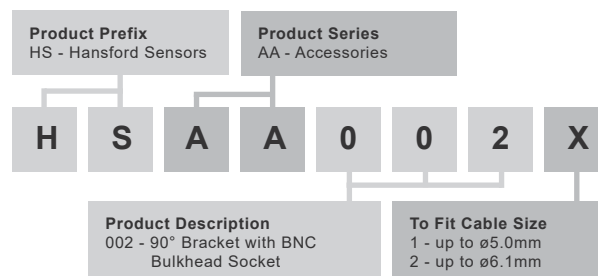


HS-AA002-1-3

Product Components



How To Order



Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.











HS-AS Studs

adapters



Adapters to connect accelerometers to machine faces.

Mounting Studs provide a secure, permanent or semi-permanent point of connection.

| Part No. | Connection Point 1 | Connection Point 2 | | |
|-------------|----------------------------|--------------------|---|--|
| HS-AS006 | Quick Fit Female | ¼"-28 UNF Male |  | |
| HS-AS009 | M6 Female | M8 Male |  | |
| HS-AS026 | 10-32 UNF Male | M6 Male |  | |
| HS-AS028 | Quick Fit Female ½" UNC | ¼"-28 UNF Male |  | |
| HS-AS030 | M8 x 1.25 Female | 1/8"BSPT Male |  | |
| HS-AS032 | Quick Fit Female | M8 Male |  | |
| HS-AS039 | Quick Fit Female ½" UNC | 10-32 UNF Male |  | |
| HS-AS045 | Quick Fit Female | M5 Female |  | |
| HS-AS088 | Quick Fit Female 9/16" UNC | M5 Female |  | |
| HS-AS092 | 3/8" UNF Female | 3/8" NPT Male |  | |
| HS-AS103 | ¼"-28 UNF Female | ¼" NPT Male |  | |
| HS-AS107-M6 | M6 Female | M6 Male |  | |
| HS-AS111 | M8 Female | M8 Female |  | |
| HS-AS119 | ¼"-28 UNF Female | 1/4"-28UNF Male |  | |
| HS-AS121 | ¼"-28 UNF Female | 3/8"-16 UNC Male |  | |

Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect.
This is not the full product list, other options are available.

HS-AS Studs

Side entry accelerometer bolts



For use with side entry accelerometers to provide a male thread.

Mounting Studs provide a secure, permanent or semi-permanent point of connection.

| Part No. | Connection Point 1 | Connection Point 2 | |
|-------------|--------------------|--------------------|--|
| HS-AS042-M6 | Socket Cap | M6 Male |  |
| HS-AS042-M8 | Socket Cap | M8 Male |  |
| HS-AS098 | Socket Cap | M6 Male |  |
| HS-AS109 | Socket Cap | 1/4"-28 UNF Male |  |
| HS-AS114 | Hexagonal Head | M6 Male |  |
| HS-AS129 | Hexagonal Head | 1/4"-28 UNF Male |  |

Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.









HS-AS Studs

Conical mounts



For use with motor with existing conical mount.

Mounting Studs provide a secure, permanent or semi-permanent point of connection.



| Part No. | Connection Point 1 | Connection Point 2 | | | |
|-----------------|--------------------|--------------------|--|--|--|
| HS-AS031-1/4-M8 | 1/4"-28 UNF Female | M8 Male |  |  | |
| HS-AS031-M6-M6 | M6 Female | M6 Male |  |  | |
| HS-AS031-M6-M8 | M6 Female | M8 Male |  |  | |
| HS-AS031-M8-M8 | M8 Female | M8 Male |  |  | |

Fin Mounts



For use in the fins of an electric motor.

Mounting Studs provide a secure, permanent or semi-permanent point of connection.

| Part No. | | Connection | |
|-------------|--------------------|--------------|---|
| HS-AS040-40 | 1/4"-28 UNF Female | 40 mm x 7 mm |  |
| HS-AS040-50 | 1/4"-28 UNF Female | 50 mm x 7 mm |  |

Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.



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sales@hansfordsensors.com

We reserve the right to alter the specification of this product without prior notice
TS571.1



HS-AS Studs

| | | |
|------------|--------------------|---------------|
| HS-AS105-1 | 1/4"-28 UNF Female | 30 mm x 13 mm |
|------------|--------------------|---------------|

| | | |
|------------|--------------------|---------------|
| HS-AS105-2 | 1/4"-28 UNF Female | 50 mm x 13 mm |
|------------|--------------------|---------------|

| | | |
|------------|--------------------|--------------|
| HS-AS105-3 | 1/4"-28 UNF Female | 45 mm x 5 mm |
|------------|--------------------|--------------|

| | | |
|------------|--------------------|--------------|
| HS-AS105-4 | 1/4"-28 UNF Female | 25 mm x 5 mm |
|------------|--------------------|--------------|

































HS-AS Studs

glue face



Glue face studs are designed to provide a stronger glue surface to connect an accelerometer to the machine.

Mounting Studs provide a secure, permanent or semi-permanent point of connection

| Part No. | Connection Point 1 | Connection Point 2 | | | |
|---------------|---------------------------|-----------------------|---|---|---|
| HS-AS014 | 1/4"-28 UNF Male | Glue Face x Ø19mm |  |  | |
| HS-AS019-15 | Magnet | Glue Face x Ø15mm |  |  | |
| HS-AS019-18 | Magnet | Glue Face x Ø18mm |  |  | |
| HS-AS019-24 | Magnet | Glue Face x Ø24mm |  |  | For quantity this product can be etched |
| HS-AS019-30 | Magnet | Glue Face x Ø30mm |  |  | For quantity this product can be etched |
| HS-AS019-38 | Magnet | Glue Face x Ø38mm |  |  | For quantity this product can be etched |
| HS-AS027-M6 | M6 Female | Glue Face x 20mm AF |  |  | |
| HS-AS027-M8 | M8 Female | Glue Face x 20mm AF |  |  | |
| HS-AS027-M8x1 | M8 x 1 Female | Glue Face x 20mm AF |  |  | |
| HS-AS029 | 10-32 UNF Male | Glue Face x Ø19mm |  |  | |
| HS-AS036 | M8 Male | Glue Face x 20.6mm AF |  |  | |
| HS-AS059-1/4 | 1/4"-28 UNF Female | Glue Face x Ø19mm |  |  | |
| HS-AS059-M6 | M6 Female | Glue Face x Ø19mm |  |  | |
| HS-AS059-M8 | M8 x 1.25 Female | Glue Face x Ø19mm |  |  | |
| HS-AS087 | Magnet - Ø5mm Centre Hole | Glue Face x Ø19mm |  |  | |

HS-AS Studs

mounting/grub screws



Screw studs for use to adapt a female thread into a male thread.

Mounting Studs provide a secure, permanent or semi-permanent point of connection

| Part No. | Connection Point 1 | Connection Point 2 | | | |
|----------|-----------------------|---------------------------------------|---|---|--|
| HS-AS008 | 1/4"-28 UNF Male | M8 Male x 1.25 Stop & Slot |  |  | |
| HS-AS020 | 10-32 UNF 3/8" Male | 10-32 UNF 3/8" Male Hex Socket Drive |  |  | |
| HS-AS021 | 1/4"-28 UNF Male | M10 Male x 1.50 Stop & Slot |  |  | |
| HS-AS022 | 1/4"-28 UNF 1/2" Male | 1/4"-28 UNF 1/2" Male Hex Stop & Slot |  |  | |
| HS-AS023 | 1/4"-28 UNF Male | M8 Male x 1.25 x 8mm Long |  |  | |
| HS-AS024 | 1/4"-28 UNF Male | M6 Male x 1 Stop & Slot |  |  | |
| HS-AS025 | 1/4"-28 UNF Male | 3/8"-24 UNF Male |  |  | |
| HS-AS043 | 1/4"-28 UNF Male | 10-32 UNF Male |  |  | |
| HS-AS053 | 1/4"-28 UNF Male | M6 Male x 1mm x 10mm Long |  |  | |
| HS-AS069 | 1/4"-28 UNF Male | 1/4"-28 UNF Male Stop & Slot |  |  | |
| HS-AS076 | 1/2"-28 UNF Male | M6 Male with Screwdriver Slot |  |  | |
| HS-AS081 | 1/4"-28 UNF Male | M12 Male x 1.7 x 10mm Long |  |  | |

HS-AS Studs

mounting/grub screws

| Part No. | Connection Point 1 | Connection Point 2 | | | |
|----------|-----------------------|--|---|---|--|
| HS-AS083 | 1/4"-28 UNF Male | M10 Male x 1.5 x 12mm Long |  |  | |
| HS-AS084 | 1/4"-28 UNF Male | M5 Male x 0.8 |  |  | |
| HS-AS086 | 1/4"-28 UNF Male | M8 x 1 Male |  |  | |
| HS-AS090 | 1/4"-28 UNF Male | M10 x 1.25 Male |  |  | |
| HS-AS101 | 1/4"-28 UNF Male | 1/2"-28 UNF Male |  |  | |
| HS-AS102 | 1/4"-28 UNF Male | 1/2"-28 UNF Male with Screwdriver Slot |  |  | |
| HS-AS104 | 1/4"-28 UNF Male | M6 Male x 1 x 7.5mm Long |  |  | |
| HS-AS110 | 1/4"-28 UNF Male | M10 x 1.25 Male x 12mm Long |  |  | |
| HS-AS112 | 1/4"-28 UNF Male | M12 x 1.5 Male |  |  | |
| HS-AS115 | 1/4"-28 UNF Male | 1/2" - 13 TPI UNC x 1" Male |  |  | |
| HS-AS122 | 1/4"-28 UNF Male | M10 x 1 Male |  |  | |
| HS-AS208 | 1/4"-28 UNF 1/2" Male | 1/4"-28 UNF 1/2" Male Hex Socket Drive |  |  | |

HS-AS Studs

Isolation



Provides a barrier to cut down on electrical interference.

Mounting Studs provide a secure, permanent or semi-permanent point of connection.

| Part No. | Connection Point 1 | Connection Point 2 | |
|-------------------|------------------------|------------------------------|--|
| HS-AS046-1 | M6 x 1 Female | M6 x 1 Male | |
| HS-AS046-2 | 1/4"-28 UNF Female | 1/4"-28 UNF Male | |
| HS-AS046-3 | M8 x 1.25 Female | M8 x 1.25 Male | |
| HS-AS051-1/4 | 1/4"-28 UNF Male | 1/4" - 28UNF Female Nylatron | |
| HS-AS051-M6 | M6 x 1 Male | M6 x 1 Female Nylatron | |
| HS-AS051-M8 | M8 x 1.25 Male | M8 x 1.25 Female Nylatron | |
| HS-AS051-M8X1.25 | M8 x 1.00 Male | M8 x 1.25 Female Nylatron | |
| HS-AS051-M10 | M10 x 1.5 Male | M10 x 1.5 Female Nylatron | |
| HS-AS051-M10X1.25 | M10 x 1.25 x 10mm Male | M10 x 1.25 Female Nylatron | |

Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.











HS-AS Studs

Quick Fit threads














For use with accelerometers with quick-fit threads.

Mounting Studs provide a secure, permanent or semi-permanent point of connection

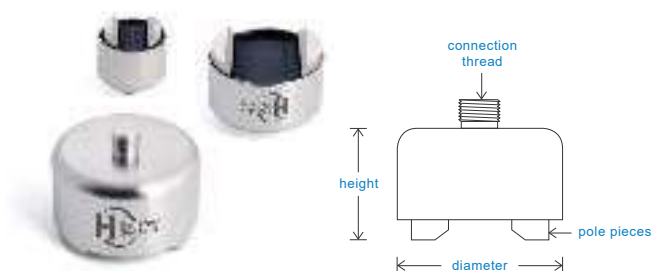
| Part No. | Connection Point 1 | Connection Point 2 | |
|----------|----------------------------|--------------------|---|
| HS-AS001 | Quick Fit Male | Glue Face |  |
| HS-AS002 | Quick Fit Male | M8 Male |  |
| HS-AS003 | Quick Fit Male | M6 Male |  |
| HS-AS004 | Quick Fit Male | 1/4"-28 UNF Male |  |
| HS-AS007 | Quick Fit Male | M10 Male |  |
| HS-AS010 | Quick Fit Male | M8 x 1.25 Female |  |
| HS-AS011 | Quick Fit Male | M6 x 1 Female |  |
| HS-AS012 | Quick Fit Male | 1/4"-28 UNF Female |  |
| HS-AS013 | Quick Fit Male (9/16" UNC) | Glue Face |  |
| HS-AS018 | Quick Fit Male (1/2" UNC) | Glue Face |  |

HS-AS Studs

Quick Fit threads




| Part No. | Connection Point 1 | Connection Point 2 | |
|----------|---------------------------|-----------------------------------|---|
| HS-AS033 | Quick Fit Male | M8 x 1 Male |  |
| HS-AS034 | Quick Fit Male (1/2" UNC) | M6 x 1 Male |  |
| HS-AS037 | Quick Fit Male (1/2" UNC) | M8 x 1.25 Male |  |
| HS-AS041 | Quick Fit Male | 3/8" BSP |  |
| HS-AS049 | Quick Fit Male | 1/8" BSP |  |
| HS-AS064 | Quick Fit Male | M5 Male |  |
| HS-AS065 | Quick Fit Male | Glue face and M6 x 1 Female |  |
| HS-AS072 | Quick Fit Male | M8 x 8mm Male |  |
| HS-AS078 | Quick Fit Male | Glue Face in 316L Stainless Steel |  |
| HS-AS108 | Quick Fit Male | M12 Male |  |
| HS-AS120 | Quick Fit Male | 1/4"NPT Male |  |

HS-AM Magnets - Pole Piece














We manufacture a range of accessories for use with our comprehensive series of industrial accelerometers to achieve a secure surface fit.

Pole Piece Pot Magnets provide a secure, semi-permanent point of connection to a curved surface and all have an operating temperature range up to 120°C.

| Part No. | Diameter | Thread | Pull Strength | Height | |
|----------|----------|---------------------|---------------|--------|---|
| HS-AM020 | 20mm | 1/4"-28 UNF Male | 8.5kg | 17mm |  |
| HS-AM001 | 25mm | 1/4"-28 UNF Male | 18kg | 17mm |  |
| HS-AM002 | 25mm | M6 Male | 18kg | 17mm |  |
| HS-AM003 | 25mm | M8 Male | 18kg | 17mm |  |
| HS-AM004 | 25mm | 10-32 UNF Male | 18kg | 17mm |  |
| HS-AM026 | 25mm | 1/2" UNC Q-Fit Male | 18kg | 21mm |  |
| HS-AM005 | 25mm | Q-Fit Male | 18kg | 23mm |  |
| HS-AM010 | 25mm | M5 Female | 18kg | 23mm |  |
| HS-AM011 | 25mm | M6 Female | 18kg | 23mm |  |
| HS-AM012 | 25mm | 1/4"-28 UNF Female | 18kg | 23mm |  |
| HS-AM013 | 25mm | M8 Female | 18kg | 23mm |  |

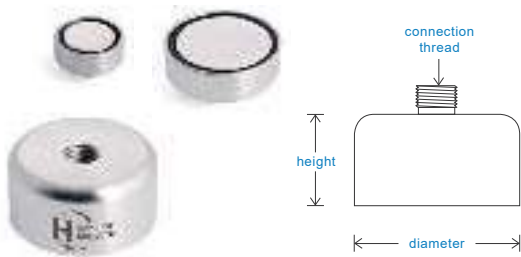
Please note: Always refer to the products full datasheet. This comprehensive product sheet cannot display every technical aspect. This is not the full product list, other options are available.

HS-AM Magnets - Pole Piece

| Part No. | Diameter | Thread | Pull Strength | Height | |
|----------|----------|--------------------|---------------|--------|---|
| HS-AM018 | 32mm | 1/4"-28 UNF Male | 20kg | 20mm |  |
| HS-AM036 | 32mm | M6 Male | 20kg | 20mm |  |
| HS-AM037 | 32mm | M8 Male | 20kg | 20mm |  |
| HS-AM041 | 32mm | M6 Female | 20kg | 26mm |  |
| HS-AM040 | 32mm | M8 Female | 20kg | 26mm |  |
| HS-AM035 | 32mm | 1/4"-28 UNF Female | 20kg | 26mm |  |
| HS-AM039 | 35mm | 1/4"-28 UNF Male | 35kg | 33mm |  |
| HS-AM042 | 35mm | M5 Female | 35kg | 33mm |  |
| HS-AM043 | 35mm | M6 Female | 35kg | 33mm |  |
| HS-AM038 | 35mm | 1/4"-28 UNF Female | 35kg | 33mm |  |
| HS-AM044 | 35mm | M8 Female | 35kg | 33mm |  |

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HS-AM Magnets - Flat Face













We manufacture a range of accessories for use with our comprehensive series of industrial accelerometers to achieve a secure surface fit.

Flat Face Pot Magnets provide a secure, semi-permanent point of connection to a flat surface and all have an operating temperature range up to 120°C.

| Part No. | Diameter | Thread | Pull Strength | Height | |
|----------|----------|--------------------|---------------|--------|---|
| HS-AM027 | 20mm | 1/4"-28 UNF Male | 12kg | 8mm |  |
| HS-AM028 | 20mm | M6 Male | 12kg | 8mm |  |
| HS-AM029 | 20mm | M8 Male | 12kg | 8mm |  |
| HS-AM030 | 20mm | 10-32 UNF Male | 12kg | 8mm |  |
| HS-AM009 | 25mm | 1/4"-28 UNF Male | 13.5kg | 8mm |  |
| HS-AM006 | 25mm | M6 Male | 13.5kg | 8mm |  |
| HS-AM007 | 25mm | M8 Male | 13.5kg | 8mm |  |
| HS-AM024 | 25mm | 10-32 UNF Male | 13.5kg | 8mm |  |
| HS-AM008 | 25mm | Q-Fit Male | 13.5kg | 14mm |  |
| HS-AM014 | 25mm | 1/4"-28 UNF Female | 13.5kg | 15mm |  |
| HS-AM015 | 25mm | M5 Female | 13.5kg | 15mm |  |

HS-AM Magnets - Flat Face

| Part No. | Diameter | Thread | Pull Strength | Height | |
|----------|----------|--------------------|---------------|--------|---|
| HS-AM016 | 25mm | M6 Female | 13.5kg | 15mm |  |
| HS-AM017 | 25mm | M8 Female | 13.5kg | 15mm |  |
| HS-AM031 | 30mm | 1/4"-28 UNF Male | 25kg | 10mm |  |
| HS-AM032 | 30mm | M6 Male | 25kg | 10mm |  |
| HS-AM033 | 30mm | M8 Male | 25kg | 10mm |  |
| HS-AM034 | 30mm | 10-32 UNF Male | 25kg | 10mm |  |
| HS-AM045 | 30mm | 1/4"-28 UNF Female | 25kg | 16mm |  |
| HS-AM046 | 30mm | M6 Female | 25kg | 16mm |  |
| HS-AM047 | 30mm | M8 Female | 25kg | 16mm |  |
| HS-AM019 | 40mm | 1/4"-28 UNF Male | 50kg | 9mm |  |

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