AC acceleration output via 2 Pin MS Connector

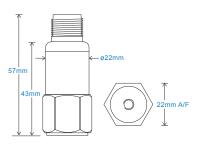
Key Features

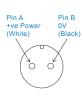
- · For use with data collector
- Premium design
- · Customisable features

Industries

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







Connection Details

Technical Performance

 $\begin{array}{c} \mbox{Mounted Base Resonance} & \mbox{see 'How To Order' table (nominal)} \\ \mbox{Sensitivity} & \mbox{see: 'How To Order' table $\pm 10\%$} \\ \mbox{Nominal 80Hz at 22°C} \\ \mbox{Frequency Response} & 1.5Hz (90cpm) to 10kHz (600kcpm) <math>\pm 5\%$ \\ \mbox{0.5Hz (30cpm) to } 12kHz (720kcpm) \pm 10\%$ \\ \mbox{0.2Hz (12cpm) to } 15kHz (900kcpm) \pm 3dB \\ \mbox{Isolation} & \mbox{Base isolated} \\ \mbox{Range} & \mbox{see: 'How To Order' table} \\ \mbox{Transverse Sensitivity} & \mbox{Less than } 5\%$ \\ \end{array}$

Mechanical

Case Material Stainless Steel
Sensing Element/Construction PZT/Shear
Mounting Torque 8Nm
Weight 106gms (nominal) body only
Screened Cable Assembly see: www.hansfordsensors.com for options
Connector HS-AA004 - non-booted
HS-AA053 or HS-0054 - booted
Mounting Threads see: 'How To Order' table

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
 >108 Ohms at 500 Volts

Environmental

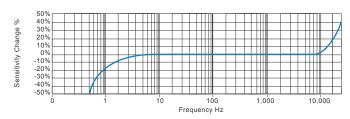
 Operating Temperature Range
 -55 to 150°C

 Sealing
 IP68

 Maximum Shock
 5000g

 EMC
 EN61326-1:2013

Typical Frequency Response (at 100mV/g)



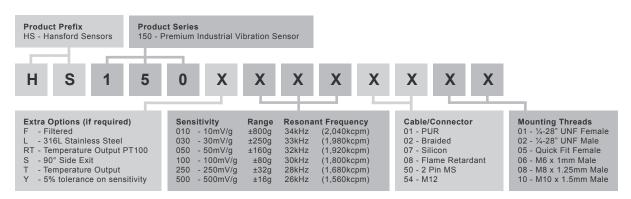
Applications

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







AC acceleration output via M12 Connector

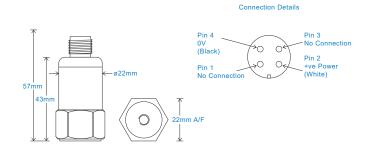
Key Features

- · For use with data collector
- Premium design
- Customisable features

Industries

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





Technical Performance

Mechanical

Case Material Stainless Steel
Sensing Element/Construction PZT/Shear
Mounting Torque 8Nm
Weight 106gms (nominal) body only
Screened Cable Assembly HS-AC010 - straight
HS-AC011 - right angle
Mounting Threads see: 'How To Order' table

Electrical

 Excitation Voltage:
 18-30 Volts 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
 >108 Ohms at 500 Volts

Environmental

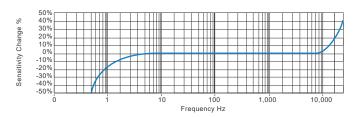
 Operating Temperature Range
 -55 to 150°C

 Sealing
 IP67

 Maximum Shock
 5000 g

 EMC
 EN61326-1:2013

Typical Frequency Response (at 100mV/g)



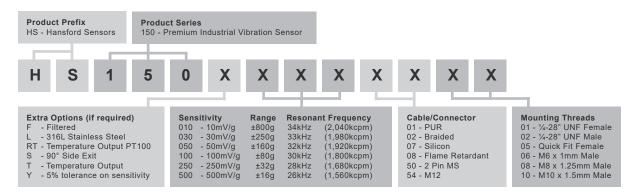
Applications

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







AC acceleration output via Braided Cable

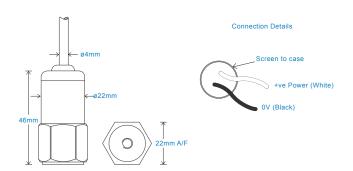
Key Features

- · For use with data collector
- Premium design
- · Customisable features

Industries

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





Technical Performance

 $\begin{array}{c} \mbox{Mounted Base Resonance} & \mbox{see 'How To Order' table (nominal)} \\ \mbox{Sensitivity} & \mbox{see: 'How To Order' table $\pm 10\%$} \\ \mbox{Nominal 80Hz at } 22^{\circ}\mbox{C} \\ \mbox{Frequency Response} & 1.5Hz (90cpm) to 10kHz (600kcpm) <math>\pm 5\%$ \\ \mbox{0.5Hz (30cpm) to } 12kHz (720kcpm) \pm 10\%$ \\ \mbox{0.2Hz (12cpm) to } 15kHz (900kcpm) \pm 3dB$ \\ \mbox{Isolation} & \mbox{Base isolated} \\ \mbox{Range} & \mbox{see: 'How To Order' table} \\ \mbox{Transverse Sensitivity} & \mbox{Less than } 5\%$ \\ \end{array}$

Mechanical

Case Material Stainless Steel
Sensing Element/Construction PZT/Shear
Mounting Torque 8Nm
Weight 106gms (nominal) body only
Maximum Cable Length 1000 metres
Standard Cable Length 5 metres
Screened Cable Braided - length to be specified with order
Mounting Threads see: 'How To Order' table

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
 >108 Ohms at 500 Volts

Environmental

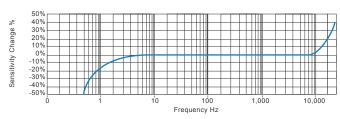
 Operating Temperature Range
 -55 to 150°C

 Sealing
 IP65

 Maximum Shock
 5000g

 EMC
 EN61326-1:2013

Typical Frequency Response (at 100mV/g)



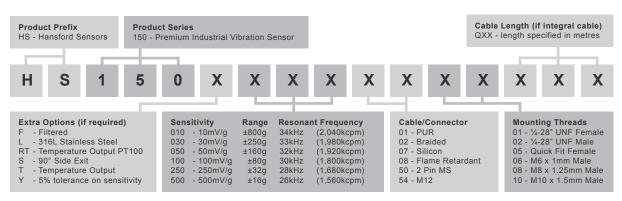
Applications

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







AC acceleration output via Silicon Cable

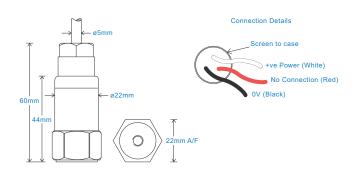
Key Features

- Waterproof
- · Premium design

Industries

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





Technical Performance

 $\begin{array}{c} \mbox{Mounted Base Resonance} & \mbox{see 'How To Order' table (nominal)} \\ \mbox{Sensitivity} & \mbox{see: 'How To Order' table $\pm 10\%$} \\ \mbox{Nominal 80Hz at } 22^{\circ}\mbox{C} \\ \mbox{Frequency Response} & 1.5\mbox{Hz (90cpm) to } 10\mbox{kHz (600kcpm)} \pm 5\%$} \\ \mbox{0.5\mbox{Hz (30cpm) to }} 12\mbox{kHz (720kcpm)} \pm 10\%$} \\ \mbox{0.2\mbox{Hz (12cpm) to }} 15\mbox{kHz (900kcpm)} \pm 3\mbox{dB} \\ \mbox{Isolation} & \mbox{Base isolated} \\ \mbox{Range} & \mbox{see: 'How To Order' table} \\ \mbox{Transverse Sensitivity} & \mbox{Less than } 5\%$ \\ \end{array}$

Mechanical

Stainless Steel Case Material Sensing Element/Construction PZT/Shear Mounting Torque Weight 106gms (nominal) body only Maximum Cable Length 1000 metres Standard Cable Length 5 metres Screened Cable Silicon - length to be specified with order see: 'How To Order' table Mounting Threads Submersible Depth 100 metres max (10 bar)

Electrical

 Excitation Voltage:
 18-30 Volts 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
 >108 Ohms at 500 Volts

Environmental

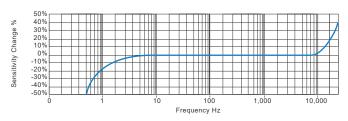
 Operating Temperature Range
 -50 to 150°C

 Sealing
 IP68

 Maximum Shock
 5000g

 EMC
 EN61326-1:2013

Typical Frequency Response (at 100mV/g)



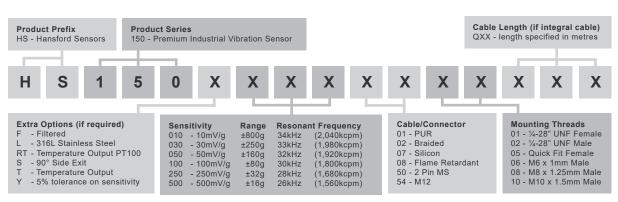
Applications

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







AC acceleration output via PUR Cable

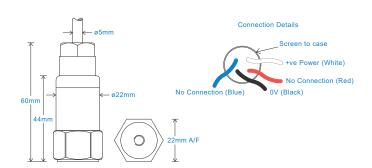
Key Features

- Waterproof
- · Resistant to oil
- Premium design

Industries

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





Technical Performance

Mechanical

Stainless Steel Case Material Sensing Element/Construction PZT/Shear Mounting Torque Weight 106gms (nominal) body only Maximum Cable Length 1000 metres Standard Cable Length 5 metres Screened Cable PUR - length to be specified with order see: 'How To Order' table Mounting Threads Submersible Depth 100 metres max (10 bar)

Electrical

 Excitation Voltage:
 18-30 Volts 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
 >108 Ohms at 500 Volts

Environmental

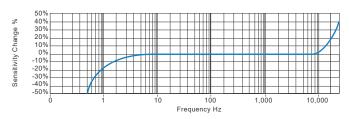
 Operating Temperature Range
 -30 to 90°C

 Sealing
 IP68

 Maximum Shock
 5000g

 EMC
 EN61326-1:2013

Typical Frequency Response (at 100mV/g)



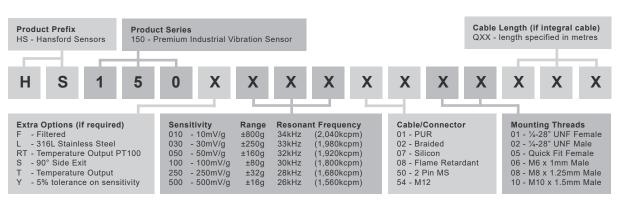
Applications

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







AC acceleration output via Flame Retardant Cable

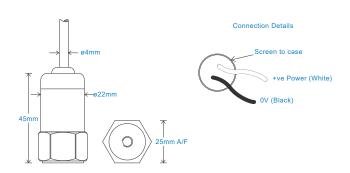
Key Features

- · For use with data collector
- Premium design
- · Low smoke, halogen free cable

Industries

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





Technical Performance

 $\begin{array}{c} \mbox{Mounted Base Resonance} & \mbox{see 'How To Order' table (nominal)} \\ \mbox{Sensitivity} & \mbox{see: 'How To Order' table $\pm 10\%$} \\ \mbox{Nominal 80Hz at } 22^{\circ}\mbox{C} \\ \mbox{Frequency Response} & 1.5\mbox{Hz (90cpm) to } 10\mbox{kHz (600kcpm)} $\pm 5\%$} \\ \mbox{0.5Hz (30cpm) to } 12\mbox{kHz (720kcpm)} $\pm 10\%$} \\ \mbox{0.2Hz (12cpm) to } 15\mbox{kHz (900kcpm)} $\pm 3\mbox{dB}$} \\ \mbox{Isolation} & \mbox{Base isolated} \\ \mbox{Range} & \mbox{see: 'How To Order' table} \\ \mbox{Transverse Sensitivity} & \mbox{Less than } 5\%$ \\ \end{array}$

Mechanical

Case Material Stainless Steel
Sensing Element/Construction PZT/Shear
Mounting Torque 8Nm
Weight 106gms (nominal) body only
Maximum Cable Length
Standard Cable Length 5 metres
Screened Cable Flame Retardant - length to be specified with order
Mounting Threads see: 'How To Order' table

Electrical

 Excitation Voltage:
 18-30 Volts 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
 >108 Ohms at 500 Volts

Environmental

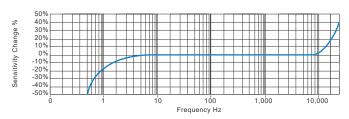
 Operating Temperature Range
 -40 to 100°C

 Sealing
 IP65

 Maximum Shock
 5000g

 EMC
 EN61326-1:2013

Typical Frequency Response (at 100mV/g)



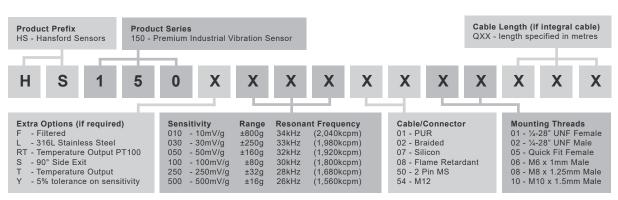
Applications

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







AC acceleration output via FEP Cable with Protective Conduit

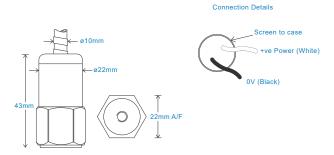
Key Features

- · Resistant to oil
- Protective Conduit
- Premium design

Industries

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





Technical Performance

Mechanical

Case Material Stainless Steel Sensing Element/Construction PZT/Shear Mounting Torque Weight 106gms (nominal) body only Screened Cable Assembly see: www.hansfordsensors.com for options Maximum Cable Length 1000 metres Standard Cable Length Mounting Threads see: 'How To Order' table Conduit Material 304 Stainless Steel Conduit Length is approx. 0.5m shorter than the cable Conduit Length Maximum Conduit Length:30m

Electrical

 Excitation Voltage:
 18-30 Volts 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
 >108 Ohms at 500 Volts

Environmental

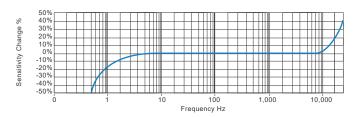
 Operating Temperature Range
 -55 to 150°C

 Sealing
 IP65

 Maximum Shock
 5000g

 EMC
 EN61326-1:2013

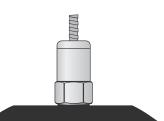
Typical Frequency Response (at 100mV/g)



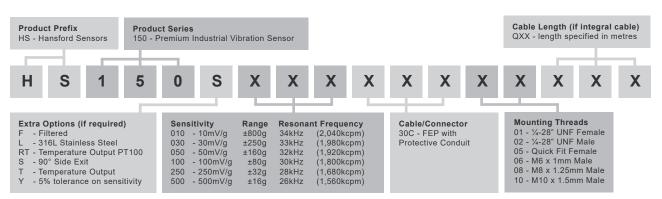
Applications

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







AC acceleration output via 4 Core Polyolefin HFFR

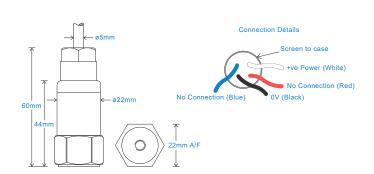
Key Features

- · Halogen free cable
- · Resistant to oil
- · Premium design

Industries

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





Technical Performance

 $\begin{array}{c} \mbox{Mounted Base Resonance} & \mbox{see 'How To Order' table (nominal)} \\ \mbox{Sensitivity} & \mbox{see: 'How To Order' table $\pm 10\%$} \\ \mbox{Nominal 80Hz at } 22^{\circ}\mbox{C} \\ \mbox{Frequency Response} & 1.5\mbox{Hz (90cpm) to } 10\mbox{kHz (600kcpm)} \pm 5\%$} \\ \mbox{0.5Hz (30cpm) to } 12\mbox{kHz (720kcpm)} \pm 10\%$} \\ \mbox{0.2Hz (12cpm) to } 15\mbox{kHz (900kcpm)} \pm 3\mbox{dB} \\ \mbox{Isolation} & \mbox{Base isolated} \\ \mbox{Range} & \mbox{see: 'How To Order' table} \\ \mbox{Transverse Sensitivity} & \mbox{Less than } 5\%$} \\ \end{array}$

Mechanical

Case Material Stainless Steel
Sensing Element/Construction PZT/Shear
Mounting Torque 8Nm
Weight 106gms (nominal) body only
Maximum Cable Length
Standard Cable Length
Screened Cable Polyolefin HFFR - length to be specified with order
Mounting Threads see: 'How To Order' table

Electrical

 Excitation Voltage:
 18-30 Volts 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
 >108 Ohms at 500 Volts

Environmental

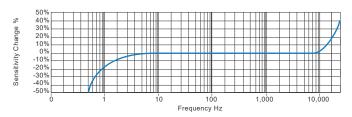
 Operating Temperature Range
 -55 to 130°C

 Sealing
 IP68

 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

