HS-150S Premium Accelerometer

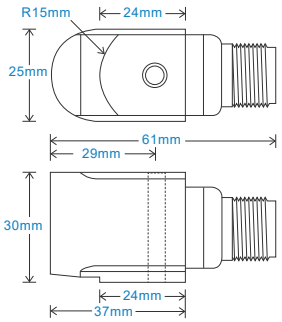
AC acceleration output via 2 Pin MS Connector

Key Features

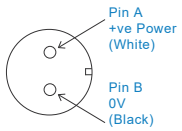
- For use with data collector and online systems
- Side entry for easy access
- Customisable features

Industries

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



Connection Details



Technical Performance

Mounted Base Resonance	see: 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ± 10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (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

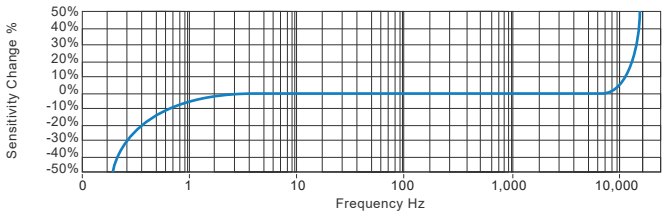
Electrical

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

Environmental

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

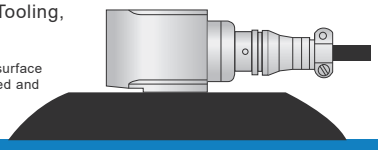
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

H	S	1	5	0	S	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
Y - 5% tolerance on sensitivity

Sensitivity	Range	Resonant Frequency
010 - 10mV/g	±800g	27kHz (1,620kcpm)
030 - 30mV/g	±250g	25kHz (1,500kcpm)
050 - 50mV/g	±160g	23kHz (1,380kcpm)
100 - 100mV/g	±80g	21kHz (1,260kcpm)
250 - 250mV/g	±32g	19kHz (1,140kcpm)
500 - 500mV/g	±16g	17kHz (1,020kcpm)

Cable/Connector
01 - PUR
02 - Braided
07 - Silicon
08 - Flame Retardant
50 - 2 Pin MS
54 - M12

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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

TS216.9

HS-150S Premium Accelerometer

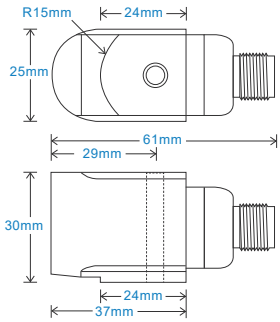
AC acceleration output via M12 Connector

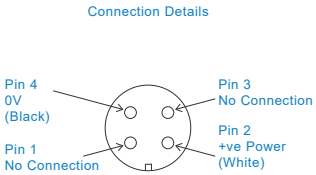
Key Features

- Premium design
- Side entry for easy access
- Customisable features

Industries

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





Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt Provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Screened Cable Assembly	HS-AC010 - straight
	HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

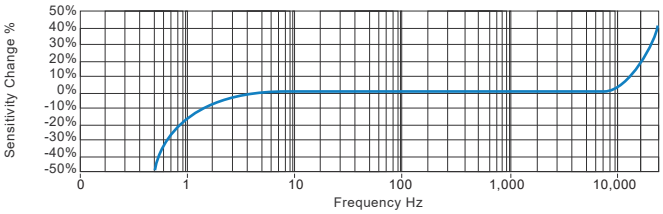
Electrical

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	$>10^8$ Ohms at 500 Volts

Environmental

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

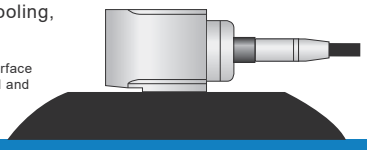
Typical Frequency Response (at 100mV/g)



Applications

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

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
150 - Premium Industrial Vibration Sensor

H	S	1	5	0	S	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
Y - 5% tolerance on sensitivity

Sensitivity	Range	Resonant Frequency
010 - 10mV/g	±800g	34kHz (2,040kcpm)
030 - 30mV/g	±250g	33kHz (1,980kcpm)
050 - 50mV/g	±160g	32kHz (1,920kcpm)
100 - 100mV/g	±80g	30kHz (1,800kcpm)
250 - 250mV/g	±32g	28kHz (1,680kcpm)
500 - 500mV/g	±16g	26kHz (1,560kcpm)

Cable/Connector
01 - PUR
02 - Braided
07 - Silicon
08 - Flame Retardant
50 - 2 Pin MS
54 - M12

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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HS-150S Premium Accelerometer

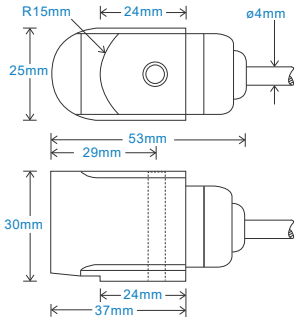
AC acceleration output via Braided Cable

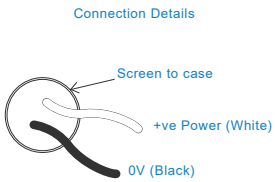
Key Features

- Premium design
- Side entry for easy access
- Customisable features

Industries

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





Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (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

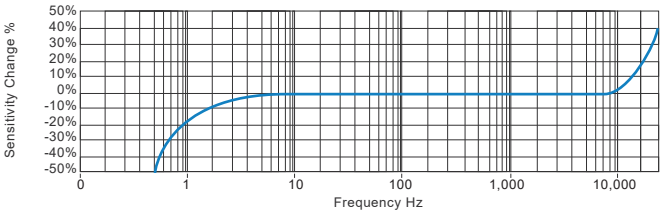
Electrical

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	>10^8 Ohms at 500 Volts

Environmental

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

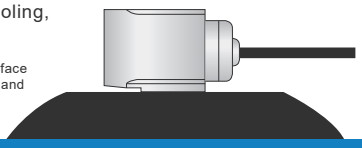
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

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

H	S	1	5	0	S	X	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
Y - 5% tolerance on sensitivity

Sensitivity	Range	Resonant Frequency
010 - 10mV/g	±800g	34kHz (2,040kcpm)
030 - 30mV/g	±250g	33kHz (1,980kcpm)
050 - 50mV/g	±160g	32kHz (1,920kcpm)
100 - 100mV/g	±80g	30kHz (1,800kcpm)
250 - 250mV/g	±32g	28kHz (1,680kcpm)
500 - 500mV/g	±16g	26kHz (1,560kcpm)

Cable/Connector
01 - PUR
02 - Braided
07 - Silicon
08 - Flame Retardant
50 - 2 Pin MS
54 - M12

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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TS271.7

HS-150S Premium Accelerometer

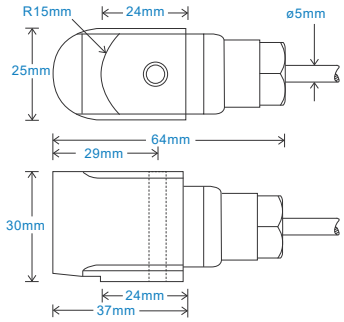
AC acceleration output via Silicon Cable

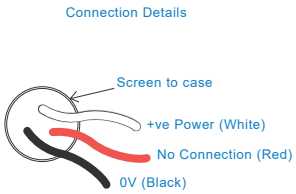
Key Features

- Waterproof
- Side entry for easy access
- Premium design

Industries

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





Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Silicon - length to be specified with order
Mounting Threads	See 'How To Order' table
Submersible Depth	100 metres max (10 bar)

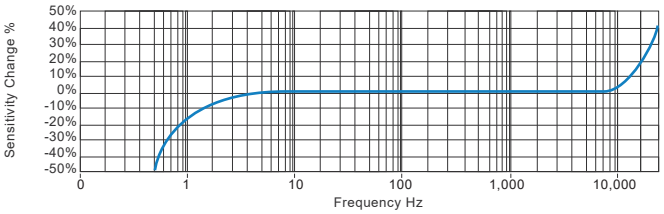
Electrical

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

Environmental

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

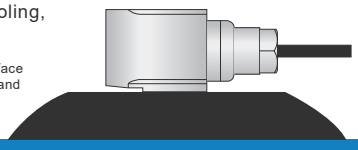
Typical Frequency Response (at 100mV/g)



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

Product Prefix	Product Series														
HS - Hansford Sensors	150 - Premium Industrial Vibration Sensor														
H	S	1	5	0	S	X	X	X	X	X	X	X	X	X	X

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

Extra Options (if required)
F - Filtered
L - 316L Stainless Steel
RT - Temperature Output PT100
S - 90° Side Exit
T - Temperature Output
Y - 5% tolerance on sensitivity

Sensitivity	Range	Resonant Frequency
010 - 10mV/g	±800g	34kHz (2,040kcpm)
030 - 30mV/g	±250g	33kHz (1,980kcpm)
050 - 50mV/g	±160g	32kHz (1,920kcpm)
100 - 100mV/g	±80g	30kHz (1,800kcpm)
250 - 250mV/g	±32g	28kHz (1,680kcpm)
500 - 500mV/g	±16g	26kHz (1,560kcpm)

Cable/Connector
01 - PUR
02 - Braided
07 - Silicon
08 - Flame Retardant
50 - 2 Pin MS
54 - M12

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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

HS-150S Premium Accelerometer

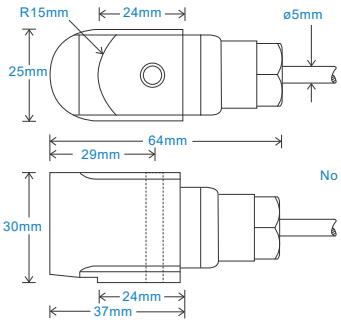
AC acceleration output via PUR Cable

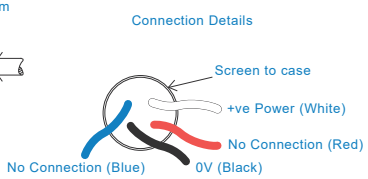
Key Features

- Waterproof
- Resistant to oil
- Premium design

Industries

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





Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	PUR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	100 metres max (10 bar)

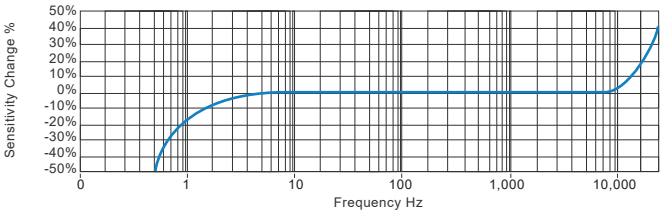
Electrical

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

Environmental

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

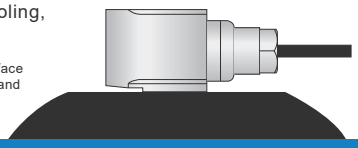
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

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

H	S	1	5	0	S	X	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
Y - 5% tolerance on sensitivity

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±800g	34kHz	(2,040kcpm)
030	- 30mV/g	±250g	33kHz	(1,980kcpm)
050	- 50mV/g	±160g	32kHz	(1,920kcpm)
100	- 100mV/g	±80g	30kHz	(1,800kcpm)
250	- 250mV/g	±32g	28kHz	(1,680kcpm)
500	- 500mV/g	±16g	26kHz	(1,560kcpm)

Cable/Connector
01 - PUR
02 - Braided
07 - Silicon
08 - Flame Retardant
50 - 2 Pin MS
54 - M12

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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

HS-150S Premium Accelerometer

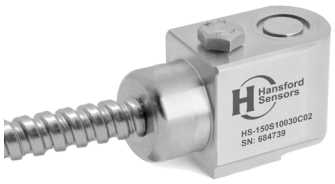
AC acceleration output via FEP Cable with Protective Conduit

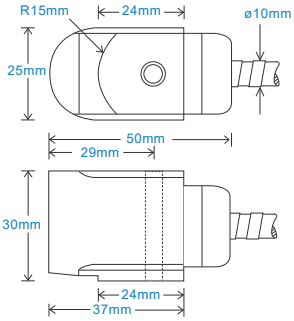
Key Features

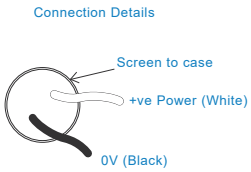
- Resistant to oil
- Protective Conduit
- Premium design

Industries

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







Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	FEP - length to be specified with order
Mounting Threads	see: 'How To Order' table
Conduit Material	304 Stainless Steel
Conduit Length	Conduit Length is approx. 0.5m shorter than the cable Maximum Conduit Length:30m

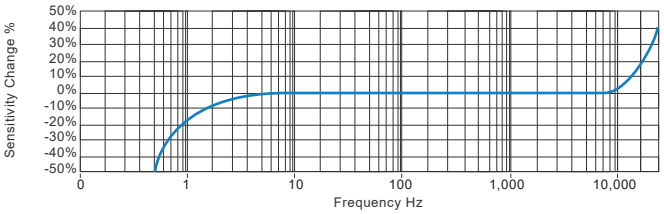
Electrical

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

Environmental

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

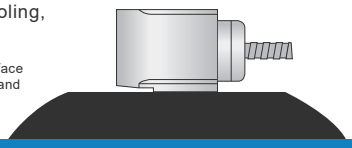
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

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

H	S	1	5	0	S	X	X	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
Y - 5% tolerance on sensitivity

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±800g	34kHz	(2,040kcpm)
030	- 30mV/g	±250g	33kHz	(1,980kcpm)
050	- 50mV/g	±160g	32kHz	(1,920kcpm)
100	- 100mV/g	±80g	30kHz	(1,800kcpm)
250	- 250mV/g	±32g	28kHz	(1,680kcpm)
500	- 500mV/g	±16g	26kHz	(1,560kcpm)

Cable/Connector
30C - FEP with Protective Conduit

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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

HS-150S Premium Accelerometer

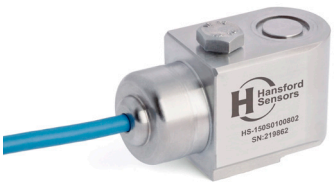
AC acceleration output via Flame Retardant Cable

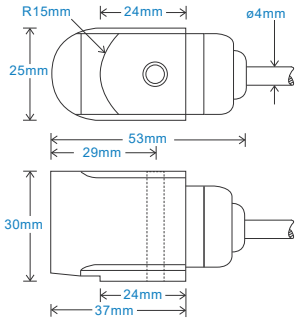
Key Features

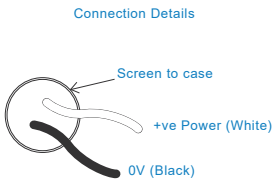
- Premium design
- Side entry for easy access
- Customisable features
- Low smoke, halogen free cable

Industries

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







Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Flame Retardant - length to be specified with order
Mounting Threads	see: 'How To Order' table

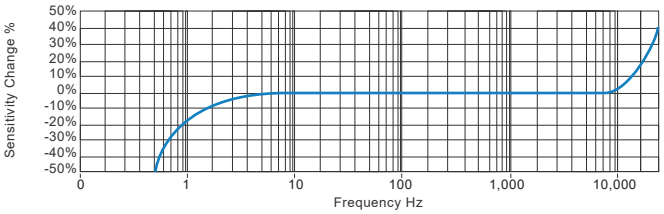
Electrical

Excitation Voltage:	18-30Volts 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

Environmental

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

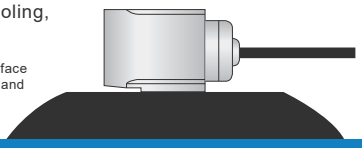
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

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

H	S	1	5	0	S	X	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
Y - 5% tolerance on sensitivity

Sensitivity	Range	Resonant Frequency
010 - 10mV/g	±800g	34kHz (2,040kcpm)
030 - 30mV/g	±250g	33kHz (1,980kcpm)
050 - 50mV/g	±160g	32kHz (1,920kcpm)
100 - 100mV/g	±80g	30kHz (1,800kcpm)
250 - 250mV/g	±32g	28kHz (1,680kcpm)
500 - 500mV/g	±16g	26kHz (1,560kcpm)

Cable/Connector
01 - PUR
02 - Braided
07 - Silicon
08 - Flame Retardant
50 - 2 Pin MS
54 - M12

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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TS809.3

HS-150S Premium Accelerometer

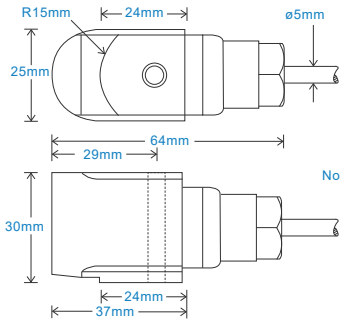
AC acceleration output via 4 Core Polyolefin HFFR

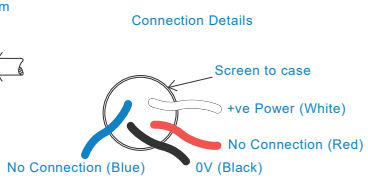
Key Features

- Side entry for easy access
- High Temperature
- Premium design

Industries

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





Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Polyolefin HFFR - length to be specified with order
Mounting Threads	see: 'How To Order' table

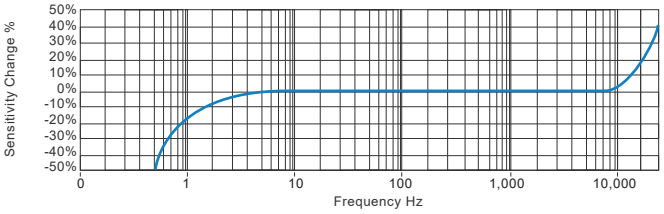
Electrical

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	>10^8 Ohms at 500 Volts

Environmental

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

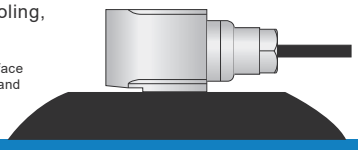
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

Cable Length
QXX - length specified in metres

H	S	1	5	0	S	X	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
Y - 5% tolerance on sensitivity

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±800g	34kHz	(2,040kcpm)
030	- 30mV/g	±250g	33kHz	(1,980kcpm)
050	- 50mV/g	±160g	32kHz	(1,920kcpm)
100	- 100mV/g	±80g	30kHz	(1,800kcpm)
250	- 250mV/g	±32g	28kHz	(1,680kcpm)
500	- 500mV/g	±16g	26kHz	(1,560kcpm)

Cable/Connector
37 - 4 Core
Polyolefin HFFR

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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

HS-150S Premium Accelerometer

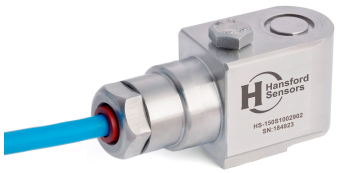
AC acceleration output via 3 Core Silicon Cable with Protective Over-Sheath

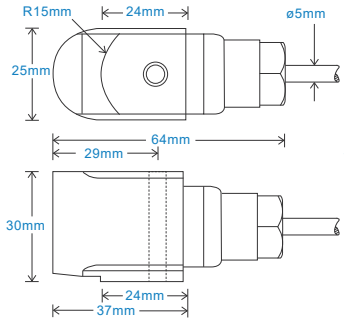
Key Features

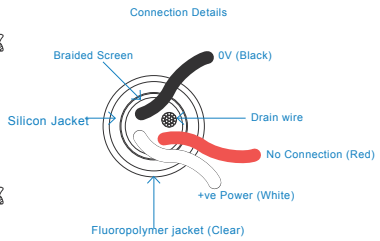
- Waterproof
- Side entry for easy access
- Premium design

Industries

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







Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Silicon - length to be specified with order
Mounting Threads	See 'How To Order' table
Submersible Depth	100 metres max (10 bar)

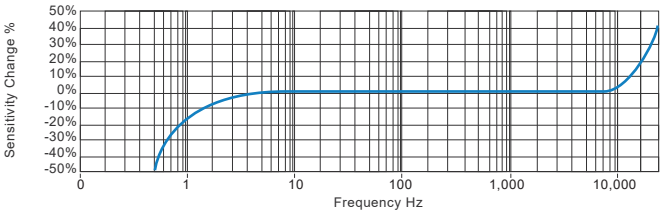
Electrical

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

Environmental

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

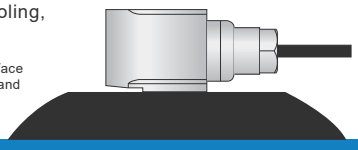
Typical Frequency Response (at 100mV/g)



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

Product Prefix	Product Series											Cable Length (if integral cable)		
HS - Hansford Sensors	150 - Premium Industrial Vibration Sensor											QXX - length specified in metres		
H	S	1	5	0	S	X	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
Y - 5% tolerance on sensitivity

Sensitivity	Range	Resonant Frequency
010 - 10mV/g	±800g	34kHz (2,040kcpm)
030 - 30mV/g	±250g	33kHz (1,980kcpm)
050 - 50mV/g	±160g	32kHz (1,920kcpm)
100 - 100mV/g	±80g	30kHz (1,800kcpm)
250 - 250mV/g	±32g	28kHz (1,680kcpm)
500 - 500mV/g	±16g	26kHz (1,560kcpm)

Cable/Connector
29 - Silicon Over-Sheath

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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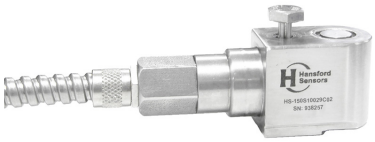
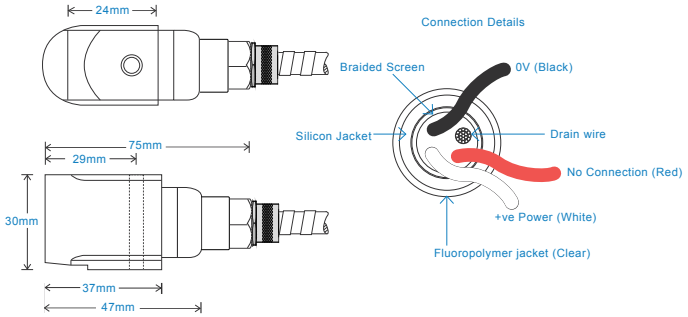
HS-150S Premium Accelerometer

AC acceleration output via 3 Core Silicon Cable with Protective Over-Sheath and Removable Stainless Steel Conduit

Key Features

- Waterproof to IP68
- Side entry for easy access
- Removable Stainless Steel Conduit





Industries

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

Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Silicon - length to be specified with order
Mounting Threads	see: 'How To Order' table

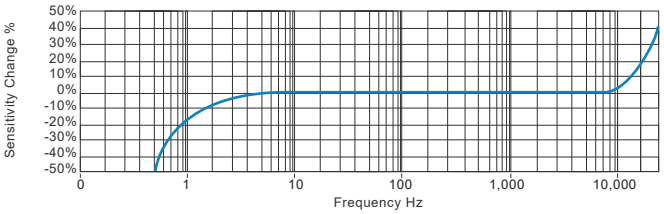
Electrical

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	>10^8 Ohms at 500 Volts

Environmental

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

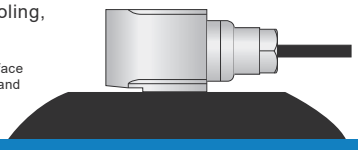
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

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

H	S	1	5	0	S	X	X	X	X	X	X	X	X	X	X

Extra Options (if required)
F - Filtered
RT - Temperature Output PT100
S - 90° Side Exit
T - Temperature Output
Y - 5% tolerance on sensitivity

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±800g	34kHz	(2,040kcpm)
030	- 30mV/g	±250g	33kHz	(1,980kcpm)
050	- 50mV/g	±160g	32kHz	(1,920kcpm)
100	- 100mV/g	±80g	30kHz	(1,800kcpm)
250	- 250mV/g	±32g	28kHz	(1,680kcpm)
500	- 500mV/g	±16g	26kHz	(1,560kcpm)

Cable/Connector
29C - Silicon Cable with Over-Sheath and Removable Conduit

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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HS-150S Premium Accelerometer

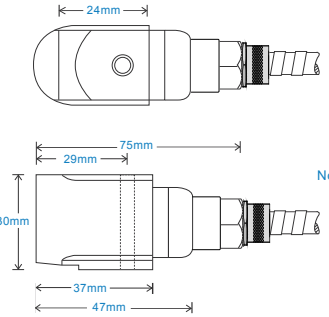
AC acceleration output via 4 Core PUR Cable with Removable Stainless Steel Conduit

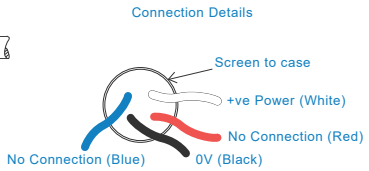
Key Features

- Waterproof to IP68
- Side entry for easy access
- Removable Stainless Steel Conduit

Industries

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





Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	PUR - length to be specified with order
Mounting Threads	see: 'How To Order' table

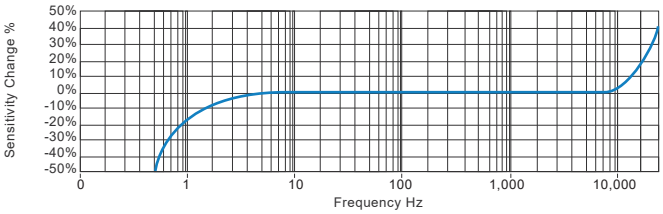
Electrical

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

Environmental

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

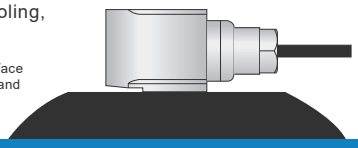
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

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

H	S	1	5	0	S	X	X	X	X	X	X	X	X	X	X

Extra Options (if required)
F - Filtered
RT - Temperature Output PT100
S - 90° Side Exit
T - Temperature Output
Y - 5% tolerance on sensitivity

Sensitivity	Range	Resonant Frequency
010 - 10mV/g	±800g	34kHz (2,040kcpm)
030 - 30mV/g	±250g	33kHz (1,980kcpm)
050 - 50mV/g	±160g	32kHz (1,920kcpm)
100 - 100mV/g	±80g	30kHz (1,800kcpm)
250 - 250mV/g	±32g	28kHz (1,680kcpm)
500 - 500mV/g	±16g	26kHz (1,560kcpm)

Cable/Connector
34 - 4 Core PUR Cable with removable Stainless Steel Conduit
35 - 3 Core Silicon Cable with removable Stainless Steel Conduit

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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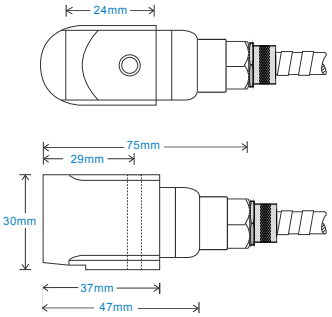
We reserve the right to alter the specification of this product without prior notice

HS-150S Premium Accelerometer

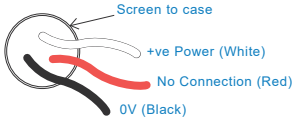
AC acceleration output via 3 Core Silicon Cable with Removable Stainless Steel Conduit

Key Features

- Waterproof to IP68
- Side entry for easy access
- Removable Stainless Steel Conduit



Connection Details



Industries

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

Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Silicon - length to be specified with order
Mounting Threads	see: 'How To Order' table

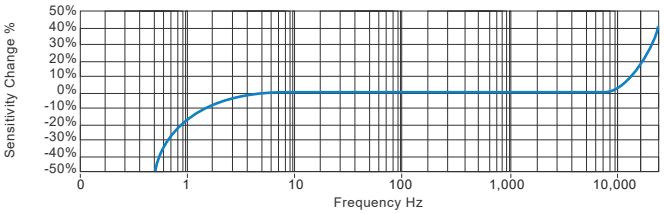
Electrical

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	>10^8 Ohms at 500 Volts

Environmental

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

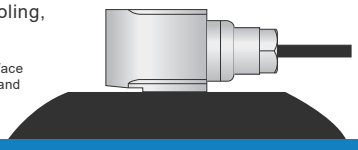
Typical Frequency Response (at 100mV/g)



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

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

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

H	S	1	5	0	S	X	X	X	X	X	X	X	X	X	X

Extra Options (if required)
F - Filtered
RT - Temperature Output PT100
S - 90° Side Exit
T - Temperature Output
Y - 5% tolerance on sensitivity

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±800g	34kHz	(2,040kcpm)
030	- 30mV/g	±250g	33kHz	(1,980kcpm)
050	- 50mV/g	±160g	32kHz	(1,920kcpm)
100	- 100mV/g	±80g	30kHz	(1,800kcpm)
250	- 250mV/g	±32g	28kHz	(1,680kcpm)
500	- 500mV/g	±16g	26kHz	(1,560kcpm)

Cable/Connector
34 - 4 Core PUR Cable with removable Stainless Steel Conduit
35 - 3 Core Silicon Cable with removable Stainless Steel Conduit

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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HS-150S Premium Accelerometer

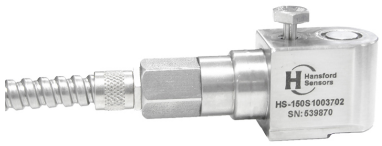
AC acceleration output via 4 Core Polyolefin HFFR with Protective Conduit

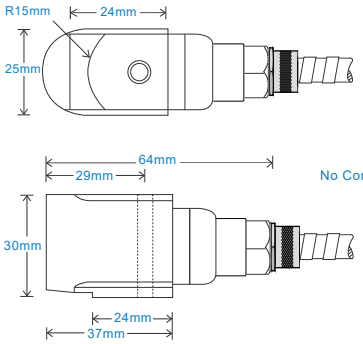
Key Features

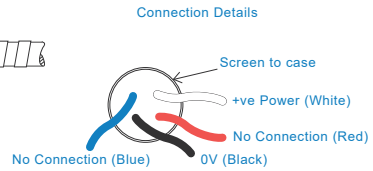
- High Temperature
- Protective Conduit
- Premium design

Industries

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







Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Polyolefin HFFR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	100 metres max (10 bar)

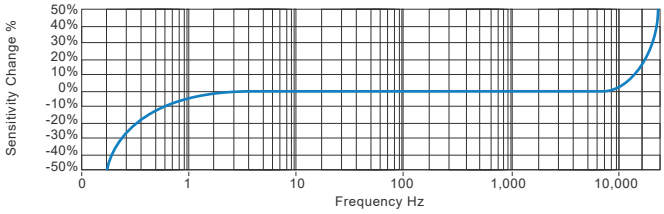
Electrical

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

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

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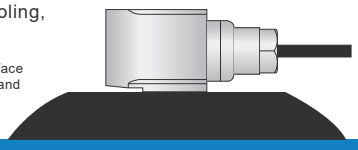

How To Order

Product Prefix
HS - Hansford Sensors

Product Series
150 - Premium Industrial Vibration Sensor

H	S	1	5	0	S	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
Y - 5% tolerance on sensitivity
H - High Temperature

Sensitivity		Range	Resonant Frequency	
010	- 10mV/g	±800g	34kHz	(2,040kcpm)
030	- 30mV/g	±250g	33kHz	(1,980kcpm)
050	- 50mV/g	±160g	32kHz	(1,920kcpm)
100	- 100mV/g	±80g	30kHz	(1,800kcpm)
250	- 250mV/g	±32g	28kHz	(1,680kcpm)
500	- 500mV/g	±16g	26kHz	(1,560kcpm)

Cable/Connector
37C - 4 Core Polyolefin HFFR with Protective Conduit

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

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