AC acceleration output via 2 Pin MS Connector

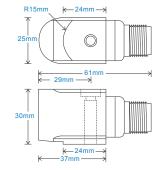
Key Features

- · For use with data collector
- · Side entry for easy access
- Customisable features



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





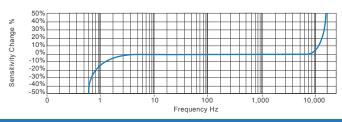
Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Screened Cable Assembly	see: www.hansfordsensors.com for options
Isolation	Base isolated	Connector	HS-AA004 - non-booted
Range	see: 'How To Order' table		HS-AA053 or HS-0054 - booted
Transverse Sensitivity	Less than 5%	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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Sealing Maximum Shock

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-55 to 140°C

EN61326-1:2013

IP68

5000g

How To Order

Product Prefix HS - Hansford Sensors		t Series dustrial \	/ibration S	ensor							
H S 1	0	0	S	X	X	X	X	X	X	X	
Extra Options (if required) - Filtered - 316L Stainless Steel RT - Temperature Output PT 5 - 90° Side Exit - Temperature Output 7 - 5% tolerance on sensiti		030 - 050 - 100 - 250 -	tivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kd (1,500kd (1,380kd (1,260kd (1,140kd (1,020kd	cpm) cpm) cpm) cpm) cpm)	01 - PI 02 - Bi 07 - Si 08 - FI	raided ilicon ame Reta Pin MS		Mounting Threads 02 - %-28" UNF Ma 06 - M6 x 1mm Mal 08 - M8 x 1.25mm I



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We reserve the right to alter the specification of this product without prior notice TS002.7

CE

AC acceleration output via M12 Connector

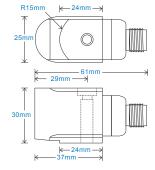
Key Features

- · For use with data collector
- · Side entry for easy access
- Customisable features

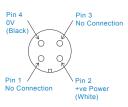


Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





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	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%

Case Material	
Sensing Element/Construction	PZ
Mounting Torque	
Mounting Bolt provided	see: 'How To Order' tab
Weight	185gms (nor
Screened Cable Assembly	HS-/
	HS-AC
Mounting Threads	See: 'How

Mounting Threads

Mechanical

ZT/Compression 8Nm able x 30mm long ominal) body only AC010 - straight 011 - right angle ee: '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

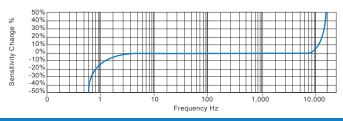
Environmental

Operating Temperature Range Sealing Maximum Shock EMC

-55 to 140°C IP67 5000g EN61326-1:2013

Stainless Steel

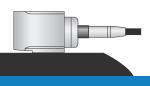
Typical Frequency Response (at 100mV/g)



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.)



CE

How To Order

Product Prefix HS - Hansford Sensors		ct Series ndustrial \	/ibration S	ensor							
H S 1	0	0	S	X	X	X	X	X	X	X	
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output P ⁻ S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensit	۲100	030 - 050 - 100 - 250 -	tivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	:pm) :pm) :pm) :pm) :pm)	01 - PI 02 - Bi 07 - Si 08 - FI	raided licon ame Retar Pin MS	-	Mounting Th 02 - ¼-28" UN 06 - M6 x 1m 08 - M8 x 1.2



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

TS032.7

AC acceleration output via Braided Cable

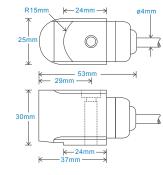
Key Features

- · For use with data collector
- · Side entry for easy access
- Customisable features

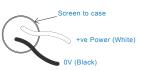
Industries

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





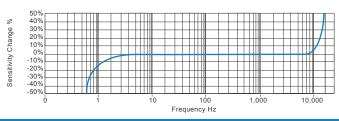
Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Braided - length to be specified with order
Transverse Sensitivity	Less than 5%	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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

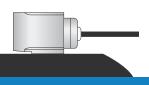
Sealing Maximum Shock

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-55 to 140°C

EN61326-1:2013

IP65

5000g

How To Order

Product Prefix HS - Hansford Sensors		:t Series idustrial V	/ibration S	ensor							Length length sp	ecified in r	netres
H S 1	0	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 010 -10mV/g ±800g 030 -30mV/g ±250g 050 -50mV/g ±160g 100 -100mV/g ±80g 250 -250mV/g ±32g 500 -500mV/g ±16g			Resonant Frequency 27kHz (1,620kcpm) 25kHz (1,500kcpm) 23kHz (1,380kcpm) 21kHz (1,260kcpm) 19kHz (1,140kcpm) 17kHz (1,020kcpm)			01 - PU 02 - Br 07 - Sil 08 - Fla	aided licon ame Retar Pin MS		02 - ¼ 06 - M	ti ng Threa -28" UNF 6 x 1mm M 8 x 1.25m	Male Male



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We reserve the right to alter the specification of this product without prior notice TS010.7

AC acceleration output via Silicon Cable

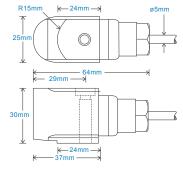
Key Features

- · For use with data collector
- Side entry for easy access
- Waterproof



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





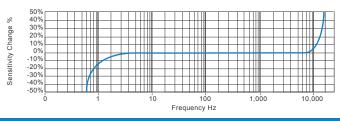
Connection Details



nless Steel
ompression
8Nm
30mm long
) body only
000 metres
5 metres
with order
Order' table
ax (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

Typical Frequency Response (at 100mV/g)



Sealing Maximum Shock EMC

Operating Temperature Range

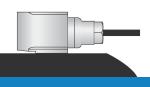
-50 to 140°C IP68 5000g EN61326-1:2013

Applications

Environmental

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 100 - Industrial Vibration Sensor											Length length spe	ecified in r	netres
H S 1	0	0	S	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered - 316L Stainless Steel RT - Temperature Output P' S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensi	Г100	030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kg (1,500kg (1,380kg (1,260kg (1,140kg (1,020kg	cpm) cpm) cpm) cpm) cpm)	01 - PI 02 - Bi 07 - Si 08 - FI	raided licon ame Retai Pin MS		02 - ¼ 06 - M	ing Threa -28" UNF 6 x 1mm M 8 x 1.25m	Male Aale



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We reserve the right to alter the specification of this product without prior notice TS011.8

AC acceleration output via PUR Cable

Key Features

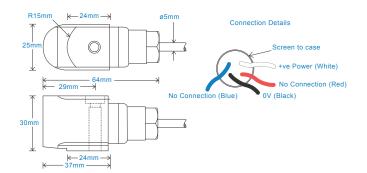
Side entry for easy access

- Waterproof
- Resistant to oil



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





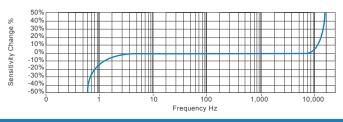
Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)	(
Sensitivity	see: 'How To Order' table ±10%	5
	Nominal 80Hz at 22°C	1
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	1
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	١
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	1
Isolation	Base isolated	\$
Range	see: 'How To Order' table	
Transverse Sensitivity	Less than 5%	I
		9

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt provided	see: 'How To Order' table x 30mm long
Weight	185gms (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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Sealing Maximum Shock

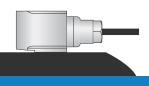
EMC

Operating Temperature Range

Mechanical

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-30 to 90°C

EN61326-1:2013

IP68

5000g

How To Order

Product Prefix Product Series HS - Hansford Sensors 100 - Industrial Vibration Sensor											Length length spe	cified in n	netres
H S 1	0	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 PT S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensiti		030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resonar 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	cpm) cpm) cpm) cpm) cpm)	01 - Pl 02 - Br 07 - Si 08 - Fl	aided licon ame Retar Pin MS		02 - ¼ 06 - M	ing Threa 28" UNF I 6 x 1mm M 3 x 1.25mr	Male Iale



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We reserve the right to alter the specification of this product without prior notice TS084.7



AC acceleration output via Flame Retardant Cable

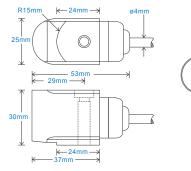
Key Features

- For use with data collector
- Side entry for easy access
- Low smoke, halogen free cable



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

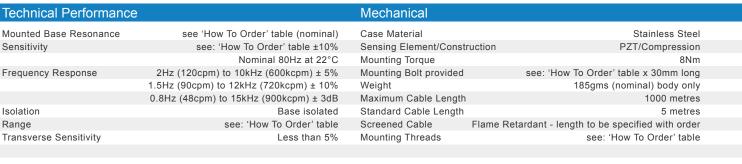




Connection Details

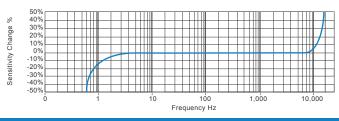
0V (Black)

+ve Power (White)



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

Typical Frequency Response (at 100mV/g)



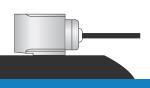
Environmental

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

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		t Series dustrial V	ibration S	ensor							Length length spe	ecified in	metres
H S 1	0	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 P S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensit	Г100	030 - 3 050 - 3 100 - 2 250 - 2	vity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resonar 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	pm) pm) pm) pm) pm)	01 - PL 02 - Br 07 - Si	aided licon ame Retar Pin MS		02 - ¼- 06 - M6	ing Threa 28" UNF 6 x 1mm I 3 x 1.25m	Male Male



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TS086.6

CE

AC acceleration output via 4 Core Polyolefin HFFR

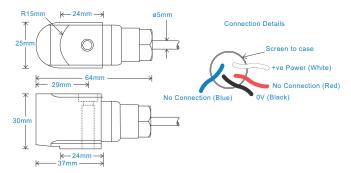
Key Features

- Side entry for easy access
- Resistant to oil

Industries

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



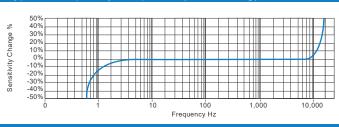


Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Constru	uction PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Polyolefin HFFR - length to be specified with order
Transverse Sensitivity	Less than 5%	Mounting Threads	see: 'How To Order' table

5

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

Typical Frequency Response (at 100mV/g)



Environmental

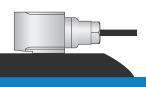
Operating remperature Range	
Sealing	
Maximum Shock	
EMC	

-55 to 130°C
IP68
5000g
EN61326-1:2013

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 100 - Industrial Vibration Sensor										Cable QXX -		ecified in r	netres
H S 1	0	0	S	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered RT - Temperature Output P S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensit	Г100	030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	pm) pm) pm) pm) pm)		Connector Core Polyc	r blefin HFFf	R 02 - 06 -	unting Th - ¼-28" UN - M6 x 1mi - M8 x 1.2	NF Male m Male



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We reserve the right to alter the specification of this product without prior notice \$\$T\$1048.3

HS-100S Accelerometer AC acceleration output via FEP Cable with Protective Conduit

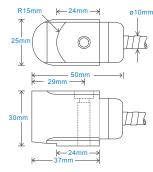
Key Features

- Resistant to oil
- Protective Conduit
- Premium design

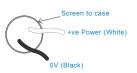


Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Shear
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Weight	106gms (nominal) body only
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Screened Cable Assembly	see: www.hansfordsensors.com for options
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Mounting Threads	see: 'How To Order' table
Transverse Sensitivity	Less than 5%	Conduit Material	316 Stainless Steel
		Conduit Length Conduit L	ength is approx. 0.5m shorter than the cable
			Maximum Conduit Length:30m

Electrical	
Evolution Voltogo	18-30Volts DC
Excitation Voltage:	
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

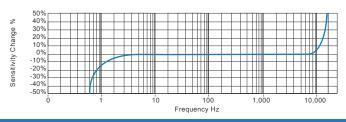
Environmental

Sealing Maximum Shock

EMC

Operating Temperature Range

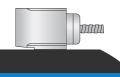
Typical Frequency Response (at 100mV/g)



Applications

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-55 to 140°C

IP65

5000g EN61326-1:2013

How To Order

Product Prefix HS - Hansford Sensors		ct Series ndustrial \	/ibration S	ensor							Length (i length sp		
H S 1	0	0	S	X	X	X	X	X	X	X	x	x	X
Extra Options (if require F - Filtered L - 316L Stainless Stee RT - Temperature Output S - 90° Side Exit T - Temperature Output Y - 5% tolerance on ser	PT100	030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resonar 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	pm) pm) pm) pm) pm)	30C -	/Connecto FEP with tive Condu		02 - ¼ 06 - M	t ing Threa -28" UNF 6 x 1mm I 8 x 1.25m	Male Male



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We reserve the right to alter the specification of this product without prior notice TS781.5

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

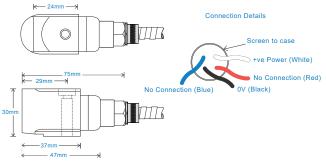


- Waterproof to IP68
- · Side entry for easy access
- Removable Stainless Steel Conduit

Industries

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





Technical Performance

Technical Performance)	Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	PUR - length to be specified with order
Transverse Sensitivity	Less than 5%	Mounting Threads	see: 'How To Order' table

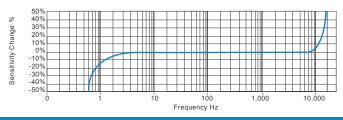
Electrical	
Excitation Voltage:	18-30Volts DC
Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	>10 ⁸ Ohms at 500 Volts

Environmental

Operating Temperature Range Sealing Maximum Shock EMC

-30 to 90°C IP68 5000g EN61326-1:2013

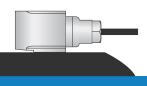
Typical Frequency Response (at 100mV/g)



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		t Series Idustrial V	/ibration S	ensor							Length length sp	ecified in	metres
H S 1	0	0	S	X	X	X	X	X	X	X	X	x	X
Extra Options (if required) F - Filtered RT - Temperature Output P S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensi	, T100	030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	pm) pm) pm) pm) pm)	01C - 4 with rem Steel Co 07C - 3	Core Silio novable S	R Cable tainless con Cable	02 06	unting Th - ¼-28" UI - M6 x 1m - M8 x 1.2	NF Male



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CE

We reserve the right to alter the specification of this product without prior notice TS928.2

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

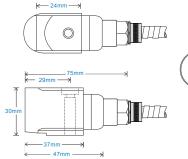
Key Features

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

Industries

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





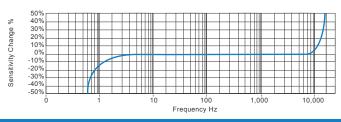
Screen to case +ve Power (White) No Connection (Red)

Connection Details

Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Silicon - length to be specified with order
Transverse Sensitivity	Less than 5%	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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

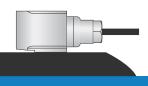
Sealing Maximum Shock

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-50 to 140°C IP68

EN61326-1:2013

5000g

How To Order

Product Prefix HS - Hansford Sensors		t Series dustrial V	/ibration S	ensor							Length length spe	ecified in r	netres
H S 1	0	0	S	X	X	X	X	X	X	X	X	X	X
Extra Options (if required F - Filtered RT - Temperature Output P S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensi	T100	030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Frequer (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	pm) pm) pm) pm) pm)	01C - 4 with rem Steel Co 07C - 3	Core Silic lovable Si	R Cable tainless on Cable	02 - 06 -	unting Th 14-28" Uf M6 x 1m M8 x 1.2	VF Male



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We reserve the right to alter the specification of this product without prior notice TS978.2

HS-100ST Accelerometer AC acceleration and temperature output via 3 Pin MS Connector

Key Features

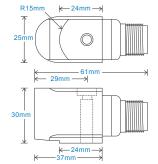
Temperature output

- Side entry for easy access
- For use with data collector

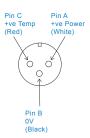


Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





Connection Details

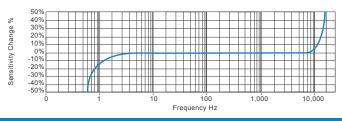


Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Screened Cable Assembly	see: www.hansfordsensors.com for options
Isolation	Base isolated	Connector	HS-AA005 - non-booted
Range	see: 'How To Order' table		HS-AA068 or HS-0069 - booted
Temperature Output	10 mV/°C standard 100°C - Option 140°C	Mounting Threads	see: 'How To Order' table
Transverse Sensitivity	Less than 5%		

ectrical	
Cultai	

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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

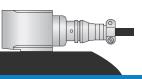
Sealing Maximum Shock

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-55 to 140°C

EN61326-1:2013

IP68

5000g

How To Order

Product Prefix HS - Hansford Sensors	Product Series 100 - Industrial Vibration S	Sensor								
H S 1	0 0 S	т	X	X	X	X	X	X	X	
Extra Options (if required) F - Filtered L - 316L Stainless Steel S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensiti	Sensitivity 010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	pm) pm) pm) pm) pm)	01 - Pl 03 - Br 07 - Si 15 - Fl	aided licon ame Reta Pin MS		02 - ¼ 06 - M	ing Threa -28" UNF 6 x 1mm № 8 x 1.25m



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AC acceleration and temperature output via M12 Connector

Key Features

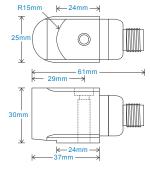
Temperature output

- Side entry for easy access
- For use with data collector

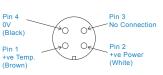
Industries

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





Connection Details



Technical Performance Mechanical Mounted Base Resonance see 'How To Order' table (nominal) Sensitivity see: 'How To Order' table ±10% Nominal 80Hz at 22°C 2Hz (120cpm) to 10kHz (600kcpm) ± 5% Frequency Response 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB Isolation Base isolated see: 'How To Order' table Range Temperature Output 10 mV/°C standard 100°C - Option 140°C Transverse Sensitivity Less than 5%

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	185gms (nominal) body only
Screened Cable Assembly	HS-AC010 - straight
	HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

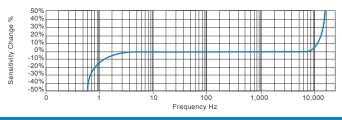
Electrical

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

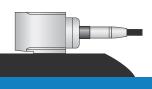
Typical Frequency Response (at 100mV/g)



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 100 - Inc		/ibration S	ensor								
H S 1	0	0	S	Т	X	X	X	X	X	X	X	
Extra Options (if required) F - Filtered - 316L Stainless Steel S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensiti	vity	030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kg (1,500kg (1,380kg (1,260kg (1,140kg (1,020kg	:pm) :pm) :pm) :pm) :pm)	01 - P 03 - Bi 07 - Si 15 - Fl	aided licon ame Reta Pin MS		02 - 1 06 - N	ting Thro 4-28" UNI 16 x 1mm 18 x 1.25



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We reserve the right to alter the specification of this product without prior notice TS027.7

AC acceleration and temperature output via Braided Cable

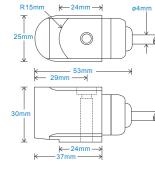
Key Features

- Temperature output
- · Side entry for easy access
- · For use with data collector



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





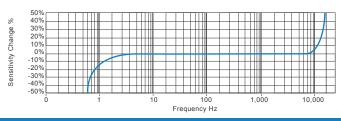
Connection Details



Technical Performance	1	Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Braided - length to be specified with order
Temperature Output	10 mV/°C standard 100°C - Option 140°C	Mounting Threads	see: 'How To Order' table
Transverse Sensitivity	Less than 5%		

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

Typical Frequency Response (at 100mV/g)



Operating Temperature Range

Environmental

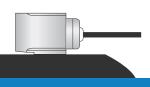
Sealing Maximum Shock EMC

-55 to 140°C IP65 5000g EN61326-1:2013

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 Sei 100 - Indust	r ies rial Vibration S	Sensor								Length length sp	ecified in r	netres
H S 1	0 0	S	Т	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered L - 316L Stainless Steel S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensit	01 03 05 10	0 - 30mV/g 0 - 50mV/g 0 - 100mV/g 0 - 250mV/g	±32g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	cpm) cpm) cpm) cpm) cpm)	01 - P 03 - B 07 - Si 15 - Fl	raided ilicon ame Reta Pin MS		02 - ¼ 06 - M	ting Threa -28" UNF 6 x 1mm M 8 x 1.25m	Male Male	



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

CE

TS043.7

AC acceleration and temperature output via Silicon Cable

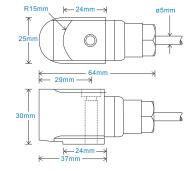
Key Features

- Temperature output
- Side entry for easy access
- Waterproof

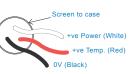
Industries

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





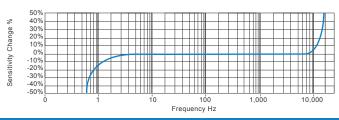
Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Silicon - length to be specified with order
Temperature Output	10 mV/°C standard 100°C - Option 140°C	Mounting Threads	see: 'How To Order' table
Transverse Sensitivity	Less than 5%	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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

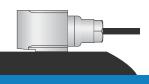
Sealing Maximum Shock

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-50 to 140°C

EN61326-1:2013

IP68

5000g

How To Order

Product Prefix HS - Hansford Sensors	Product 100 - Ind	: Series dustrial Vibrat	tion Sensor								Length length sp	ecified in n	netres
H S 1	0	0 \$	S T	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered - 316L Stainless Steel S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensit		Sensitivity 010 - 10m 030 - 30m 050 - 50m 100 - 100r 250 - 250r 500 - 500r	V/g ±800g V/g ±250g V/g ±160g nV/g ±80g nV/g ±32g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kg (1,500kg (1,380kg (1,260kg (1,140kg (1,020kg	cpm) cpm) cpm) cpm) cpm)	01 - Pl 03 - Br 07 - Si 15 - Fl	raided licon ame Reta Pin MS		02 - ¼ 06 - M	ting Threa -28" UNF 6 x 1mm № 8 x 1.25m	Male Male	



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AC acceleration and temperature output via PUR Cable

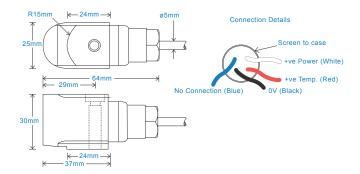
Key Features

- Temperature output
- Side entry for easy access
- Waterproof
- Resistant to oil

Industries

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





Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)	Case Mate
Sensitivity	see: 'How To Order' table ±10%	Sensing E
	Nominal 80Hz at 22°C	Mounting
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum
Isolation	Base isolated	Standard
Range	see: 'How To Order' table	Screened
Temperature Output	10 mV/°C standard 90°C	Mounting
Transverse Sensitivity	Less than 5%	Submersit

Mechanical	
Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	185gms (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

EMC

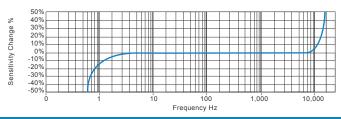
Environmental

Sealing Maximum Shock

Operating Temperature Range

-30 to 90°C IP68 5000g EN61326-1:2013

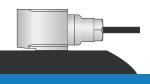
Typical Frequency Response (at 100mV/g)



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 100 - Ind	Series Iustrial Vit	oration Se	ensor								Length length spe	ecified in n	netres
H S 1	0	0	S	т	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered - 316L Stainless Steel S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensit		050 - 5 100 - 1 250 - 2		Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	cpm) cpm) cpm) cpm) cpm)	01 - PU 03 - Br 07 - Si	aided licon ame Retar Pin MS		02 - ¼ 06 - M	ti ng Threa -28" UNF 6 x 1mm M 8 x 1.25m	Male /Iale	



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We reserve the right to alter the specification of this product without prior notice TS191.6

HS-100ST Accelerometer AC acceleration and temperature output via Flame Retardant Cable

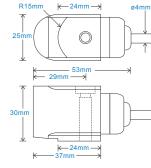
Key Features

- Temperature output
- Side entry for easy access
- Low smoke, halogen free cable

Industries

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





Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construct	ion PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable Fla	ame Retardant - length to be specified with order
Temperature Output	10 mV/°C standard 100°C - Option 140°C	Mounting Threads	see: 'How To Order' table
Transverse Sensitivity	Less than 5%		

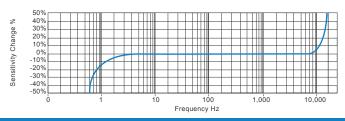
Electrical	
Excitation Voltage	18-30Volts DC
Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	>10 ⁸ Ohms at 500 Volts

ono

EMC

Sealing Maximum Shock

Typical Frequency Response (at 100mV/g)



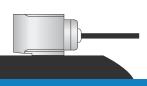
Applications

Environmental

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-40 to 100°C

EN61326-1:2013

IP65

5000g

How To Order

Product Prefix HS - Hansford Sensors	Product S 100 - Indu		bration Se	ensor								Length length sp	ecified in r	netres
H S 1	0	0	S	Т	X	X	X	X	Х	X	X	X	X	>
Extra Options (if required) F - Filtered - 316L Stainless Steel S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensit	ivity	050 - 5 100 - 1 250 - 2		Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	:pm) :pm) :pm) :pm) :pm)	01 - PU 03 - Br 07 - Si 15 - FI	aided licon ame Retar Pin MS	-	02 - ¼ 06 - M	ing Threa -28" UNF 6 x 1mm № 8 x 1.25m	Male Male	



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CE

We reserve the right to alter the specification of this product without prior notice TS376.6

HS-100SRT Accelerometer AC acceleration and PT100 temperature output via M12 Connector

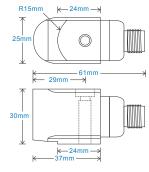
Key Features

- PT100 temperature output
- Side entry for easy access
- For use with data collector

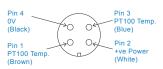
Industries

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 2Hz (120cpm) to 10kHz (600kcpm) ± 5% Frequency Response 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB Isolation Base isolated see: 'How To Order' table Range Temperature Output PT100 (100 Ohms) Transverse Sensitivity Less than 5%

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	185gms (nominal) body only
Screened Cable Assembly	HS-AC010 - straight
	HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

Electrical

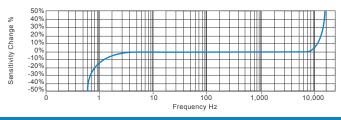
Excitation Voltage	18-30Volts DC
Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	>10 ⁸ Ohms at 500 Volts

Environmental

Mechanical

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

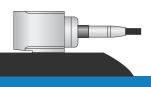
Typical Frequency Response (at 100mV/g)



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 100 - Ind		ibration S	ensor								
H S 1	0	0	S	R	Т	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered - 316L Stainless Steel RT - Temperature Output PT S - 90° Side Exit Y - 5% tolerance on sensiti		030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resonat 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kg (1,500kg (1,380kg (1,260kg (1,140kg (1,020kg	:pm) :pm) :pm) :pm) :pm)	Cable / 01 - Pl 54 - M		r	02 - ½ 06 - M	ting Thread 28" UNF M 6 x 1mm M 8 x 1.25mr



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We reserve the right to alter the specification of this product without prior notice TS170.9

AC acceleration and temperature output via FEP Cable with Protective Conduit

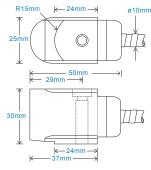
Key Features

- · Resistant to oil
- · Protective Conduit
- Premium design

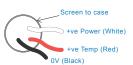
Industries

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





Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Screened Cable Assembly	see: www.hansfordsensors.com for options
Isolation	Base isolated	Maximum Cable Length	1000 metres
Range	see: 'How To Order' table	Standard Cable Length	5 metres
Temperature	10 mV/ °C standard 100°C - Option 130°C	Mounting Threads	see: 'How To Order' table
Transverse Sensitivity	Less than 5%	Conduit Material	316 Stainless Steel
		Conduit Length Conduit L	ength is approx. 0.5m shorter than the cable

Electrical		
Excitation Voltage:	18-30Volts DC	;
Electrical Noise	0.1mg max	I
Current Range	0.5mA to 8mA	١.
Bias Voltage	10 - 12 Volts DC	;
Settling Time	2 seconds	;
Output Impedance	200 Ohms max.	
Case Isolation	>108 Ohms at 500 Volts	;

Maximum Shock EMC

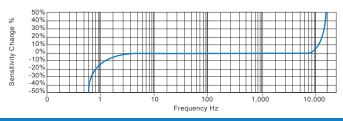
Sealing

Environmental

Operating Temperature Range

-55 to 140°C IP65 5000g 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 Sen		Product 100 - Ind		/ibration S	ensor									Length (if length spe		
H S	1	0	0	S	Т	X	X	X	X	X	X	X	X	X	X	X
Extra Options (if r F - Filtered L - 316L Stainless RT - Temperature (S - 90° Side Exit T - Temperature (Y - 5% tolerance	s Steel Output PT1 Output		030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	:pm) :pm) :pm) :pm) :pm)	33C - F	Connecto EP with ive Condu		02 - ¼ 06 - M	ing Threa -28" UNF 6 x 1mm N 8 x 1.25m	Male Male		



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We reserve the right to alter the specification of this product without prior notice TS782.5

AC acceleration output via 2 Pin MS Connector

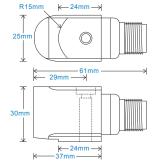
Key Features

- For use with data collector
- Side entry for easy access
- · Filtered output

Industries

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





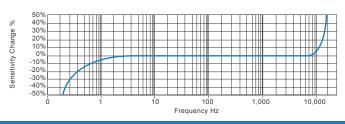
Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 3dB	Screened Cable Assembly	see: www.hansfordsensors.com for options
Isolation	Base isolated	Connector	HS-AA004 - non-booted
Range	see: 'How To Order' table		HS-AA053 or HS-0054 - booted
Transverse Sensitivity	Less than 5%	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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Maximum Shock

Sealing

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-55 to 140°C

EN61326-1:2013

IP68

5000g

How To Order

Product Prefix HS - Hansford Sensors		ct Series ndustrial V	/ibration S	ensor								
H S 1	0	0	S	F	X	X	X	X	X	X	X	
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output PT S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensiti		030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resonant Frequency 27kHz (1,620kcpm) 25kHz (1,500kcpm) 23kHz (1,380kcpm) 21kHz (1,260kcpm) 19kHz (1,140kcpm) 17kHz (1,020kcpm)			01 - P 02 - B 07 - Si 08 - FI	aided licon ame Reta Pin MS		02 - ½ 06 - N	ting Th ı 4-28" UN 16 x 1mr 18 x 1.25



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AC acceleration output via M12 Connector

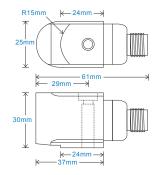
Key Features

- For use with data collector
- Side entry for easy access
- · Filtered output

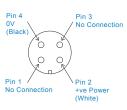


Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





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%

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt provided	see: 'How To Order' table x 30mm long
Weight	185gms (nominal) body only
Screened Cable Assembly	HS-AC010 - straight
	HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

Electrical 18-30Volts DC **Excitation Voltage** 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. >108 Ohms at 500 Volts Case Isolation

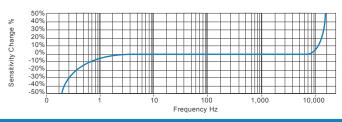
Environmental

Mechanical

Operating Temperature Range
Sealing
Maximum Shock
EMC

-55 to	140°C
	IP67
	5000g
EN61326-	1:2013

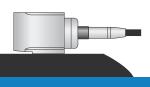
Typical Frequency Response (at 100mV/g)



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 S 100 - Indu		ibration Se	ensor									
H S 1	0	0	S	F	X	X	X	X	X	X	X		
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output PT S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensiti	100	030 - 3 050 - 3 100 - 3 250 - 3	vity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resonant Frequency 27kHz (1,620kcpm) 25kHz (1,500kcpm) 23kHz (1,380kcpm) 21kHz (1,260kcpm) 19kHz (1,140kcpm) 17kHz (1,020kcpm)			01 - Pl 02 - Br 07 - Si 08 - Fl	aided licon ame Retar Pin MS		02 - ½ 06 - N	ting Thre 4-28" UNF 46 x 1mm 18 x 1.25n	Male Male



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CE

We reserve the right to alter the specification of this product without prior notice TS098.7

AC acceleration output via Braided Cable

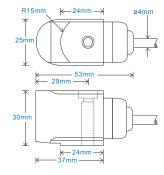
Key Features

- For use with data collector
- Side entry for easy access
- Filtered output

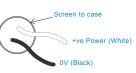


Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





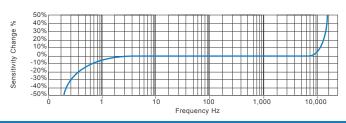
Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 3dB	Maxiumum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Braided - length to be specified with order
Transverse Sensitivity	Less than 5%	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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

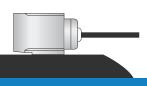
Sealing Maximum Shock

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-55 to 140°C

EN61326-1:2013

IP65

5000g

How To Order

Product Prefix HS - Hansford Sensors	Product S 100 - Indu		ibration S	ensor								Length length sp	ecified in r	netres
H S 1	0	0	S	F	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output P' S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensi	Г100	050 - 4 100 - 2 250 - 2		Range ±800g ±250g ±160g ±80g ±32g ±16g	Resonant Frequency 27kHz (1,620kcpm) 25kHz (1,500kcpm) 23kHz (1,380kcpm) 21kHz (1,260kcpm) 19kHz (1,140kcpm) 17kHz (1,020kcpm)			01 - PU 02 - Br 07 - Si 08 - FI	aided licon ame Retar Pin MS		02 - ¼ 06 - M	ing Threa -28" UNF 6 x 1mm № 8 x 1.25m	Male Male	



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We reserve the right to alter the specification of this product without prior notice TS138.6

AC acceleration output via Silicon Cable

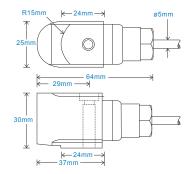
Key Features

- · For use with data collector
- Side entry for easy access
- Filtered output

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/Compression
Mounting Torque	8Nm
Mounting Bolt provided	see: 'How To Order' table x 30mm long
Weight	185gms (nominal) body only
Maxiumum 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

Maximum Shock EMC

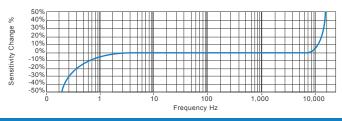
Sealing

Environmental

Operating Temperature Range

-50 to 140°C IP68 5000g EN61326-1:2013

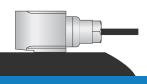
Typical Frequency Response (at 100mV/g)



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 Serie 100 - Industria	-	Sensor								Length length spe	ecified in n	netres
H S 1	0 0	S	F	X	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output PT S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensit	010 030 100 100 250	sitivity - 10mV/g - 30mV/g - 50mV/g - 100mV/g - 250mV/g - 500mV/g	±32g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kd (1,500kd (1,380kd (1,260kd (1,140kd (1,020kd	opm) opm) opm) opm) opm)	01 - P 02 - B 07 - Si 08 - FI	raided licon ame Reta Pin MS		02 - ¼ 06 - M	t ing Threa -28" UNF 6 x 1mm M 8 x 1.25m	Male /Iale	



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We reserve the right to alter the specification of this product without prior notice TS139.6

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AC acceleration output via PUR Cable

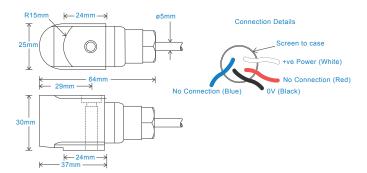
Key Features

- For use with data collector
- Side entry for easy access
- Filtered output



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





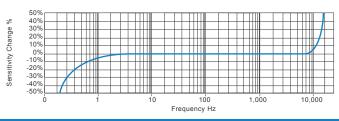
Technical Performance

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/Compression
Mounting Torque	8Nm
Mounting Bolt provided	see: 'How To Order' table x 30mm long
Weight	185gms (nominal) body only
Maxiumum 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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

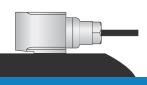
Sealing Maximum Shock

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



-30 to 90°C

EN61326-1:2013

IP68

5000g

How To Order

Product Prefix HS - Hansford Sensors	Product 100 - Inc	t Series dustrial Vi	bration S	ensor								Length length spo	ecified in n	netres
H S 1	0	0	S	F	Χ	X	X	X	X	X	X	X	X	X
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output P S - 90° Side Exit T - Temperature Output P Y - 5% tolerance on sensiti	Г100	050 - 5 100 - 1 250 - 2		Range ±800g ±250g ±160g ±80g ±32g ±16g	Resonar 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	spm) spm) spm) spm) spm)	01 - Pl 02 - Br 07 - Si 08 - Fl	aided licon ame Reta Pin MS		02 - ¼ 06 - M	t ing Threa -28" UNF 6 x 1mm M 8 x 1.25m	Male /Iale	



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AC acceleration output via Flame Retardant Cable

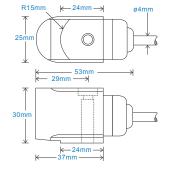
Key Features

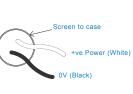
- Low smoke, halogen free cable
- Side entry for easy access
- Filtered output



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







Connection Details

Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 3dB	Maxiumum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable Flame	e Retardant - length to be specified with order
Transverse Sensitivity	Less than 5%	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

Maximum Shock EMC

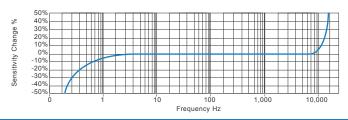
Operating Temperature Range

Environmental

Sealing

-40 to 100°C IP65 5000g EN61326-1:2013

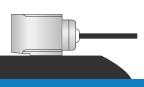
Typical Frequency Response (at 100mV/g)



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 100 - Ind	t Series dustrial Vi	bration S	ensor								Length length spe	ecified in n	netres
H S 1	0	0	S	F	X	X	X	X	X	X	X	X	X	Х
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensiti	Т100	050 - 5 100 - 1 250 - 2		Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 27kHz 25kHz 23kHz 21kHz 19kHz 17kHz	nt Freque (1,620kc (1,500kc (1,380kc (1,260kc (1,140kc (1,020kc	pm) pm) pm) pm) pm) pm)	01 - Pl 02 - Br 07 - Si 08 - Fl	aided licon ame Retai Pin MS		02 - ¼ 06 - M	ing Threa -28" UNF I 6 x 1mm M 8 x 1.25mi	Male Nale	



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HS-100IS Intrinsically Safe Accelerometer AC acceleration output via 2 Pin MS Connector

Key Features

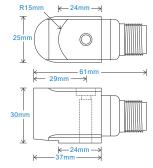
• Intrinsically Safe with European, USA, South African, Indian and Australian approvals

· Side entry for easy access

Industries

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







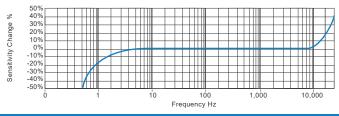


Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Screened Cable Assembly	see: www.hansfordsensors.com for options
Isolation	Base isolated	Connector	HS-AA004 - non-booted
Range	see: 'How To Order' table		HS-AA053 or HS-0054 - booted
Transverse Sensitivity	Less than 5%	Mounting Threads	see: 'How To Order' table

-	
	ectrical
	Curuar

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

Typical Frequency Response (at 100mV/g)



Environmental

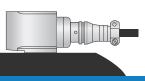
Operating Temperature Range Sealing Maximum Shock EMC

see: attached certification details IP68 5000g EN61326-1:2013

Applications

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



Certifications











This product is certified in accordance with UL 913, 8th Ed. Rev. December 6, 2013 CAN/CSA C22.2 No. 157-92 (R2012) +Upd1 +Upd2



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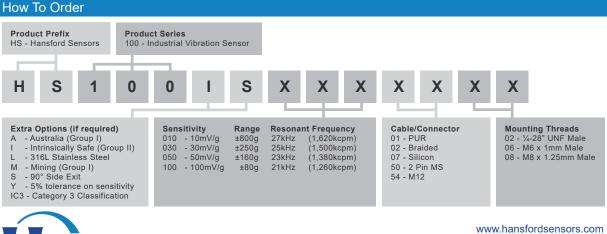
We reserve the right to alter the specification of this product without prior notice TS039.19

HS-100IS Intrinsically Safe Accelerometer AC acceleration output via 2 Pin MS Connector

Intrinsically Safe Requirer	nents		
Maximum Cable Length	See website www.hansfordsensors.com	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +60°C) (Gas)
	- see attached system drawing	Ex ia IIIC	C T80°C IP65 Da (-55°C ≤ Ta ≤ +60°C) (Dust)
		E	Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +110°C) (Gas)*
Certificate details: Group I	IECEx BAS07.0037X	Ex ia IIIC T1	I30°C IP65 Da (-55°C ≤ Ta ≤ +110°C) (Dust)*
	Baseefa07ATEX0149X		Ex ia I Ma (-55°C ≤ Ta ≤ +110°C) (Mining)
	🖾 I M1		*On request - consult Sales Office
	Ex ia I Ma		
	(-55°C ≤ Ta ≤ +110°C)	Australia Approval Group I	IECEx ITA 11.0013X
			Ex ia I Ma
Certificate details: Group II	IECEx BAS07.0035X		(-55°C ≤ Ta ≤ +110°C)
(ignition temperature 130°C)	Baseefa07ATEX0144X		
	🐵 II 1GD	US/Canada Approvals	Certificate No. USTC/15/FAI/01350
	Ex ia IIC T4 Ga		, 2, Groups A - G, T4, -55°C to +110°C, IP65
	Ex ia IIIC T130°C IP65 Da		Zone 0, AEx, ia, IIC, T4, Ga, -55°C to +110°C
	(-55°C ≤ Ta ≤ +110°C)	Zone 20, AEx	t, ia, ⅢC, T130°C, IP65, Da, -55°C to +110°C
Certificate details: Group II	IECEx BAS07.0035X		vision 1, 2, Groups A - G, T6, -55°C to +60°C
(ignition temperature 80°C)	Baseefa07ATEX0144X	,	Zone 0, AEx, ia, IIC, T6, Ga, -55°C to +60°C
	© II 1GD	Zone 20, Al	Ex, ia, IIIC, T80°C, IP65, DA, -55°C to +60°C
	Ex ia IIC T6 Ga		
	Ex ia IIIC T80°C IP65 Da	South African Approval	Certificate No. MASC S/16-0231X
	(-55°C ≤ Ta ≤ +60°C)		Group II (As Baseefa/ATEX) MASC M/16-0230X
Accelerometer System Certificate	Baseefa07Y0145		Group I (As Baseefa/ATEX)
Acceleronneter System Certificate	Ex ia IIC T6 (-55°C \leq Ta \leq +60°C)		Gloup I (As Baseela/ATEA)
	Ex ia IIC T4 (-55°C \leq Ta \leq +110°C)	System Connections	see attached system drawings
	On request - consult Sales Office	System Connections	see allached system drawings
	On request - consult cales onloc	Barrier	1 x Pepperl + Fuchs Galvanic Isolator
Terminal Parameters	Ui = 28V, li = 93mA, Pi = 0.65W	Barrier	KFD2-VR4-Ex1.26 (BAS02ATEX7206)
	Ci = 83nf		see attached system drawings
	Li/Ri = 15.4µH/Ohm	1 x MTL	Zener Barrier MTL7728+ (BAS01ATEX7217)
			or Pepperl + Fuchs Zener Barrier
500V Isolation	Units Will Pass A 500V Isolation Test	Z728	3 (BAS01ATEX7005) or any other barrier that
			conforms to system drawings on website

Notes: Special conditions of safe use for Group I & II. The free end of the cable on the integral cable version of the apparatus must be terminated in an appropriate dust-proof enclosure.

Intrinsically Safe Requirements for	IC3 Varitations		
HS-100IC3 Variation is certified as Category 3	equipment. These sensors	Certified Temperature Range	Ex ic IIC T4 Gc (-55°C ≤ Ta ≤ +110°C)
are only certified for use within Zones 2.			
		Terminal Parameters	Ui = 25.2V, li = 146mA, Pi = 0.92W
			Ci = 83nf
			Li 66µH
Certificate Details: Group II	IECEx BAS17.0054X		
(ignition temperature 130°C)	Baseefa7ATEX0069X	500V Isolation	Units will pass a 500V Isolation Test
	لاي) II 3G		
	Ex ic IIC T4 Gc	Special Conditions of Use:	The Ci and Li parameters listed on the
	(-55°C ≤ Ta ≤ +110°C)		equipment certificate must be taken into
			account when connecting this equipment.



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Excellence in Vibration Monitoring





We reserve the right to alter the specification of this product without prior notice TS039 19



HS-100IS Intrinsically Safe Accelerometer AC acceleration output via M12 Connector

Key Features

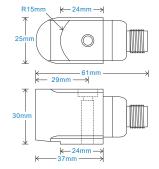
· Intrinsically Safe with European, USA, South African, Indian and Australian approvals

· Side entry for easy access

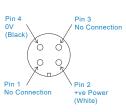
Industries

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









Stainless Steel

8Nm

IP67

5000g

EN61326-1:2013

PZT/Compression

HS-AC010 - straight

HS-AC011 - right angle

see: 'How To Order' table

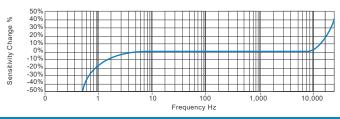
see: attached certification details

185gms (nominal) body only

Technical Performance Mechanical Mounted Base Resonance see 'How To Order' table (nominal) Case Material Sensitivity see: 'How To Order' table ±10% Sensing Element/Construction Nominal 80Hz at 22°C Mounting Torque 2Hz (120cpm) to 10kHz (600kcpm) ± 5% **Frequency Response** Mounting Bolt Provided see: 'How To Order' table x 30mm long 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% Weight 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB Screened Cable Assembly Isolation Base isolated see: 'How To Order' table Mounting Threads Range Transverse Sensitivity Less than 5%

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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Maximum Shock

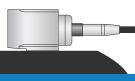
Sealing

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



Certifications





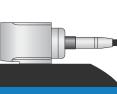




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CE

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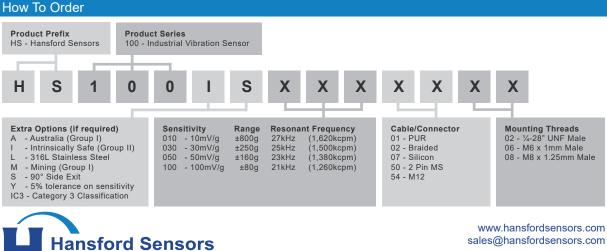


HS-100IS Intrinsically Safe Accelerometer AC acceleration output via M12 Connector

Intrinsically Safe Requiren	nents		
Maximum Cable Length	See website www.hansfordsensors.com	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +60°C) (Gas)
	- see attached system drawing	Ex ia IIIC	C T80°C IP65 Da (-55°C ≤ Ta ≤ +60°C) (Dust)
		E	Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +110°C) (Gas)*
Certificate details: Group I	IECEx BAS07.0037X	Ex ia IIIC T1	30°C IP65 Da (-55°C ≤ Ta ≤ +110°C) (Dust)*
	Baseefa07ATEX0149X		Ex ia I Ma (-55°C ≤ Ta ≤ +110°C) (Mining)
	☑I M1		*On request - consult Sales Office
	Ex ia I Ma		
	(-55°C ≤ Ta ≤ +110°C)	Australia Approval Group I	IECEx ITA 11.0013X
			Ex ia I Ma
Certificate details: Group II	IECEx BAS07.0035X		(-55°C ≤ Ta ≤ +110°C)
(ignition temperature 130°C)	Baseefa07ATEX0144X		
	🐵 II 1GD	US/Canada Approvals	Certificate No. USTC/15/FAI/01350
	Ex ia IIC T4 Ga		, 2, Groups A - G, T4, -55°C to +110°C, IP65
	Ex ia IIIC T130°C IP65 Da		Zone 0, AEx, ia, IIC, T4, Ga, -55°C to +110°C
	(-55°C ≤ Ta ≤ +110°C)	Zone 20, AEx	, ia, IIIC, T130°C, IP65, Da, -55°C to +110°C
Certificate details: Group II	IECEx BAS07.0035X		vision 1, 2, Groups A - G, T6, -55°C to +60°C
(ignition temperature 80°C)	Baseefa07ATEX0144X	,	Zone 0, AEx, ia, IIC, T6, Ga, -55°C to +60°C
	ا ا GD	Zone 20, Al	Ex, ia, IIIC, T80°C, IP65, DA, -55°C to +60°C
	Ex ia IIC T6 Ga		
	Ex ia IIIC T80°C IP65 Da	South African Approval	Certificate No. MASC S/16-0231X
	(-55°C ≤ Ta ≤ +60°C)		Group II (As Baseefa/ATEX)
			MASC M/16-0230X
Accelerometer System Certificate	Baseefa07Y0145		Group I (As Baseefa/ATEX)
	Ex ia IIC T6 (-55°C ≤ Ta ≤ +60°C)		
	Ex ia IIC T4 (-55°C ≤ Ta ≤ +110°C)	System Connections	see attached system drawings
	On request - consult Sales Office	D	
		Barrier	1 x Pepperl + Fuchs Galvanic Isolator
Terminal Parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W		KFD2-VR4-Ex1.26 (BAS02ATEX7206)
	Ci = 83nf	(see attached system drawings
	Li/Ri = 15.4µH/Ohm	1 x MTL	Zener Barrier MTL7728+ (BAS01ATEX7217)
		7700	or Pepperl + Fuchs Zener Barrier
500V Isolation	Units Will Pass A 500V Isolation Test	2728	B (BAS01ATEX7005) or any other barrier that
			conforms to system drawings on website

Notes: Special conditions of safe use for Group I & II. The free end of the cable on the integral cable version of the apparatus must be terminated in an appropriate dust-proof enclosure.

Intrinsically Safe Requirements	for IC3 Varitations		
HS-100IC3 Variation is certified as Catego	ry 3 equipment. These sensors	Certified Temperature Range	Ex ic IIC T4 Gc (-55°C ≤ Ta ≤ +110°C)
are only certified for use within Zones 2.			
		Terminal Parameters	Ui = 25.2V, li = 146mA, Pi = 0.92W
			Ci = 83nf
			Li 66µH
Certificate Details: Group II	IECEx BAS17.0054X		
(ignition temperature 130°C)	Baseefa7ATEX0069X	500V Isolation	Units will pass a 500V Isolation Test
	لاي) II 3G		
	Ex ic IIC T4 Gc	Special Conditions of Use:	The Ci and Li parameters listed on the
	(-55°C ≤ Ta ≤ +110°C)		equipment certificate must be taken into
			account when connecting this equipment.



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CE

X



HS-100IS Intrinsically Safe Accelerometer AC acceleration output via Braided Cable

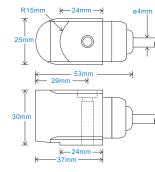
Key Features

- Intrinsically Safe with European, USA, South African, Indian and Australian approvals
- · Side entry for easy access

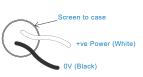
Industries

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





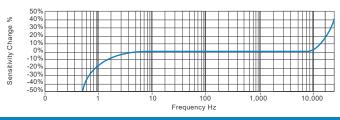




Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	185gms (nominal) body only
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Braided - length to be specified with order
Transverse Sensitivity	Less than 5%	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

Typical Frequency Response (at 100mV/g)



Applications

Environmental

Maximum Shock

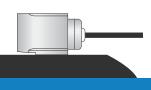
Sealing

EMC

Operating Temperature Range

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



see: attached certification details

IP65

5000g

EN61326-1:2013

Certifications











This product is certified in accordance with UL 913, 8th Ed. Rev. December 6, 2013 CAN/CSA C22.2 No. 157-92 (R2012) +Upd1 +Upd2



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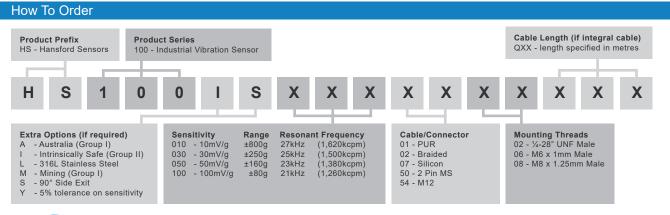
We reserve the right to alter the specification of this product without prior notice TS041 19

HS-100IS Intrinsically Safe Accelerometer AC acceleration output via Braided Cable

Intrinsically Safe Requirer	nents		
Maximum Cable Length	See website www.hansfordsensors.com	Cartified Temperature Dance	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +60°C) (Gas)
Maximum Cable Length	- see attached system drawing		T80°C IP65 Da (-55°C \leq Ta \leq +60°C) (Gas)
	- see allached system drawing		x ia IIC T4 Ga (-55°C \leq Ta \leq +110°C) (Gas)*
Contificate detailer Crown I	IECEx BAS07.0037X		
Certificate details: Group I	Baseefa07ATEX0149X	Ex la IIIC 113	30° C IP65 Da (-55°C \leq Ta \leq +110°C) (Dust)*
			Ex ia I Ma (-55°C ≤ Ta ≤ +110°C) (Mining)
	©I M1		*On request - consult Sales Office
	Ex ia I Ma		
	(-55°C ≤ Ta ≤ +110°C)	Australia Approval Group I	IECEx ITA 11.0013X
			Ex ia I Ma
Certificate details: Group II	IECEx BAS07.0035X		(-55°C ≤ Ta ≤ +110°C)
(ignition temperature 130°C)	Baseefa07ATEX0144X		
	الآھ 🕼 🕼 🕼	US/Canada Approvals	Certificate No. USTC/15/FAI/01350
	Ex ia IIC T4 Ga		2, Groups A - G, T4, -55°C to +110°C, IP65
	Ex ia IIIC T130ºC IP65 Da		one 0, AEx, ia, IIC, T4, Ga, -55°C to +110°C
	(-55°C ≤ Ta ≤ +110°C)	Zone 20, AEx,	ia, IIIC, T130°C, IP65, Da, -55°C to +110°C
Certificate details: Group II	IECEx BAS07.0035X		ision 1, 2, Groups A - G, T6, -55°C to +60°C
(ignition temperature 80°C)	Baseefa07ATEX0144X		Zone 0, AEx, ia, IIC, T6, Ga, -55°C to +60°C
	اا 1GD	Zone 20, AE	x, ia, IIIC, T80°C, IP65, DA, -55°C to +60°C
	Ex ia IIC T6 Ga		
	Ex ia IIIC T80°C IP65 Da	South African Approval	Certificate No. MASC S/16-0231X
	(-55°C ≤ Ta ≤ +60°C)		Group II (As Baseefa/ATEX)
			MASC M/16-0230X
Accelerometer System Certificate	Baseefa07Y0145		Group I (As Baseefa/ATEX)
	Ex ia IIC T6 (-55°C ≤ Ta ≤ +60°C)		
	Ex ia IIC T4 (-55°C ≤ Ta ≤ +110°C)	System Connections	see attached system drawings
	On request - consult Sales Office		
		Barrier	1 x Pepperl + Fuchs Galvanic Isolator
Terminal Parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W		KFD2-VR4-Ex1.26 (BAS02ATEX7206)
	Ci = 83nf		see attached system drawings
	Li/Ri = 15.4µH/Ohm	1 x MTL 2	Zener Barrier MTL7728+ (BAS01ATEX7217)
			or Pepperl + Fuchs Zener Barrier
500V Isolation	Units Will Pass A 500V Isolation Test	Z728	(BAS01ATEX7005) or any other barrier that
			conforms to system drawings on website

Notes: Special conditions of safe use for Group I & II. The free end of the cable on the integral cable version of the apparatus must be terminated in an appropriate dust-proof enclosure.

Intrinsically Safe Requirements for IC	C3 Varitations		
HS-100IC3 Variation is certified as Category 3 e	quipment. These sensors	Certified Temperature Range	Ex ic IIC T4 Gc (-55°C ≤ Ta ≤ +110°C)
are only certified for use within Zones 2.			
		Terminal Parameters	Ui = 25.2V, li = 146mA, Pi = 0.92W
			Ci = 83nf
			Li 66µH
Certificate Details: Group II	IECEx BAS17.0054X		
(ignition temperature 130°C)	Baseefa7ATEX0069X	500V Isolation	Units will pass a 500V Isolation Test
	لاي) II 3G		
	Ex ic IIC T4 Gc	Special Conditions of Use:	The Ci and Li parameters listed on the
	(-55°C ≤ Ta ≤ +110°C)		equipment certificate must be taken into
			account when connecting this equipment.





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HS-100IS Intrinsically Safe Accelerometer

AC acceleration output via Silicon Cable

Key Features

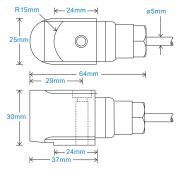
• Intrinsically Safe with European, USA, South African, Indian and Australian approvals

Side entry for easy access

Industries

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





Connection Details



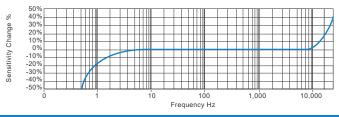
Technical Performance Mounted Base Resonance see 'How To Order' table (nominal) Sensitivity see: 'How To Order' table ±10% Nominal 80Hz at 22°C 2Hz (120cpm) to 10kHz (600kcpm) ± 5% Frequency Response 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB Isolation Base isolated see: 'How To Order' table Range Transverse Sensitivity Less than 5%

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	185gms (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)

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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

Typical Frequency Response (at 100mV/g)



Environmental

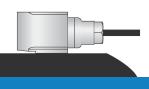
Mechanical

Operating Temperature Range Sealing Maximum Shock EMC see: attached certification details IP68 5000g EN61326-1:2013

Applications

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



Certifications









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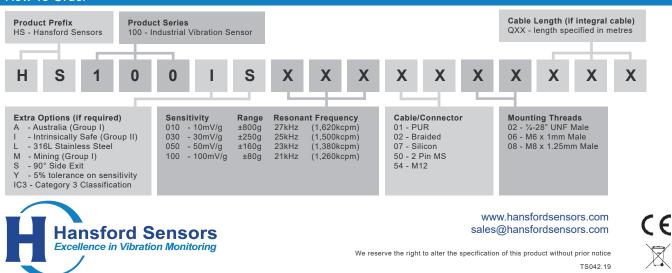
We reserve the right to alter the specification of this product without prior notice \$\$T\$S042.19

HS-100IS Intrinsically Safe Accelerometer AC acceleration output via Silicon Cable

Intrinsically Safe Requirer	nents		
Maximum Cable Length	See website www.hansfordsensors.com	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +60°C) (Gas)
	- see attached system drawing	Ex ia III	C T80°C IP65 Da (-55°C ≤ Ta ≤ +60°C) (Dust)
			Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +110°C) (Gas)*
Certificate details: Group I	IECEx BAS07.0037X	Ex ia IIIC T	130°C IP65 Da (-55°C ≤ Ta ≤ +110°C) (Dust)*
	Baseefa07ATEX0149X		Ex ia I Ma (-55°C ≤ Ta ≤ +110°C) (Mining)
	I M1		*On request - consult Sales Office
	Ex ia I Ma		
	(-55°C ≤ Ta ≤ +110°C)	Australia Approval Group I	IECEx ITA 11.0013X
			Ex ia I Ma
Certificate details: Group II	IECEx BAS07.0035X		(-55°C ≤ Ta ≤ +110°C)
(ignition temperature 130°C)	Baseefa07ATEX0144X		
	🖾 II 1GD	US/Canada Approvals	Certificate No. USTC/15/FAI/01350
	Ex ia IIC T4 Ga		1, 2, Groups A - G, T4, -55°C to +110°C, IP65
	Ex ia IIIC T130°C IP65 Da		Zone 0, AEx, ia, IIC, T4, Ga, -55°C to +110°C
	(-55°C ≤ Ta ≤ +110°C)	Zone 20, AE>	
Certificate details: Group II	IECEx BAS07.0035X		vision 1, 2, Groups A - G, T6, -55°C to +60°C
(ignition temperature 80°C)	Baseefa07ATEX0144X		Zone 0, AEx, ia, IIC, T6, Ga, -55°C to +60°C
	ا ا GD	-, , , -,, ,, ,	
	Ex ia IIC T6 Ga		
	Ex ia IIIC T80°C IP65 Da	South African Approval	Certificate No. MASC S/16-0231X
	(-55°C ≤ Ta ≤ +60°C)		Group II (As Baseefa/ATEX)
			MASC M/16-0230X
Accelerometer System Certificate	Baseefa07Y0145		Group I (As Baseefa/ATEX)
	Ex ia IIC T6 (-55°C ≤ Ta ≤ +60°C)		
	Ex ia IIC T4 (-55°C \leq Ta \leq +110°C)	System Connections	see attached system drawings
	On request - consult Sales Office		
T 1 1 B 1		Barrier	1 x Pepperl + Fuchs Galvanic Isolator
Terminal Parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W		KFD2-VR4-Ex1.26 (BAS02ATEX7206)
	Ci = 83nf		see attached system drawings
	Li/Ri = 15.4µH/Ohm	1 x MTL	Zener Barrier MTL7728+ (BAS01ATEX7217)
		770	or Pepperl + Fuchs Zener Barrier
500V Isolation	Units Will Pass A 500V Isolation Test	272	8 (BAS01ATEX7005) or any other barrier that
			conforms to system drawings on website

Notes: Special conditions of safe use for Group I & II. The free end of the cable on the integral cable version of the apparatus must be terminated in an appropriate dust-proof enclosure.

Intrinsically Safe Requirements for IC3 Varitations			
HS-100IC3 Variation is certified as Category 3 equipment. These sensors		Certified Temperature Range	Ex ic IIC T4 Gc (-55°C ≤ Ta ≤ +110°C)
are only certified for use within Zones 2.			
		Terminal Parameters	Ui = 25.2V, li = 146mA, Pi = 0.92W
			Ci = 83nf
			Li 66µH
Certificate Details: Group II	IECEx BAS17.0054X		
(ignition temperature 130°C)	Baseefa7ATEX0069X	500V Isolation	Units will pass a 500V Isolation Test
	⟨िµ II 3G		
	Ex ic IIC T4 Gc	Special Conditions of Use:	The Ci and Li parameters listed on the
	(-55°C ≤ Ta ≤ +110°C)		equipment certificate must be taken into
			account when connecting this equipment.
How To Order			



HS-100IS Intrinsically Safe Accelerometer AC acceleration output via PUR Cable

Key Features

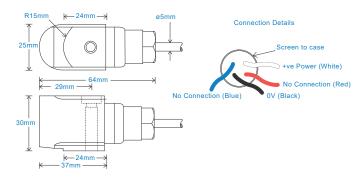
• Intrinsically Safe with European, USA, South African, Indian and Australian approvals

· Side entry for easy access

Industries

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





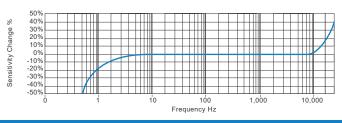
Technical Performance

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%

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	185gms (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 >10⁸ Ohms at 500 Volts

Typical Frequency Response (at 100mV/g)



Applications

Maximum Shock

Environmental

Sealing

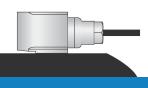
EMC

Operating Temperature Range

Mechanical

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

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



see: attached certification details

IP68

5000g

EN61326-1:2013

Certifications











This product is certified in accordance with UL 913, 8th Ed. Rev. December 6, 2013 CAN/CSA C22.2 No. 157-92 (R2012) +Upd1 +Upd2



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HS-100IS Intrinsically Safe Accelerometer AC acceleration output via PUR Cable

Intrinsically Safe Requirements			
Maximum Cable Length	See website www.hansfordsensors.com	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +60°C) (Gas)
	- see attached system drawing	Ex ia IIIC	T80°C IP65 Da (-55°C ≤ Ta ≤ +60°C) (Dust)
		E	x ia IIC T4 Ga (-55°C ≤ Ta ≤ +110°C) (Gas)*
Certificate details: Group I	IECEx BAS07.0037X	Ex ia IIIC T1	30°C IP65 Da (-55°C ≤ Ta ≤ +110°C) (Dust)*
	Baseefa07ATEX0149X		Ex ia I Ma (-55°C ≤ Ta ≤ +110°C) (Mining)
	ال M1		*On request - consult Sales Office
	Ex ia I Ma		
	(-55°C ≤ Ta ≤ +110°C)	Australia Approval Group I	IECEx ITA 11.0013X
			Ex ia I Ma
Certificate details: Group II	IECEx BAS07.0035X		(-55°C ≤ Ta ≤ +110°C)
(ignition temperature 130°C)	Baseefa07ATEX0144X		
	🖗 II 1GD	US/Canada Approvals	Certificate No. USTC/15/FAI/01350
	Ex ia IIC T4 Ga		, 2, Groups A - G, T4, -55°C to +110°C, IP65
	Ex ia IIIC T130°C IP65 Da		one 0, AEx, ia, IIC, T4, Ga, -55°C to +110°C
	(-55ºC ≤ Ta ≤ +110ºC)	Zone 20, AEx,	ia, IIIC, T130°C, IP65, Da, -55°C to +110°C
Certificate details: Group II	IECEx BAS07.0035X		ision 1, 2, Groups A - G, T6, -55°C to +60°C
(ignition temperature 80°C)	Baseefa07ATEX0144X		Zone 0, AEx, ia, IIC, T6, Ga, -55°C to +60°C
	الآھ) ا		
	Ex ia IIC T6 Ga		
	Ex ia IIIC T80°C IP65 Da	South African Approval	Certificate No. MASC S/16-0231X
	(-55°C ≤ Ta ≤ +60°C)		Group II (As Baseefa/ATEX)
			MASC M/16-0230X
Accelerometer System Certificate			Group I (As Baseefa/ATEX)
	Ex ia IIC T6 (-55°C ≤ Ta ≤ +60°C)		
	Ex ia IIC T4 (-55°C \leq Ta \leq +110°C)	System Connections	see attached system drawings
	On request - consult Sales Office	5	
T 1 1 D 1		Barrier	1 x Pepperl + Fuchs Galvanic Isolator
Terminal Parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W		KFD2-VR4-Ex1.26 (BAS02ATEX7206)
	Ci = 83nf	4 NT1	see attached system drawings
	Li/Ri = 15.4µH/Ohm	1 x MIL .	Zener Barrier MTL7728+ (BAS01ATEX7217)
E00) (logistics		7700	or Pepperl + Fuchs Zener Barrier
500V Isolation	Units Will Pass A 500V Isolation Test	2728	(BAS01ATEX7005) or any other barrier that
			conforms to system drawings on website

Notes: Special conditions of safe use for Group I & II. The free end of the cable on the integral cable version of the apparatus must be terminated in an appropriate dust-proof enclosure.

	Intrinsically Safe Requirements for IC3 Varitations			
HS-100IC3 Variation is certified as Category 3 equipment. These sensors		Certified Temperature Range	Ex ic IIC T4 Gc (-55°C ≤ Ta ≤ +110°C)	
	are only certified for use within Zones 2.			
			Terminal Parameters	Ui = 25.2V, li = 146mA, Pi = 0.92W
				Ci = 83nf
				Li 66µH
	Certificate Details: Group II	IECEx BAS17.0054X		
	(ignition temperature 130°C)	Baseefa7ATEX0069X	500V Isolation	Units will pass a 500V Isolation Test
		لاي) II 3G		
		Ex ic IIC T4 Gc	Special Conditions of Use:	The Ci and Li parameters listed on the
		(-55°C ≤ Ta ≤ +110°C)		equipment certificate must be taken into
				account when connecting this equipment.
	How To Order			

