Three AC outputs via M12 Connector

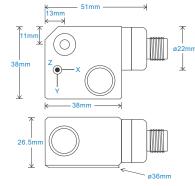
Key Features

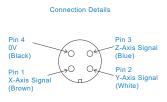
- · Output via three axies
- For use with data collector
- Customisable features

Industries

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







Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
	+3kHz for aluminium version
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C per axies
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 unless specified Aluminium
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	235gms (nominal) - Stainless Steel
	115gms (nominal) - Aluminium
Screened Cable Assembly	HS-AC010 - straight
Mounting Threads	see: 'How To Order' table

Electrical **Electrical Noise** 0.1mg max Current Range 0.5mA to 8mA **Bias Voltage** 10 - 12 Volts DC Settling Time 1 second **Output Impedance** 200 Ohms max. **Case Isolation** >108 Ohms at 500 Volts

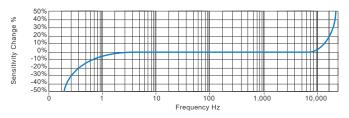
Environmental

Mechanical

Operating Temperature Range Sealing Maximum Shock EMC

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

Typical Frequency Response (at 100mV/g)

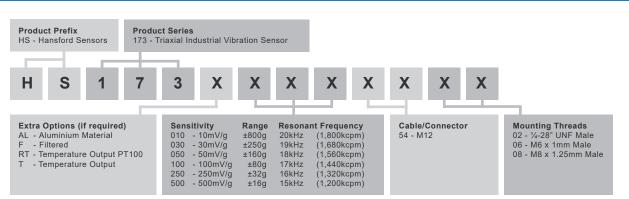


Applications

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





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CE

We reserve the right to alter the specification of this product without prior notice TS262.13

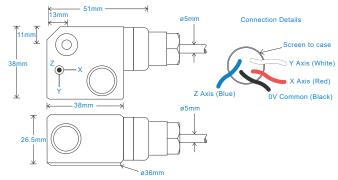
Key Features

- · Output via three axes
- Waterproof
- Resistant to oil

Industries

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

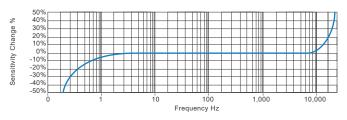




Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel unless specified Aluminium
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Shear
	Nominal 80Hz at 22°C per axies	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	235gms (nominal) - Stainless Steel
	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
		Submersible Depth	100 metres max (10 bar)

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-30 to 90°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	1 second	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 ⁸ Ohms at 500 Volts		

Typical Frequency Response (at 100mV/g)



Applications

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

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



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We reserve the right to alter the specification of this product without prior notice TS983.3

HS-173 Premium Triaxial Accelerometer AC acceleration output via 4 Core Polyolefin HFFR

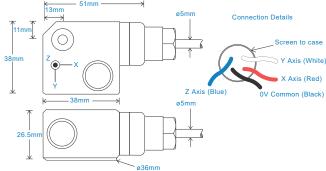
Key Features

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

Industries

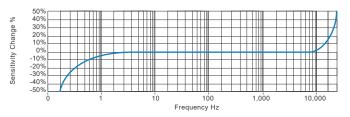
Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical





Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel unless specified Aluminium
	+3kHz for aluminium version	Sensing Element/Construction	on PZT/Shear
Sensitivity	see: 'How To Order' table ±10%	Mounting Torque	8Nm
	Nominal 80Hz at 22°C per axies	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Weight	235gms (nominal) - Stainless Steel
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%		115gms (nominal) - Aluminium
	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 Pol	lyolefin HFFR - length to be specified with order
Transverse Sensitivity	Less than 5%	Mounting Threads	see: 'How To Order' table
		Submersible Depth	100 metres max (10 bar)
Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Rang	-55 to 130°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	1 second	EMC	EN61326-1:2013
Setting Time	T Second		EN01320-1.2013

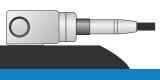
Typical Frequency Response (at 100mV/g)



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

Output Impedance Case Isolation

Product Prefix HS - Hansford Sensors	Product Series 173 - Triaxial Industrial Vib	ration Sensor				
H S 1	7 3 X	X X	X X	X X	X	
Extra Options (if required AL - Aluminium Material F - Filtered	Sensitivity 010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g	Range Resona ±800g 20kHz ±250g 19kHz ±160g 18kHz ±80g 17kHz ±32g 16kHz ±16g 15kHz	ant Frequency (1,800kcpm) (1,680kcpm) (1,560kcpm) (1,440kcpm) (1,320kcpm) (1,200kcpm)	Cable/Connector 37 - 4 Core Polyo		Mounting Threads 02 - ¼-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Ma

200 Ohms max.

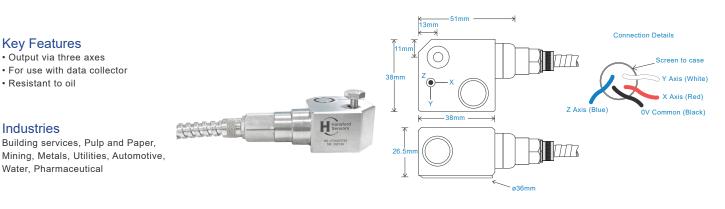
>108 Ohms at 500 Volts



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We reserve the right to alter the specification of this product without prior notice TS1047.5

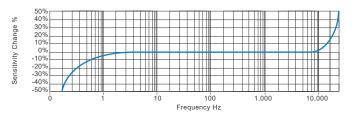
HS-173 Premium Triaxial Accelerometer AC acceleration output via 4 Core Polyolefin HFFR with Protective Conduit



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel unless specified Aluminium
	+3kHz for aluminium version	Sensing Element/Construction	PZT/Shear
Sensitivity	see: 'How To Order' table ±10%	Mounting Torque	8Nm
	Nominal 80Hz at 22°C per axies	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Weight	235gms (nominal) - Stainless Steel
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%		115gms (nominal) - Aluminium
	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 Polyo	lefin HFFR - length to be specified with order
Transverse Sensitivity	Less than 5%	Mounting Threads	see: 'How To Order' table
		Submersible Depth	100 metres max (10 bar)
Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-55 to 130°C

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

Typical Frequency Response (at 100mV/g)



Applications

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.)



IP68

5000g EN61326-1:2013

How To Order

Product Prefix HS - Hansford Sensors	Product Series 173 - Triaxial Industrial Vit	oration Sensor			
H S 1	7 3 X	x x	X X	x x x	
Extra Options (if required) AL - Aluminium Material F - Filtered	Sensitivity 010 - 10mV/g 030 - 30mV/g 050 - 50mV/g 100 - 100mV/g 250 - 250mV/g 500 - 500mV/g	Range Resona ±800g 20kHz ±250g 19kHz ±160g 18kHz ±80g 17kHz ±32g 16kHz ±16g 15kHz	ant Frequency (1,800kcpm) (1,680kcpm) (1,560kcpm) (1,440kcpm) (1,320kcpm) (1,200kcpm)	Cable/Connector 37C - 4 Core Polyolefin HFFR with Protective Conduit	Mounting Threads 02 - ¼-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male



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We reserve the right to alter the specification of this product without prior notice TS988.2

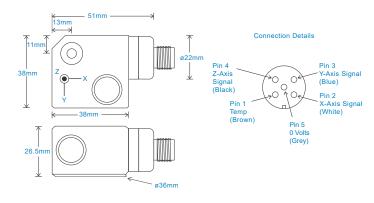
HS-173T Premium Triaxial Accelerometer Three AC and temperature outputs via M12 Connector

Key Features

Industries

•Temperature Output •Output via three axes •For use with data collector •Customisable features





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

Technical Performance	
Mounted Base Resonance	see 'How To Order' table (nominal)
	+3kHz for aluminium version
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C per axies
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
Temperature Output	10mV/°C
Transverse Sensitivity	Less than 5%

Case Material		Stainless Steel unless specified Aluminium
Sensing Eleme	ent/Construction	PZT/Shear
Mounting Torqu	ue	8Nm
Mounting Bolt	Provided	see: 'How To Order' table x 30mm long
Weight		235gms (nominal) - Stainless Steel
		115gms (nominal) - Aluminium
Screened Cabl	le Assembly	HS-AC303 - straight
		HS-AC032 - right angle
Mounting Threa	ads	see: 'How To Order' table

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

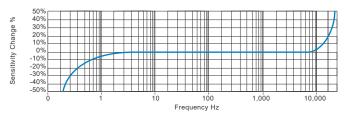
Environmental

Mechanical

Operating Temperature Range Sealing Maximum Shock EMC

-55 to 150°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.)



Product Prefix HS - Hansford Sensors		t Series iaxial Inc	lustrial Vib	ration Se	nsor						
H S 1	7	3	Т	X	X	X	X	X	X	X	
Extra Options (if required) AL - Aluminium Material F - Filtered RT - Temperature Output PT T - Temperature Output	100	030 - 050 - 100 - 250 -	tivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 20kHz 19kHz 18kHz 17kHz 16kHz 15kHz	nt Freque (1,800kg (1,680kg (1,560kg (1,440kg (1,320kg (1,200kg	opm) opm) opm) opm) opm)		Connecto Pin M12	or	Mounting Threads 02 - ¼-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Ma



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We reserve the right to alter the specification of this product without prior notice TS825.5

AC Acceleration and Temperature Output via 5 Core PTFE Cable

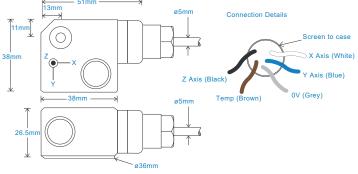
Key Features

- High Temperature
- Output via 3 axes
- For use with data collector

Industries

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

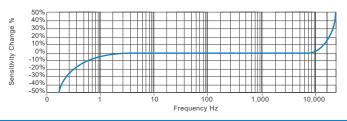




Technical Performance Mechanical Mounted Base Resonance see 'How To Order' table (nominal) Case Material Stainless Steel Sensitivity see: 'How To Order' table ±10% Sensing Element/Construction PZT/Shear Nominal 80Hz at 22°C per axies Mounting Torque 8Nm see: 'How To Order' table x 30mm long **Frequency Response** 2Hz (120cpm) to 10kHz (600kcpm) ± 5% Mounting Bolt Provided Weight-Sensor Only 1.5Hz (90cpm) to 12kHz (720kcpm) ± 10% 235gms (nominal) - Stainless Steel Maximum Cable Length 1000 metres 0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB Isolation Base isolated Standard Cable Length 5 metres Screened Cable PTFE Cable - length to be specified with order see: 'How To Order' table Range Temperature Output 10 mV/°C - 150°C Mounting Threads see: 'How To Order' table Submersible Depth 100 metres max (10 bar) Transverse Sensitivity Less than 5%

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

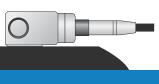
Typical Frequency Response (at 100mV/g)



Applications

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

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



-55 to 150°C

EN61326-1:2013

IP68 5000g

How To Order

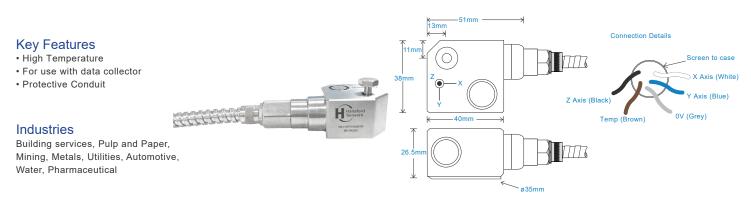
Product Prefix HS - Hansford Sensors		t Series Tiaxial Inc	lustrial Vib	ration Se	nsor							
H S 1	7	3	Н	Т	X	X	X	X	X	X	X	
Extra Options (if required) F - Filtered H - High Temperature T - Temperature Output		030 - 050 - 100 - 250 -	ivity 10mV/g 30mV/g 50mV/g 100mV/g 250mV/g 500mV/g	Range ±800g ±250g ±160g ±80g ±32g ±16g	Resona 20kHz 19kHz 18kHz 17kHz 16kHz 15kHz	nt Freque (1,800kg (1,680kg (1,560kg (1,440kg (1,320kg (1,200kg	:pm) :pm) :pm) :pm) :pm)	38 - 5 38C - 5	Connecto Core PTF 5 Core PT otective c	E Cable FE Cable	02 - ½ 06 - M	ting Thre -28" UNI 6 x 1mm 8 x 1.25



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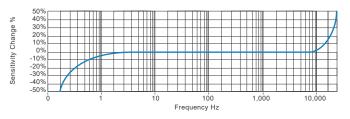
We reserve the right to alter the specification of this product without prior notice TS1131

HS-173HT Premium Triaxial Accelerometer AC Acceleration and Temperature Output via 5 Core PTFE Cable with Protective Conduit



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/Constr	ruction PZT/Shear
	Nominal 80Hz at 22°C per axies	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-Sensor Only	235gms (nominal) - Stainless Steel
	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	PTFE Cable - length to be specified with order
Temperature Output	10 mV/°C - 150°C	Mounting Threads	see: 'How To Order' table
Transverse Sensitivity	Less than 5%	Submersible Depth	100 metres max (10 bar)
-		Conduit Material	Stainless Steel
		Conduit Length Co	onduit Length is approx. 0.5m shorter than the cable

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



Applications

Environmental

Maximum Shock

Sealing

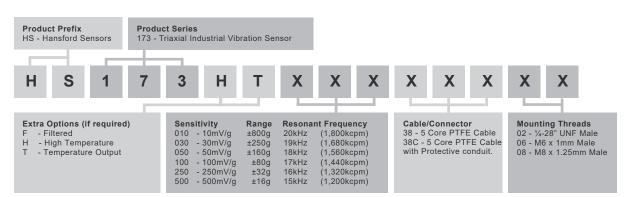
EMC

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.)

How To Order





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CE

-55 to 150°C

EN61326-1:2013

IP68

5000g

We reserve the right to alter the specification of this product without prior notice TS1011.3

Three AC and PT100 temperature outputs via 6 Pin 62GB connector

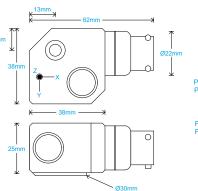
Key Features

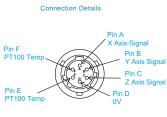
- Temperature Output •
- Output via three axies
- For use with data collector ٠
- Customisable features



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



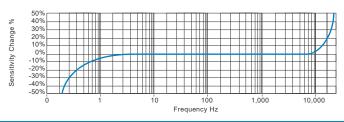




Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel unless specified Aluminium
	+3kHz for aluminium version	Sensing Element/Construction	PZT/Shear
Sensitivity	see: 'How To Order' table ±10%	Mounting Torque	8Nm
	Nominal 80Hz at 22°C per axies	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Weight	235gms (nominal) - Stainless Steel
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%		115gms (nominal) - Aluminium
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Connector	HS-AA125 Amphenol
Isolation	Base isolated		62GB-16F10-06SN
Range	see: 'How To Order' table	Mounting Threads	see: 'How To Order' table
Temperature Output	PT100 (-50°C to +500°C)		
Transverse Sensitivity	Less than 5%		

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

Typical Frequency Response (at 100mV/g)



Operating Temperature Range

Environmental

Sealing Maximum Shock EMC

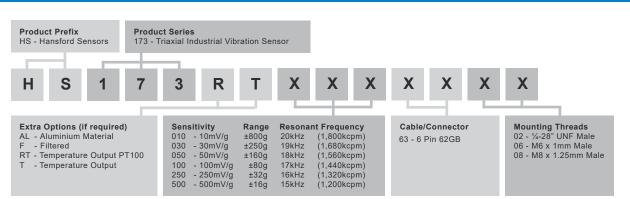
-55 to 130°C IP67 5000g EN61326-1:2013

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





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CE

We reserve the right to alter the specification of this product without prior notice TS855.4

Three AC outputs via M12 Connector

Key Features

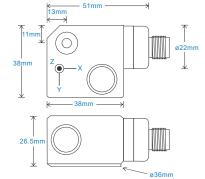
• Intrinsically Safe with European, USA and Australian approvals

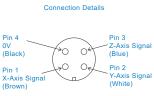
- Output via three axies
- For use with data collectorCustomisable features

Industries

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







Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
	+3kHz for aluminium version
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 22°C per axies
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 unle
Sensing Element/Construction	
Mounting Torque	
Mounting Bolt Provided	see: 'How To Or
Weight	235gms (no
	115ams

Screened Cable Assembly Mounting Threads

Environmental

Maximum Shock

Sealing

EMC

US

710318

Operating Temperature Range

Mechanical

nless Steel unless specified Aluminium PZT/Shear 8Nm see: 'How To Order' table x 30mm long 235gms (nominal) - Stainless Steel 115gms (nominal) - Aluminium HS-AC010 - straight see: 'How To Order' table

see: attached certification details

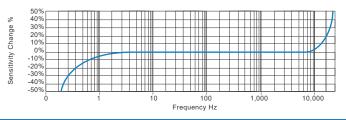
IP67

5000g

EN61326-1:2013

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

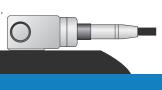
Typical Frequency Response (at 100mV/g)



Applications

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

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



Certifications





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



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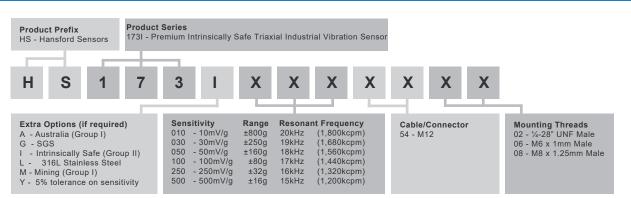
We reserve the right to alter the specification of this product without prior notice $$\mathsf{TS923.5}$$

Three AC outputs via M12 Connector

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

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

How To Order





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Three AC outputs via PUR cable

Key Features

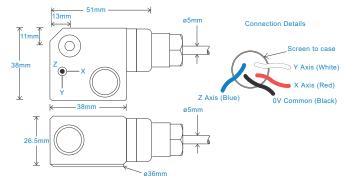
 Intrinsically Safe with European, USA and Australian approvals

- Output via three axies
- For use with data collectorCustomisable features

Industries

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



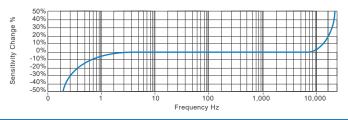


Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel unless specified Aluminium
	+3kHz for aluminium version	Sensing Element/Construction	PZT/Shear
Sensitivity	see: 'How To Order' table ±10%	Mounting Torque	8Nm
	Nominal 80Hz at 22°C per axies	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Weight	235gms (nominal) - Stainless Steel
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%		115gms (nominal) - Aluminium
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	See certificate
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
		Submersible Depth	100 metres max (10 bar)
Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	see: attached certification details
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	1 second	EMC	EN61326-1:2013

200 Ohms max.

>108 Ohms at 500 Volts

Typical Frequency Response (at 100mV/g)



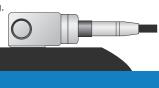
Applications

US

710318

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

Output Impedance

Case Isolation





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



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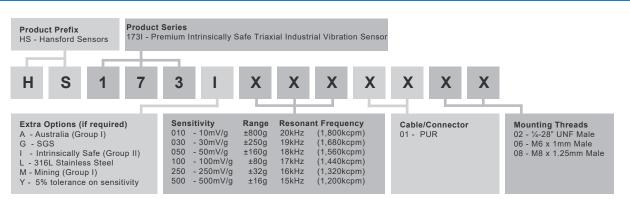
Three AC outputs via PUR cable

Intrinsically Safe Requirements

Certificate details: Group II and III	IECExBAS 18.0082X	Certified Temperature Range Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +69°C) (Gas)
	Baseefa18ATEX0130X	Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +104°C) (Gas)
	🖾 II 1GD	Ex ia IIIB T102°C Da (-55°C ≤ Ta ≤ +69°C) (Dust)
	Ex ja II T6T4	Ex ia IIIB T131°C Da (-55°C ≤ Ta ≤ +98°C) (Dust)
	Ex ia IIIC T135°C Da	Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust)
	Ex ia IIIB T102°C…T131°C Da	Ex ia I Ma (-55°C ≤ Ta ≤ +104°C) (Dust)
Certificate details: Group I	IECEx 18.0082X	Australia Approval Group I IECEx ExTC 18.0032X
	Baseefa18ATEX00130X	Ex ia I Ma
	الا <i>ن</i> ا الا	(-55°C ≤ Ta ≤ +104°C)
	Ex ia I Ma	
	Ex ia IIIC T110°CT145°C Da	US/Canada Approvals Certificate No. SGSNA/19/BAS/00005
		CI I, II, III, Div 1, 2 Gr A-G T*
Terminal Parameters 10m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W	CI I Zn 0 AEx ia IIC T6T4 Ga
	Ci = 7.4nF	CI II Zn 20 AEx ia IIIC T135°C Da
	Li= 7.2µH	Ex ia IIC T6T4 Ga
		Ex ia IIIC T135°C Da
Terminal Parameters 92m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W	
	Ci = 38.3nF	Or
	Li= 66µH	
		CI I, II, III, Div 1, 2 Gr A-D G and F T*
500V Isolation	Units Will Pass A 500V Isolation Test	CI I Zn 0 AEx ia IIC T6T4 Ga
		CI II Zn 20 AEx ia IIIC T135⁰C Da
Standards Applied to Product	EN IEC 60079-0:2018	CI II Zn 20 AEx ia IIIB T102°CT131°C Da
	EN 60079-11:2012	Ex ja IIC T6T4 Ga
		Ex ia IIIC T135ºC Da
	IEC 60079-0 Edition 7 2017	Ex ja IIIB T102°CT131°C Da
	IEC 60079-11 Edition 6 2011	
		Control Drawing M06-088-A
Barrier	1 x Pepperl + Fuchs Galvanic Isolator	
	KFD2-VR4-Ex1.26 (BAS02ATEX7206)	
1 x MTL Zene	r Barrier MTL7728+ (BAS01ATEX7217)	
or Pepperl + Fuchs Zener Barrier		
	S01ATEX7005) or any other barrier that	
	conforms with the terminal parameters	

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

How To Order





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Three AC outputs via PUR cable with Protective Conduit

Key Features

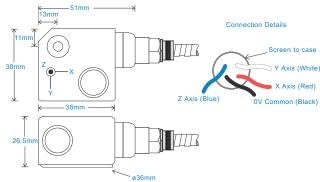
 Intrinsically Safe with European, USA and Australian approvals

- Output via three axies
- For use with data collectorProtective Conduit

Industries

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

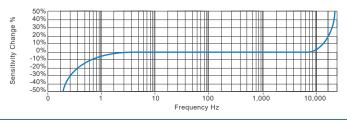




Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table ±10%	Sensing Element/Construction	PZT/Shear
	Nominal 80Hz at 22°C per axies	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) ± 5%	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) ± 10%	Weight	235gms (nominal) - Stainless Steel
	0.8Hz (48cpm) to 15kHz (900kcpm) ± 3dB	Maximum Cable Length	See certificate
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
		Submersible Depth	100 metres max (10 bar)

Electrical		Environmental	
Elocatodi		Environmenten	
Electrical Noise	0.1mg max	Operating Temperature Range	see: attached certification details
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	1 second	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 ⁸ Ohms at 500 Volts		

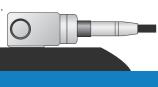
Typical Frequency Response (at 100mV/g)



Applications

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

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



Certifications





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



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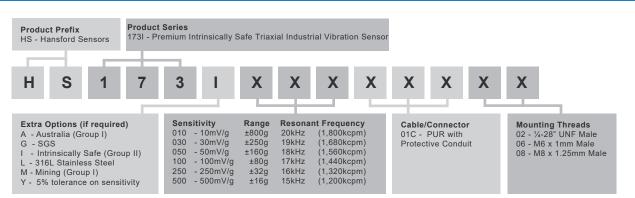


Three AC outputs via PUR cable with Protective Conduit

Intrinsically Safe Requireme	ents		
Certificate details: Group II and III	IECExBAS 18.0082X Baseefa18ATEX0130X	Certified Temperature Range Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +69°C) (Gas) Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +104°C) (Gas)	
	🖾 II 1GD	Ex ia IIIB T102°C Da (-55°C ≤ Ta ≤ +69°C) (Dust)	
	Ex ia II T6T4	Ex ia IIIB T131°C Da (-55°C ≤ Ta ≤ +98°C) (Dust)	
	Ex ia IIIC T135°C Da	Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust)	
	Ex ia IIIB T102ºCT131ºC Da	Ex ia I Ma (-55°C ≤ Ta ≤ +104°C) (Dust)	
Certificate details: Group I	IECEx 18.0082X	Australia Approval Group I IECEx ExTC 18.0032X	
	Baseefa18ATEX0130X	Ex ia I Ma	
	[™] I M 1	(-55°C ≤ Ta ≤ +104°C)	
	Ex ia I Ma		
	Ex ia IIIC T110°CT145°C Da	US/Canada Approvals Certificate No. SGSNA/19/BAS/00005	
		CI I, II, III, Div 1, 2 Gr A-G T*	
Terminal Parameters 10m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W	CI I Zn 0 AEx ia IIC T6T4 Ga	
	Ci = 7.4nF	CI II Zn 20 AEx ia IIIC T135°C Da	
	Li= 7.2µH	Ex ia IIC T6T4 Ga	
		Ex ia IIIC T135°C Da	
Terminal Parameters 92m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W		
	Ci = 38.3nF	Or	
	Li= 66µH		
		CI I, II, III, Div 1, 2 Gr A-D G and F T*	
500V Isolation	Units Will Pass A 500V Isolation Test	CI I Zn 0 AEx ia IIC T6T4 Ga	
Standards Applied to Product	EN IEC 60079-0:2018	CI II Zn 20 AEx ia IIIC T135°C Da	
Standards Applied to Floduct	EN 60079-0.2018	CI II Zn 20 AEx ia IIIB T102°CT131°C Da	
	EN 60079-11.2012	Ex ia IIC T6T4 Ga	
	IEC 60079-0 Edition 7 2017	Ex ia IIIC T135°C Da	
	IEC 60079-11 Edition 6 2011	Ex ia IIIB T102ºCT131ºC Da	
		Control Drawing M06-088-A	
Barrier	1 x Pepperl + Fuchs Galvanic Isolator	Control Drawing M00-088-A	
	KFD2-VR4-Ex1.26 (BAS02ATEX7206)		
	Barrier MTL7728+ (BAS01ATEX7200)		
or Pepperl + Fuchs Zener Barrier			
Z728 (BAS	01ATEX7005) or any other barrier that		
	conforms with the terminal parameters		
	·		

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

How To Order





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