

HS-150I Premium Intrinsically Safe Accelerometer

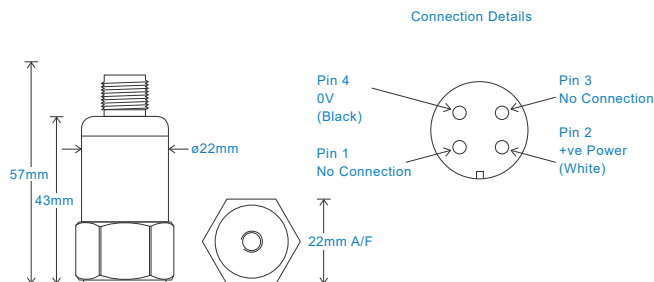
AC acceleration output via M12 Connector

Key Features

- Intrinsically Safe with European, USA, Indian and Australian approvals
- For use with data collector

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

Mechanical

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

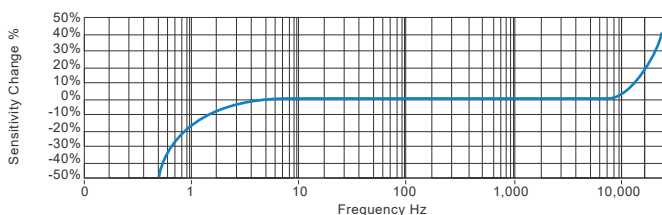
Electrical

Excitation Voltage:	18-30Volts 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	see: attached certification details
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

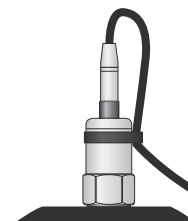
Typical Frequency Response (at 100mV/g)



Applications

팬, 모터, 펌프, 압축기, 원심분리기, 컨베이어, 공기 처리기, 기어박스, 롤, 건조기, 프레스, 냉각, VAC, 스펀들, 공작 기계, 공정 장비

진동 센서는 평평한 표면에 단단히 고정해야 합니다 (반드시 평평한 표면을 제작하고 케이블을 센서 본체에 고정해야 할 수도 있습니다.)



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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sales@hansfordsensors.com

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

TS900.6



HS-150I Premium Intrinsically Safe Accelerometer

AC acceleration output via M12 Connector

Intrinsically Safe Requirements

Maximum Cable Length	See website www.hansfordsensors.com	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +57°C) (Gas) Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +103°C) (Gas)
Certificate details: Group I	IECEX 18.0082X Baseefa18ATEX0130X ⓈI M 1 Ex ia I Ma		Ex ia IIIB T110°C Da (-55°C ≤ Ta ≤ +57°C) (Dust) Ex ia IIIB T145°C Da (-55°C ≤ Ta ≤ +92°C) (Dust) Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust) Ex ia I Ma (-55°C ≤ Ta ≤ +103°C) (Mining)
Certificate details: Group II and III	IECEX 18.0082X Baseefa18ATEX0130X ⓈII 1GD Ex ia IIC T6..T4 Ga Ex ia IIIC T135°C Da Ex ia IIIB T110°C..T145°C Da	Australian Approval Group I	IECEX ExTC 18.0032X Ex ia I Ma (-55°C < Ta < +104°C)
Terminal Parameters Connector	Ui = 28V, Ii = 93mA, Pi = 0.65W Ci = 1.2nF Li = 0	US/Canada Approvals	Certificate No. SGSNA/19/BAS/00005 CI I, II, III, Div 1, 2 Gr A-G T* CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIC T135°C Da Ex ia IIC T6...T4 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 IEC 60079-0 Edition 7 2017 IEC 60079-11 Edition 6 2011		CI I, II, III, Div 1, 2 Gr A-D G and F T* CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIB T110°C...T145°C Da Ex ia IIC T6...T4 Ga Ex ia IIIC T110°C...T145°C Da
Barrier	1 x Pepperl + Fuchs Galvanic Isolator KFD2-VR4-Ex1.26 (BAS02ATEX7206) 1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217) or Pepperl + Fuchs Zener Barrier Z728 (BAS01ATEX7005) or any other barrier that conforms with the terminal parameters	Control Drawing	M06-083-A Overbraided Cable M06-084-A PUR Cable M06-085-A Silicone Cable M06-086-A FR PUR Cable M06-087-A Various Cables (HS-150IT Only)

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

Product Prefix	Product Series										
HS - Hansford Sensors	150I - Premium Intrinsically Safe Accelerometer										
		H	S	1	5	0	I	X	X	X	X
Extra Options (if required)											
A - Australia (Group I)											
G - SGS (US/Canada Approval)											
I - Intrinsically Safe (Group II)											
L - 316L Stainless Steel											
M - Mining (Group I)											
S - 90° Side Exit											
Y - 5% tolerance on sensitivity											
T - Temperature											
		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
		010 - 10mV/g		±800g		34kHz (2,040kcpm)		01 - PUR		01 - ¼-28" UNF Female	
		030 - 30mV/g		±250g		33kHz (1,980kcpm)		02 - Braided		02 - ¼-28" UNF Male	
		050 - 50mV/g		±160g		32kHz (1,920kcpm)		07 - Silicon		05 - Quick Fit Female	
		100 - 100mV/g		±80g		30kHz (1,800kcpm)		08 - Flame Retardant		06 - M6 x 1mm Male	
		250 - 250mV/g		±32g		28kHz (1,680kcpm)		50 - 2 Pin MS		08 - M8 x 1.25mm Male	
		500 - 500mV/g		±16g		26kHz (1,560kcpm)		52 - 3 Pin MS		10 - M10 x 1.5mm Male	
								54 - M12			

HS-150I Premium Intrinsically Safe Accelerometer

AC acceleration output via 2 Pin MS Connector

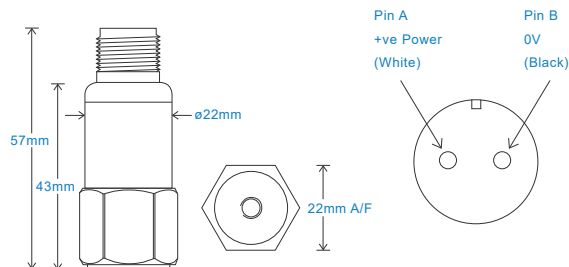
Connection Details

Key Features

- Intrinsically Safe with European, USA, Indian and Australian approvals
- For use with data collector

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

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Weight	106gms (nominal) body only
Screened Cable Assembly	see: www.hansfordsensors.com for options
Connector	HS-AA004 - non-booted HS-AA053 or HS-AA054 - booted
Mounting Threads	see: 'How To Order' table

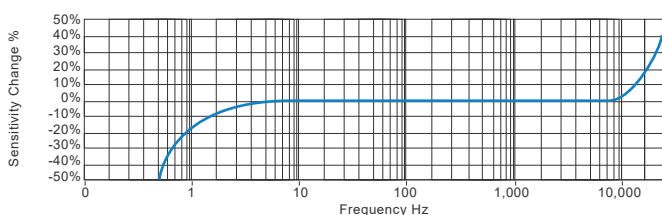
Electrical

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

Environmental

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

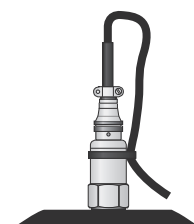
Typical Frequency Response (at 100mV/g)



Applications

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

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



Certificates



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
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 UL 913, 8th Ed. Rev. October 16, 2015



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TS897.8



HS-150I Premium Intrinsically Safe Accelerometer

AC acceleration output via 2 Pin MS Connector

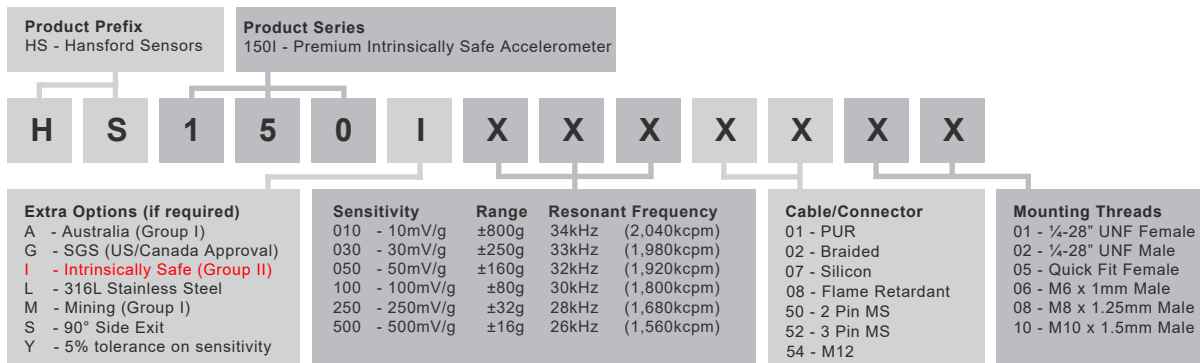
Intrinsically Safe Requirements

Maximum Cable Length	See website www.hansfordsensors.com	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +57°C) (Gas) Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +103°C) (Gas)
Certificate details: Group I	IECEX 18.0082X Baseefa18ATEX0130X ⓈI M 1 Ex ia I Ma		Ex ia IIIB T110°C Da (-55°C ≤ Ta ≤ +57°C) (Dust) Ex ia IIIB T145°C Da (-55°C ≤ Ta ≤ +92°C) (Dust) Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust) Ex ia I Ma (-55°C ≤ Ta ≤ +103°C) (Mining)
Certificate details: Group II and III	IECEX 18.0082X Baseefa18ATEX0130X ⓈII 1GD Ex ia IIC T6..T4 Ga Ex ia IIIC T135°C Da Ex ia IIIB T110°C..T145°C Da	Australian Approval Group I	IECEX ExTC 18.0032X Ex ia I Ma (-55°C < Ta < +104°C)
Terminal Parameters Connector	Ui = 28V, Ii = 93mA, Pi = 0.65W Ci = 1.2nF Li = 0	US/Canada Approvals	Certificate No. SGSNA/19/BAS/00005 CI I, II, III, Div 1, 2 Gr A-G T* CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIC T135°C Da Ex ia IIC T6...T4 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 IEC 60079-0 Edition 7 2017 IEC 60079-11 Edition 6 2011		CI I, II, III, Div 1, 2 Gr A-D G and F T* CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIB T110°C...T145°C Da Ex ia IIC T6...T4 Ga Ex ia IIIC T110°C...T145°C Da
Barrier	1 x Pepperl + Fuchs Galvanic Isolator KFD2-VR4-Ex1.26 (BAS02ATEX7206) 1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217) or Pepperl + Fuchs Zener Barrier Z728 (BAS01ATEX7005) or any other barrier that conforms with the terminal parameters	Control Drawing	M06-083-A Overbraided Cable M06-084-A PUR Cable M06-085-A Silicone Cable M06-086-A FR PUR Cable M06-087-A Various Cables (HS-150IT Only)

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



HS-150I Premium Intrinsically Safe Accelerometer

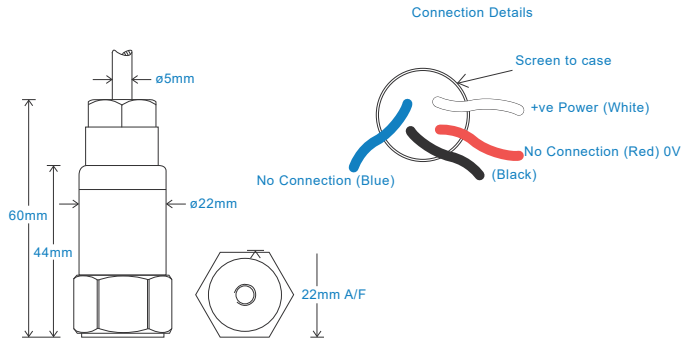
AC acceleration output via PUR Cable

Key Features

- Intrinsically Safe with European, USA, Indian and Australian approvals
- For use with data collector

Industries

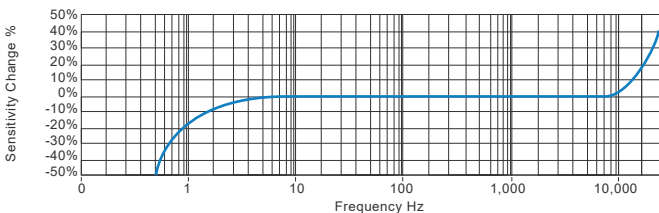
Building services, Pulp and Paper,
Mining, Metals, Utilities, Automotive,
Water, Pharmaceutical



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C	Sensing Element/Construction	PZT/Shear
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$	Mounting Torque	8Nm
Isolation	Base isolated	Weight	106gms (nominal) body only
Range	see: 'How To Order' table	Maximum Cable Length	See certificate
Transverse Sensitivity	Less than 5%	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		Environmental	
Excitation Voltage:	18-30Volts DC	Operating Temperature Range	see: attached certification details
Electrical Noise	0.1mg max	Sealing	IP68
Current Range	0.5mA to 8mA	Maximum Shock	5000g
Bias Voltage	10 - 12 Volts DC	EMC	EN61326-1:2013
Settling Time	2 seconds		
Output Impedance	200 Ohms max.		
Case Isolation	$>10^8$ Ohms at 500 Volts		

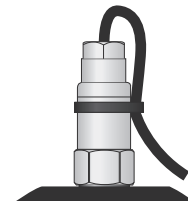
Typical Frequency Response (at 100mV/g)



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.)



Certification



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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TS898.6



HS-150I Premium Intrinsically Safe Accelerometer

AC acceleration output via PUR cable

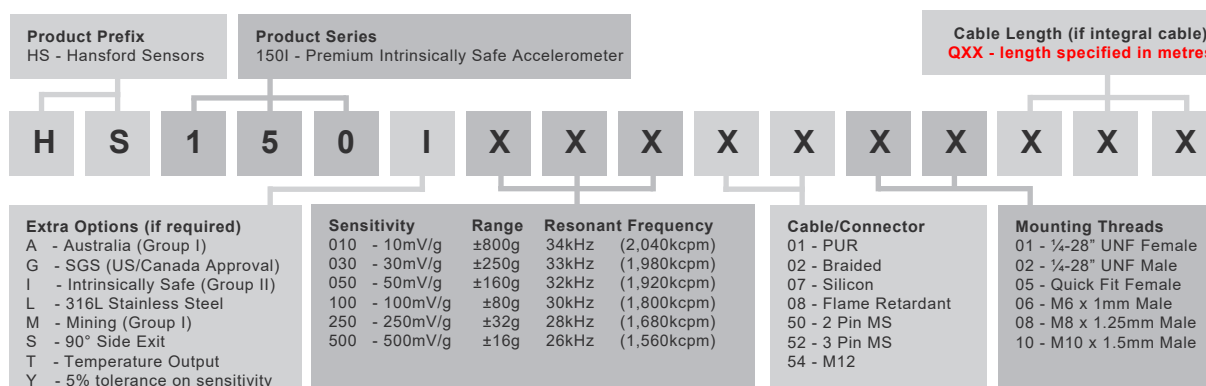
Intrinsically Safe Requirements

Sensor Maximum Cable Length	Up to 92 metres	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +57°C) (Gas) Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +103°C) (Gas)
Certificate details: Group I	IECEEx 18.0082X Baseefa18ATEX0130X Ⓔ I M 1 Ex ia I Ma		Ex ia IIIC T110°C Da (-55°C ≤ Ta ≤ +57°C) (Dust) Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust) Ex ia IIIC T145°C Da (-55°C ≤ Ta ≤ +92°C) (Dust) Ex ia I Ma (-55°C ≤ Ta ≤ +103°C) (Mining)
Certificate details: Group II and III	IECEEx 18.0082X Baseefa18ATEX0130X Ⓔ II 1GD Ex ia IIC T6..T4 Ga Ex ia IIIC T110°C..T145°C Da	Australian Approval Group I	IECEEx ExTC 18.0032X Ex ia I Ma (-55°C ≤ Ta ≤ +104°C)
		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 = 5.0nF Li= 7.2µH		CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIC T110°C...T145°C Da CI II Zn 20 AEx ia IIIB T110°C...T145°C Da Ex ia IIC T6...T4 Ga
Terminal Parameters 92m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W Ci = 35.9nF Li= 66µH		Ex ia IIIC T110°C...T145°C
		Control Drawing	M06-083-A Overbraided Cable M06-084-A PUR Cable M06-085-A Silicone Cable M06-086-A FR PUR Cable
500V Isolation	Units Will Pass A 500V Isolation Test		M06-087-A Various Cables (HS-150IT Only)
Standards Applied to Product	EN IEC 60079-0:2018 EN 60079-11:2012		
		Barrier	1 x Pepperl + Fuchs Galvanic Isolator KFD2-VR4-Ex1.26 (BAS02ATEX7206) 1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217) or Pepperl + Fuchs Zener Barrier Z728 (BAS01ATEX7005) or any other barrier that conforms with the terminal parameters
	IEC 60079-0 Edition 7 2017 IEC 60079-11 Edition 6 2011		

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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TS898.6



HS-150I Premium Intrinsically Safe Accelerometer

AC acceleration output via Braided Cable

Key Features

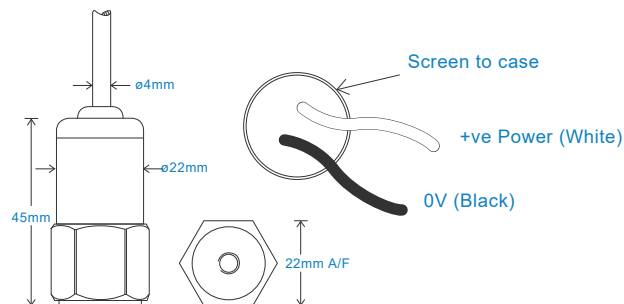
- Intrinsically Safe with European, USA, Indian and Australian approvals
- For use with data collector

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

Mechanical

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

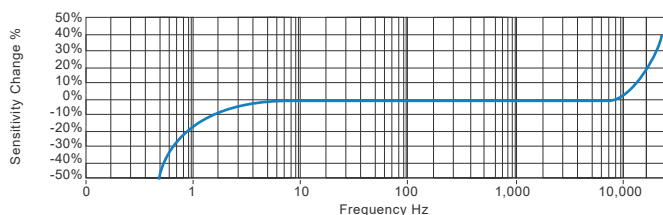
Electrical

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

Environmental

Operating Temperature Range	see: attached certification details
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

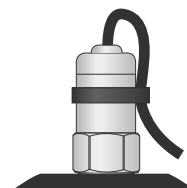
Typical Frequency Response (at 100mV/g)



Applications

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

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



Certification



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UL 60079-11, 6th Ed. Rev. September 6, 2013
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UL 913, 8th Ed. Rev. October 16, 2015



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TS881.8



AC acceleration output via Braided Cable

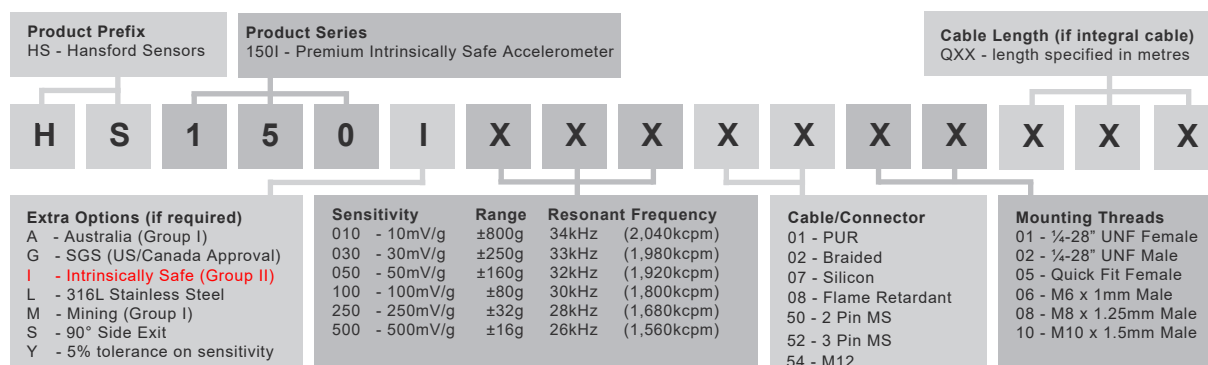
Intrinsically Safe Requirements

Sensor Maximum Cable Length		Up to 92 metres	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +57°C) (Gas) Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +103°C) (Gas)
Certificate details: Group I	IECEx 18.0082X			Ex ia IIIC T110°C Da (-55°C ≤ Ta ≤ +57°C) (Dust)
	Baseefa18ATEX0130X			Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust)
	ⓈI M 1			Ex ia IIIC T145°C Da (-55°C ≤ Ta ≤ +92°C) (Dust)
	Ex ia I Ma			Ex ia I Ma (-55°C ≤ Ta ≤ +103°C) (Mining)
Certificate details: Group II and III	IECEx 18.0082X	Australian Approval Group I		IECEx ExTC 18.0032X
	Baseefa18ATEX0130X			Ex ia I Ma
	ⓈII 1GD			(-55°C ≤ Ta ≤ +104°C)
	Ex ia IIC T6..T4 Ga			
	Ex ia IIIC T110°C..T145°C Da	US/Canada Approvals		Certificate No. SGSNA/19/BAS/00005 CI I, II, III, Div 1, 2 Gr A-G T* CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIC T110°C...T145°C Da CI II Zn 20 AEx ia IIIB T110°C...T145°C Da Ex ia IIC T6...T4 Ga Ex ia IIIC T110°C...T145°C
Terminal Parameters 10m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W			
	Ci = 5.0nF			
	Li= 7.2µH			
Terminal Parameters 92m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W			
	Ci = 35.9nF			
	Li= 66µH	Control Drawing		M06-083-A Overbraided Cable M06-084-A PUR Cable M06-085-A Silicone Cable M06-086-A FR PUR Cable M06-087-A Various Cables (HS-150IT Only)
500V Isolation	Units Will Pass A 500V Isolation Test			
Standards Applied to Product	EN IEC 60079-0:2018			
	EN 60079-11:2012			
		Barrier		1 x Pepperl + Fuchs Galvanic Isolator KFD2-VR4-Ex1.26 (BAS02ATEX7206) 1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217) or Pepperl + Fuchs Zener Barrier Z728 (BAS01ATEX7005) or any other barrier that conforms with the terminal parameters
	IEC 60079-0 Edition 7 2017 IEC 60079-11 Edition 6 2011			

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.

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How To Order



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TS881.8



HS-150I Premium Intrinsically Safe Accelerometer

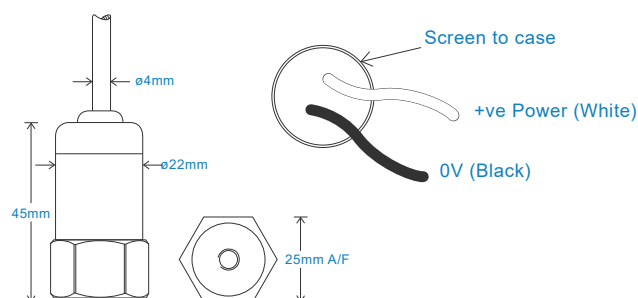
AC acceleration output via Flame Retardant Cable

Key Features

- Intrinsically Safe with European, USA, Indian and Australian approvals
- Low smoke, halogen free cable

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

Mechanical

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

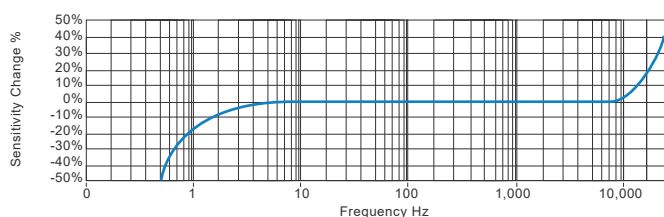
Electrical

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

Environmental

Operating Temperature Range	see: attached certification details
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

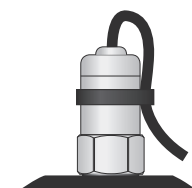
Typical Frequency Response (at 100mV/g)



Applications

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

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



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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TS901.7



HS-150I Premium Intrinsically Safe Accelerometer

AC acceleration output via Flame Retardant Cable

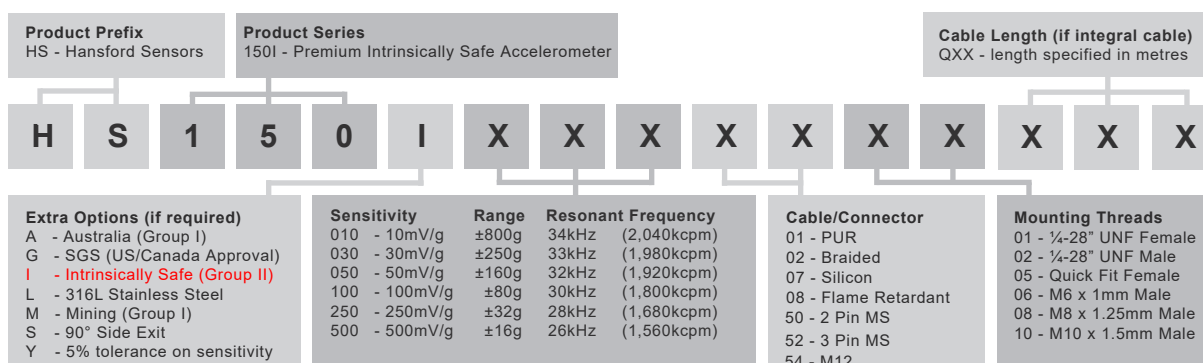
Intrinsically Safe Requirements

Sensor Maximum Cable Length	Up to 92 metres	Certified Temperature Range	Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +57°C) (Gas) Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +103°C) (Gas)
Certificate details: Group I	IECEx 18.0082X Baseefa18ATEX0130X Ⓔ I M 1 Ex ia I Ma		Ex ia IIIC T110°C Da (-55°C ≤ Ta ≤ +57°C) (Dust) Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust) Ex ia IIIC T145°C Da (-55°C ≤ Ta ≤ +92°C) (Dust) Ex ia I Ma (-55°C ≤ Ta ≤ +103°C) (Mining)
Certificate details: Group II and III	IECEx 18.0082X Baseefa18ATEX0130X Ⓔ II 1GD Ex ia IIC T6..T4 Ga Ex ia IIIC T110°C..T145°C Da	Australian Approval Group I	IECEx ExTC 18.0032X Ex ia I Ma (-55°C ≤ Ta ≤ +104°C)
		US/Canada Approvals	Certificate No. SGSNA/19/BAS/00005 CI I, II, III, Div 1, 2 Gr A-G T* CI I Zn 0 AEx ia IIC T6...T4 Ga CI II Zn 20 AEx ia IIIC T110°C...T145°C Da CI II Zn 20 AEx ia IIIB T110°C...T145°C Da Ex ia IIC T6...T4 Ga Ex ia IIIC T110°C...T145°C
Terminal Parameters 10m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W Ci = 5.0nF Li= 7.2µH		
Terminal Parameters 92m of cable	Ui = 28V, Ii = 93mA, Pi = 0.65W Ci = 35.9nF Li= 66µH		
		Control Drawing	M06-083-A Overbraided Cable M06-084-A PUR Cable M06-085-A Silicone Cable M06-086-A FR PUR Cable M06-087-A Various Cables (HS-150IT Only)
500V Isolation	Units Will Pass A 500V Isolation Test		
Standards Applied to Product	EN IEC 60079-0:2018 EN 60079-11:2012		
		Barrier	1 x Pepperl + Fuchs Galvanic Isolator KFD2-VR4-Ex1.26 (BAS02ATEX7206) 1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217) or Pepperl + Fuchs Zener Barrier Z728 (BAS01ATEX7005) or any other barrier that conforms with the terminal parameters
	IEC 60079-0 Edition 7 2017 IEC 60079-11 Edition 6 2011		

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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