

HS-150IS Premium Intrinsically Safe Accelerometer

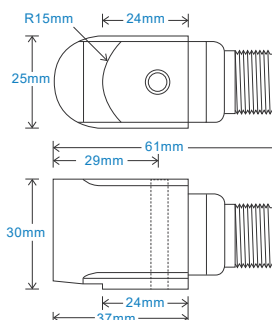
AC acceleration output via 2 Pin MS Connector

Key Features

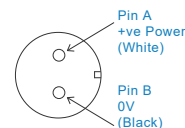
- Intrinsically Safe with European, USA, Indian and Australian approvals
- For use with data collector
- Side entry for easy access

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 $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) $\pm 5\%$ 0.5Hz (30cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.2Hz (12cpm) 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
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Screened Cable Assembly	see: www.hansfordsensors.com for options
Connector	HS-AA004 - non-booted HS-AA053 or HS-AA054 - booted
Mounting Threads	see: 'How To Order' table

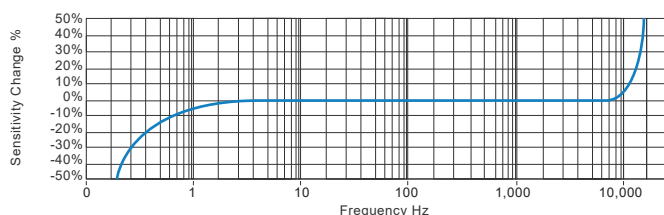
Electrical

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

Environmental

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

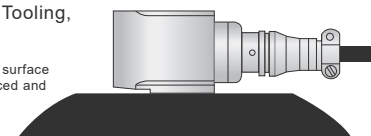
Typical Frequency Response (at 100mV/g)



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
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

TS903.9



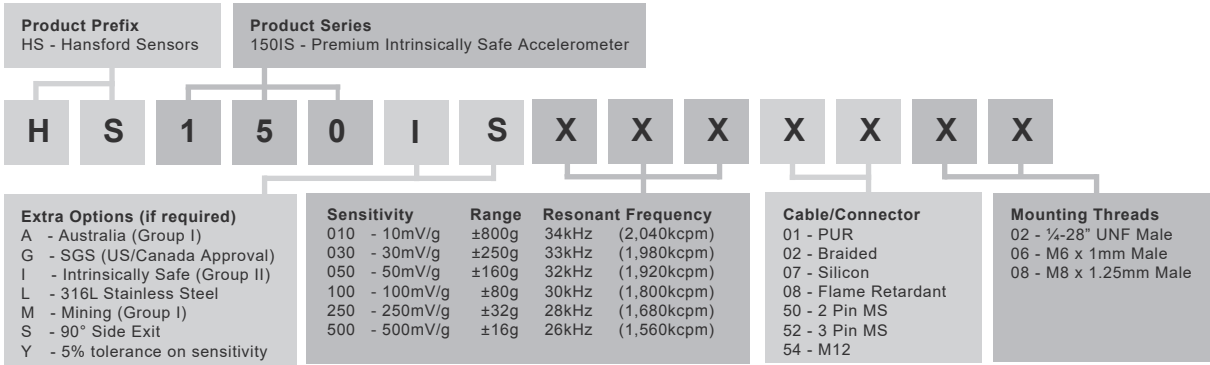
HS-150IS Premium Intrinsically Safe Accelerometer

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		Ex ia IIIB T110°C Da (-55°C ≤ Ta ≤ +57°C) (Dust)
	Baseefa18ATEX0130X		Ex ia IIIB T145°C Da (-55°C ≤ Ta ≤ +92°C) (Dust)
	ⓈI M 1		Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°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		
Terminal Parameters Connector	Ex ia IIIC T135°C Da	US/Canada Approvals	Certificate No. SGSNA/19/BAS/00005
	Ex ia IIIB T110°C..T145°C Da		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
500V Isolation	Ui = 28V, Ii = 93mA, Pi = 0.65W		Ex ia IIC T6...T4 Ga
	CI = 1.2nF		Ex ia IIIC T135°C Da
	Li= 0		
	Units Will Pass A 500V Isolation Test		Or
Standards Applied to Product	EN IEC 60079-0:2018		CI I, II, III, Div 1, 2 Gr A-D G and F T*
	EN 60079-11:2012		CI I Zn 0 AEx ia IIC T6...T4 Ga
	IEC 60079-0 Edition 7 2017		CI II Zn 20 AEx ia IIIB T110°C...T145°C Da
	IEC 60079-11 Edition 6 2011		Ex ia IIC T6...T4 Ga
Barrier	1 x Pepperl + Fuchs Galvanic Isolator	Control Drawing	M06-083-A Overbraided Cable
	KFD2-VR4-Ex1.26 (BAS02ATEX7206)		M06-084-A PUR Cable
	1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217)		M06-085-A Silicone Cable
	or Pepperl + Fuchs Zener Barrier		M06-086-A FR PUR Cable
500V Isolation	Z728 (BAS01ATEX7005) or any other barrier that		M06-087-A Various Cables (HS-150IT Only)
	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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