

HS-170IS Premium Intrinsically Safe Accelerometer

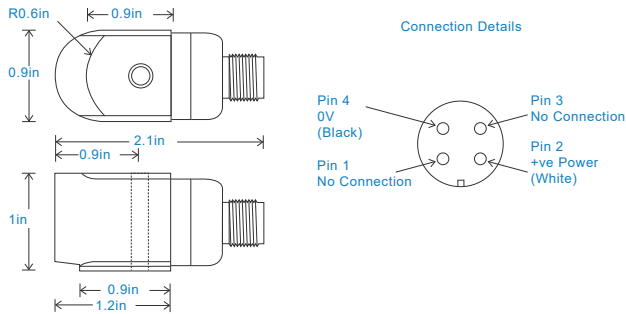
AC acceleration output via M12 Connector

Key Features

- Intrinsically Safe with European, US, Indian and Australian approvals
- Compact design
- Premium design
- Side entry for easy access

Industries

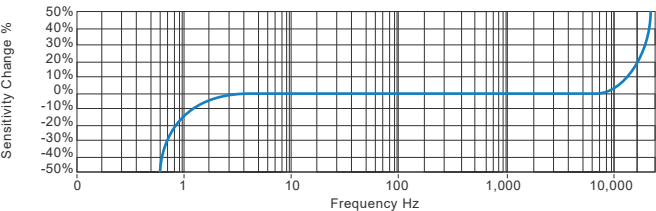
Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table $\pm 10\%$	Sensing Element/Construction	PZT/Shear
Frequency Response	Nominal 80Hz at 72°F	Mounting Torque	5.9ft. lbs
	120cpm (2Hz) to 840kcpm (14kHz) $\pm 5\%$	Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
	90cpm (1.5Hz) to 960kcpm (16kHz) $\pm 10\%$	Weight	4.7 oz. (nominal) body only
	48cpm (0.8Hz) to 1,140kcpm (19kHz) $\pm 3\text{dB}$	Connector	Use booted connector only
Isolation	Base isolated	Mounting Threads	see: 'How To Order' table
Range	see: 'How To Order' table		
Transverse Sensitivity	Less than 5%		

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	see: attached certification details
Current Range	0.5mA to 8mA	Sealing	IP67
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.)



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

TS921U.6



AC acceleration output via M12 Connector

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)
	Ex 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)

Ex ia IIC T6..T4 Ga			
Ex ia IIIC T135°C Da	US/Canada Approvals	Certificate No.	SGSNA/19/BAS/00005
Ex ia IIIB T110°C..T145°C Da		Cl I, II, III, Div 1, 2 Gr A-G T*	

Terminal Parameters Connector	$U_i = 28V$, $I_i = 93mA$, $P_i = 0.65W$ $C_i = 1.2nF$ $L_i = 0$	C_i II Zn 20 AEx ia IIC T135°C Da Ex ia IIC T6...T4 Ga Ex ia IIC T135°C Da
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500V Isolation	Units Will Pass A 500V Isolation Test	Or
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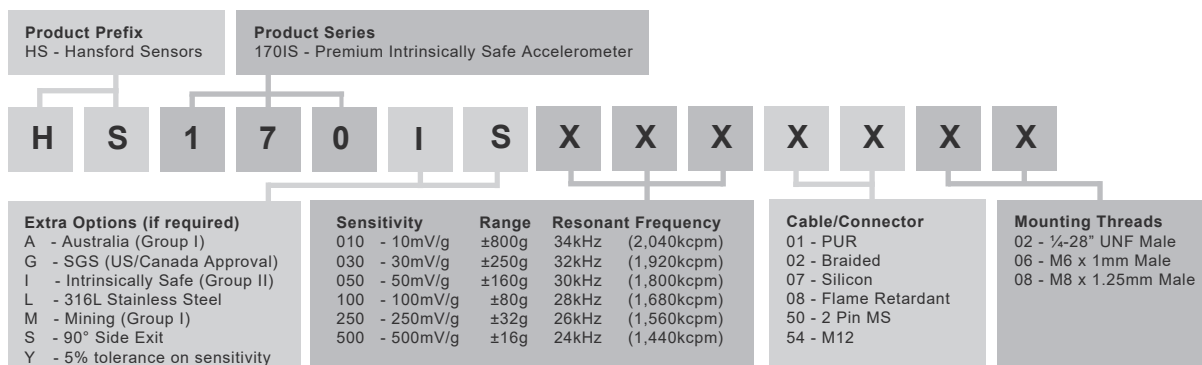
Standards Applied to Product	EN IEC 60079-0:2018	CI I, II, III, Div 1, 2 Gr A-D G and F T*
	EN 60079-11:2012	CI I Zn 0 AEx ia IIC T6...T4 Ga
		CI II Zn 20 AEx ia IIIB T110°C...T145°C Da
	IEC 60079-0 Edition 7 2017	Ex ia IIC T6...T4 Ga
	IEC 60079-11 Edition 6 2011	Ex ia IIIC T110°C...T145°C Da

Barrier	1 x Pepperl + Fuchs Galvanic Isolator KFD2-VR4-Ex1.26 (BAS02ATEX7206)	Control Drawing	M06-083-A Overbraided Cable
	1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217) or Pepperl + Fuchs Zener Barrier		M06-084-A PUR Cable
	Z728 (BAS01ATEX7005) or any other barrier that conforms with the terminal parameters		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



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