

HS-173I Premium ATEX Triaxial Accelerometer

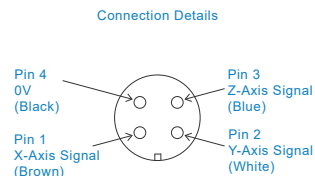
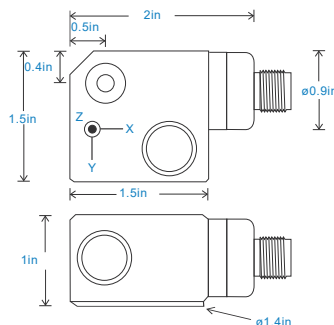
Three AC outputs via M12 Connector

Key Features

- Intrinsically Safe with European, USA and Australian approvals
- Output via three axes
- 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)
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 72°F per axes
Frequency Response	120cpm (2Hz) to 600kcpm (10kHz) $\pm 5\%$ 90cpm (1.5Hz) to 720kcpm (12kHz) $\pm 10\%$ 48cpm (0.8Hz) to 900kcpm (15kHz) $\pm 3\text{dB}$
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	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	8.3 oz. (nominal)
Screened Cable Assembly	HS-AC010 - straight
Mounting Threads	see: 'How To Order' table
Mounting Stud	HS-AS226, HS-AS221 or HS-AS222

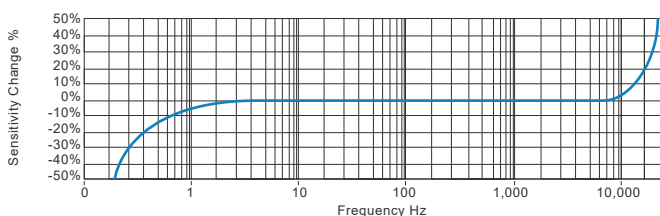
Electrical

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	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

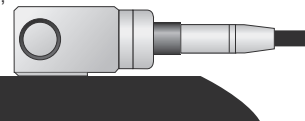
Typical Frequency Response (at 100mV/g)



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



www.hansfordsensors.com
sales@hansfordsensors.com

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

TS923U.10



Three AC outputs via M12 Connector

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)
	Ex II 1GD		Ex ia IIIB T102°C Da (-55°C ≤ Ta ≤ +69°C) (Dust)
	Ex ia II T6..T4		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)

Ex ia IIC T110°C..T145°C Da	US/Canada Approvals	Certificate No. SGSNA/19/BAS/00005
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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 IIIC T135°C Da
	IEC 60079-0 Edition 7 2017	CI II Zn 20 AEx ia IIIB T102°C...T131°C Da
	IEC 60079-11 Edition 6 2011	Ex ia IIC T6...T4 Ga

Barrier	1 x Pepperl + Fuchs Galvanic Isolator KFD2-VR4-Ex1.26 (BAS02ATEX7206)	Ex ia IIIB T102°C...T131°C Da
	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 M06-088-A

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.

Product Prefix HS - Hansford Sensors		Product Series 1731 - Premium Intrinsically Safe Triaxial Industrial Vibration Sensor																			
H		S		1		7		3		I		X		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) Y - 5% tolerance on sensitivity				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		Resonant Frequency 1,200kcpm (20kHz) 1,140kcpm (19kHz) 1,080kcpm (18kHz) 1,020kcpm (17kHz) 960kcpm (16kHz) 900kcpm (15kHz)				Cable/Connector 54 - M12				Mounting Threads 02 - ¼-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male					



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