HS-105I ATEX High Temp. Accelerometer

AC output via Low Noise Cable

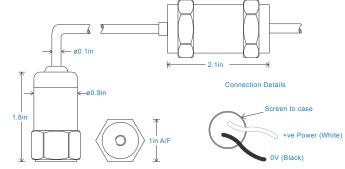
Key Features

- Intrinsically safe with European and Indian approval
- · Includes external charge amplifier
- · Optional temperature ranges
- · Low noise cable

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 Frequency Response 120cpm (2Hz) to 600kcpm (10kHz) $\pm 5\%$ 90cpm (1.5Hz) to 720kcpm (12kHz) $\pm 10\%$ 48cpm (0.8Hz) to 900kcpm (15kHz) ± 3 dB

Isolation Base isolated Range see: 'How To Order' table Transverse Sensitivity Less than 5%

Mechanical

Case Material Stainless Steel
Sensing Element/Construction PZT/Compression
Mounting Torque 5.9ft. lbs
Weight 4.4 oz. (nominal)
Maximum Cable Length 3,280 ft.
Cable see: 'How To Order' table - (65 ft.
max between sensor and charge amplifier)
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
 2 seconds

 Output Impedance
 200 Ohms max

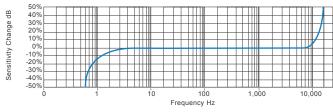
 Case Isolation
 >108 Ohms at 500 Volts

Environmental

Operating Temperature Range

Ex ia IIC T2 (-4°F \leq Ta \leq +480°F) Accelerometer Ex ia IIC T4 (-4°F \leq Ta \leq +176°F) Charge Amplifier IP67 5000g EN61326-1:2013

Typical Frequency Response (at 100mV/g)



Applications

Maximum Shock

Sealing

EMC

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









www.hansfordsensors.com sales@hansfordsensors.com



HS-105I ATEX High Temp. Accelerometer AC output via Low Noise Cable

Intiliaisically Saic requirements	Intrinsically	v Safe F	Requirements
-----------------------------------	---------------	----------	--------------

· · · · · · · · · · · · · · · · · · ·			
Maximum Cable Length	328 ft. max.	500V Isolation	Units Will Pass A 500V Isolation Test
Certificate details: Group II	IECExBAS09.0157	Barrier	1 x Pepperl + Fuchs Galvanic Isolator
Accelerometer	Baseefa07ATEX0336		KFD2-VR4-Ex1.26 (BAS02ATEX7206)
	®II 1G		or equivalent
	Ex ia IIA T2 Ga		
	$(-4^{\circ}F \le Ta \le +480^{\circ}F)$		1 x MTL Zener Barrier MTL7728+ (BAS01ATEX7217)
			or Pepperl + Fuchs Zener Barrier
Certificate details: Group II	IECExBAS09.0157		Z728 (BAS01ATEX7005) or equivalent
Charge Amplifier	Baseefa07ATEX0336		
	®II 1G	Notes:	Special conditions of safe use for Group II.
	Ex ia IIA T4 Ga		The free end of the cable on the integral cable
	$(-4^{\circ}F \le Ta \le +176^{\circ}F)$		version of the apparatus must be terminated in
			an appropriate enclosure certified flameproof.
Terminal Parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W,		The unit has no serviceable parts.
	Ci = 54 nF, Li = 60μH		

How To Order

