

HS-004IS ATEX Low Power Accelerometer Capsule

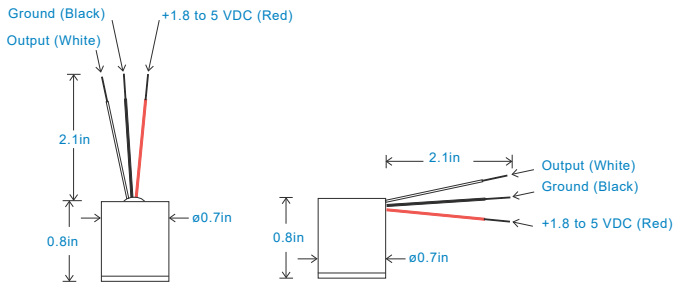
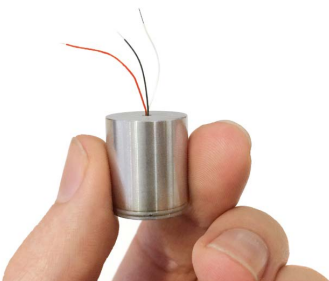
AC acceleration output

Key Features

- OEM Capsule
- Low voltage
- Ultra low power consumption

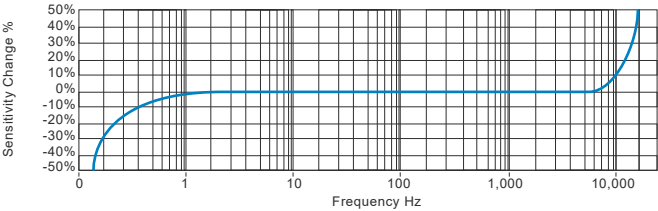
Industries

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	18cpm (0.3Hz) to 900kcpm (15kHz) ± 3 dB	Weight	0.6 oz. (nominal)
Isolation	Base isolated		
Range	see: 'How To Order' table @ 5V power		
Transverse Sensitivity	Less than 5%		
Broadband Resolution	<500 μ g		
Amplitude Linearity	$\pm 1\%$		

Electrical		Environmental	
Electrical Noise	< 500 μ g	Operating Temperature Range	-40 to 248°F
Power Requirements	see: 'How To Order' table	Sealing	IP55
Current Consumption	100 μ A nominal at 5V supply (60 μ A at 1.8V)	Maximum Shock	5000g
Bias Voltage	50% of supply voltage	EMC	EN61326-1:2013
Settling Time	1 second	Electromagnetic Sensitivity	150 μ g/gauss
Output Impedance	100 Ohms max.		
Case Isolation	>108 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

Certificates



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We reserve the right to alter the specification of this product without prior notice
TS776U.4



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Intrinsically Safe Requirements

Certificate details: Group II

IECEX BAS 18.0072U

Standards Applied to Product

EN IEC 60079-0:2018

Baseefa18ATEX0110U

EN 60079-11:2012

Ⓔ II 1G

Ex ia IIC T6...T1 G

IEC 60079-0 Edition 7 2017

IEC 60079-11 Edition 6 2011

Terminal Parameters

Ui = 5.2V, Ii = 367mA, Pi = 305mW

Ci = 12pF

Li = 0

Certified temperature range:

	T6	T5	T4	T3	T2	T1
Mounted in free space (11K surface temperature rise)	69°C	84°C	110°C	110°C	110°C	110°C
Mounted in enclosed space with approximately 61cm ³ of free space around the capsule (16.5K surface temperature rise)	63.5°C	78.5°C	110°C	110°C	110°C	110°C
Mounted in enclosed space with approximately 40cm ³ of free space around the capsule (20K surface temperature rise)	60°C	75°C	110°C	110°C	110°C	110°C

Schedule of Limitations:

1. The piezo-electric crystal within the assembly is internally protected by adequately rated, triplicated zener diodes and so no further consideration is required.
2. The HS-004I Capsule shall be completely encased within an equipment enclosure providing a degree of ingress protection of at least IP20.

How To Order

