

# HS-004 Low Power Accelerometer Capsule

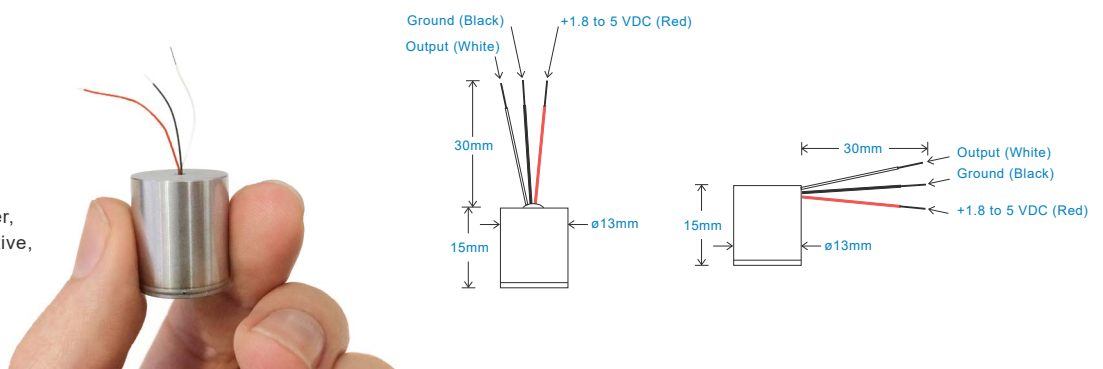
## AC acceleration output

### Key Features

- OEM Capsule
- Low voltage
- Ultra low power consumption

### Industries

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



### Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response	0.3Hz (18cpm) to 15kHz (900kcpm) $\pm 3$ dB
Isolation	Base isolated
Range	see: 'How To Order' table @ 5V power
Transverse Sensitivity	Less than 5%
Broadband Resolution	<500 $\mu$ g
Amplitude Linearity	$\pm 1\%$

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Weight	18gms (nominal)

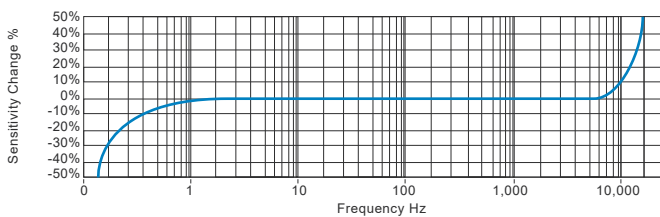
### Electrical

Electrical Noise	< 500 $\mu$ g
Power Requirements	see: 'How To Order' table
Current Consumption	100 $\mu$ A nominal at 5V supply (60 $\mu$ A at 1.8V)
Bias Voltage	50% of supply voltage
Settling Time	1 second
Output Impedance	100 Ohms max.
Case Isolation	>108 Ohms at 500 Volts

### Environmental

Operating Temperature Range	-40 to 120°C
Sealing	IP55
Maximum Shock	5000g
EMC	EN61326-1:2013
Electromagnetic Sensitivity	150 $\mu$ g/gauss

### 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

### How To Order

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 004 - Low Power Accelerometer Capsule	<b>Options (if required)</b> S - Side exit
H	S	0 0 4 X X X X X X
<b>Sensitivity</b>	<b>Range</b>	<b>Resonant Frequency</b>
010 - 10mV/g	$\pm 200$ g	36kHz (2,160kcpm)
030 - 30mV/g	$\pm 60$ g	34kHz (2,040kcpm)
050 - 50mV/g	$\pm 40$ g	32kHz (1,920kcpm)
100 - 100mV/g	$\pm 20$ g	30kHz (1,800kcpm)
250 - 250mV/g	$\pm 8$ g	28kHz (1,680kcpm)
500 - 500mV/g	$\pm 4$ g	26kHz (1,560kcpm)
		<b>Power Supply Voltage</b> 05 - 5V nominal  (other options available upon request)



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