

HS-004 Low Power Accelerometer Capsule

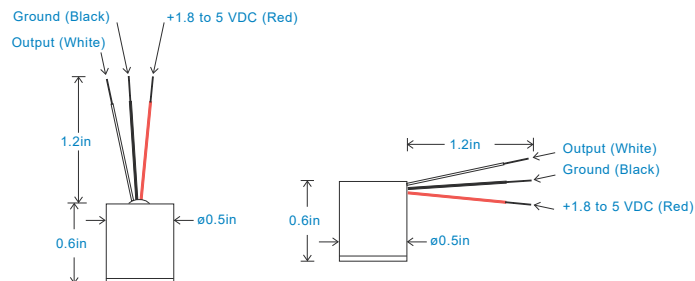
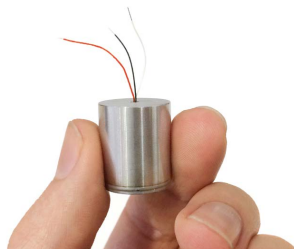
AC acceleration output

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 72°F |
| Frequency Response | 18cpm (0.3Hz) to 900kcpm (15kHz) ± 3 dB |
| Isolation | Base isolated |
| Range | see: 'How To Order' table @ 5V power |
| Transverse Sensitivity | Less than 5% |
| Broadband Resolution | <500 μ g |
| Amplitude Linearity | $\pm 1\%$ |

Mechanical

| | |
|------------------------------|-------------------|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Shear |
| Weight | 0.6 oz. (nominal) |

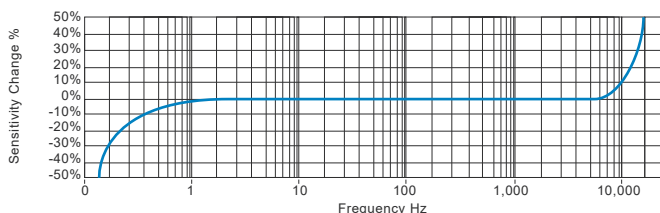
Electrical

| | |
|---------------------|---|
| Electrical Noise | < 500 μ g |
| Power Requirements | see: 'How To Order' table |
| Current Consumption | 100 μ A nominal at 5V supply (60 μ 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 248°F |
| Sealing | IP55 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |
| Electromagnetic Sensitivity | 150 μ 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

| Product Prefix | Product Series | Options (if required) |
|-----------------------|---------------------------------------|-----------------------|
| HS - Hansford Sensors | 004 - Low Power Accelerometer Capsule | S - Side exit |
| H | S | 0 |
| 0 | 0 | 4 |
| X | X | X |
| X | X | X |
| X | X | X |
| X | X | X |
| X | X | X |
| X | X | X |
| X | X | X |

| Sensitivity | Range | Resonant Frequency | Power Supply Voltage |
|---------------|-------------|--------------------|--|
| 010 - 10mV/g | ± 200 g | 2,160kcpm (36kHz) | 05 - 5V nominal |
| 030 - 30mV/g | ± 60 g | 2,040kcpm (34kHz) | (other options available upon request) |
| 050 - 50mV/g | ± 40 g | 1,920kcpm (32kHz) | |
| 100 - 100mV/g | ± 20 g | 1,800kcpm (30kHz) | |
| 250 - 250mV/g | ± 8 g | 1,680kcpm (28kHz) | |
| 500 - 500mV/g | ± 4 g | 1,560kcpm (26kHz) | |



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We reserve the right to alter the specification of this product without prior notice
TS396U.4

