

# HS-100F Accelerometer

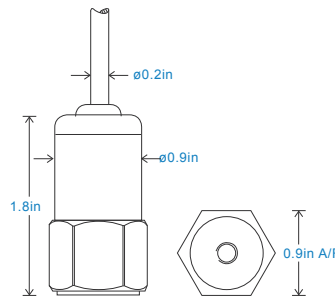
## AC acceleration output via Flame Retardant Cable

### Key Features

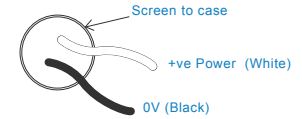
- Low smoke, halogen free cable
- For use with data collector
- Customisable features

### Industries

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



### Connection Details



### 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	90cpm (1.5Hz) to 600kcpm (10kHz) $\pm 5\%$ 30cpm (0.5Hz) to 720kcpm (12kHz) $\pm 10\%$ 12cpm (0.2Hz) 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/Compression
Mounting Torque	5.9ft. lbs
Weight	3.7 oz. (nominal) body only
Maximum Cable Length	3,280 ft.
Standard Cable Length	16 ft.
Shielded Cable	Flame Retardant - length to be specified with order
Mounting Threads	see: 'How To Order' table

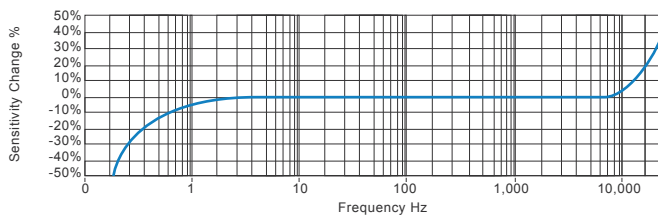
### Electrical

Excitation Voltage	18-30Volts DC
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	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-40 to 212°F
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

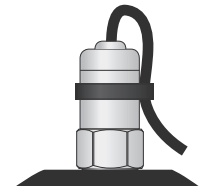
### Typical Frequency Response (at 100mV/g)



### 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.)



### How To Order

Product Prefix HS - Hansford Sensors		Product Series 100 - Industrial Vibration Sensor					Cable Length UXX - length specified in feet							
H	S	1	0	0	F	X	X	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads				
F - Filtered		010 - 10mV/g		$\pm 800\text{g}$		1,680kcpm (28kHz)		01 - PUR		01 - 1/4-28" UNF Female				
I - Intrinsically Safe		030 - 30mV/g		$\pm 250\text{g}$		1,560kcpm (26kHz)		02 - Braided		02 - 1/4-28" UNF Male				
L - 316L Stainless Steel		050 - 50mV/g		$\pm 160\text{g}$		1,440kcpm (24kHz)		07 - Silicon		05 - Quick Fit Female				
RT - Temperature Output PT100		100 - 100mV/g		$\pm 80\text{g}$		1,320kcpm (22kHz)		08 - Flame Retardant		06 - M6 x 1mm Male				
T - Temperature Output		250 - 250mV/g		$\pm 32\text{g}$		1,200kcpm (20kHz)		50 - 2 Pin MS		08 - M8 x 1.25mm Male				
Y - 5% tolerance on sensitivity		500 - 500mV/g		$\pm 16\text{g}$		1,080kcpm (18kHz)		54 - M12		10 - M10 x 1.5mm Male				



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

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