

# HS-180S Premium Accelerometer

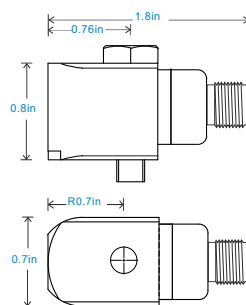
## AC acceleration output via M12 Connector

### Key Features

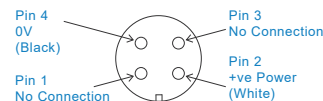
- Mini compact design
- Premium design
- Side entry for easy access

### Industries

Automotive, Machine Tools, OEM



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	120cpm (2Hz) to 840kcpm (14kHz) $\pm 5\%$ 90cpm (1.5Hz) to 960kcpm (16kHz) $\pm 10\%$ 48cpm (0.8Hz) to 1,140kcpm (19kHz) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 1in long
Weight	3 oz. (nominal) body only
Screened cable assembly	HS-AC010 - straight
Connector	HS-AA043
Mounting Threads	see: 'How To Order' table

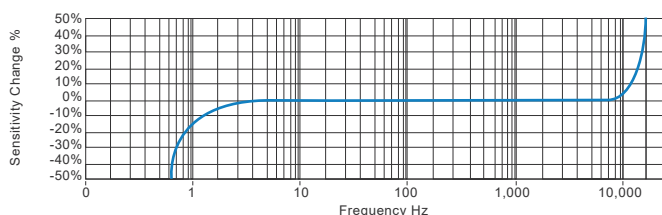
### Electrical

Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	1 second
Output Impedance	200 Ohms max.
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-67 to 266°F
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

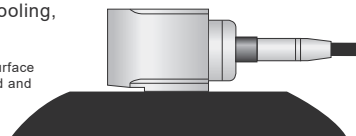
### Typical Frequency Response (at 100mV/g)



### 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	Product Series										
HS - Hansford Sensors	180 - Compact Premium Industrial Vibration Sensor										
H	S	1	8	0	S	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
F - Filtered		010 - 10mV/g		$\pm 800\text{g}$		30kHz (1,800kcpm)		08 - Flame Retardant		02 - 1/4-28" UNF Male	
L - 316L Stainless Steel		100 - 100mV/g		$\pm 80\text{g}$		24kHz (1,440kcpm)		50 - 2 Pin MS		06 - M6 x 1mm Male	
S - 90° Side Exit								54 - M12			
Y - 5% tolerance on sensitivity											



[www.hansfordsensors.com](http://www.hansfordsensors.com)  
[sales@hansfordsensors.com](mailto:sales@hansfordsensors.com)

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

TS973U.2

