

# HS-150T Premium Accelerometer

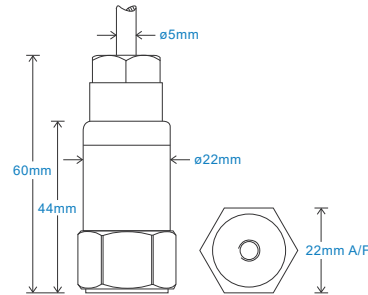
AC acceleration and temperature output via PUR Cable

## Key Features

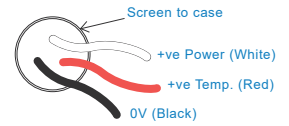
- Waterproof
- Resistant to oil
- Temperature output

## 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 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) $\pm 5\%$ 0.5Hz (30cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.2Hz (12cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Temperature Output	10 mV/°C standard 100°C - Option 150°C
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Weight	106gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	PUR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	100 metres max (10 bar)

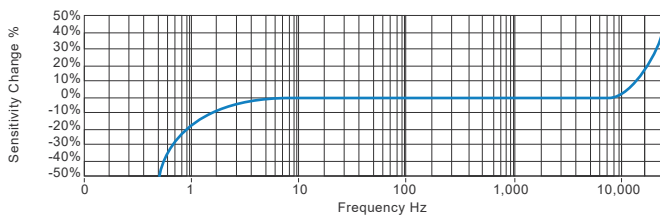
## Electrical

Excitation Voltage:	18-30Volts DC
Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	1 second
Output Impedance	200 Ohms max.
Case Isolation	$>10^8$ Ohms at 500 Volts

## Environmental

Operating Temperature Range	-30 to 90°C
Sealing	IP68
Maximum Shock	5000 g
EMC	EN61326-1:2013

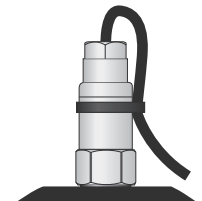
## Typical Frequency Response (at 100mV/g)



## 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 150 - Premium Industrial Vibration Sensor	Cable Length (if integral cable) QXX - length specified in metres
H	S	1
5	0	T
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
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	$\pm 800\text{g}$	34kHz (2,040kcpm)	01 - PUR	01 - 1/4-28" UNF Female
HT - High Temperature maximum 150°C	030 - 30mV/g	$\pm 250\text{g}$	33kHz (1,980kcpm)	03 - Braided	02 - 1/4-28" UNF Male
L - 316L Stainless Steel	050 - 50mV/g	$\pm 160\text{g}$	32kHz (1,920kcpm)	07 - Silicon	05 - Quick Fit Female
S - 90° Side Exit	100 - 100mV/g	$\pm 80\text{g}$	30kHz (1,800kcpm)	15 - Flame Retardant	06 - M6 x 1mm Male
T - Temperature Output	250 - 250mV/g	$\pm 32\text{g}$	28kHz (1,680kcpm)	52 - 3 Pin MS	08 - M8 x 1.25mm Male
Y - 5% tolerance on sensitivity	500 - 500mV/g	$\pm 16\text{g}$	26kHz (1,560kcpm)	54 - M12	10 - M10 x 1.5mm Male



[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

TS280.8

