HS-100ST Accelerometer

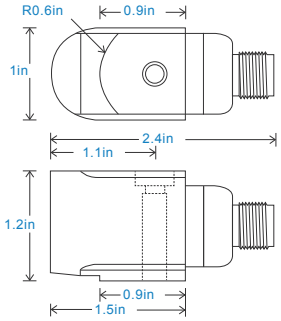
AC acceleration and temperature output via M12 Connector

Key Features

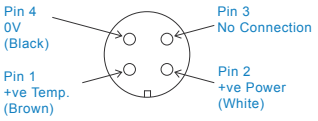
- Temperature output
- Side entry for easy access
- For use with data collector

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 ±10%
	Nominal 80Hz at 72°F
Frequency Response	120cpm (2Hz) to 600kcpm (10kHz) ± 5%
	90cpm (1.5Hz) to 720kcpm (12kHz) ± 10%
	48cpm (0.8Hz) to 900kcpm (15kHz) ± 3dB
Isolation	Base isolated
Range	see: 'How To Order' table
Temperature Output	10 mV/ºC standard 212°F - Option 284°F
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
Weight	6.5 oz. (nominal) body only
Sheilded Cable Assembly	HS-AC010 - straight
	HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

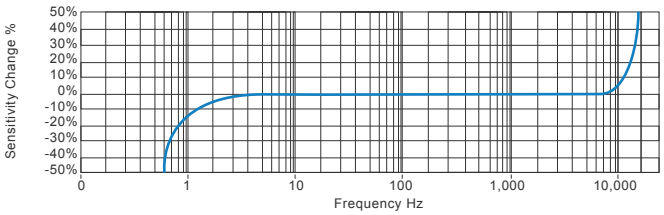
Electrical

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	-67 to 284°F
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

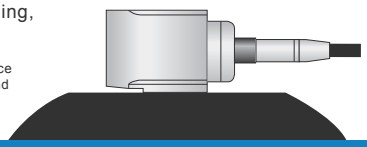
Typical Frequency Response (at 100mV/g)



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
HS - Hansford Sensors

Product Series
100 - Industrial Vibration Sensor

H	S	1	0	0	S	T	X	X	X	X	X	X	X

Extra Options (if required)
F - Filtered
L - 316L Stainless Steel
S - 90° Side Exit
T - Temperature Output
Y - 5% tolerance on sensitivity

Sensitivity	Range	Resonant Frequency	
010 - 10mV/g	±800g	1,620kcpm	(27kHz)
030 - 30mV/g	±250g	1,500kcpm	(25kHz)
050 - 50mV/g	±160g	1,380kcpm	(23kHz)
100 - 100mV/g	±80g	1,260kcpm	(21kHz)
250 - 250mV/g	±32g	1,140kcpm	(19kHz)
500 - 500mV/g	±16g	1,020kcpm	(17kHz)

Cable/Connector
01 - PUR
03 - Braided
07 - Silicon
15 - Flame Retardant
52 - 3 Pin MS
54 - M12

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

Hansford Sensors
Excellence in Vibration Monitoring

www.hansfordsensors.com
sales@hansfordsensors.com

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

TS027U.6