HS-150ST Premium Accelerometer

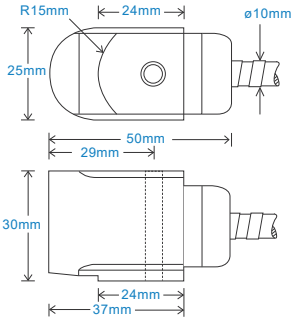
AC acceleration and temperature output via FEP Cable with Protective Conduit

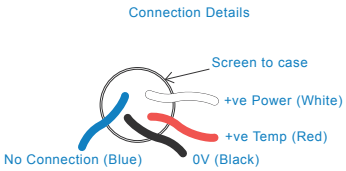
Key Features

- Resistant to oil
- Protective Conduit
- Premium design

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 ± 10%
	Nominal 80Hz at 22°C
Frequency Response	1.5Hz (90cpm) to 10kHz (600kcpm) ± 5%
	0.5Hz (30cpm) to 12kHz (720kcpm) ± 10%
	0.2Hz (12cpm) to 15kHz (900kcpm) ± 3dB
Isolation	Base isolated
Range	see: 'How To Order' table
Temperature	10 mV/ °C standard 100°C - Option 130°C
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Mounting Bolt provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	FEP - length to be specified with order
Mounting Threads	see: 'How To Order' table
Conduit Material	304 Stainless Steel
Conduit Length	Conduit Length is approx. 0.5m shorter than the cable

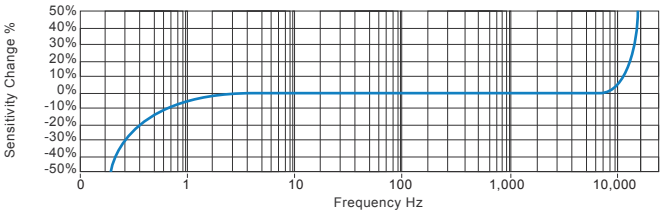
Electrical

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	-55 to 150°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

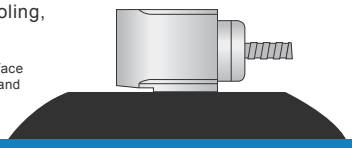
Typical Frequency Response (at 100mV/g)



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
150 - Premium Industrial Vibration Sensor

Cable Length (if integral cable)
QXX - length specified in metres

H	S	1	5	0	S	T	X	X	X	X	X	X	X	X	X	X	X

Extra Options (if required)
F - Filtered
L - 316L Stainless Steel
RT - Temperature Output PT100
S - 90° Side Exit
T - Temperature Output
Y - 5% tolerance on sensitivity

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

Cable/Connector
30C - FEP with Protective Conduit

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

Hansford Sensors
Excellence in Vibration Monitoring

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