HS-150S Premium Accelerometer

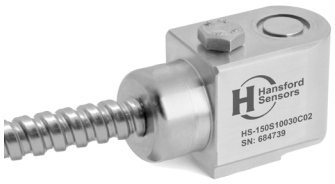
AC acceleration output via FEP Cable with Protective Conduit

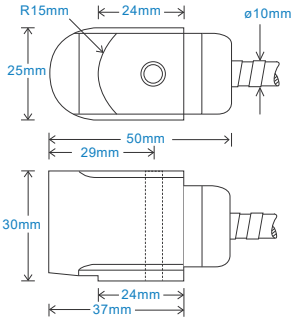
Key Features

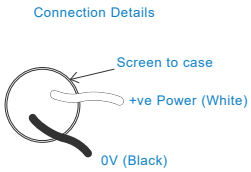
- Resistant to oil
- Protective Conduit
- Premium design

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
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 Maximum Conduit Length:30m

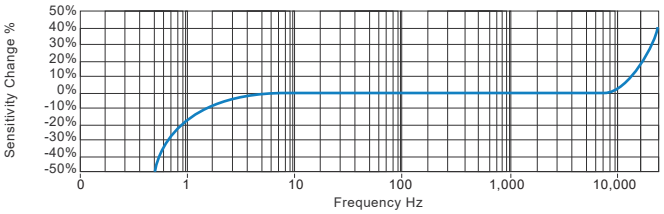
Electrical

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

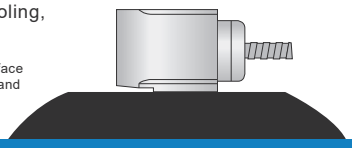
Typical Frequency Response (at 100mV/g)



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	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	34kHz (2,040kcpm)
030 - 30mV/g	±250g	33kHz (1,980kcpm)
050 - 50mV/g	±160g	32kHz (1,920kcpm)
100 - 100mV/g	±80g	30kHz (1,800kcpm)
250 - 250mV/g	±32g	28kHz (1,680kcpm)
500 - 500mV/g	±16g	26kHz (1,560kcpm)

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