

HS-150ST Premium Accelerometer

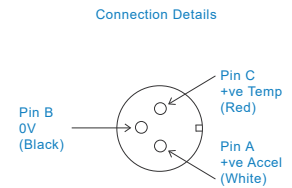
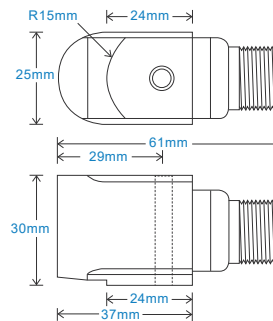
AC acceleration and temperature output via 3 Pin MS Connector

Key Features

- Temperature output
- Side entry for easy access
- 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 $\pm 10\%$ 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
Mounting Bolt Provided	see: 'How To Order' table x 35mm long
Weight	205gms (nominal) body only
Screened Cable Assembly	see: www.hansfordsensors.com for options
Connector	HS-AA005 - non-booted HS-AA068 or HS-AA069 - booted
Mounting Threads	see: 'How To Order' table

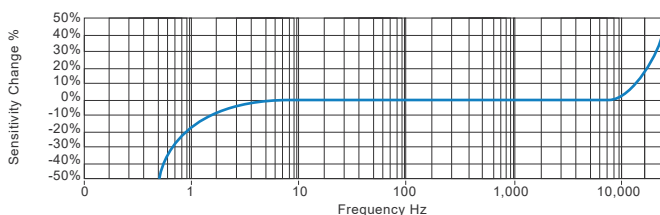
Electrical

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

Environmental

Operating Temperature Range	-55 to 150°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

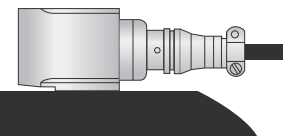
Typical Frequency Response (at 100mV/g)



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	150 - Premium Industrial Vibration Sensor	H	S	1	5	0	S	T	X	X	X	X	X
Extra Options (if required)													
F - Filtered													
HT - High Temperature maximum 150°C													
L - 316L Stainless Steel													
S - 90° Side Exit													
T - Temperature Output													
Y - 5% tolerance on sensitivity													
Sensitivity	Range	Resonant Frequency											
010 - 10mV/g	$\pm 800\text{g}$	34kHz (2,040kcpm)											
030 - 30mV/g	$\pm 250\text{g}$	33kHz (1,980kcpm)											
050 - 50mV/g	$\pm 160\text{g}$	32kHz (1,920kcpm)											
100 - 100mV/g	$\pm 80\text{g}$	30kHz (1,800kcpm)											
250 - 250mV/g	$\pm 32\text{g}$	28kHz (1,680kcpm)											
500 - 500mV/g	$\pm 16\text{g}$	26kHz (1,560kcpm)											
Cable/Connector													
01 - PUR													
03 - Braided													
07 - Silicon													
15 - Flame Retardant													
52 - 3 Pin MS													
54 - M12													
Mounting Threads													
02 - 1/4-28" UNF Male													
06 - M6 x 1mm Male													
08 - M8 x 1.25mm Male													



www.hansfordsensors.com
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We reserve the right to alter the specification of this product without prior notice

TS215.10

