

HS-170ST Premium Accelerometer

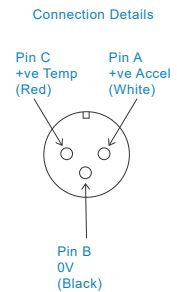
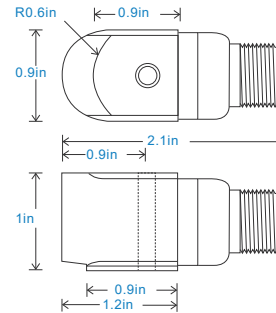
AC acceleration and temperature output via 3 Pin MS Connector

Key Features

- Temperature output
- Side entry for easy access
- Compact and 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 72°F
Frequency Response	120cpm (2Hz) to 840kcpm (14kHz) $\pm 5\%$ 90cpm (1.5Hz) to 960kcpm (16kHz) $\pm 10\%$ 48cpm (0.8Hz) to 1,140kcpm (19kHz) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Temperature Output	10 mV/°C standard 212°F - Option 300°F
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	5.9ft. lbs
Mounting Bolt Provided	see: 'How To Order' table x 1.2in long
Weight	4.7 oz. (nominal) body only
Connector	Use booted connector only
Mounting Threads	see: 'How To Order' table

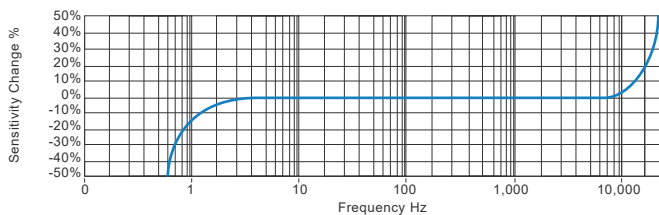
Electrical

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	-67 to 300°F
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	170 - Compact Premium Industrial Vibration Sensor												
H	S	1	7	0	S	T	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads			
F - Filtered		010 - 10mV/g		$\pm 800\text{g}$		1,800kcpm (30kHz)		01 - PUR		02 - 1/4-28" UNF Male			
HT - High Temperature maximum 300°F		030 - 30mV/g		$\pm 250\text{g}$		1,680kcpm (28kHz)		03 - Braided		06 - M6 x 1mm Male			
L - 316L Stainless Steel		050 - 50mV/g		$\pm 160\text{g}$		1,560kcpm (26kHz)		07 - Silicon		08 - M8 x 1.25mm Male			
S - 90° Side Exit		100 - 100mV/g		$\pm 80\text{g}$		1,440kcpm (24kHz)		15 - Flame Retardant					
T - Temperature Output		250 - 250mV/g		$\pm 32\text{g}$		1,320kcpm (22kHz)		52 - 3 Pin MS					
Y - 5% tolerance on sensitivity		500 - 500mV/g		$\pm 16\text{g}$		1,200kcpm (20kHz)		54 - M12					



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

TS223U.7

