

HS-170ST Premium Accelerometer

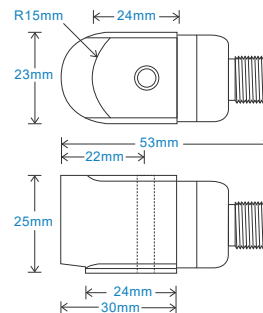
AC acceleration and temperature output via M12 Connector

Key Features

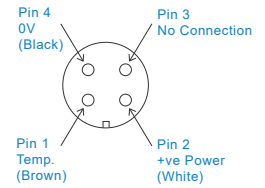
- Compact and premium design
- Temperature output
- Side entry for easy access

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 $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response	2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$
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	8 Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	135gms (nominal) body only
Connector	Use booted connector only
Mounting Threads	see: 'How To Order' table

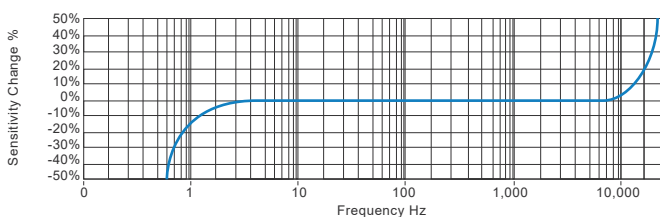
Electrical

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	-55 to 150°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

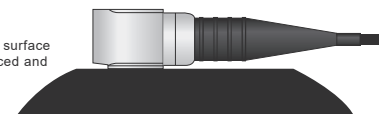
Typical Frequency Response (at 100mV/g)



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 170 - Compact Premium Industrial Vibration Sensor										
H	S	1	7	0	S	T	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
F - Filtered		010 - 10mV/g		$\pm 800\text{g}$		30kHz (1,800kcpm)		01 - PUR		02 - 1/4-28" UNF Male	
HT - High Temperature maximum 150°C		030 - 30mV/g		$\pm 250\text{g}$		28kHz (1,680kcpm)		03 - Braided		06 - M6 x 1mm Male	
L - 316L Stainless Steel		050 - 50mV/g		$\pm 160\text{g}$		26kHz (1,560kcpm)		07 - Silicon		08 - M8 x 1.25mm Male	
S - 90° Side Exit		100 - 100mV/g		$\pm 80\text{g}$		24kHz (1,440kcpm)		15 - Flame Retardant			
T - Temperature Output		250 - 250mV/g		$\pm 32\text{g}$		22kHz (1,320kcpm)		52 - 3 Pin MS			
Y - 5% tolerance on sensitivity		500 - 500mV/g		$\pm 16\text{g}$		20kHz (1,200kcpm)		54 - M12			



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

TS222.8

