

HS-170 Premium Accelerometer

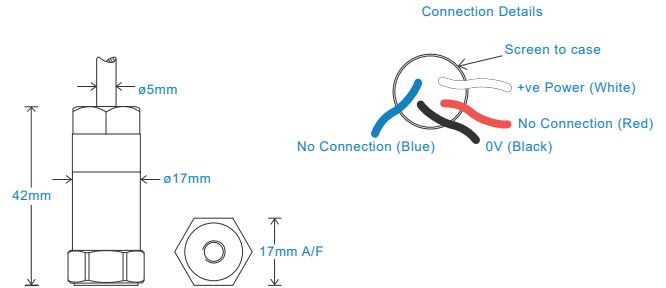
AC acceleration output via PUR Cable

Key Features

- Compact design
- Waterproof
- Resistant to oil
- Customisable features

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	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
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8 Nm
Weight	52gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	PUR - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	100 metres max (10 bar)

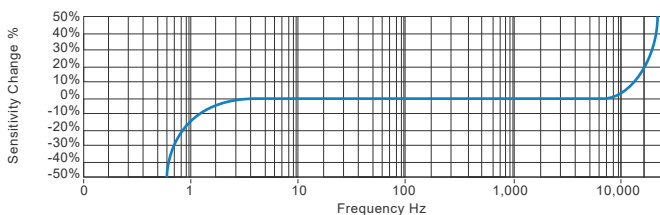
Electrical

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	-30 to 90°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

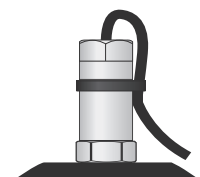
Typical Frequency Response (at 100mV/g)



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 HS - Hansford Sensors	Product Series 170 - Compact Premium Industrial Vibration Sensor	Cable Length (if integral cable) QXX - length specified in metres
H	S	1
7	0	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Extra Options (if required)	Sensitivity	Range	Resonant Frequency	Cable/Connector	Mounting Threads
F - Filtered	010 - 10mV/g	$\pm 800\text{g}$	30kHz (1,800kcpm)	01 - PUR	01 - 1/4-28" UNF Female
L - 316L Stainless Steel	030 - 30mV/g	$\pm 250\text{g}$	28kHz (1,680kcpm)	02 - Braided	02 - 1/4-28" UNF Male
S - 90° Side Exit	050 - 50mV/g	$\pm 160\text{g}$	26kHz (1,560kcpm)	07 - Silicon	06 - M6 x 1mm Male
Y - 5% tolerance on sensitivity	100 - 100mV/g	$\pm 80\text{g}$	24kHz (1,440kcpm)	08 - Flame Retardant	08 - M8 x 1.25mm Male
	250 - 250mV/g	$\pm 32\text{g}$	22kHz (1,320kcpm)	50 - 2 Pin MS	10 - M10 x 1.5mm Male
	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

TS1389

