HS-170S Premium Accelerometer
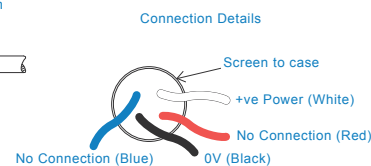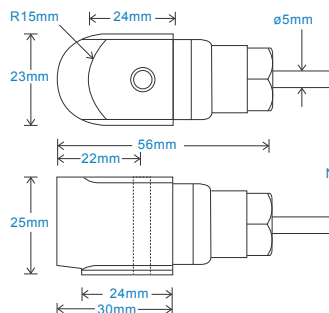## AC acceleration output via PUR Cable

Key Features
- Compact and Premium design
- Waterproof
- Resistent to oil

Industries
Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical

Connection Details
- Screen to case
- +ve Power (White)
- No Connection (Red)
- No Connection (Blue)
- 0V (Black)

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	2Hz (120cpm) to 14kHz (840kcpm) ± 5%
	1.5Hz (90cpm) to 16kHz (960kcpm) ± 10%
	0.8Hz (48cpm) to 19kHz (1,140kcpm) ± 3dB
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

Mechanical

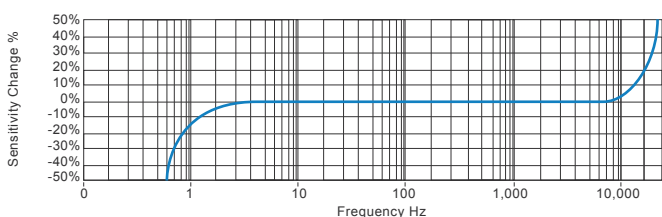|	
Case Material	Stainless Steel
Sensing Element/Construction	PZT/Shear
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight	135gms (nominal)
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	PUR - length to be specified with order
Mounting 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

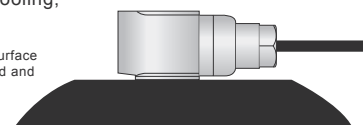|	
Operating Temperature Range	-30 to 90°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

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	S	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	30kHz	(1,800kcpm)
030 - 30mV/g	±250g	28kHz	(1,680kcpm)
050 - 50mV/g	±160g	26kHz	(1,560kcpm)
100 - 100mV/g	±80g	24kHz	(1,440kcpm)
250 - 250mV/g	±32g	22kHz	(1,320kcpm)
500 - 500mV/g	±16g	20kHz	(1,200kcpm)

Cable/Connector
- 01 - PUR
- 02 - Braided
- 07 - Silicon
- 08 - Flame Retardant
- 50 - 2 Pin MS
- 54 - M12

Mounting Threads
- 02 - ¼-28" UNF Male
- 06 - M6 x 1mm Male
- 08 - M8 x 1.25mm Male