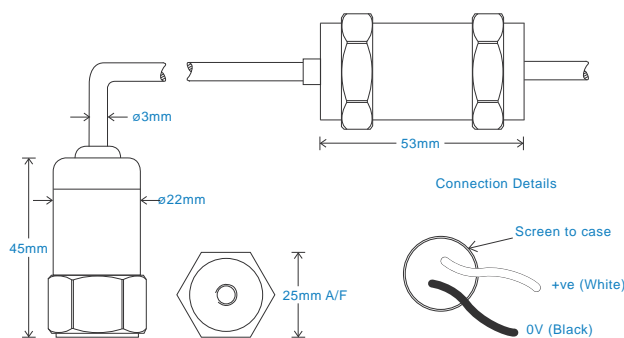


Key Features

- Includes external charge amplifier
- Optional temperature ranges
- Low noise cable

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 10kHz (600kcpm) $\pm 5\%$ 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$ 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	125gms (nominal)
Maximum Cable Length	1000 metres
Cable	see: 'How To Order' table - (20 metres max between sensor and charge amplifier)
Mounting Threads	see: 'How To Order' table

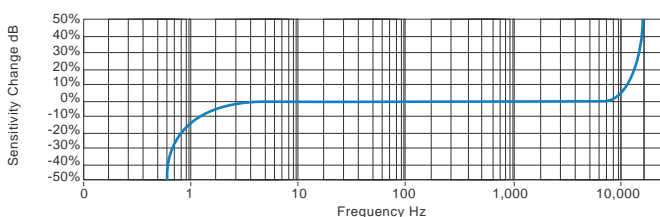
Electrical

Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	$>10^8$ Ohms at 500 Volts

Environmental

Operating Temperature Range	min -55 °C
Sealing	see 'How To Order' table for max IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

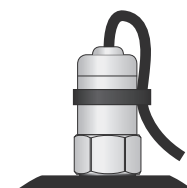
Typical Frequency Response (at 100mV/g)



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	Product Series	Cable Length (if integral cable)														
HS - Hansford Sensors	105 - Industrial Vibration Sensor	QXX/XX - length before/after charge amp, specified in metres														
H	S	1	0	5	X	X	X	X	X	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable		Mounting Threads						
Y - 5% tolerance on sensitivity		010 - 10mV/g		$\pm 800\text{g}$		28kHz (1,680kcpm)		04 - Low Noise (150°C)		01 - 1/4-28" UNF Female						
S - 90° Side Exit		030 - 30mV/g		$\pm 250\text{g}$		26kHz (1,560kcpm)		05 - Low Noise (250°C)		02 - 1/4-28" UNF Male						
T - Temperature Output		050 - 50mV/g		$\pm 160\text{g}$		24kHz (1,440kcpm)				05 - Quick Fit Female						
I - Intrinsically Safe		100 - 100mV/g		$\pm 80\text{g}$		22kHz (1,320kcpm)				06 - M6 x 1mm Male						
RT - Temperature Output PT100		250 - 250mV/g		$\pm 32\text{g}$		20kHz (1,200kcpm)				08 - M8 x 1.25mm Male						
		500 - 500mV/g		$\pm 16\text{g}$		18kHz (1,080kcpm)				10 - M10 x 1.5mm Male						



For pricing or any further information, please contact Omni Instruments Ltd.