

HS-173 Premium Triaxial Accelerometer

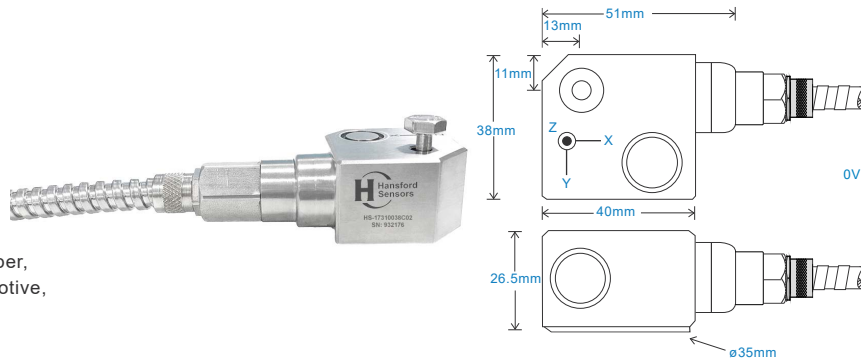
AC Acceleration Output via 5 Core PTFE Cable with Protective Conduit

Key Features

- For use with data collector
- Protective Conduit
- 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 per axes
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/Shear
Mounting Torque	8Nm
Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Weight-Sensor Only	235gms (nominal) - Stainless Steel
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	PTFE Cable - length to be specified with order
Mounting Threads	see: 'How To Order' table
Mounting Stud	HS-AS226, HS-AS221 or HS-AS222
Submersible Depth	100 metres max (10 bar)
Conduit Material	Stainless Steel
Conduit Length	Conduit Length is approx. 0.5m shorter than the cable

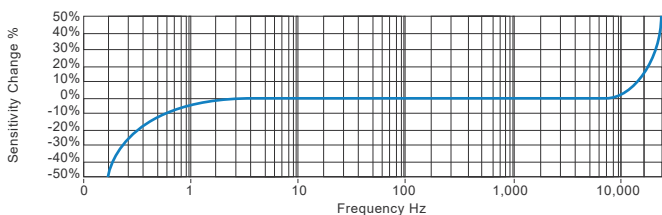
Electrical

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	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

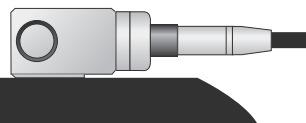
Typical Frequency Response (at 100mV/g)



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	173 - Triaxial Industrial Vibration Sensor	H	S	1	7	3	X	X	X	X	X	X
Extra Options (if required)	Sensitivity	Range	Resonant Frequency	Cable/Connector	Mounting Threads							
F - Filtered	010 - 10mV/g	$\pm 800\text{g}$	20kHz (1,200kcpm)	38 - 5 Core PTFE Cable	02 - 1/4-28" UNF Male							
H - High Temperature	030 - 30mV/g	$\pm 250\text{g}$	19kHz (1,140kcpm)	38C - 5 Core PTFE Cable	06 - M6 x 1mm Male							
T - Temperature Output	050 - 50mV/g	$\pm 160\text{g}$	18kHz (1,080kcpm)	with Protective conduit.	08 - M8 x 1.25mm Male							
	100 - 100mV/g	$\pm 80\text{g}$	17kHz (1,020kcpm)									
	250 - 250mV/g	$\pm 32\text{g}$	16kHz (960kcpm)									
	500 - 500mV/g	$\pm 16\text{g}$	15kHz (900kcpm)									