

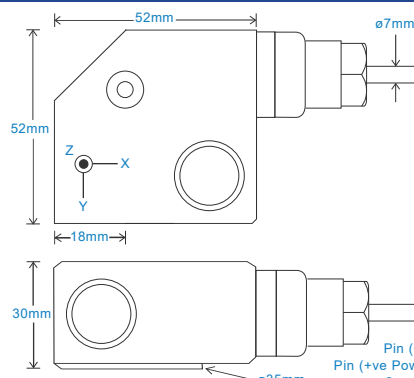
**4-20mA velocity output** via 8 core PUR cable

## Key Features

- For use with PLC/DCS systems
- Customisable features
- Waterproof

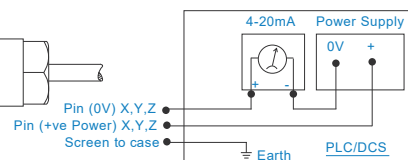
## Industries

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



### Connection Details

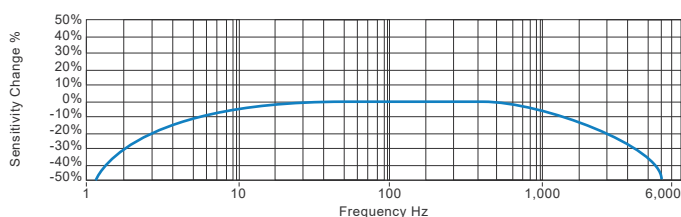
White - +ve Power X  
Brown - 0V X  
Yellow - +ve Power Y  
Black - 0V Y  
Blue - +ve Power Z  
Red - 0V Z



Technical Performance			Mechanical	
Mounted Base Resonance		17kHz (nominal)	Case Material	Stainless Steel
Velocity Ranges		see: 'How To Order' table ±10% Nominal 80Hz at 22°C	Sensing Element/Construction	PZT/Shear
			Mounting Torque	8Nm
Frequency Response	10Hz (600cpm) to 1kHz (60kcpm) ± 5% - ISO10816		Mounting Bolt Provided	see: 'How To Order' table x 37mm long
Isolation		Base isolated	Weight	530 gms (nominal) body only
Range		50g peak	Maximum Cable Length	1000 metres
Transverse Sensitivity		Less than 5%	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		Environmental	
Current Output	4-20mA DC proportional to Velocity Range	Operating Temperature Range	-30 to 90°C
Supply Voltage	15-30 Volts DC (for 4-20mA)	Sealing	IP68
Settling Time	1 second	Maximum Shock	5000g
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts	EMC	EN61326-1:2013
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts		

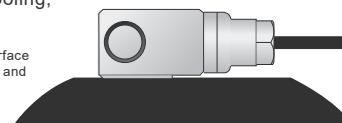
## Typical Frequency Response



## 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**  
473 - Industrial Vibration Sensor

**Extra Options (if required)**  
F - Filtered  
L - 316L Stainless Steel  
RT - Temperature Output PT100  
T - Temperature Output

**Velocity Range (RMS unless specified)**  
010 - 0-10 mm/sec  
020 - 0-20 mm/sec  
025 - 0-25 mm/sec  
050 - 0-50 mm/sec  
100 - 0-100 mm/sec

**Cable/Connector**  
43 - 8 Core PUR

**Mounting Threads**  
02 - 1/4-28" UNF Male  
06 - M6 x 1mm Male  
08 - M8 x 1.25mm Male

**Qxxx** xxx=cable 길이



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



# HS-473 Triaxial Accelerometer

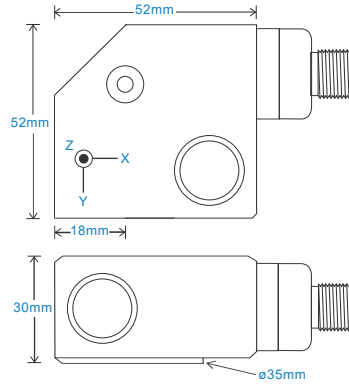
4-20mA **velocity output** via 8 Pin M12 Connector

## Key Features

- For use with PLC/DCS systems
- Customisable features

## Industries

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



### Connection Details

- Pin 1 - White - X Power
- Pin 2 - Brown - X 0V
- Pin 3 - Green - Temp Out
- Pin 4 - Yellow - Y Power
- Pin 5 - Black - Y 0V
- Pin 6 - Purple - Temp 0V
- Pin 7 - Blue - Z Power
- Pin 8 - Red - Z 0V



### Temp Sensor

- Pin 1 - +
- Pin 3 - Temp Out
- Pin 6 - 0V



## Technical Performance

Mounted Base Resonance	17kHz (nominal)
Velocity Ranges	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response	10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816
Isolation	Base isolated
Range	<b>50g peak</b>
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 37mm long
Weight	530 gms (nominal) body only
Screened Cable Assembly	<b>HS-AC731</b>
Mounting Threads	see: 'How To Order' table

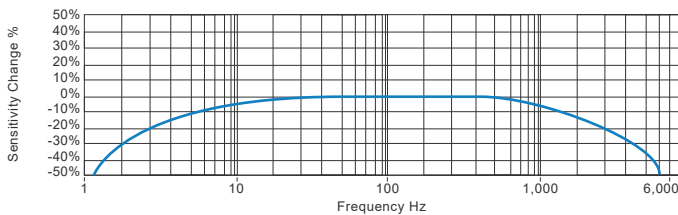
## Electrical

Current Output	<b>4-20mA DC proportional to Velocity Range</b>
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	1 second
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

## Environmental

Operating Temperature Range	<b>-25 to 120°C</b>
Sealing	<b>IP67</b>
Maximum Shock	5000g
EMC	EN61326-1:2013

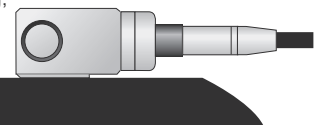
## Typical Frequency Response



## 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		Options									Cable/Connector		Mounting Threads		
HS - Hansford Sensors		473 - Industrial Vibration Sensor															
H		S		4		7		3		X		X		X		X	
Extra Options (if required)		Velocity Range (RMS unless specified)		Cable/Connector		Mounting Threads											
F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 T - Temperature Output		010 - 0-10 mm/sec 020 - 0-20 mm/sec 025 - 0-25 mm/sec 050 - 0-50 mm/sec 100 - 0-100 mm/sec		66 - 8 Pin Connector		02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male											
P - Peak Range PP - Peak to Peak Range																	



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TS1208.5

