

# HS-420 Accelerometer

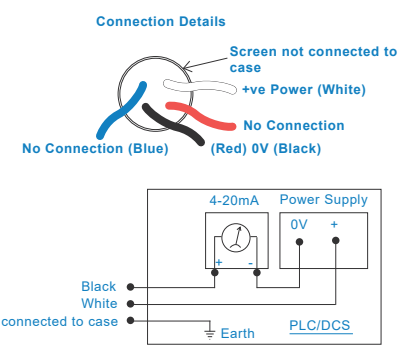
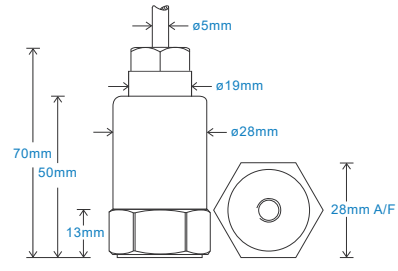
## 4-20mA velocity output via PUR Cable

### Key Features

- Waterproof
- Resistant to oil
- For use with PLC/DCS systems

### Industries

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



### Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (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)

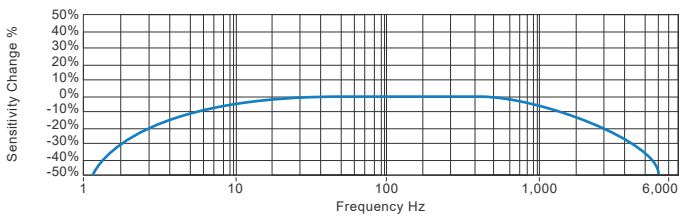
### Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-25 to 90°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

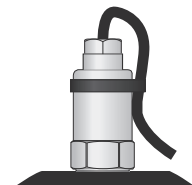
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor	케이블 길이 (일체형 케이블인 경우) QXX - 미터 단위로 지정된 길이												
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b> F - Filtered I - Intrinsically Safe L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output					<b>Velocity Range</b> (지정하지 않는 한 RMS) 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			<b>Cable/Connector</b> 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12			<b>Mounting Threads</b> 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male			



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TS189.7

# HS-420 Accelerometer

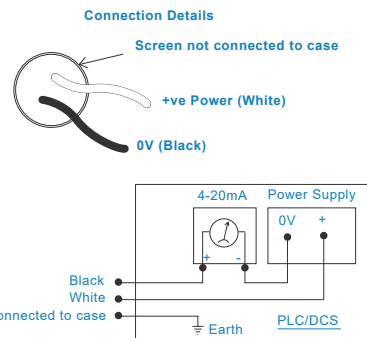
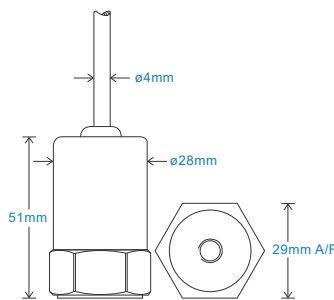
## 4-20mA velocity output via Braided Cable

### Key Features

- For use with PLC/DCS systems
- Customisable features

### Industries

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



### Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal)
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Braided - length to be specified with order
Mounting Threads	see: 'How To Order' table

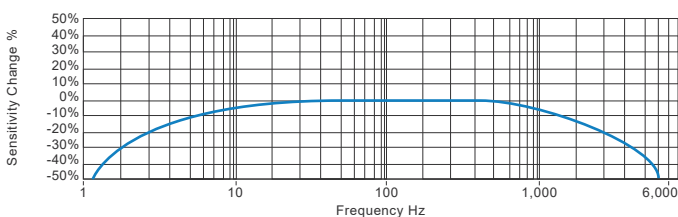
### Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-25 to 120°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

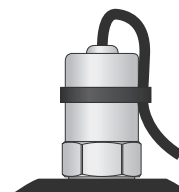
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor	케이블 길이 (일체형 케이블인 경우) QXX - 미터 단위로 지정된 길이												
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b> F - Filtered I - Intrinsically Safe L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output		<b>P</b> - Peak Range <b>PP</b> - Peak to Peak Range		<b>Velocity Range (지정하지 않는 한 RMS)</b> 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				<b>Cable/Connector</b> 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12			<b>Mounting Threads</b> 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male			



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TS009.10



# HS-420 Accelerometer

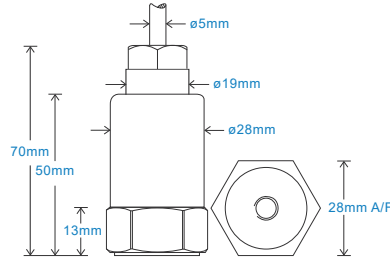
## 4-20mA velocity output via Silicon Cable

### Key Features

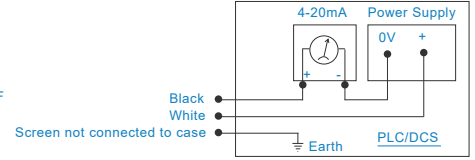
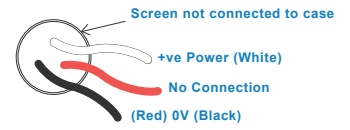
- For use with PLC/DCS systems
- Waterproof

### Industries

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



### Connection Details



### Technical Performance

Mounted Base Resonance	5kHz min
Velocity Ranges	see: 'How To Order' table ±10% Nominal 80Hz at 22°C
Frequency Response	10Hz (600cpm) to 1kHz (60kcpm) ± 5% - ISO10816
Isolation	Base isolated
Range	50g peak
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Silicon - length to be specified with order
Mounting Threads	see: 'How To Order' table
Submersible Depth	100 metres max (10 bar)

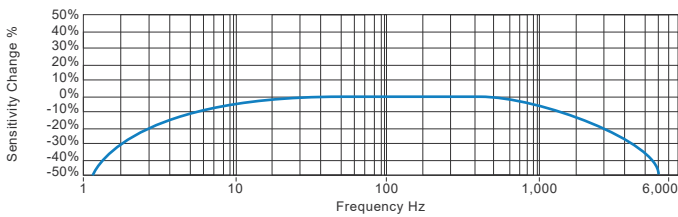
### Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts

### Environmental

Operating Temperature Range	-25 to 120°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

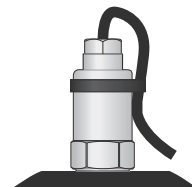
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor	케이블 길이 (일체형 케이블인 경우) QXX - 미터 단위로 지정된 길이												
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b> F - Filtered I - Intrinsically Safe L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output					<b>Velocity Range</b> (지정하지 않는 한 RMS) 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			<b>Cable/Connector</b> 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12			<b>Mounting Threads</b> 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male			



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TS016.11



# HS-420 Accelerometer

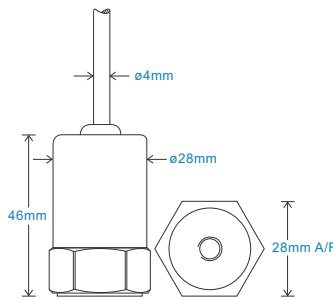
## 4-20mA velocity output via Flame Retardant Cable

### Key Features

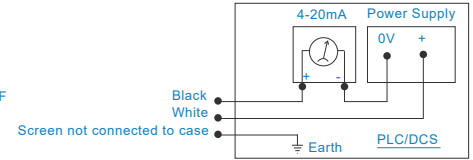
- For use with PLC/DCS systems
- Customisable features
- Low smoke, halogen free cable

### Industries

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



### Connection Details



### Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Flame Retardant - length to be specified with order
Mounting Threads	see: 'How To Order' table

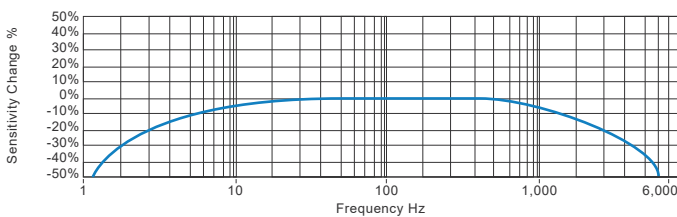
### Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-25 to 90°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

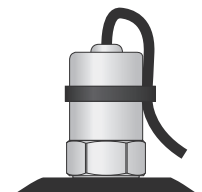
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor	케이블 길이 (일체형 케이블인 경우) QXX - 미터 단위로 지정된 길이												
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b> F - Filtered I - Intrinsically Safe L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output					<b>Velocity Range</b> (지정하지 않는 한 RMS) 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			<b>Cable/Connector</b> 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12			<b>Mounting Threads</b> 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male			



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# HS-420 Accelerometer

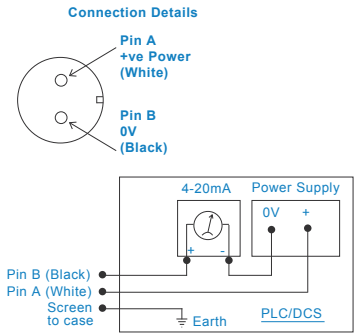
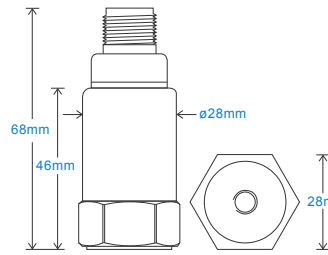
## 4-20mA velocity output via 2 Pin MS Connector

### Key Features

- For use with PLC/DCS systems
- Customisable features

### Industries

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



### Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal)
Screened Cable Assembly	see: <a href="http://www.hansfordsensors.com">www.hansfordsensors.com</a> for options
Connector	HS-AA004 - non-booted HS-AA053 or HS-AA054 - booted
Mounting Threads	see: 'How To Order' table

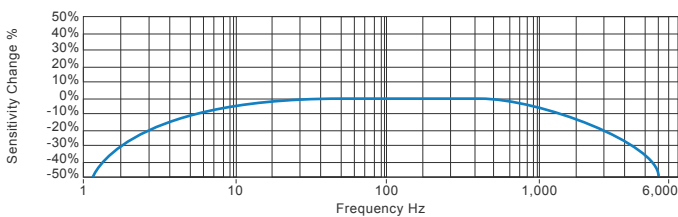
### Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-25 to 120°C
Sealing	IP68
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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor												
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		
<b>Extra Options (if required)</b> F - Filtered I - Intrinsicly Safe L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output					<b>Velocity Range</b> (지정하지 않는 한 RMS) 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			<b>Cable/Connector</b> 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12			<b>Mounting Threads</b> 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male		



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TS008.9

# HS-420 Accelerometer

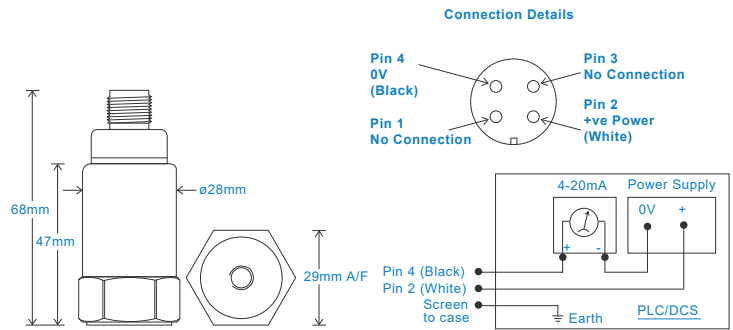
## 4-20mA velocity output via M12 Connector

### Key Features

- For use with PLC/DCS systems
- Customisable features

### Industries

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



### Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal) body only
Screened Cable Assembly	HS-AC010 - straight HS-AC011 - right angle
Mounting Threads	see: 'How To Order' table

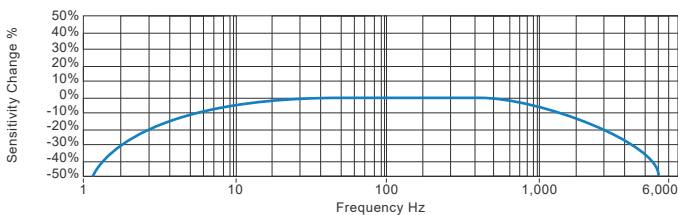
### Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

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

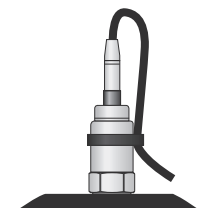
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor																							
<b>H S 4 2 0 X X X X X X X X</b>																								
<b>Extra Options (if required)</b>				<b>Velocity Range</b> (지정하지 않는 한 RMS)				<b>Cable/Connector</b>			<b>Mounting Threads</b>													
F - Filtered	I - Intrinsically Safe	L - 316L Stainless Steel	RT - Temperature Output PT100	S - 90° Side Exit	T - Temperature Output	P - Peak Range	PP - Peak to Peak Range	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	01 - PUR	02 - Braided	07 - Silicon	08 - Flame Retardant	50 - 2 Pin MS	54 - M12	01 - 1/4-28" UNF Female	02 - 1/4-28" UNF Male	05 - Quick Fit Female	06 - M6 x 1mm Male	08 - M8 x 1.25mm Male	10 - M10 x 1.5mm Male



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# HS-420 Accelerometer

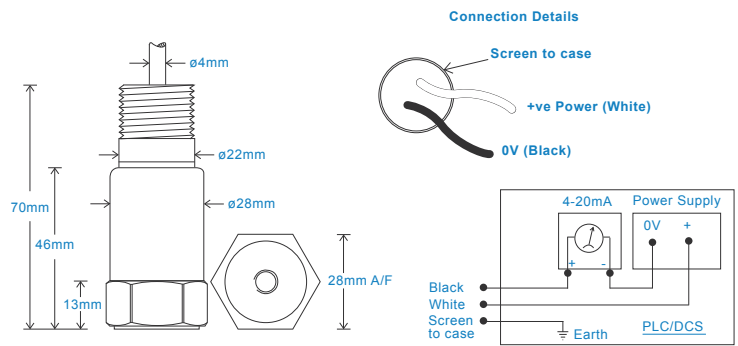
4-20mA velocity output via Flame Retardant Cable for use with Terminal Head

## Key Features

- For use with Terminal Head
- Customizable features

## Industries

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



## Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal)
External Cable Length	site cable up to 1000 metres
Integral Cable Length	up to 300 mm
Cable Connections	Screw Terminals
Mounting Threads	see: 'How To Order' table

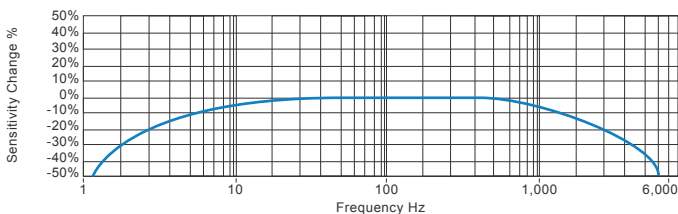
## Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

## Environmental

Operating Temperature Range	-25 to 90°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

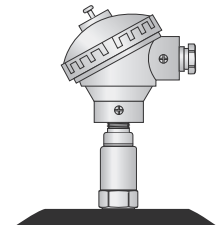
## Typical Frequency Response



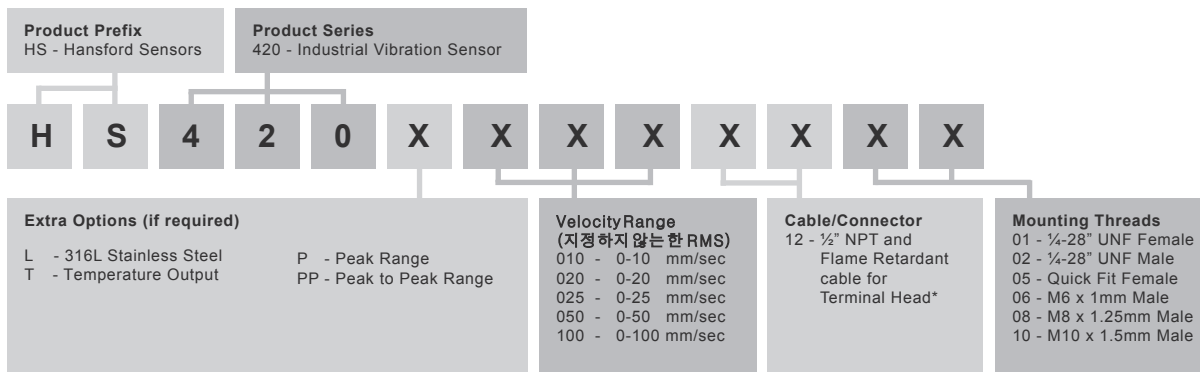
## Applications

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



\*HS-AA042 또는 HS-AA052  
단자 헤드 별도 구매



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# HS-420 Accelerometer

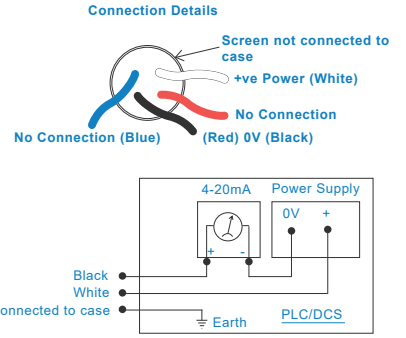
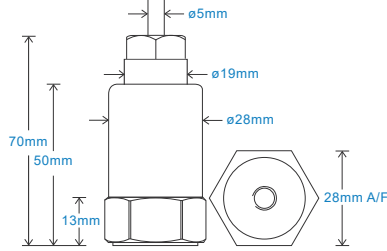
## 4-20mA velocity output via 4 Core Polyolefin HFFR

### Key Features

- Halogen free cable
- Resistant to oil
- For use with PLC/DCS systems

### Industries

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



### Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Screened Cable	Polyolefin HFFR - length to be specified with order
Mounting Threads	see: 'How To Order' table

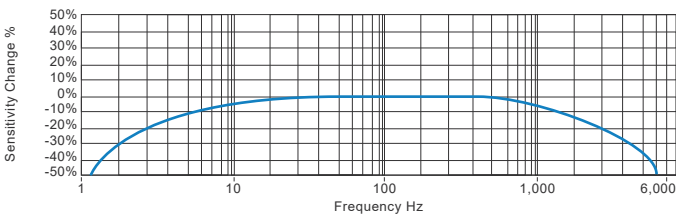
### Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-55 to 130°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

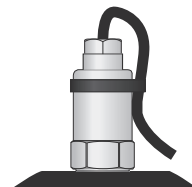
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor	케이블 길이 (일체형 케이블인 경우) QXX - 미터 단위로 지정된 길이												
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b> F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output					<b>Velocity Range</b> (지정하지 않는 한 RMS) 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			<b>Cable/Connector</b> 37 - 4 Core Polyolefin HFFR			<b>Mounting Threads</b> 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male			



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# HS-420 Accelerometer

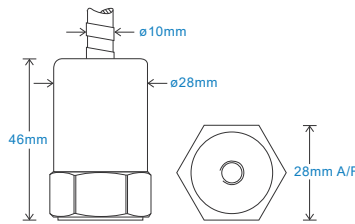
## 4-20mA velocity output via FEP Cable with Protective Conduit

### Key Features

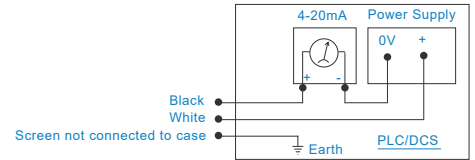
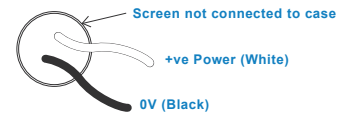
- For use with PLC/DCS systems
- Customisable features

### Industries

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



### Connection Details



### Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

### Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal) body only
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Mounting Threads	see: 'How To Order' table
Conduit Material	316 Stainless Steel
Conduit Length	Conduit Length is approx. 0.5m shorter than the cable Maximum Conduit Length: 30m

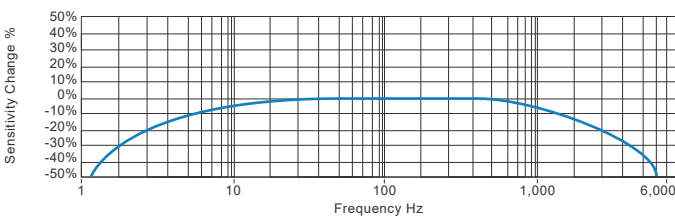
### Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	$>10^8$ Ohms at 500 Volts

### Environmental

Operating Temperature Range	-25 to 120°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

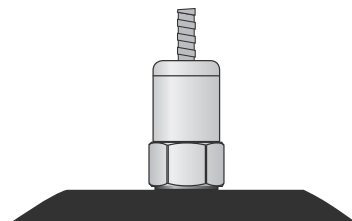
### Typical Frequency Response



### 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor	<b>케이블 길이 (일체형 케이블인 경우)</b> QXX - 미터 단위로 지정된 길이													
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b> F - Filtered I - Intrinsically Safe L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output					<b>P</b> - Peak Range <b>PP</b> - Peak to Peak Range			<b>Velocity Range (지정하지 않는 한 RMS)</b> 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			<b>Cable/Connector</b> 30C - FEP with Protective Conduit		<b>Mounting Threads</b> 02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male		



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# HS-420 Accelerometer

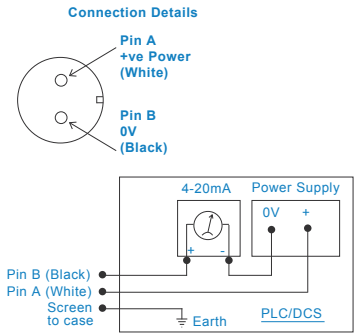
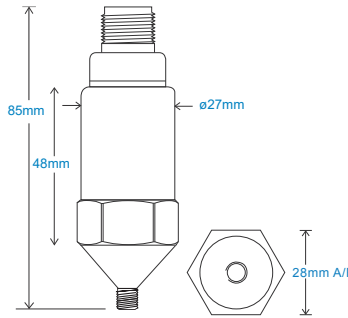
4-20mA velocity output via 2 Pin MS Connector with Conical Mounting

## Key Features

- For use with PLC/DCS systems
- Customisable features
- M8 Conical Mounting

## Industries

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



## Technical Performance

Mounted Base Resonance	5kHz min
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	50g peak
Transverse Sensitivity	Less than 5%

## Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150gms (nominal)
Screened Cable Assembly	see: <a href="http://www.hansfordsensors.com">www.hansfordsensors.com</a> for options
Connector	HS-AA004 - non-booted HS-AA053 or HS-AA054 - booted
Mounting Threads	M8 Conical Base

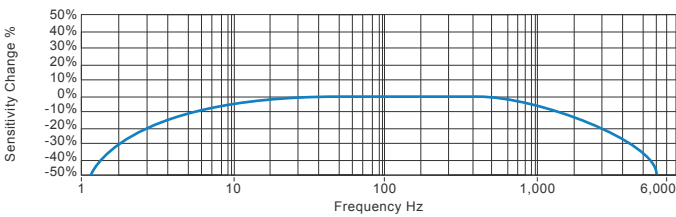
## Electrical

Current Output	4-20mA DC proportional to Velocity Range
Supply Voltage	15-30 Volts DC (for 4-20mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts

## Environmental

Operating Temperature Range	-25 to 120°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

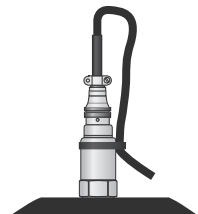
## Typical Frequency Response



## 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

<b>Product Prefix</b> HS - Hansford Sensors	<b>Product Series</b> 420 - Industrial Vibration Sensor										
<b>H</b>	<b>S</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Extra Options (if required)</b> F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 T - Temperature Output					<b>Velocity Range</b> (지정하지 않는 한 RMS) 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			<b>Cable/Connector</b> 50 - 2 Pin MS 54 - M12 Connector		<b>Mounting Threads</b> 19 - M8 Conical Base	



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