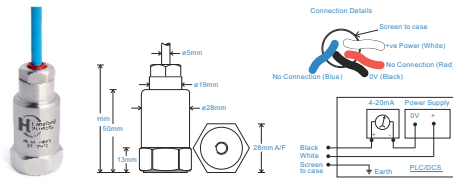


# HS-420 Accelerometer

4-20mA Velocity Output

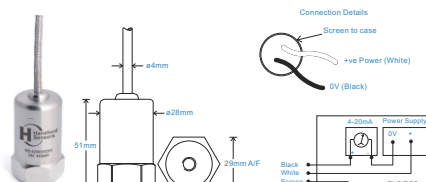
## Cable and Connector Options

### PUR Cable (01)



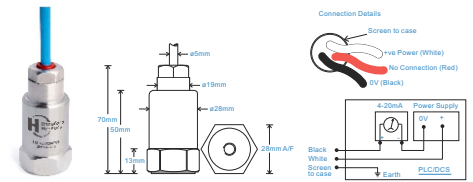
Cable/Connector	
Screened Cable	PUR
Maximum cable length	1000 metres
Standard cable length	5 metres
Environmental	
Operating Temperature Range	-25 to 90°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

### Braided Cable (02)



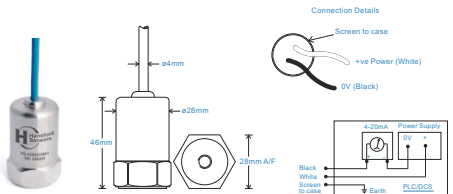
Cable/Connector	
Screened Cable	Braided
Maximum cable length	1000 metres
Standard cable length	5 metres
Environmental	
Operating Temperature Range	-25 to 120°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

### Silicon Cable (07)



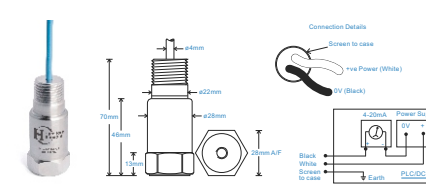
Cable/Connector	
Screened Cable	Silicon
Maximum cable length	1000 metres
Standard cable length	5 metres
Environmental	
Operating Temperature Range	-25 to 120°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

### Flame Retardant Cable (08)



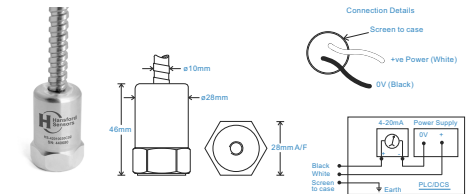
Cable/Connector	
Screened Cable	Flame Retardant
Maximum cable length	1000 metres
Standard cable length	5 metres
Environmental	
Operating Temperature Range	-25 to 90°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

### Flame Retardant Cable for use with Terminal Head (12)



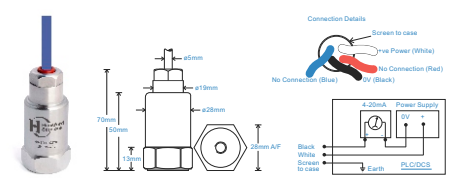
Cable/Connector	
Screened Cable	Flame Retardant for Terminal Head
External cable length	site cable up to 1000 metres
Internal cable length	up to 300 metres
Environmental	
Operating Temperature Range	-25 to 90°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

### FEP Cable with Protective Conduit (30C)



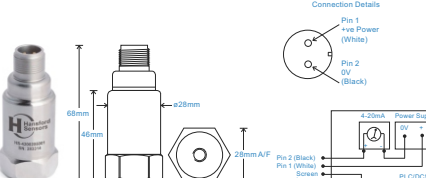
Cable/Connector	
Screened Cable	FEP with Protective Conduit
Maximum cable length	1000 metres
Standard cable length	5 metres
Environmental	
Operating Temperature Range	-25 to 120°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

### 4 Core Polyolefin HFFR (37)



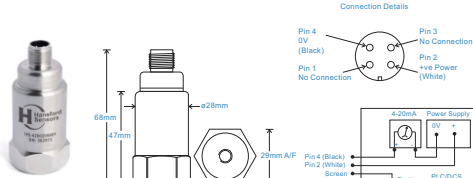
Cable/Connector	
Screened Cable	4-Core Polyolefin HFFR
Maximum cable length	1000 metres
Standard cable length	5 metres
Environmental	
Operating Temperature Range	-55 to 130°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

### 2 Pin MS (50)



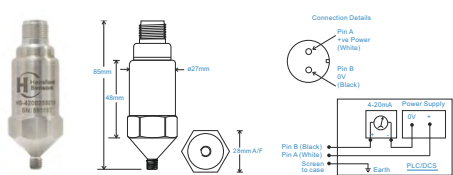
Cable/Connector	
Screened Cable Assembly	2 Pin MS
Connector	HS-AA004 - non-booted HS-AA053 or HS-0054 - booted
Environmental	
Operating Temperature Range	-25 to 120°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

### M12 Connector (54)



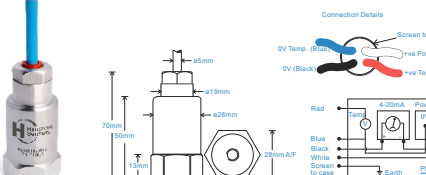
Cable/Connector	
Screened Cable Assembly	M12 Connector
Connector	HS-AC010 - straight HS-AC011 - right angle
Environmental	
Operating Temperature Range	-25 to 120°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

### 2 Pin MS with Conical Mounting (50)



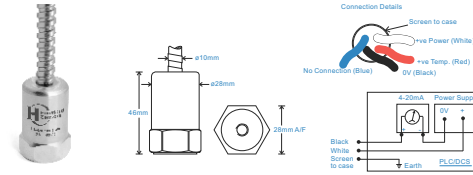
Cable/Connector	
Screened Cable	2 Pin MS
Connector	HS-AA004 - non-booted HS-AA053 or HS-0054 - booted
Environmental	
Operating Temperature Range	-25 to 120°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

### PUR Cable Temperature (01)



Cable/Connector	
Screened Cable	PUR Cable
Maximum Cable Length	1000 metres
Standard Cable Length	5 metres
Environmental	
Operating Temperature Range	-25 to 90°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

### FEP Cable with Protective Conduit Temperature (33C)

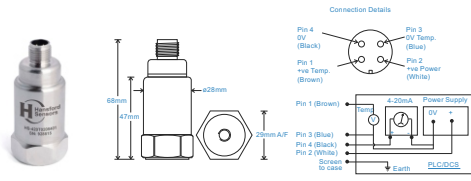


Cable/Connector	
Screened Cable	FEP with Protective Conduit
Maximum cable length	1000 metres
Standard cable length	5 metres
Environmental	
Operating Temperature Range	-25 to 90°C
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

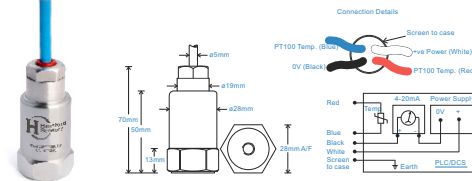
# HS-420 Accelerometer

4-20mA Velocity Output

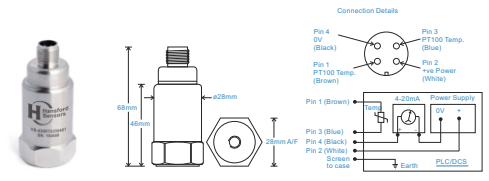
## M12 Connector Temperature (54)



## PUR Cable PT100 temperature (01)



## M12 Connector PT100 temperature (54)



Cable/Connector	
Screened Cable	M12 Connector
Connector	HS-AC010 - straight HS-AC011 - right angle
Environmental	
Operating Temperature Range	-25 to 90°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

Cable/Connector	
Screened Cable	PUR Cable
Maximum cable length	1000 metres
Standard cable length	5 metres
Environmental	
Operating Temperature Range	-25 to 90°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

Cable/Connector	
Screened Cable	M12 Connector
Connector	HS-AC010 - straight HS-AC011 - right angle
Environmental	
Operating Temperature Range	-25 to 90°C
Sealing	IP67
Maximum Shock	5000g
EMC	EN61326-1:2013

## Technical Performance

Mounted Base Resonance	5kHz min
Sensitivity	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
Mounting Threads	see: 'How To Order' table

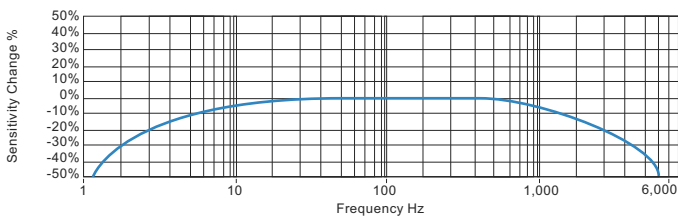
## Electrical

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

## Industries

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

## 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 420 - Industrial Vibration Sensor				Cable Length (if integral cable) QXX - length specified in metres								
H	S	4	2	0	X	X	X	X	X	X	X	X	X	X
Extra Options (if required)						Velocity Range (RMS unless specified)			Cable/Connector			Mounting Threads		
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			01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 12 - ½" NPT and Flame Retardant cable for Terminal Head* 30C - FEP with Protective Conduit 37 - 4 Core Polyolefin HFFR 50 - 2 Pin MS 54 - M12			01 - ¼-28" UNF Female 02 - ¼-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male 19 - M8 Conical Base		