
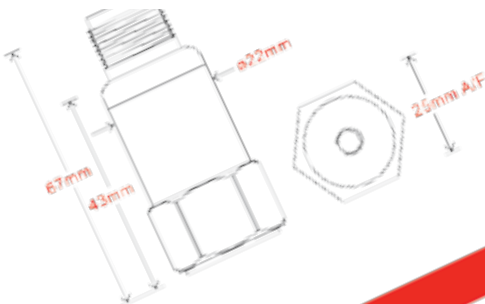


Vibration sensors and accessories

cele
tput via 2 Pin Me

ector
es

es, Pulp and Paper,
s, Utilities, Automotive,
naceutical

Mechanical

Case Material: Stainless Steel
Sensing Element/Construction: PZT/Compression
Mounting Torque: 8N
Weight: 125gms (nominal)
Screened Cable Assembly: VS-AA004 - non-b
Connector: VS-AA053 or HS-0054 -
see: 'How To Order'

Environmental

Operating Temperature Range: see: www.IKMinstrutek.no for op
Sealing: VS-AA004 - non-b
Maximum Shock: VS-AA053 or HS-0054 -
EMC: see: 'How To Order'

Physical Performance

Rated Base Resonance: see 'How To Order' table (nominal)
Sensitivity: see: 'How To Order' table $\pm 10\%$
Frequency Response: 2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$
Isolation Range: 1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$
Transverse Sensitivity: 0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$
Base isolated: see: 'How To Order' table
Less than 5%

0.1mg max
0.5mA to 8mA
10 - 12 Volts DC
2 seconds
200 Ohms max.
500 Volts

Compressors,
handlers,

IKM vibration sensors and accessories in all ranges



IKM
Instrutek AS

A collaborating partner

IKM Instrutek is a collaborating partner that focuses on quality, product range and expertise. IKM Instrutek supplies products and services to the shipping and offshore sectors, industry and the public sector, as well as other businesses with varying metrological needs.

Our expertise ranges from measuring instruments, maritime navigation and communication, to process instrumentation, condition monitoring, calibration and special request items.

The company was established in 1985. Its head office is in Larvik, with branch offices in Stavanger, Bergen and Ålesund.

The company has around 60 employees and a budgeted turnover of over NOK 200 million. The company is part of the IKM group with around 2,450 employees and an annual turnover of approx. NOK 4.2 billion

A part of the IKM Group

IKM Instrutek is part of the IKM Group - a multidiscipline sub supplier focusing primarily on the oil and gas industry. The IKM Group conducts business within the following five areas: Electrical/Instrument/Process, Subsea/Completion/Commissioning, Engineering/Operations, Fabrication/Inspection and Rig/Downhole Services.

Focus on Growth is always the goal, and IKM's ambition is that even the most demanding customer shall choose IKM as their preferred business partner. All IKM companies are ISO-certified, and through internal revisions, audits, and continuous monitoring. IKM Corporate Group ensures that it meets and exceeds the needs of its customers and employees with respect to quality, health, safety and the environment.

Vibration sensors and accessories

High quality vibration sensors and accessories with competitive prices. IKM Instrutek deliver IKM vibration sensors and accessories in all ranges.

Please note that this is only a small selection of the sensors we deliver. Please contact us if you do not find what you are looking for.



Products:

- AC Vibration sensors (with different sensitivities)
- AC Velocity sensors (with different sensitivities)
- Sensors for high temperatures
- 4-20mA vibration sensors and transmitters
- Cables
- Magnets and studs
- Switch & Connection Enclosures
- Junction Boxes
- Installation Products



VS-100 Accelerometer

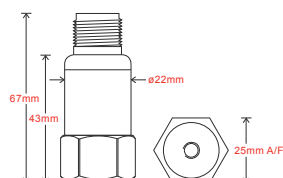
AC acceleration output via 2 Pin MS Connector

Key Features

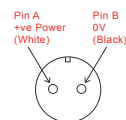
- Most common seller
- For use with data collector
- Customisable features

Industries

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



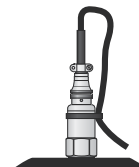
Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table $\pm 10\%$	Sensing Element/Construction	PZT/Compression
Nominal 80Hz at 22°C		Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$	Weight	125gms (nominal)
	1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$	Screened Cable Assembly	see: www.IKMinstrutek.no for options
	0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3dB$	Connector	VS-AA004 - non-booted VS-AA053 or HS-0054 - booted
Isolation	Base isolated	Mounting Threads	see: 'How To Order' table
Range	see: 'How To Order' table		
Transverse Sensitivity	Less than 5%		

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-55 to 140°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	2 seconds	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 ⁸ Ohms at 500 Volts		

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 VS - IKM Instrutek	Product Series 100 - Industrial Vibration Sensor	Cable Length (if integral cable) QXX - length specified in metres									
V	S	1	0	0	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
F - Filtered		010 - 10mV/g		±800g		28kHz (1,680kcpm)		01 - PUR		01 - ¼-28" UNF Female	
I - Intrinsically Safe		030 - 30mV/g		±250g		26kHz (1,560kcpm)		02 - Braided		02 - ½-28" UNF Male	
L - 316L Stainless Steel		050 - 50mV/g		±180g		24kHz (1,440kcpm)		07 - Silicon		05 - Quick Fit Female	
RT - Temperature Output PT100		100 - 100mV/g		±80g		22kHz (1,320kcpm)		08 - Flame Retardant		06 - M6 x 1mm Male	
T - Temperature Output		250 - 250mV/g		±32g		20kHz (1,200kcpm)		50 - 2 Pin MS		08 - M8 x 1.25mm Male	
Y - 5% tolerance on sensitivity		500 - 500mV/g		±16g		18kHz (1,080kcpm)		54 - M12		10 - M10 x 1.5mm Male	



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We reserve the right to alter the specification of this product without prior notice
TS525.1E

VS-100S Accelerometer

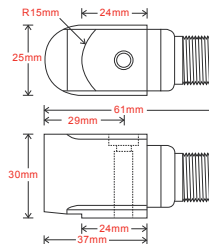
AC acceleration output via 2 Pin MS Connector

Key Features

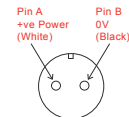
- For use with data collector
- Side entry for easy access
- Customisable features

Industries

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



Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table $\pm 10\%$	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$	Weight	185gms (nominal)
	0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3dB$	Screened Cable Assembly	see: www.IKMinstrutek.no for options
Isolation	Base isolated	Connector	VS-AA004 - non-booted
Range	see: 'How To Order' table		VS-AA053 or VS-0054 - bootied
Transverse Sensitivity	Less than 5%	Mounting Threads	see: 'How To Order' table

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-55 to 140°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	2 seconds	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 ⁸ Ohms at 500 Volts		

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 VS - IKM Instrutek	Product Series 100 - Industrial Vibration Sensor	Cable Length (if integral cable) QXX - length specified in metres									
V	S	1	0	0	S	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
F - Filtered		010 - 10mV/g		±800g		27kHz (1,620kcpm)		01 - PUR		02 - 1/4-28 UNF Male	
L - 316L Stainless Steel		030 - 30mV/g		±250g		25kHz (1,500kcpm)		02 - Braided		06 - M6 x 1mm Male	
RT - Temperature Output PT100		050 - 50mV/g		±180g		23kHz (1,380kcpm)		07 - Silicon		08 - M8 x 1.25mm Male	
S - 90° Side Exit		100 - 100mV/g		±80g		21kHz (1,260kcpm)		08 - Flame Retardant			
T - Temperature Output		250 - 250mV/g		±32g		19kHz (1,140kcpm)		50 - 2 Pin MS			
Y - 5% tolerance on sensitivity		500 - 500mV/g		±16g		17kHz (1,020kcpm)		54 - M12			



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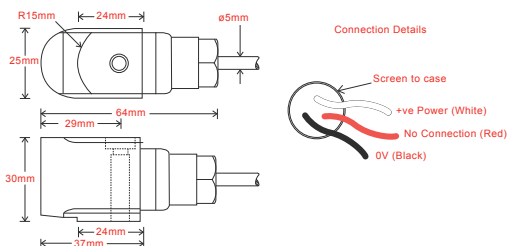


We reserve the right to alter the specification of this product without prior notice
TS534.1A

AC acceleration output via Silicon Cable

- For use with data collector
- Side entry for easy access
- Waterproof

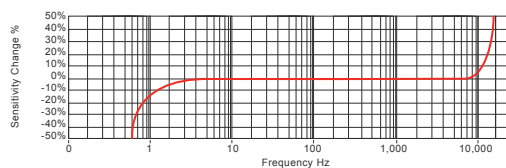
Building services, Pulp and Paper,
Mining, Metals, Utilities, Automotive,
Water, Pharmaceutical



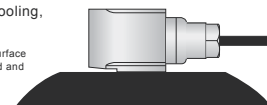
Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table $\pm 10\%$	Sensing Element/Construction	PZT/Compression
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 10kHz (600kcpm) $\pm 5\%$	Mounting Bolt provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 12kHz (720kcpm) $\pm 10\%$	Weight	185gms (nominal)
	0.8Hz (48cpm) to 15kHz (900kcpm) $\pm 3\text{dB}$	Maximum Cable Length	1000 metres
Isolation	Base isolated	Standard Cable Length	5 metres
Range	see: 'How To Order' table	Screened Cable	Silicon - length to be specified with order
Transverse Sensitivity	Less than 5%	Mounting Threads	see: 'How To Order' table
		Submersible Depth	100 metres max (10 bar)

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-50 to 140°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	2 seconds	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 ⁸ Ohms at 500 Volts		

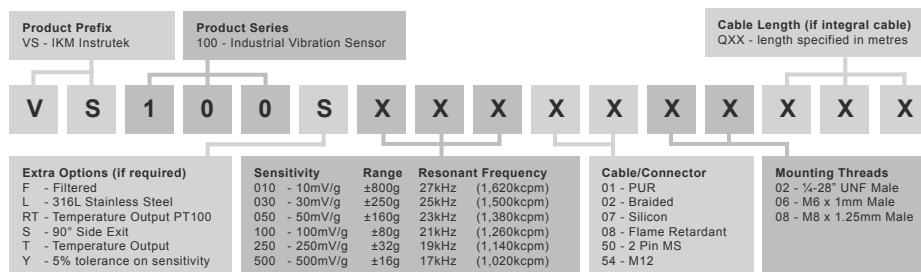
Applications



Fans, Motors, Pumps, Compressors,
Centrifuges, Conveyors, Air Handlers,
Gearboxes, Rolls, Dryers, Presses,
Cooling, VAC, Spindles, Machine Tooling,
Process Equipment



How To Order



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



VS-170 Premium Accelerometer

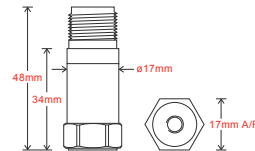
AC acceleration output via 2 Pin MS Connector

Key Features

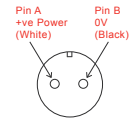
- Compact design
- Premium design
- Customisable features

Industries

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



Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C	Sensing Element/Construction	PZT/Shear
Frequency Response	2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$	Mounting Torque	8 Nm
	1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$	Weight	52gms (nominal)
	0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$	Screened Cable Assembly	see: www.IKMinstrutek.no for options
Isolation	Base isolated	Connector	VS-AA004 - non-booted VS-AA053 or VS-0054 - bootied
Range	see: 'How To Order' table	Mounting Threads	see: 'How To Order' table
Transverse Sensitivity	Less than 5%		

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-55 to 130°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	1 second	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 ⁸ Ohms at 500 Volts		

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)									
VS - IKM Instrutek	170 - Compact Premium Industrial Vibration Sensor	QXX - length specified in metres									
V	S	1	7	0	X	X	X	X	X	X	X
Extra Options (if required)		Sensitivity		Range		Resonant Frequency		Cable/Connector		Mounting Threads	
F - Filtered		010 - 10mV/g		$\pm 800\text{g}$		34kHz (2,040kcpm)		02 - Braided		01 - 1/4-28" UNF Female	
L - 316L Stainless Steel		030 - 30mV/g		$\pm 250\text{g}$		32kHz (1,920kcpm)		08 - Flame Retardant		02 - 1/4-28" UNF Male	
RT - Temperature Output PT100		050 - 50mV/g		$\pm 160\text{g}$		30kHz (1,800kcpm)		50 - 2 Pin MS		06 - M6 x 1mm Male	
S - 90° Side Exit		100 - 100mV/g		$\pm 80\text{g}$		28kHz (1,680kcpm)		54 - M12		08 - M8 x 1.25mm Male	
T - Temperature Output		250 - 250mV/g		$\pm 32\text{g}$		26kHz (1,560kcpm)				10 - M10 x 1.5mm Male	
Y - 5% tolerance on sensitivity		500 - 500mV/g		$\pm 16\text{g}$		24kHz (1,440kcpm)					



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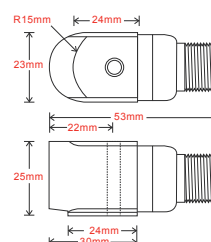
TS526.1E

AC acceleration output via 2 Pin MS Connector

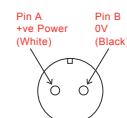
- Compact design
- Side entry for easy access
- Premium design



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



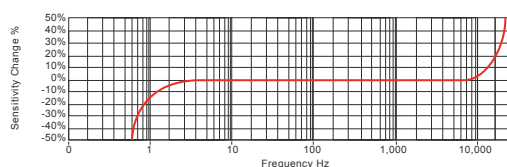
Connection Details



Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table $\pm 10\%$	Sensing Element/Construction	PZT/Shear
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$	Weight	135gms (nominal)
	0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3dB$	Connector	Use booted connector only
Isolation	Base isolated	Mounting Threads	see: 'How To Order' table
Range	see: 'How To Order' table		
Transverse Sensitivity	Less than 5%		

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-55 to 130°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	1 second	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 ⁸ Ohms at 500 Volts		

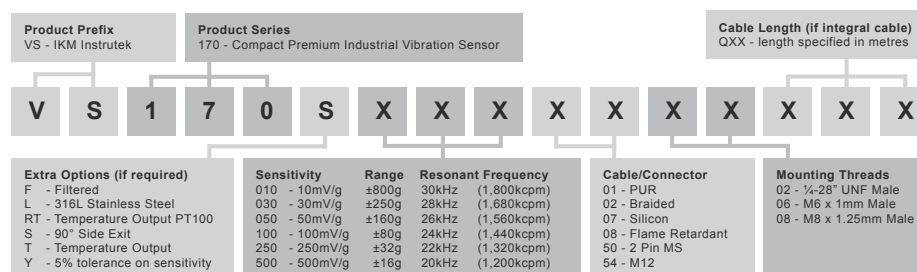
Applications



Fans, Motors, Pumps, Compressors,
Centrifuges, Conveyors, Air Handlers,
Gearboxes, Rolls, Dryers, Presses,
Cooling, VAC, Spindles, Machine Tooling,
Process Equipment



How To Order



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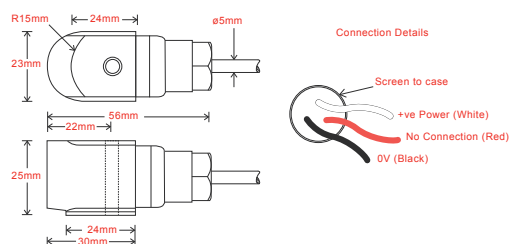


We reserve the right to alter the specification of this product without prior notice.

AC acceleration output via Silicon Cable

- Premium design
- Waterproof
- Compact design

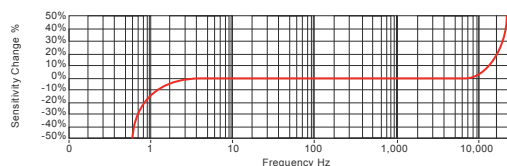
Building services, Pulp and Paper,
Mining, Metals, Utilities, Automotive,
Water, Pharmaceutical



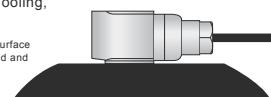
Technical Performance		Mechanical	
Mounted Base Resonance	see 'How To Order' table (nominal)	Case Material	Stainless Steel
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C	Sensing Element/Construction	PZT/Shear
Frequency Response	2Hz (120cpm) to 14kHz (840kcpm) $\pm 5\%$	Mounting Torque	8Nm
	1.5Hz (90cpm) to 16kHz (960kcpm) $\pm 10\%$	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
	0.8Hz (48cpm) to 19kHz (1,140kcpm) $\pm 3\text{dB}$	Weight	135gms (nominal)
Isolation	Base isolated	Maximum Cable Length	1000 metres
Range	see: 'How To Order' table	Standard Cable Length	5 metres
Transverse Sensitivity	Less than 5%	Screened Cable	Silicon - length to be specified with order
		Mounting Threads	see: 'How To Order' table
		Submersible Depth	100 metres max (10 bar)

Electrical		Environmental	
Electrical Noise	0.1mg max	Operating Temperature Range	-55 to 130°C
Current Range	0.5mA to 8mA	Sealing	IP68
Bias Voltage	10 - 12 Volts DC	Maximum Shock	5000g
Settling Time	1 second	EMC	EN61326-1:2013
Output Impedance	200 Ohms max.		
Case Isolation	>10 ⁸ Ohms at 500 Volts		

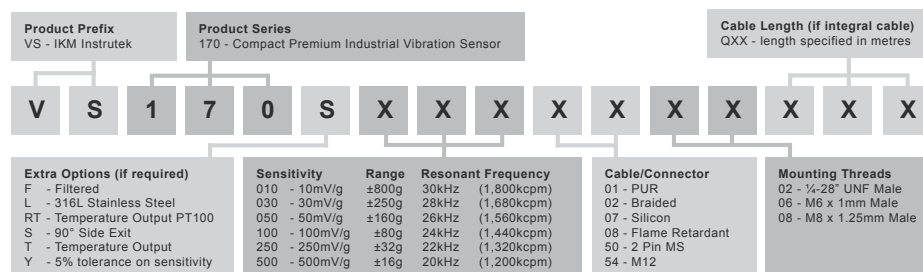
Applications



Fans, Motors, Pumps, Compressors,
Centrifuges, Conveyors, Air Handlers,
Gearboxes, Rolls, Dryers, Presses,
Cooling, VAC, Spindles, Machine Tooling,
Process Equipment



How To Order



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TS540 1A

VS-420 Accelerometer

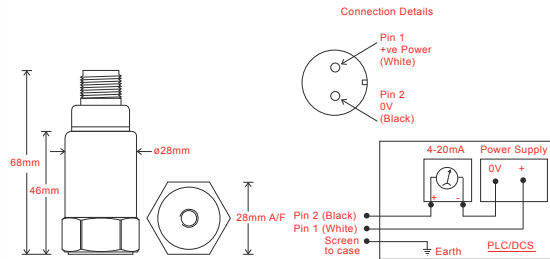
4-20mA velocity output via 2 Pin MS Connector

Key Features

- For use with PLC/DCS systems
- Customisable features

Industries

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



Technical Performance			Mechanical	
Mounted Base Resonance	5kHz min		Case Material	Stainless Steel
Velocity Ranges	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C		Sensing Element/Construction	PZT/Compression
Frequency Response	10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816		Mounting Torque	8Nm
Isolation	Base isolated		Weight	150gms (nominal)
Range	50g peak		Screened Cable Assembly	see: www.IKMinstrutek.no for options
Transverse Sensitivity	Less than 5%		Connector	VS-AA004 - non-booted VS-AA053 or VS-0054 - booted
			Mounting Threads	see: 'How To Order' table

Electrical		Environmental	
Current Output	4-20mA DC proportional to Velocity Range	Operating Temperature Range	-25 to 90°C
Supply Voltage	15-30 Volts DC (for 4-20mA)	Sealing	IP68
Settling Time	2 seconds	Maximum Shock	5000g
Output Impedance	Loop Resistance 600 Ohms max. at 24 Volts	EMC	EN61326-1:2013
Case Isolation	>10 ⁸ Ohms at 500 Volts		

Typical Frequency Response	Applications
	<p>Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, VAC, Spindles, Machine Tooling, Process Equipment</p> <p>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.)</p>

How To Order

Product Prefix		Product Series						Cable Length (if integral cable)						
VS - IKM Instrutek		420 - Industrial Vibration Sensor						QXX - length specified in metres						
V	S	4	2	0	X	X	X	X	X	X	X	X	X	X
Extra Options (if required)		P - Peak Range PP - Peak to Peak Range		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				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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VS-420S Accelerometer

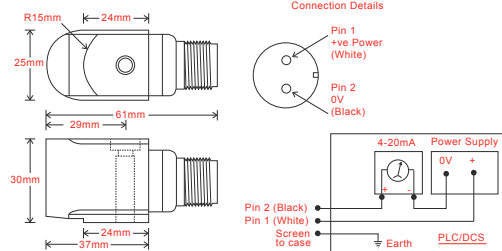
4-20mA velocity output via 2 Pin MS Connector

Key Features

- For use with PLC/DCS systems
- Side entry for easy access
- Customisable features

Industries

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



Technical Performance		Mechanical	
Mounted Base Resonance	5kHz min	Case Material	Stainless Steel
Velocity Ranges	see: 'How To Order' table $\pm 10\%$	Sensing Element/Construction	PZT/Shear
	Nominal 80Hz at 22°C	Mounting Torque	8Nm
Frequency Response	10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Isolation	Base isolated	Weight	185gms (nominal)
Range	50g peak	Screened Cable Assembly	see: www.IKMinstrutek.no for options
Transverse Sensitivity	Less than 5%	Connector	VS-AA004 - non-booted
			VS-AA053 or VS-0054 - booted
		Mounting Threads	see: 'How To Order' table

Electrical		Environmental	
Current Output	4-20mA DC proportional to Velocity Range	Operating Temperature Range	-25 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 ⁸ Ohms at 500 Volts		

Typical Frequency Response	Applications
	<p>Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, VAC, Spindles, Machine Tooling, Process Equipment</p> <p>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.)</p>

How To Order

Product Prefix	Product Series	Cable Length (if integral cable)									
VS - IKM Instrutek	420 - Industrial Vibration Sensor	QXX - length specified in metres									
V	S	4	2	0	S	X	X	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 S - 90° Side Exit T - Temperature Output					P - Peak Range PP - Peak to Peak Range			01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12		02 - 1/4-28" UNF Male 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male	



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VS-420S Accelerometer

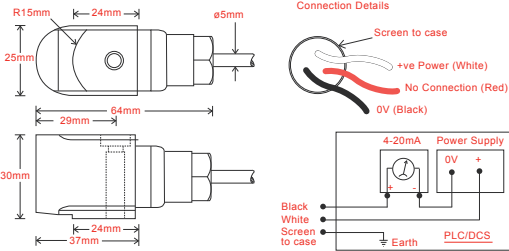
4-20mA velocity output via Silicon Cable

Key Features

- For use with PLC/DCS systems
- Side entry for easy access
- Waterproof

Industries

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



Technical Performance		Mechanical	
Mounted Base Resonance	5kHz min	Case Material	Stainless Steel
Velocity Ranges	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C	Sensing Element/Construction	PZT/Shear
Frequency Response	10Hz (600cpm) to 1kHz (60kcpm) $\pm 5\%$ - ISO10816	Mounting Torque	8Nm
Isolation	Base isolated	Mounting Bolt Provided	see: 'How To Order' table x 30mm long
Range	50g peak	Weight	185gms (nominal)
Transverse Sensitivity	Less than 5%	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		Environmental	
Current Output	4-20mA DC proportional to Velocity Range	Operating Temperature Range	-25 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	$>10^8$ Ohms at 500 Volts		

Typical Frequency Response	Applications
----------------------------	--------------

Sensitivity Change %

Frequency Hz

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)												
VS - IKM Instrutek	420 - Industrial Vibration Sensor	QXX - length specified in metres												
V	S	4	2	0	S	X	X	X	X	X	X	X	X	X
Extra Options (if required)					Velocity Range			Cable/Connector			Mounting Threads			
F - Filtered					(RMS unless specified)			01 - PUR			02 - 1/4-28" UNF Male			
L - 316L Stainless Steel					010 - 0-10 mm/sec			02 - Braided			06 - M6 x 1mm Male			
RT - Temperature Output PT100					020 - 0-20 mm/sec			07 - Silicon			08 - Flame Retardant			
S - 90° Side Exit					025 - 0-25 mm/sec			08 - Flame Retardant			50 - 2 Pin MS			
T - Temperature Output					050 - 0-50 mm/sec			50 - 2 Pin MS			54 - M12			
					100 - 0-100 mm/sec			54 - M12						

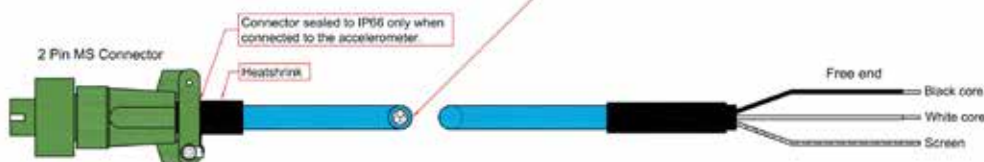
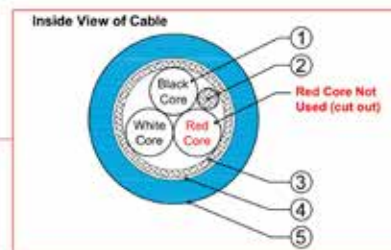
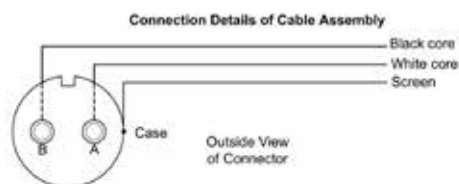


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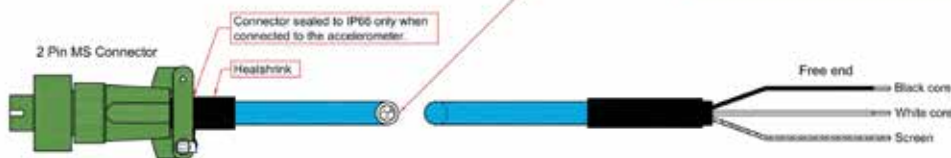
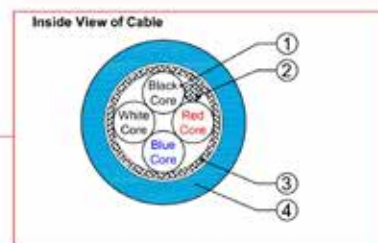
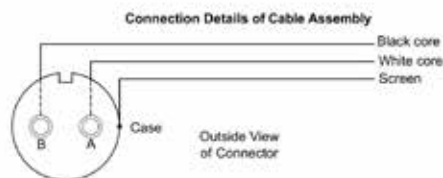


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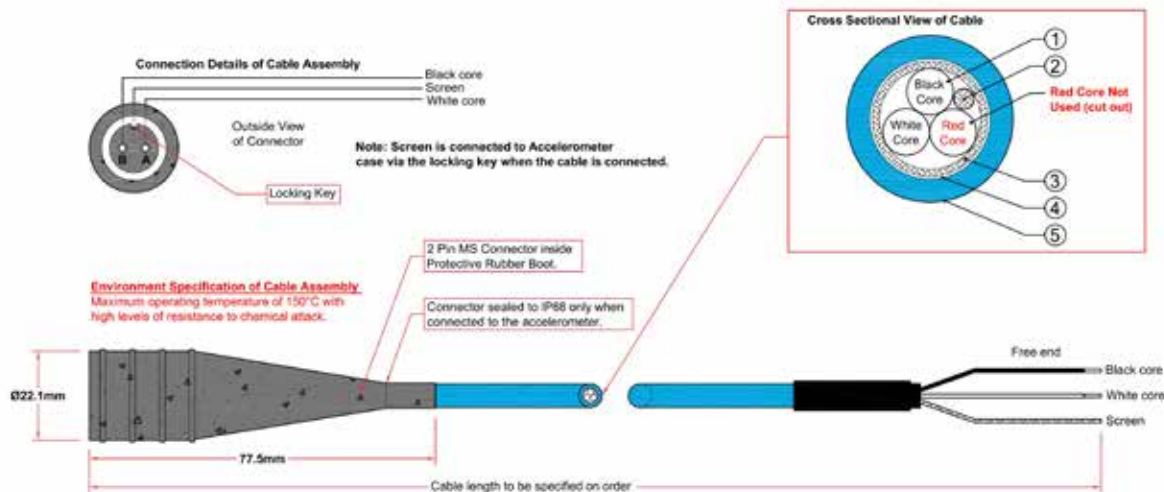
Materials of Cable: C91-018 Silicon Cable				
Pos	Description	Dimension	Overall Diameter	Remarks
1.	Tin plated copper conductor insulation of ETFE	20 AWG 0.17	0.96 1.30	19 x 0.20 (0.6sqmm)
2.	Screen wire of tin plated copper	24 AWG	0.60	19 x 0.13 (0.24sqmm)
3.	Braided screen of tin plated copper	18 x 7 x 0.10 Lay = 23.4 Angle = 22.1	3.25	Coverage: 65% min
4.	Non woven polyester binder		3.4	
5.	Jacket of Silicon, blue pressure-extruded round	0.90	5.2 nom	

Technical Data of Cable		
Technical Data	Values at 20°C	Unit
Conductor resistance	Max. 32.4	Ω / km
Insulation resistance	>1500	MΩ x km
Test voltage	3	KV DC
Voltage rating	600	V AC
Capacitance	Core-core: 178 ± 18 Core-screen: 335 ± 33	nF / km
Impedance	Core-core: 28.6 ± 2.8 Core-screen: 15.3 ± 2	Ω
Weight	46	g / m
Temperature rating	-50 / +150	°C



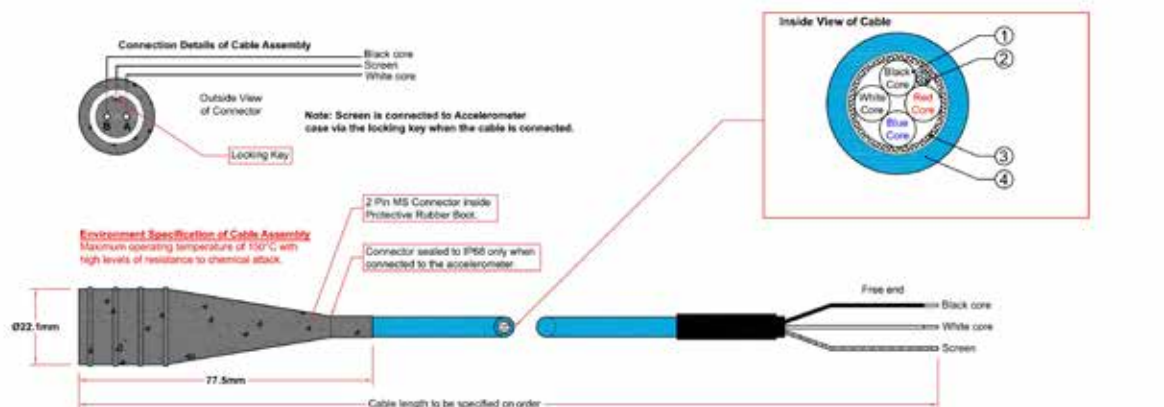
Materials of Cable: C91-001 PUR cable				
Pos	Description	Dimension	Overall Diameter	Remarks
1.	Tin plated copper conductor insulation of HF1 147	22 AWG 0.20	0.75 1.16	19 x 0.16 (0.34mm²)
2.	Screen wire of tin plated copper	26 AWG	0.48	19 x 0.10 (0.16mm²)
3.	Wrapped aluminium polyester foil screen		3.0	
4.	Jacket of TPU 90 M, blue pressure-extruded round	1.15	5.3 ± 0.2	

Technical Data of Cable		
Technical Data	Values at 20°C	Unit
Conductor resistance	Max. 53.1	Ω / km
Insulation resistance	>1500	MΩ x km
Test voltage	3	KV DC
Voltage rating	600	V AC
Capacitance	Core-opposite core: 139 Core-adjacent core: 145 Core-screen: 240	nF / km
Impedance	Core-opposite core: 48 Core-adjacent core: 44 Core-screen: 20	Ω
Radiation tolerance	4 x 10 ⁻⁶ S	Gy
Weight	38	g / m
Temperature rating	-40 / +90	°C
Core current rating	Max. 6	Amps at 40°C ambient air temp.



Pos	Description	Dimension	Overall Diameter	Remarks
1.	Tin plated copper conductor insulation of ETFE	20 AWG 0.17	0.98 1.30	19 x 0.20 (0.64gmm)
2.	Screen wire of tin plated copper	24 AWG	0.60	19 x 0.13 (0.244gmm)
3.	Braided screen of tin plated copper	16 x 7 x 0.10 Lay = 23.4 Angle = 22.1	3.25	Coverage: 85% min
4.	Non screen polyester binder		3.4	
5.	Jacket of Silicon, blue pressure-extruded round	0.90	5.2 nom	

Technical Data	Values at 20°C	Unit
Conductor resistance	Max: 32.4	Ω / km
Insulation resistance	>1500	MΩ x km
Test voltage	3	KV DC
Voltage rating	600	V AC
Capacitance	Core-core: 178 ± 18 Core-screen: 335 ± 33 Core-core: 28.8 ± 28	nF / km
Impedance	Core-screen: 15.3 ± 2	Ω
Weight	49	g / m
Temperature rating	-50 / +150	°C



Pos	Description	Dimension	Overall Diameter	Remarks
1.	Tin plated copper conductor insulation of HF 147	22 AWG 0.20	0.28 1.16	19 x 0.16 (0.24mm)
2.	Screen wire of tin plated copper	26 AWG	0.48	19 x 0.10 (0.18mm)
3.	Striped aluminum polyester foil screen		3.0	
4.	Jacket of TPU 90 M, blue pressure-extruded round	1.18	5.3 ± 0.2	

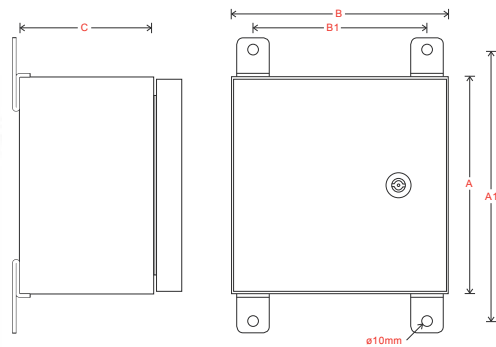
Technical Data	Values at 20°C	Unit
Conductor resistance	Max: 53.1	Ω / km
Insulation resistance	>1500	MΩ x km
Test voltage	3	KV DC
Voltage rating	600	V AC
Capacitance	Core-opposite core: 139 Core-adjacent core: 145 Core-screen: 240 Core-opposite core: 44 Core-adjacent core: 44	nF / km
Impedance	Core-screen: 20	Ω
Radiation tolerance	4 x 10 ⁴ S	Gy
Weight	38	g / m
Temperature rating	-40 / +90	°C
Core current rating	Max: 6	Amperes at 40°C ambient air temp

VS-CE Connection Enclosure

Painted Mild Steel

Key Features

- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connectors

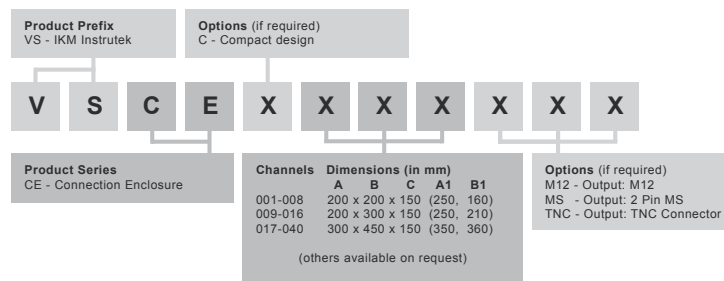


dimensions to be specified in 'how to order' table

Technical Performance

Inputs	Via accelerometer	Termination	Klippon Type
Output	BNC as standard (alternatives can be specified in 'How To Order' table)	Door	Twist Handle
Mounting Board	Engraved traffolyte panel (customisable upon request)	Glanding	Glands supplied but not fitted
Material	Mild Steel painted RAL 7042 as standard (alternatives can be specified in options of 'How To Order' table)	Single input M12 - ø3.5-7mm cable	Holes are punched for:
Dimensions	see: 'How To Order' table	Single input M20 - ø7-13mm multi-core cable	
Sealing	IP66	Multi input M20 - 3 x ø5.3mm	
		Labelling	Channel locations - other labelling available upon request
		Mounting	supplied are 4 x Brackets
		EMC	EN61326-1:2013

How To Order



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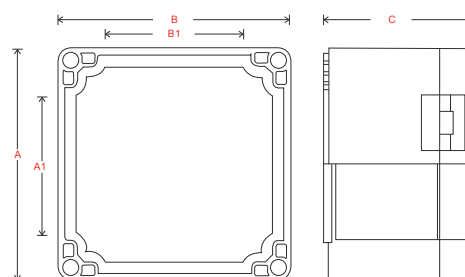
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TS559.1

VS-CE Connection Enclosure

Polycarbonate

Key Features

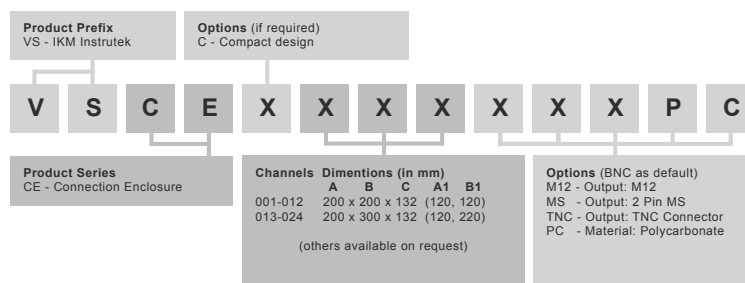
- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connectors



Technical Performance

Inputs	Via accelerometer	Door	Catches
Output	BNC as standard (alternatives can be specified in 'How To Order' table)	Glanding	Glands supplied but not fitted
Mounting Board	Engraved traffolyte panel (customisable upon request)	Holes are punched for: Single input M12 - ø3.5-7mm cable Single input M20 - ø7-13mm multi-core cable	
Material	Polycarbonate (to be specified in options of 'How To Order' table)	Labelling	Multi input M20 - 3 x ø5.3mm Channel locations - other labelling available upon request
Dimensions	see: 'How To Order' table	Mounting	supplied are 4 x Brackets
Sealing	IP66		
Termination	Klippon Type		

How To Order

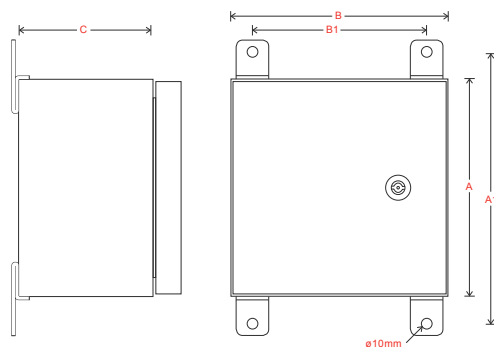


VS-CE Connection Enclosure

Stainless Steel

Key Features

- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via multiple connectors

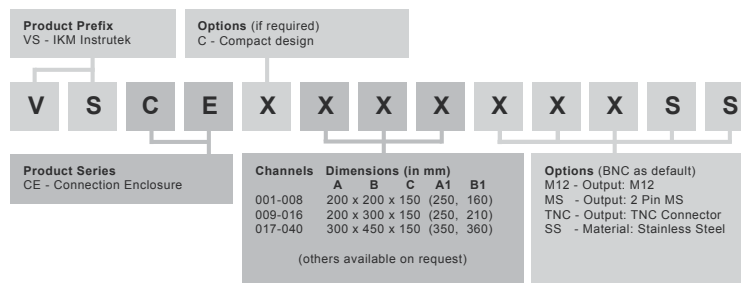


dimensions to be specified in 'how to order' table

Technical Performance

Inputs	Via accelerometer	Door	Lock and polyamide key
Output	BNC as standard (alternatives can be specified in 'How To Order' table)	Glanding	Glands supplied but not fitted
Mounting Board	Engraved traffolyte panel (customisable upon request)		Holes are punched for:
			Single input M12 - ø3.5-7mm cable
Material	304 Stainless Steel (to be specified in options of 'How To Order' table)		Single input M20 - ø7-13mm multi-core cable
			Multi input M20 - 3 x ø5.3mm
Dimensions	see: 'How To Order' table	Labelling	Channel locations - other labelling available upon request
Sealing	IP66	Mounting	supplied are 4 x Brackets
Termination	Klippon Type	EMC	EN61326-1:2013

How To Order

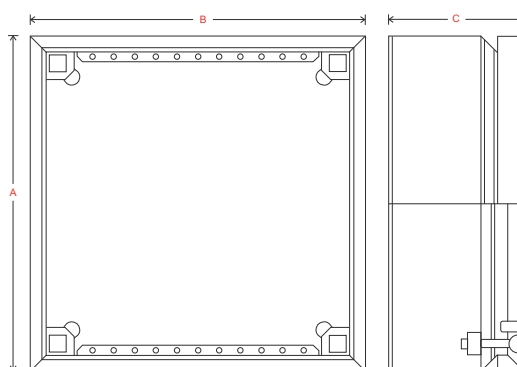


VS-JE Junction Enclosure

Mild Steel

Key Features

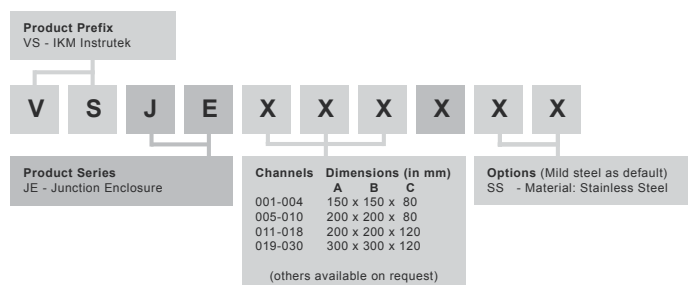
- Accelerometer cable glanding
- Ease of installation
- Flexible combinations



Technical Performance

Inputs	Accelerometer cabling	Glanding	Glands supplied but not fitted
Output	Multi-core glanding		Holes are punched for:
Material	Mild Steel painted RAL 7042 as standard (alternatives can be specified in options of 'How To Order' table)	Single input M12 - ø3.5-7mm cable	Single input M20 - ø7-13mm multi-core cable
Dimensions	see: 'How To Order' table	Multi input M20 - 3 x ø5.3mm	Channel locations - other labelling available upon request
Sealing	IP66	Mounting	supplied are 4 x Brackets
Termination	Klippon Type	EMC	EN61326-1:2013
Operating Temperature Range	-20 to 130°C		

How To Order

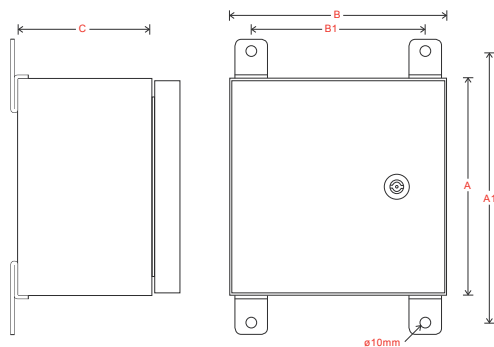


VS-SE Switching Enclosure

Painted Mild Steel

Key Features

- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via one connector

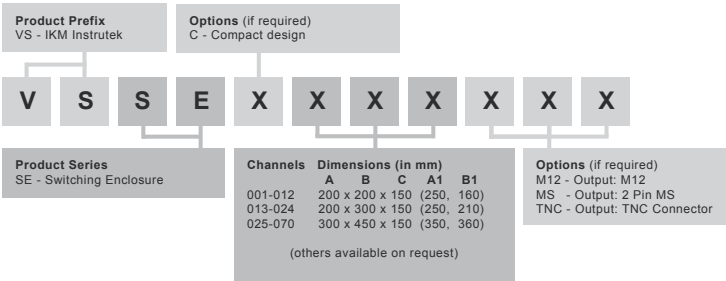


dimensions to be specified in 'how to order' table

Technical Performance

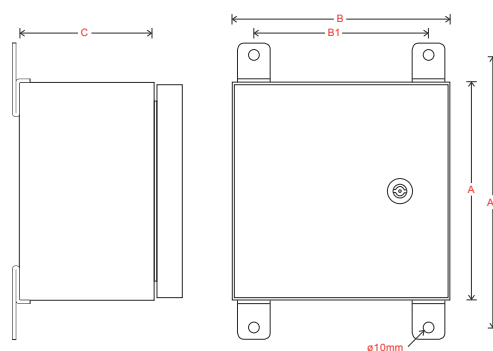
Inputs	Via accelerometer	Termination	Din rail terminals wired to switch
Output	BNC as standard (alternatives can be specified in 'How To Order' table)	Door	Twist Handle
Mounting Board	Engraved traffolyte panel (customisable upon request)	Glanding	Glands supplied but not fitted
Material	Mild Steel painted RAL 7042 as standard (alternatives can be specified in options of 'How To Order' table)	Single input M12	- ø3.5-7mm cable
Dimensions	see: 'How To Order' table	Single input M20	- ø7-13mm multi-core cable
Sealing	IP66	Labelling	Channel locations - other labelling available upon request
		Mounting	supplied are 4 x Brackets
		EMC	EN61326-1:2013

How To Order



Stainless Steel

- Provides a terminal to take readings from accelerometers via a portable data-collector
- Multiple outputs via one connector



dimensions to be specified in 'how to order' table

Inputs	Via accelerometer	Door	Lock and polyamide key
Output	BNC as standard (alternatives can be specified in 'How To Order' table)	Glanding	Glands supplied but not fitted
Mounting Board	Engraved traffolyte panel (customisable upon request)		Holes are punched for: Single input M12 - ø3.5-7mm cable Single input M20 - ø7-13mm multi-core cable
Material	304 Stainless Steel (to be specified in options of 'How To Order' table)		Multi input M20 - 3 x ø5.3mm
Dimensions	see: 'How To Order' table	Labelling	Channel locations - other labelling available upon request
Sealing	IP66	Mounting	supplied are 4 x Brackets
Termination	Din rail terminals wired to switch	EMC	EN61326-1:2013

Product Prefix
VS - IKM Instrutek

Options (if required)
C - Compact design

Product Series
SE - Switching Enclosure

Channels
001-012
013-024
025-070

Dimensions (in mm)
A B C A1 B1
200 x 200 x 150 (250, 160)
200 x 300 x 150 (250, 210)
300 x 450 x 150 (350, 360)

Options (BNC as default)
M12 - Output: M12
MS - Output: 2 Pin MS
TNC - Output: TNC Connector
SS - Material: Stainless Steel

VS-AA002 Bracket

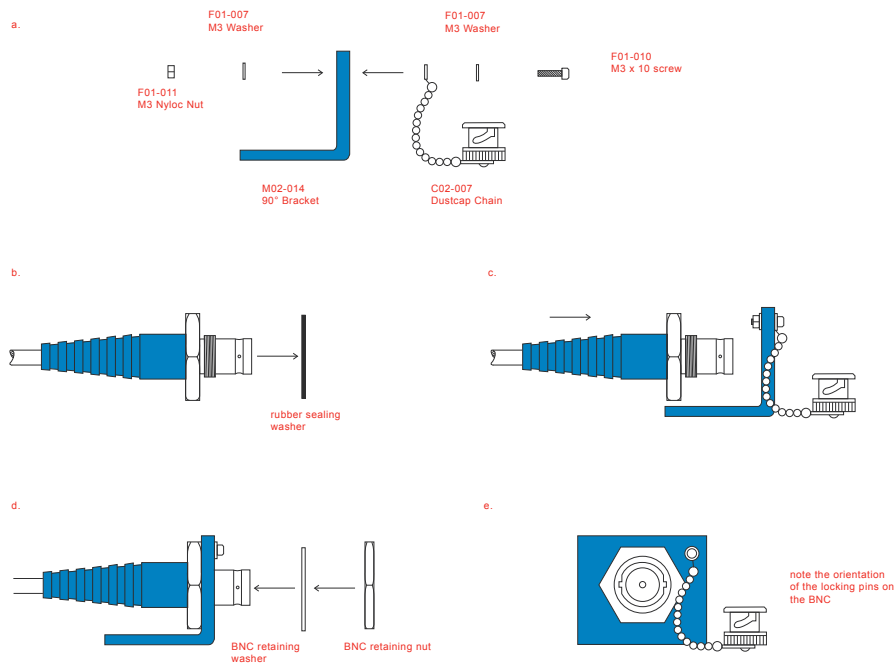
90° BNC Bulkhead Socket



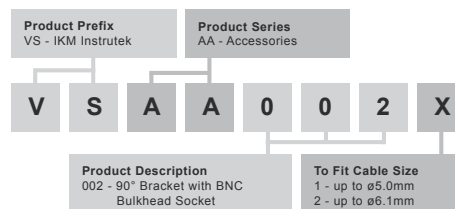
We manufacture a range of accessories for use with our comprehensive series of industrial accelerometers to achieve a secure surface fit.

Mounting Studs provide a secure, permanent or semi-permanent point of connection

Product Components



How To Order



VS-AA031 Spot Facing Kit

Key Features

- Portable and compact
- Creates flat surface to ensure an effective mount for accelerometers
- Available with various mounting thread options
- Requires pistol drill

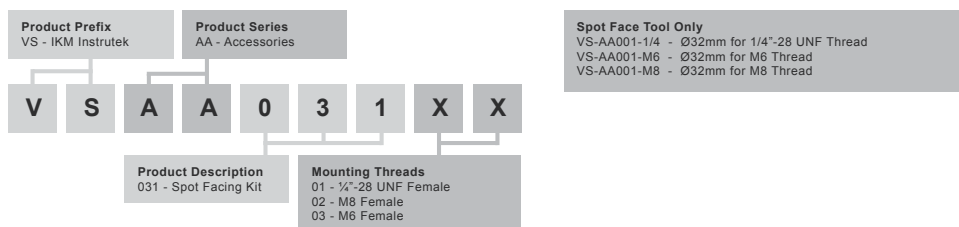


Product Description

The VS-AA031 Series product range includes all the necessary tools needed to accurately mount a vibration sensor onto the rotating machine. The packaged kit includes; tapping drill, taps, tap wrench and a spot facing tool, all presented in a compact portable box. There are three versions of the kit available to allow for different mounting threads; 1/4, M6 and M8.

The best possible method of mounting a sensor is via a drilled and tapped hole directly to the machine housing. However, this method often encounters problems when the housing is not flat. The spot facing tool kit allows the engineer to install the sensor on a flat surface ensuring best practice mounting technique.

How To Order

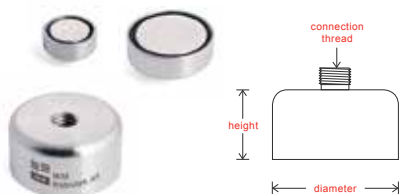


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TS550.1A



VS-AM Magnets - Flat Face



We manufacture a range of accessories for use with our comprehensive series of industrial accelerometers to achieve a secure surface fit.

Flat Face Pot Magnets provide a secure, semi-permanent point of connection to a flat surface and all have an operating temperature range up to 120°C









Part No.	Diameter	Thread	Pull Strength	Height	
VS-AM027	20mm	1/4"-28 UNF Male	12kg	8mm	
VS-AM028	20mm	M6 Male	12kg	8mm	
VS-AM029	20mm	M8 Male	12kg	8mm	
VS-AM030	20mm	10-32 UNF Male	12kg	8mm	
VS-AM009	25mm	1/4"-28 UNF Male	13.5kg	8mm	
VS-AM006	25mm	M6 Male	13.5kg	8mm	
VS-AM007	25mm	M8 Male	13.5kg	8mm	
VS-AM024	25mm	10-32 UNF Male	13.5kg	8mm	
VS-AM008	25mm	Q-Fit Male	13.5kg	14mm	
VS-AM014	25mm	1/4"-28 UNF Female	13.5kg	15mm	
VS-AM015	25mm	M5 Female	13.5kg	15mm	

VS-AM Magnets - Pole Piece



We manufacture a range of accessories for use with our comprehensive series of industrial accelerometers to achieve a secure surface fit.

Pole Piece Pot Magnets provide a secure, semi-permanent point of connection to a curved surface and all have an operating temperature range up to 120°C

















Part No.	Diameter	Thread	Pull Strength	Height	
VS-AM020	20mm	1/4"-28 UNF Male	8.5kg	17mm	
VS-AM001	25mm	1/4"-28 UNF Male	18kg	17mm	
VS-AM002	25mm	M6 Male	18kg	17mm	
VS-AM003	25mm	M8 Male	18kg	17mm	
VS-AM004	25mm	10-32 UNF Male	18kg	17mm	
VS-AM026	25mm	1/2" UNC Q-Fit Male	18kg	21mm	
VS-AM005	25mm	Q-Fit Male	18kg	23mm	
VS-AM010	25mm	M5 Female	18kg	23mm	
VS-AM011	25mm	M6 Female	18kg	23mm	
VS-AM012	25mm	1/4"-28 UNF Female	18kg	23mm	
VS-AM013	25mm	M8 Female	18kg	23mm	

VS-AS Studs



We manufacture a range of accessories for use with our comprehensive series of industrial accelerometers to achieve a secure surface fit.

Mounting Studs provide a secure, permanent or semi-permanent point of connection

Part No.	Connection Point 1	Connection Point 2	
VS-AS001	Quick Fit Male	Glue Face	
VS-AS002	Quick Fit Male	M8 Male	
VS-AS003	Quick Fit Male	M6 Male	
VS-AS004	Quick Fit Male	1/4"-28 UNF Male	
VS-AS006	Quick Fit Female	1/4"-28 UNF Male	
VS-AS007	Quick Fit Male	M10 Male	
VS-AS008	1/4"-28 UNF Male	M8 Male	
VS-AS012	Quick Fit Male	1/4"-28 UNF Female	
VS-AS014	1/4"-28 UNF Male	Glue Face	
VS-AS018	Quick Fit Male (1/2" UNC)	Glue Face	
VS-AS021	1/4"-28 UNF Male	M10 Male	
VS-AS027-1/4	1/4"-28 UNF Female	Glue Face	
VS-AS027-M6	M6 Female	Glue Face	
VS-AS027-M8	M8 Female	Glue Face	
VS-AS029	10-32 UNF Male	Glue Face	
VS-AS032	Quick-Fit Female	M8 Male	

VS-660 Accelerometer Cable & Bias Checker

Key Features

- For use by the condition monitoring engineer
- Verifies the functionality of an accelerometer
- Compact and portable
- Rechargeable battery



Technical Performance

Input	Constant current accelerometer
Display	Indicates the DC bias of accelerometer
LED	Indicates status of test accelerometer
	Green - OK
	Red - High Bias Voltage
	Amber - Low Bias Voltage
Connection	BNC socket
Leads	Supplied with 0.5 m BNC plug lead for connection to BNC socket or switch box.
	Spring clip lead to enable direct connection to an accelerometer with flying leads
Enclosure	Blue plastic, with rubber moulding
Size	75 x 125 x 300 mm
Battery life	3 hrs (1 x PP3)
	Low battery indicator on display
Weight	270 gms
EMC	EN61326-1:2013

VS-661 Accelerometer Simulator

Key Features

- For use by the condition monitoring engineer
- Provides two switched levels of simulated vibration velocity signals allowing verification of vibration monitor and alarm circuits
- Compact and portable
- Rechargeable battery



Technical Performance

Input	100mV/g monitoring system
Output	50mV rms @ 156 Hz = 5mm/s rms (0.5g rms) or 200 mV rms @ 156 Hz = 20 mm/s rms (2g rms)
LED	Indicates function Green - Power On Red - 20mm/s Amber - 5mm/s
Connection	BNC socket
Leads	Supplied with 0.5 m BNC plug lead for connection to BNC socket or switch box. Also lead to enable direct connection to an accelerometer with flying leads
Enclosure	Blue plastic, with rubber moulding
Size	75 x 125 x 300 mm
Battery life	3 hrs (1 x PP3) Low battery indicator on display
Weight	270 gms
EMC	EN61326-1:2013



Quality, expertise, approval and certificates

IKM Instrutek is a specialist company certified and approved within many different fields.

Specific certificates and approvals for different products and services are available upon request.





Classification authority. Certified by the National Institute of Technology within:

- ISO 9001 The most recognised standard in the world for quality assurance.
- NS-EN ISO 14001 The most recognised standard in the world for environmental management.
- OHSAS 18001 Internationally recognised standard for the Working Environment Act and the Internal Control Regulations.



Classification authority Certified by DNV GL within condition monitoring.



Classification authority. Certified by ABS within condition monitoring.



Classification authority. Certified by ABS within condition monitoring.



Safety testing and certification of electrical materials. Certification by Nemko within electro-thermography.



Member's association that works for openness and responsibility in the global extractive industry.



Supplier register and qualification solution used by purchasing agents in the Nordic transport sector.



Achilles JQS is qualified as a supplier to the oil industry in Norway and Denmark.



Supplier register and a qualification system used by the Nordic energy sector.



Recycling company for the collection, recycling and environmentally-appropriate processing of electrical and electronic waste.



Return scheme for packaging, plastic packaging, packaging cartons and drink cartons.



The International Traffic in Arms Regulations (ITAR). We are authorised to supply ITAR regulated products.



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