

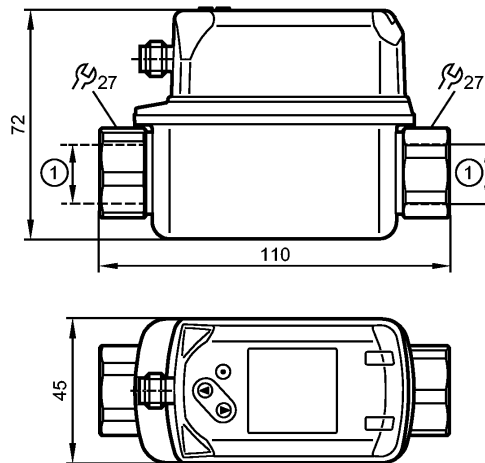


# SV4504

SVK12XXX50KG/US-100



Flow sensors



1: Rc 1/2  
DN 8



### Product characteristics

Vortex flow meter

DN 8

Process connection: Rc 1/2

Measuring range

1...20 l/min

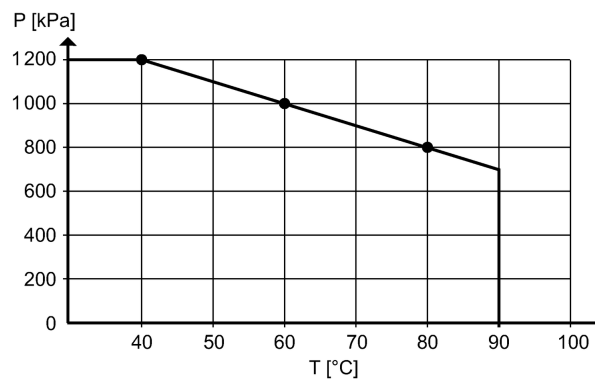
-10...90 °C

### Application

Application

Liquids of the fluid group 2 according to the Pressure Equipment Directive (PED):  
Water, deionised water, cooling water

Pressure rating [bar]



Pressure rating

[bar]

12; (up to 40 °C)

Medium temperature

[°C]

-10...90

### Electrical data

Electrical design

DC

Operating voltage

[V]

18...30 DC

Current consumption

[mA]

< 30

Insulation resistance

[MΩ]

> 100 (500 V DC)

Protection class

III

Reverse polarity protection

yes

### Outputs

Output function

OUT1 = analogue signal temperature  
OUT2 = analogue signal flow



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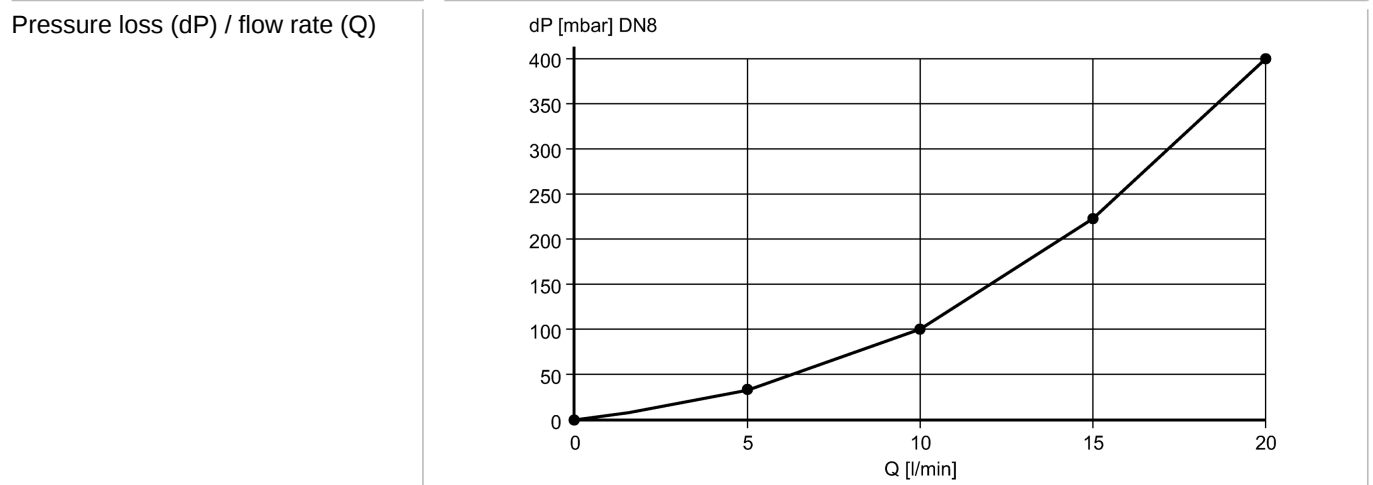
Short-circuit protection	yes
Overload protection	yes
Analog output	4...20 mA
Max. load [Ω]	500

### Measuring / setting range

Flow monitoring		
Measuring range	1...20 [l/min]	0.06...1.2 [m³/h]
Display range	0...24 [l/min]	0...1.44 [m³/h]
Resolution	0.1 [l/min]	0.005 [m³/h]
Analog start point, ASP	0...16 [l/min]	0...0.96 [m³/h]
Analog end point, AEP	4...20 [l/min]	0.24...1.2 [m³/h]
in steps of	0.1 [l/min]	0.005 [m³/h]
Measuring dynamics	1:20	
Temperature monitoring		
Measuring range [°C]	-10...90	
Display range [°C]	-30...110	
Resolution [°C]	0.5	
Analog start point, ASP [°C]	-10...70	
Analog end point, AEP [°C]	10...90	
in steps of [°C]	0.5	

### Accuracy / deviations

Flow monitoring		
Accuracy [% of the final value]	± 2 % MEW	
Repeatability	± 0.5 % MEW	



Temperature monitoring		
Accuracy [K]	± 1	

### Reaction times

Power-on delay time [s]	< 3	
Flow monitoring		
Response time [s]	< 1 (dAP = 0)	
Damping, dAP [s]	0...5	
Temperature monitoring		
Response time [s]	T09 = 6	

### Software / programming



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Flow sensors

Programming options      Damping for the analog output (dAA); Display unit

### Environment

Ambient temperature	[°C]	0...60, at max. 80 °C medium temperature (0...50 °C at max. 90 °C medium temperature)
Storage temperature	[°C]	-20...80
Protection		IP 65 / IP 67

### Tests / approvals

Pressure equipment directive		sound engineering practice
EMC		DIN EN 61000-6-2 DIN EN 61000-6-3
Shock resistance		DIN EN 60068-2-27      5 g (11 ms)
Vibration resistance		DIN EN 60068-2-6      with water 10...50 Hz: 1 mm with water 50...2000 Hz: 2 g
UL approval number		I002

### Mechanical data

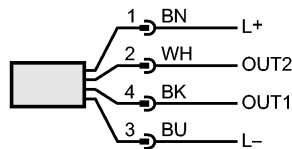
Process connection		Rc ½
Materials (wetted parts)		stainless steel (316L / 1.4404); ETFE; PA 6T; PPS; FKM
Housing materials		stainless steel (316L / 1.4404); PC; PBT+PC-GF 30; PPS; TPE-U
Tightening torque	[Nm]	30
Weight	[kg]	0.448

### Electrical connection

Connection      M12 connector; gold-plated contacts

#### Wiring

- Core colors
- BK    black
  - BN    brown
  - BU    blue
  - WH    white



OUT1: analogue output temperature  
 OUT2: analogue output flow rate  
 Colours to DIN EN 60947-5-2

### Remarks

Remarks      MW = measured value  
 MEW = final value of the measuring range

Pack quantity      [piece]      1