

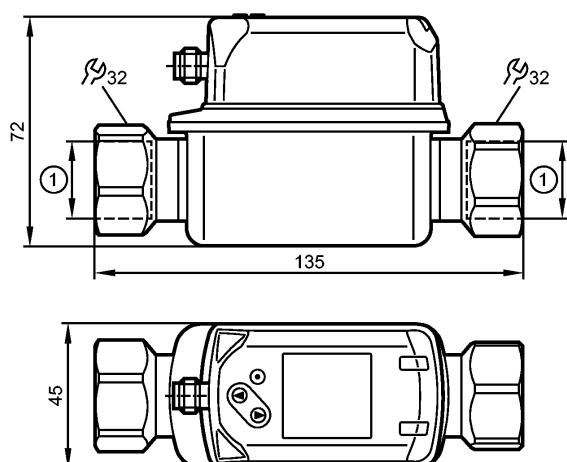


# SV7504

SVK34XXX50KG/US-100



Flow sensors



1: Rc 3/4  
DN 20



## Product characteristics

Vortex flow meter

DN 20

Process connection: Rc 3/4

Measuring range

5...100 l/min

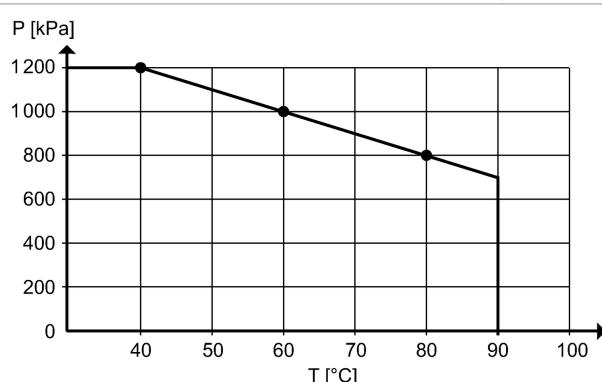
-10...90 °C

## 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]

[bar]

12; (up to 40 °C)

Medium temperature [°C]

[°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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Flow sensors

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

## Measuring / setting range

Flow monitoring		
Measuring range		5...100 [l/min]
Display range		0...120 [l/min]
Resolution		0.5 [l/min]
Analog start point, ASP		0...80 [l/min]
Analog end point, AEP		20...100 [l/min]
in steps of		0.5 [l/min]
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																										
Pressure loss (dP) / flow rate (Q)		dP [mbar] DN20 <table border="1"> <caption>Data points estimated from the graph</caption> <thead> <tr> <th>Q [l/min]</th> <th>dP [mbar]</th> </tr> </thead> <tbody> <tr><td>0</td><td>0</td></tr> <tr><td>5</td><td>5</td></tr> <tr><td>10</td><td>10</td></tr> <tr><td>20</td><td>20</td></tr> <tr><td>30</td><td>30</td></tr> <tr><td>40</td><td>40</td></tr> <tr><td>50</td><td>50</td></tr> <tr><td>60</td><td>60</td></tr> <tr><td>70</td><td>70</td></tr> <tr><td>80</td><td>80</td></tr> <tr><td>90</td><td>90</td></tr> <tr><td>100</td><td>100</td></tr> </tbody> </table>	Q [l/min]	dP [mbar]	0	0	5	5	10	10	20	20	30	30	40	40	50	50	60	60	70	70	80	80	90	90	100	100
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Temperature monitoring		
Accuracy	[K]	± 1
<b>Reaction times</b>		
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
<b>Software / programming</b>		
Programming options		Damping for the analog output (dAA); Display unit



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Flow sensors

## 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

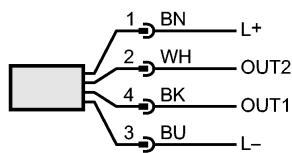
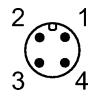
Process connection		Rc ¾
Materials (wetted parts)		stainless steel (316L / 1.4404); ETFE; PA 6T; PPS; FKM
Housing materials		stainless steel (316L / 1.4404); PC; PBT+PC-GF 30; PPS; TPE-U
Tightening torque	[Nm]	30
Weight	[kg]	0.496

## Electrical connection

Connection		M12 connector; gold-plated contacts
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### 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
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Pack quantity	[piece]	1
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