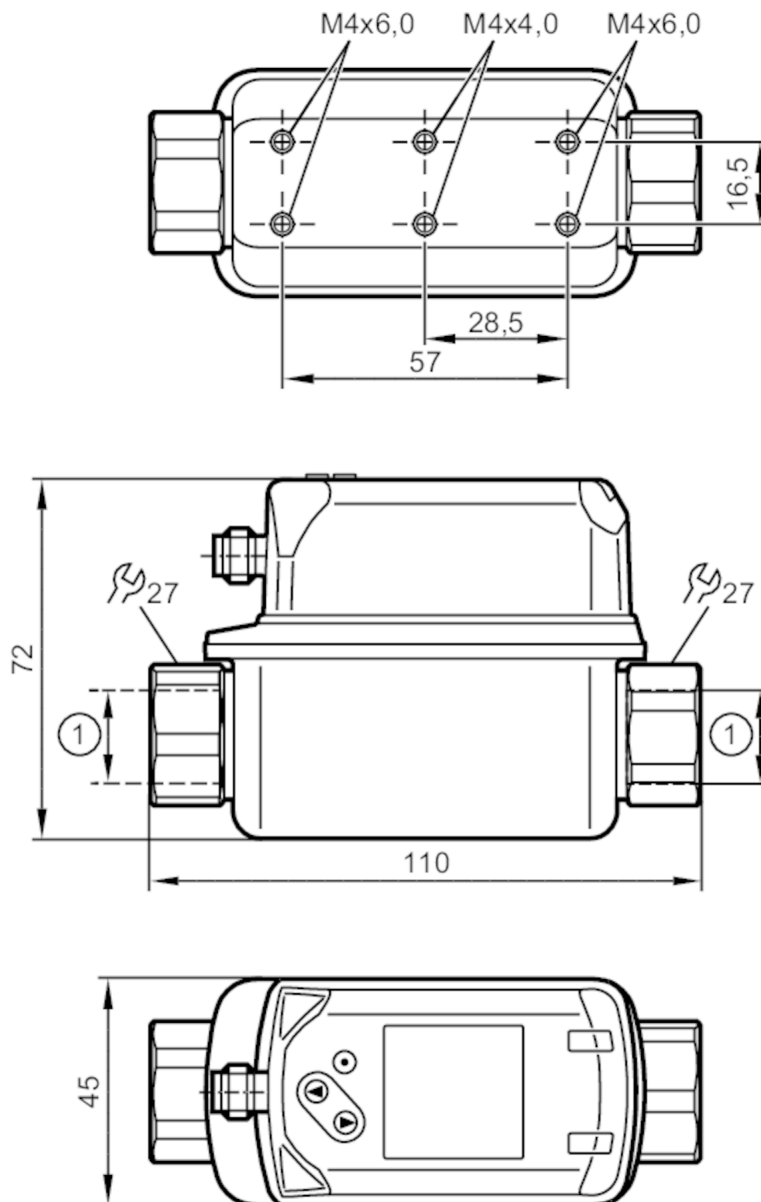


# SV4504



## SV vortex flowmeters with display for water based media

SVK12XXX50KG/US-100



1 Rc 1/2  
DN 8



### Product characteristics

Number of inputs and outputs	Number of analog outputs: 2	
Measuring range	1...20 l/min	0.06...1.2 m³/h
Process connection	threaded connection Rc 1/2 Internal thread DN8	

### Application

System	gold-plated contacts
Application	for industrial applications
Media	water; glycol solutions; Coolants
Medium temperature [°C]	-10...90



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Pressure rating	[bar]	12
Pressure rating	[MPa]	1.2
Note on pressure rating		up to 40 °C

### Electrical data

Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 30
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 3

### Inputs / outputs

Number of inputs and outputs	Number of analog outputs: 2
------------------------------	-----------------------------

### Outputs

Total number of outputs	2
Output signal	analog signal
Number of analog outputs	2
Analog current output	[mA] 4...20
Max. load	[Ω] 500
Short-circuit protection	yes
Overload protection	yes

### Measuring/setting range

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	[°C]	-10...70
Analog end point	[°C]	10...90
In steps of	[°C]	0.5

### Accuracy / deviations

#### Flow monitoring

Accuracy (in the measuring range)	± 2 % MEW; (water)
Repeatability	± 0,5 % MEW

#### Temperature monitoring

Accuracy	[K]	± 1
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Reaction times		
Flow monitoring		
Response time	[s]	1; (dAP = 0)
Damping process value dAP	[s]	0...5
Temperature monitoring		
Dynamic response T05 / T09	[s]	T09 = 6
Software / programming		
Parameter setting options		Damping for the analog output dAA; Display unit
Operating conditions		
Ambient temperature	[°C]	0...60
Note on ambient temperature		medium temperature < 80 °C medium temperature < 90 °C: 0...50 °C
Storage temperature	[°C]	-20...80
Protection		IP 65; IP 67
Tests / approvals		
EMC		DIN EN 61000-6-2
		DIN EN 61000-6-3
CPA approval	model number	001VO
	accuracy class	-
	maximum allowable error	± 2 % FS
	Q (min)	0,09 m³/h
	Q (t)	0,24 m³/h
	Q (max)	1,2 m³/h
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
MTTF	[years]	342
UL approval		UL approval number I002
Pressure equipment directive		sound engineering practice; can be used for group 2 fluids; group 1 fluids on request
Mechanical data		
Weight	[g]	441.5
Material		stainless steel (1.4404 / 316L); PC; PBT+PC-GF30; PPS; TPE-U
Materials (wetted parts)		stainless steel (1.4404 / 316L); ETFE; PA 6T; PPS; FKM
Tightening torque	[Nm]	30
Process connection		threaded connection Rc 1/2 Internal thread DN8
Remarks		
Remarks		MW = Measured value MEW = Final value of the measuring range
Pack quantity		1 pcs.

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## SV vortex flowmeters with display for water based media

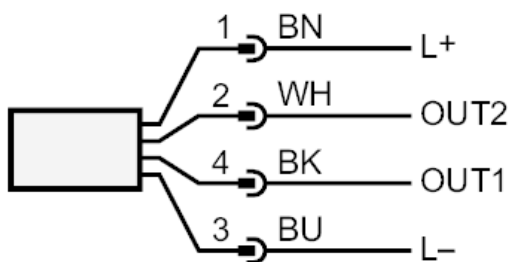
SVK12XXX50KG/US-100

### Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



### Connection



OUT1: analog output Temperature monitoring  
OUT2: analog output Volumetric flow quantity monitoring  
Colors to DIN EN 60947-5-2

Core colors :

BK = black  
BN = brown  
BU = blue  
WH = white

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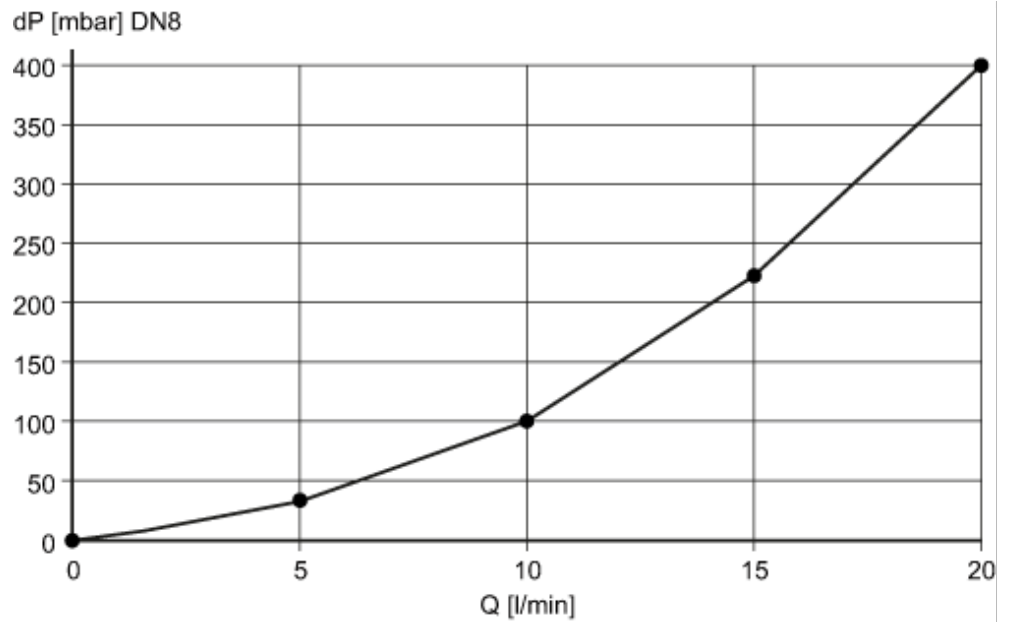


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### Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

