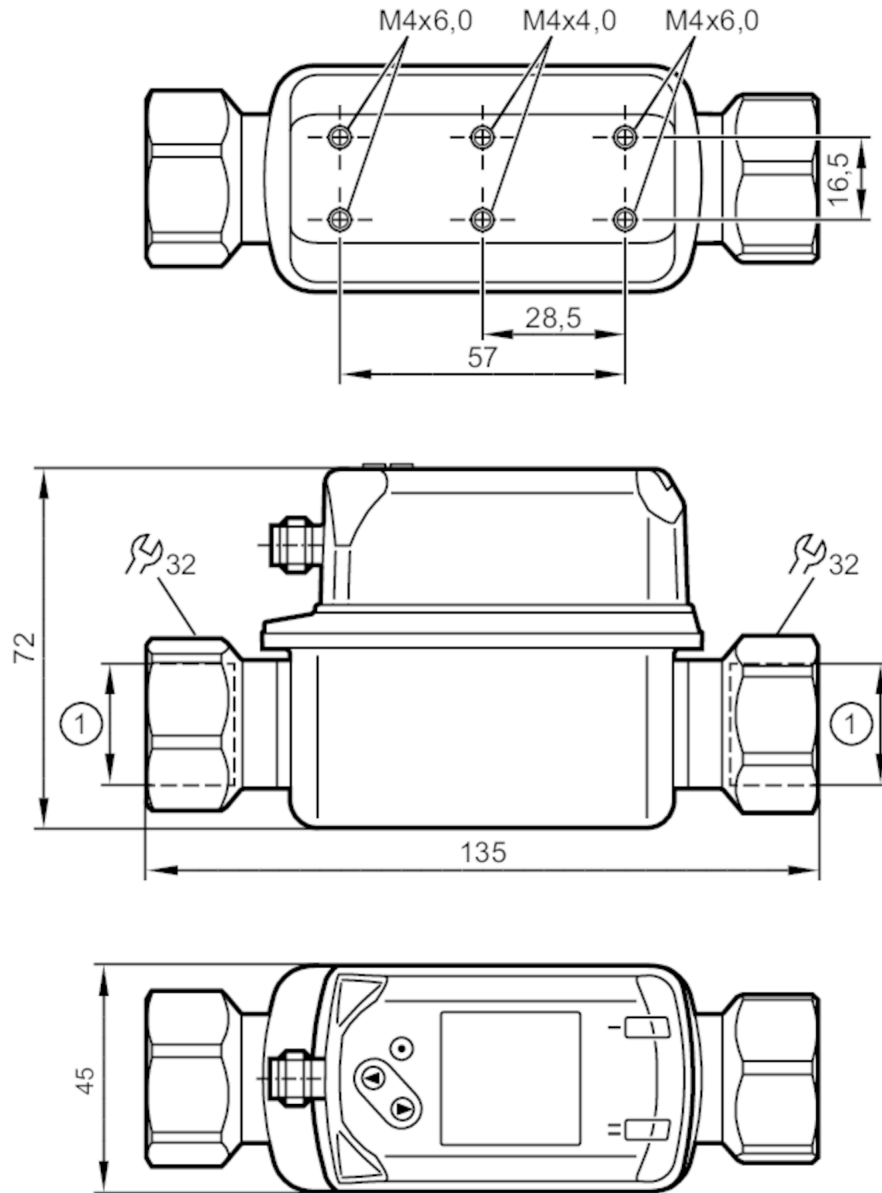


# SV7500



## SV vortex flowmeters with display for water based media

SVK34XXXIRKG/US-100



1 Rc 3/4  
DN 20



### Product characteristics

Number of inputs and outputs	Number of digital outputs: 2	
Measuring range	5...100 l/min	0.3...6 m³/h
Process connection	threaded connection Rc 3/4 Internal thread DN20	

### 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 digital outputs: 2
------------------------------	------------------------------

### Outputs

Total number of outputs	2
Output signal	switching signal; frequency signal; IO-Link; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	2
Output function	normally open / closed; (configurable)
Max. voltage drop switching output DC	[V] 2.5
Permanent current rating of switching output DC	[mA] 100
Short-circuit protection	yes
Overload protection	yes

### Measuring/setting range

Measuring range	5...100 l/min	0.3...6 m³/h
Display range	0...120 l/min	0...7.2 m³/h
Resolution	0.5 l/min	0.02 m³/h
Set point SP	6...100 l/min	0.36...6 m³/h
Reset point rP	5...99 l/min	0.3...5.94 m³/h
Frequency end point, FEP	20...100 l/min	1.2...6 m³/h
In steps of	0.5 l/min	0.02 m³/h
Frequency at the end point FRP	[Hz]	100...1000
Measuring dynamics		1:20

### Temperature monitoring

Measuring range	[°C]	-10...90
Display range	[°C]	-30...110
Resolution	[°C]	0.5
Set point SP	[°C]	-9...90
Reset point rP	[°C]	-10...89
In steps of	[°C]	0.5
Frequency start point, FSP	[°C]	-10...70
Frequency end point, FEP	[°C]	10...90
Frequency at the end point FRP	[Hz]	100...1000



## SV vortex flowmeters with display for water based media

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Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)		± 2 % MEW; (water)
Repeatability		± 0,5 % MEW
Temperature monitoring		
Accuracy	[K]	± 1
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		hysteresis / window; normally open / closed; switching logic; Frequency output; switch-on/switch-off delay; Damping; Display unit
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9
Profiles		Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis
SIO mode		yes
Required master port class		A
Process data analog		2
Process data binary		2
Min. process cycle time	[ms]	3
Supported DeviceIDs	<b>Type of operation</b> default	<b>DeviceID</b> 492
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)	0,36 m³/h
	Q (t)	1,2 m³/h
	Q (max)	6 m³/h
Shock resistance	DIN EN 60068-2-27	5 g (11 ms)

# SV7500



## SV vortex flowmeters with display for water based media

SVK34XXXIRKG/US-100

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	I001
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

### Mechanical data

Weight [g]		487.5
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 3/4 Internal thread DN20	

### Remarks

Remarks	MW = Measured value	
	MEW = Final value of the measuring range	
Pack quantity		1 pcs.

### Electrical connection

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



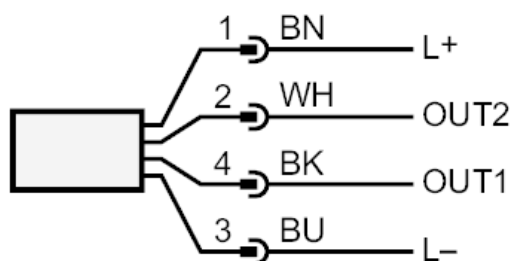
# SV7500



## SV vortex flowmeters with display for water based media

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### Connection



OUT1: Flow monitoring  
- Switching output  
- Frequency output  
- IO-Link

OUT2: flow monitoring and temperature monitoring  
- Switching output  
- Frequency output

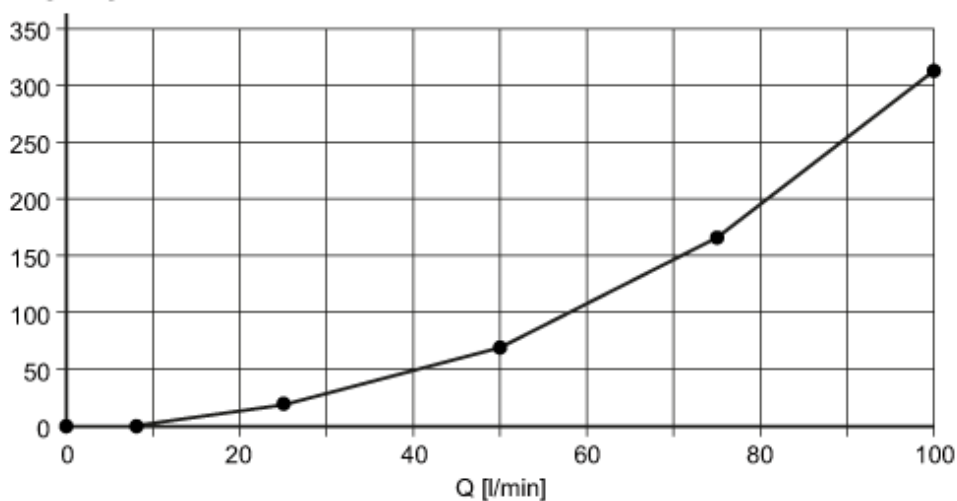
Colors to DIN EN 60947-5-2  
Core colors :

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

### Diagrams and graphs

#### Pressure loss

dP [mbar] DN20



dP Pressure loss

Q volumetric flow quantity

# SV7500



## SV vortex flowmeters with display for water based media

SVK34XXXIRKG/US-100  
pressure rating (bar)

