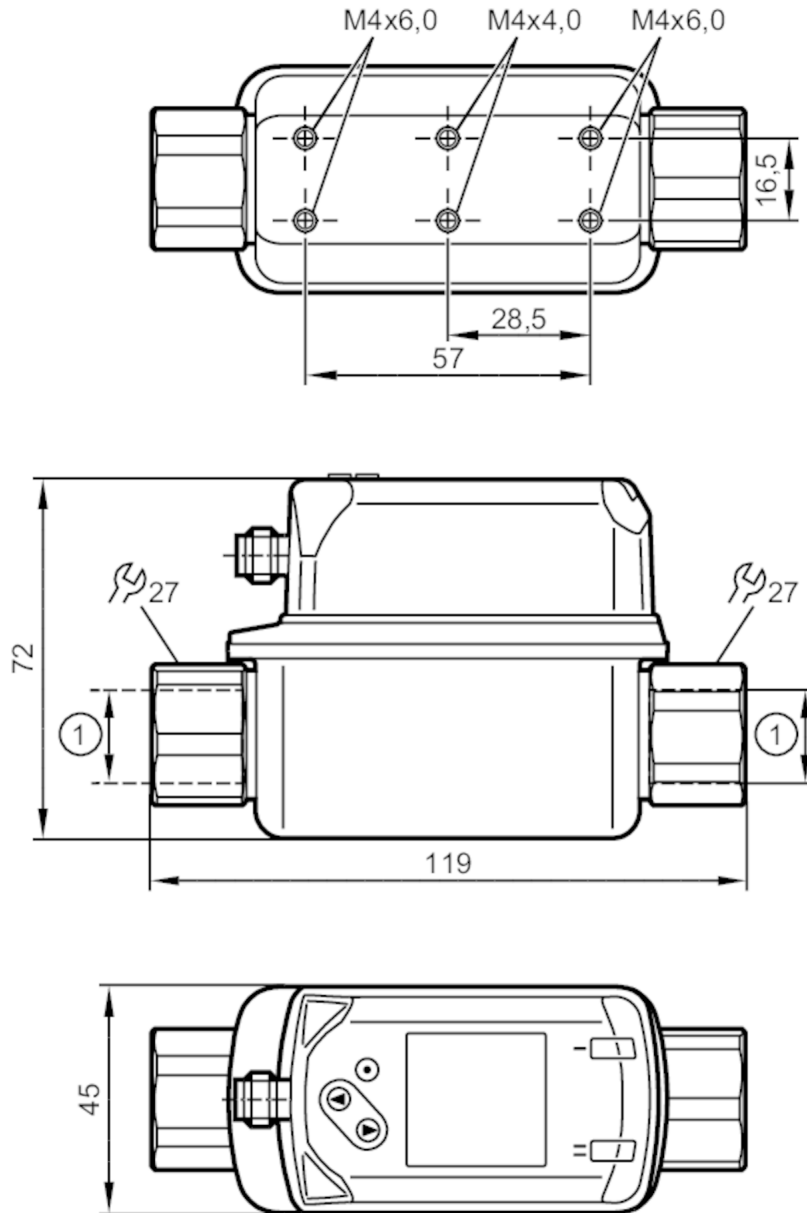


# SV4610



## SV vortex flowmeters with display for water based media

SVN12XXXIRKG/US-100



1 1/2" NPT  
DN 8



### Product characteristics

Number of inputs and outputs	Number of digital outputs: 2	
Measuring range	16...317 gph	0.26...5.28 gpm
Process connection	threaded connection 1/2" NPT DN8	

### Application

System	gold-plated contacts
Application	for industrial applications
Media	water; glycol solutions; Coolants
Medium temperature [°F]	14...194

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Pressure rating	[bar]	12
Pressure rating	[psi]	174
Note on pressure rating		up to 40 °C
MAWP (for applications according to CRN)	[bar]	3.9

### 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
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### 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	16...317 gph	0.26...5.28 gpm
Display range	0...380 gph	0...6.34 gpm
Resolution	1 gph	0.02 gpm
Set point SP	19...317 gph	0.32...5.28 gpm
Reset point rP	16...314 gph	0.26...5.24 gpm
Frequency end point, FEP	63...317 gph	1.06...5.28 gpm
In steps of	1 gph	0.02 gpm
Frequency at the end point FRP	[Hz]	100...1000
Measuring dynamics		1:20

### Temperature monitoring

Measuring range	[°F]	14...194
Display range	[°F]	-22...230
Resolution	[°F]	1
Set point SP	[°F]	16...194
Reset point rP	[°F]	14...192
In steps of	[°F]	1
Frequency start point, FSP	[°F]	14...158
Frequency end point, FEP	[°F]	50...194

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Frequency at the end point FRP	[Hz]	100...1000
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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
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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	hysteresis / window; normally open / closed; switching logic; Frequency output; switch-on/switch-off delay; Damping; Display unit	
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### 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>	<b>DeviceID</b>
	default	486

### Operating conditions

Ambient temperature	[°F]	32...140
Note on ambient temperature	medium temperature < 176 °F medium temperature < 194 °F: 32...122 °F	
Storage temperature	[°F]	-4...176
Protection	IP 65; IP 67	

### Tests / approvals

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
MTTF	[years]	342
UL approval	UL approval number	I001

# SV4610



## SV vortex flowmeters with display for water based

### media

SVN12XXXIRKG/US-100

Pressure equipment directive

sound engineering practice; can be used for group 2 fluids; group 1 fluids on request

### Mechanical data

Weight	[g]	481.5
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 1/2" NPT DN8

### Remarks

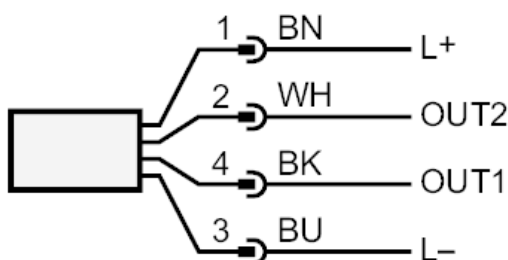
Remarks		MW = Measured value MEW = Final value of the measuring range
Pack quantity		1 pcs.

### Electrical connection

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



### 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

# SV4610

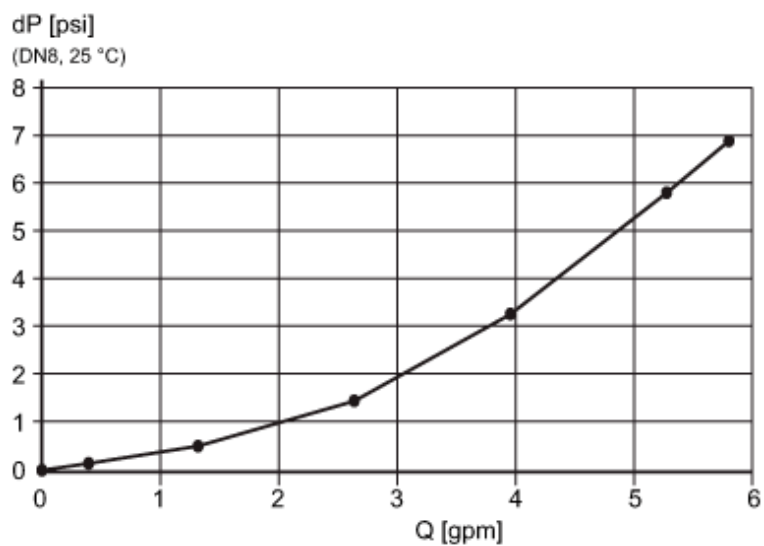


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SVN12XXXIRKG/US-100

### Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

