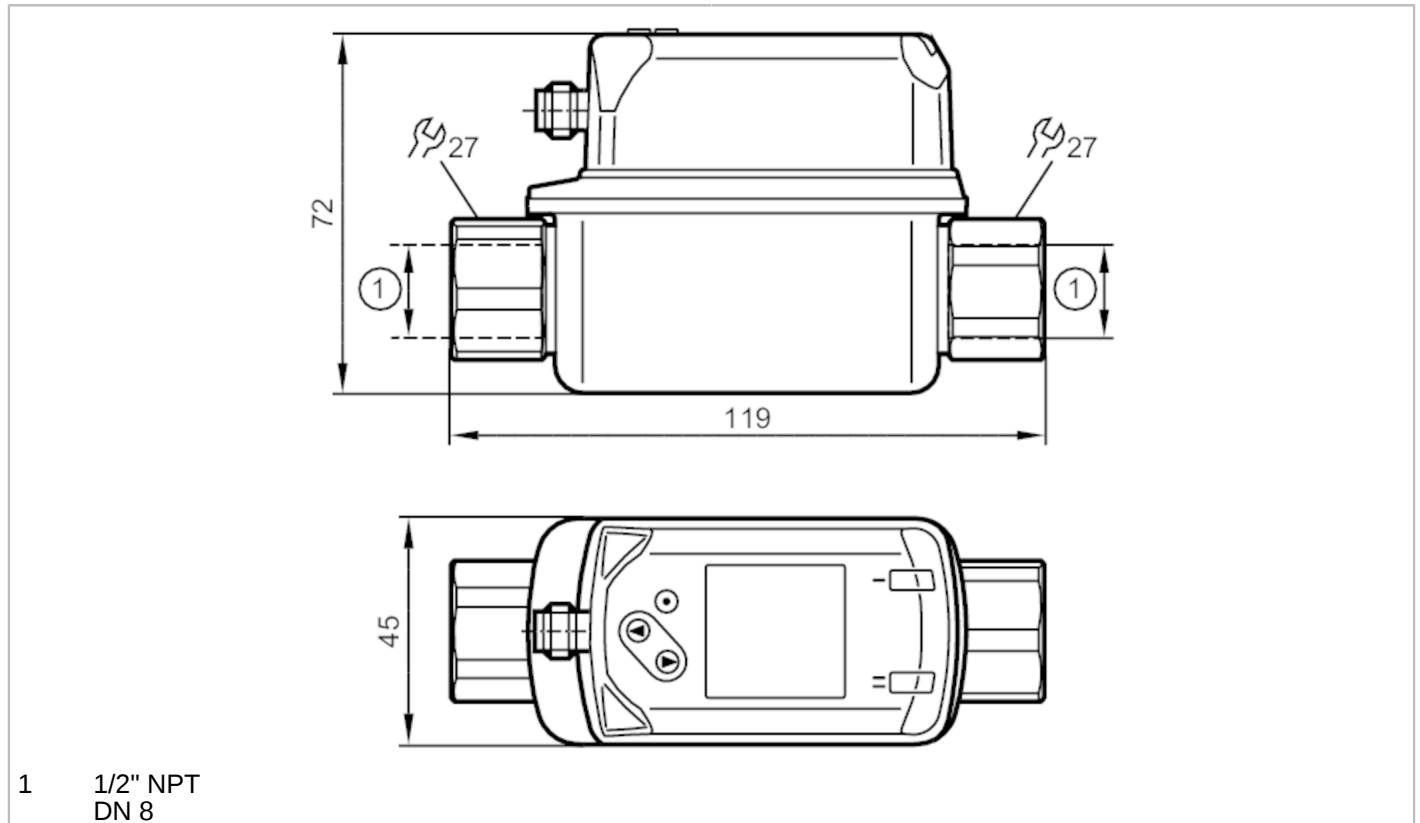


# SV4610



## Vortex flow meter with display

SVN12XXXIRKG/US-100



### 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

Special feature	Gold-plated contacts	
Application	for industrial applications	
Media	water	
Medium temperature [°F]	14...194	
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	

# SV4610



## Vortex flow meter with display

SVN12XXXIRKG/US-100

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 / normally closed; (parameterisable)	
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	
Frequency at the end point FRP [Hz]	100...1000	
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)	± 2 % MEW	
Repeatability	± 0,5 % MEW	
Temperature monitoring		
Accuracy [K]	± 1	

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## Vortex flow meter with display

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Response times		
Flow monitoring		
Response time [s]	1; (dAP = 0)	
Damping for the switching output dAP [s]	0...5	
Temperature monitoring		
Dynamic response T05 / T09 [s]	T09 = 6	
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally 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	
IO-Link device ID	486 d / 00 01 E6 h	
Profiles	Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis	
SIO mode	yes	
Required master port type	A	
Process data analogue	2	
Process data binary	2	
Min. process cycle time [ms]	3	
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)
	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 no.	I001
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight [g]	481.5	
Materials	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	

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### Remarks

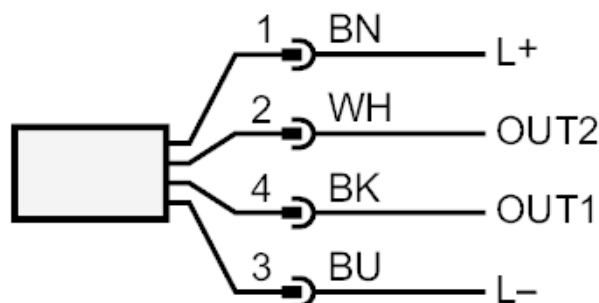
Remarks	MW = measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

### Electrical connection

Connector: 1 x M12; Contacts: gold-plated



### Connection



- OUT1:
- Flow monitoring
  - switching output
  - frequency output
  - IO-Link

- OUT2:
- flow monitoring and temperature monitoring
  - switching output
  - frequency output
- colours to DIN EN 60947-5-2

Core colours :

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

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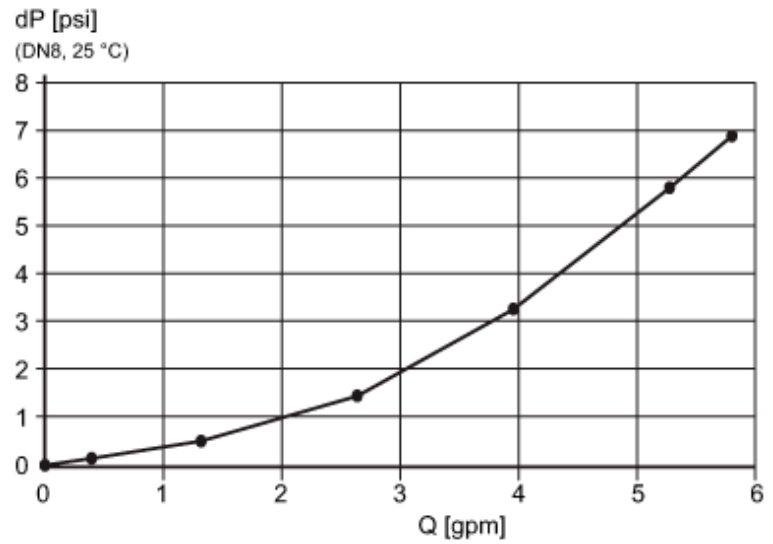


## Vortex flow meter with display

SVN12XXXIRKG/US-100

### Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

