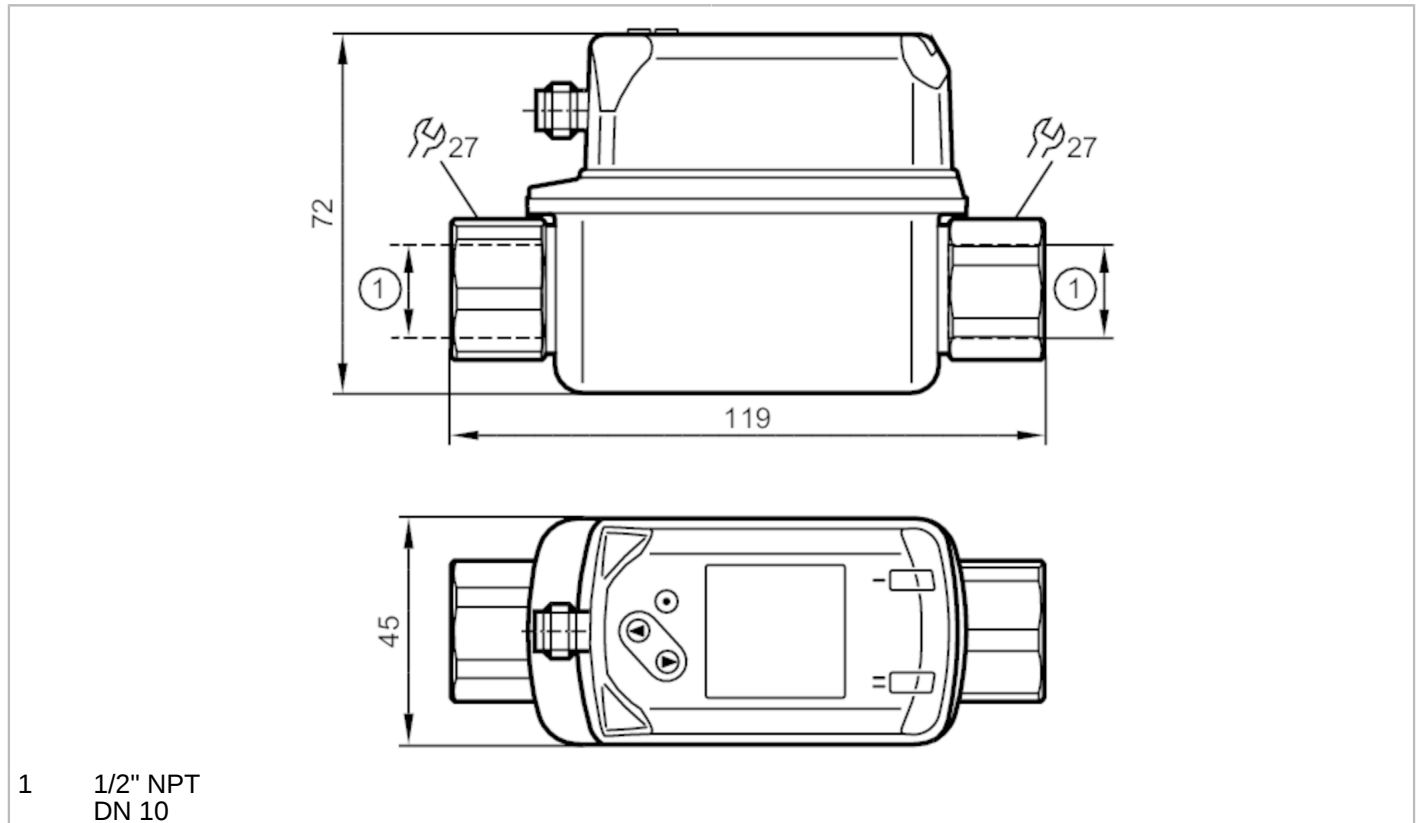


# SV5610



## Vortex flowmeters with display, Type SV

SVN12XXXIRKG/US-100



### Product characteristics

Number of inputs and outputs	Number of digital outputs: 2	
Measuring range	32...634 gph	0.55...10.55 gpm
Process connection	threaded connection 1/2" NPT DN10	

### Application

System	gold-plated contacts	
Application	for industrial applications	
Media	water	
Pressure rating [bar]	12	
Pressure rating [psi]	174	
Note on pressure rating	up to 40 °C	
MAWP (for applications according to CRN) [bar]	4.8	

### 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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## Vortex flowmeters with display, Type SV

SVN12XXXIRKG/US-100

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		32...634 gph 0.55...10.55 gpm
Display range		0...760 gph 0...12.7 gpm
Resolution		2 gph 0.05 gpm
Set point SP		38...634 gph 0.65...10.55 gpm
Reset point rP		32...628 gph 0.55...10.45 gpm
Frequency end point, FEP		126...634 gph 2.1...10.55 gpm
In steps of		2 gph 0.05 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
Reaction times		
Flow monitoring		
Response time	[s]	1; (dAP = 0)
Damping for the switching output dAP	[s]	0...5

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Temperature monitoring		
Dynamic response T05 / T09	[s]	T09 = 6
<b>Software / programming</b>		
Parameter setting options	hysteresis / window; normally open / closed; switching logic; Frequency output; switch-on/switch-off delay; Damping; Display unit	
<b>Interfaces</b>		
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 analogue	2	
Process data binary	2	
Min. process cycle time	[ms]	3
Supported DeviceIDs	Type of operation	DeviceID
	default	490
<b>Operating conditions</b>		
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	
<b>Tests / approvals</b>		
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
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
<b>Mechanical data</b>		
Weight	[g]	468
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 DN10	
<b>Remarks</b>		
Remarks	MW = Measured value MEW = Final value of the measuring range	
Pack quantity	1 pcs.	

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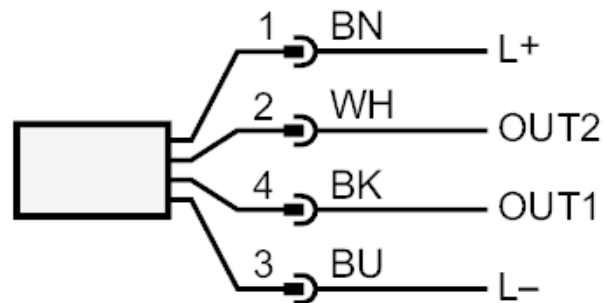
SVN12XXXIRKKG/US-100

### 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 colors :

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

# SV5610

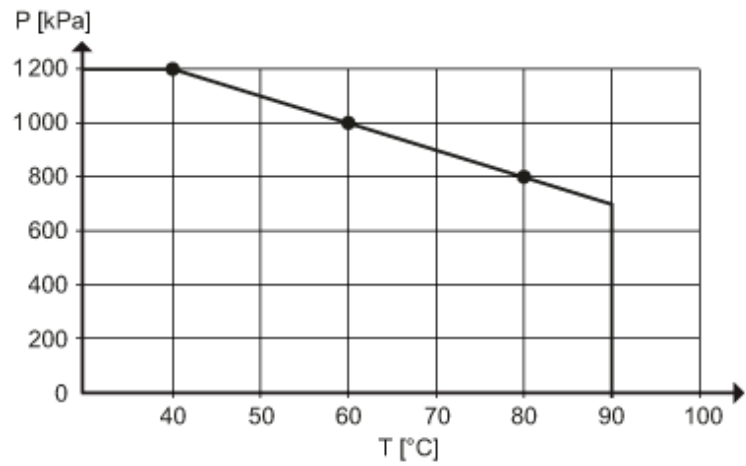


## Vortex flowmeters with display, Type SV

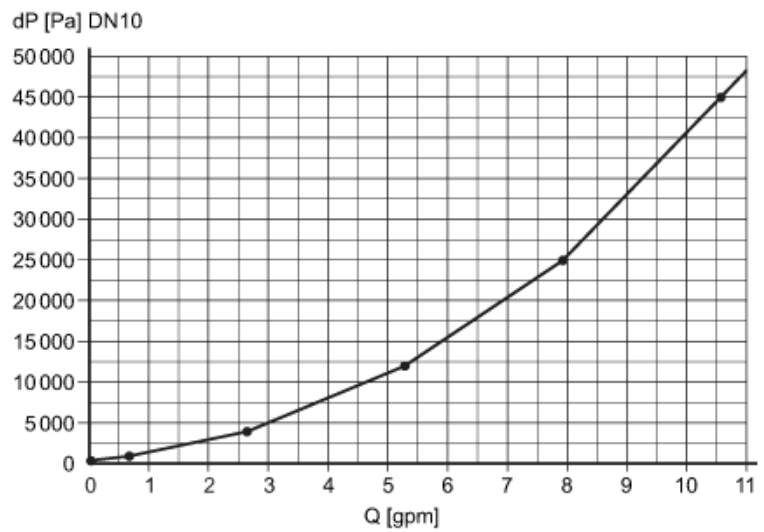
SVN12XXXIRKG/US-100

### Diagrams and graphs

pressure rating (bar)



Pressure loss



dP Pressure loss

Q volumetric flow quantity