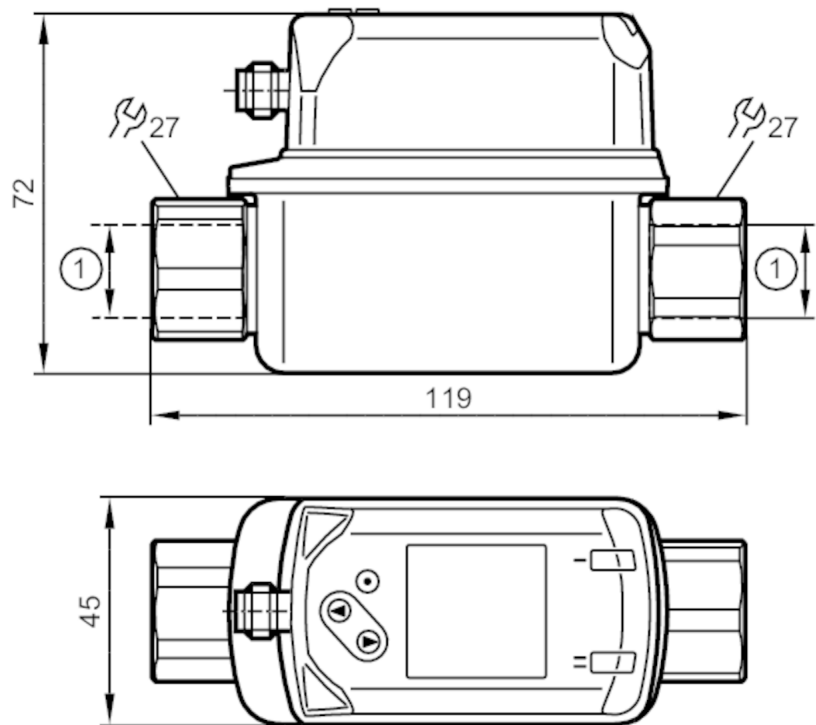


SV4610



Vortex flow meter with display

SVN12XXXIRKG/US-100



1 1/2" NPT
DN 8



Application	
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
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



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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 / 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	0.26...5.28 gpm	16...317 gph
Display range	0...6.34 gpm	0...380 gph
Resolution	0.02 gpm	1 gph
Set point SP	0.32...5.28 gpm	19...317 gph
Reset point rP	0.26...5.24 gpm	16...314 gph
Measuring dynamics	1:20	
Frequency end point, FEP	1.06...5.28 gpm	63...317 gph
Frequency at the end point FRP [Hz]	100...1000	
In steps of	0.02 gpm	1 gph
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	
Response 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
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)
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 no.	I001
Pressure Equipment Directive	Sound Engineering Practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	471.5
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	
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		

SV4610

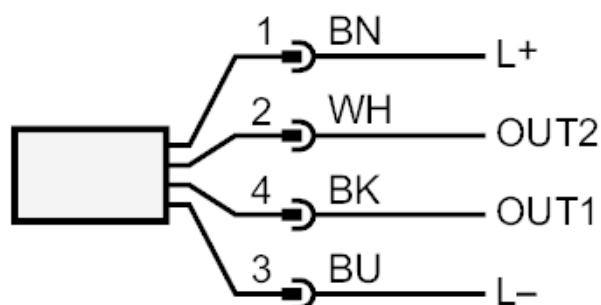


Vortex flow meter with display

SVN12XXXIRKG/US-100



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

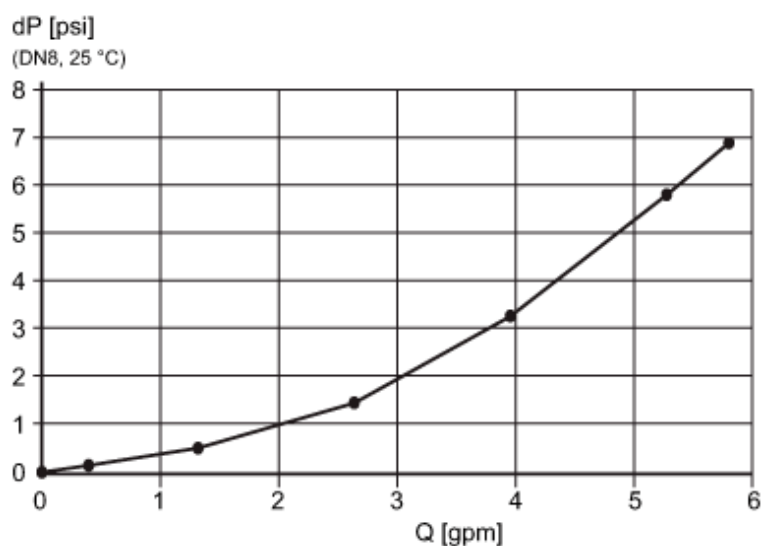


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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

