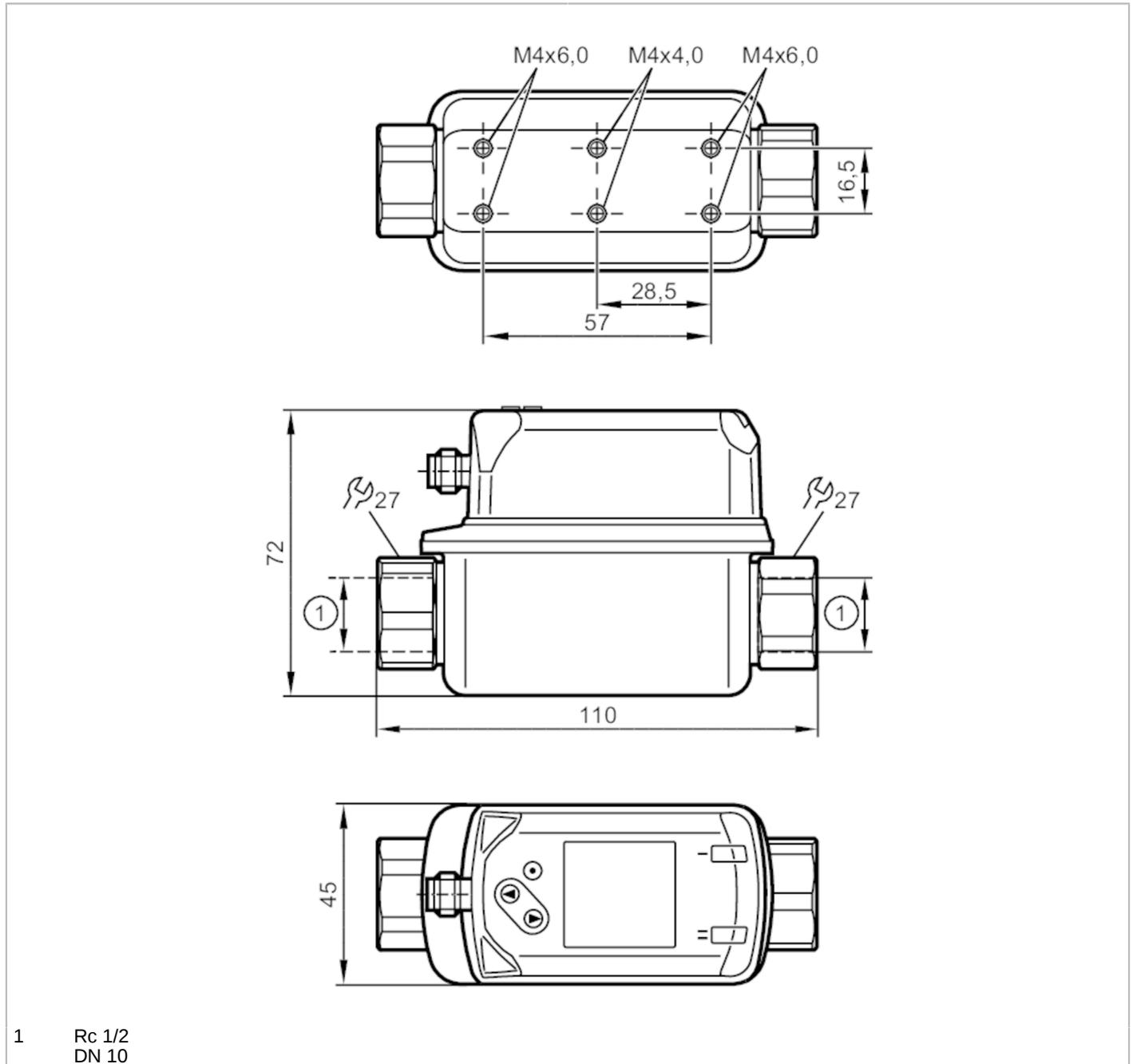


SV5500



Vortex flow meter with display

SVK12XXXIRKG/US-100



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 2
Measuring range	2...40 l/min 0.12...2.4 m³/h
Process connection	threaded connection Rc 1/2 internal thread DN10
Application	
Special feature	Gold-plated contacts
Application	for industrial applications
Media	water; glycol solutions; coolants
Medium temperature [°C]	-10...90

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Pressure rating	12 bar	1.2 MPa
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	
Measuring principle	Vortex	
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	2...40 l/min	0.12...2.4 m³/h
Display range	0...48 l/min	0...2.88 m³/h
Resolution	0.2 l/min	0.01 m³/h
Set point SP	2.4...40 l/min	0.14...2.4 m³/h
Reset point rP	2...39.6 l/min	0.12...2.38 m³/h
Frequency end point, FEP	8...40 l/min	0.48...2.4 m³/h
In steps of	0.2 l/min	0.01 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	

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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	
Response 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 / 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	
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
	Function	Device diagnosis
SIO mode	yes	
Required master port type	A	
Process data analogue	2	
Process data binary	2	
Min. process cycle time [ms]	3	
Supported DeviceIDs	Type of operation	DeviceID
	default	488
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	

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CPA approval	model number	001VO
	accuracy class	-
	maximum allowable error	± 2 % FS
	Q (min)	0,15 m ³ /h
	Q (t)	0,48 m ³ /h
	Q (max)	2,4 m ³ /h
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]	441
Housing	rectangular
Dimensions [mm]	110 x 45 x 72
Materials	stainless steel (316L/1.4404); PC; PBT+PC-GF30; PPS; TPE-U
Materials (wetted parts)	stainless steel (316L/1.4404); ETFE; PA 6T; PPS; FKM
Tightening torque [Nm]	30
Process connection	threaded connection Rc 1/2 internal thread DN10

Displays / operating elements

Display	colour display 1,44", 128 x 128 pixels 2 x LED, yellow
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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; coding: A; Contacts: gold-plated

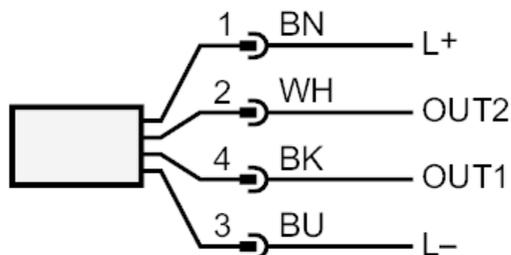




Vortex flow meter with display

SVK12XXXIRKG/US-100

Connection



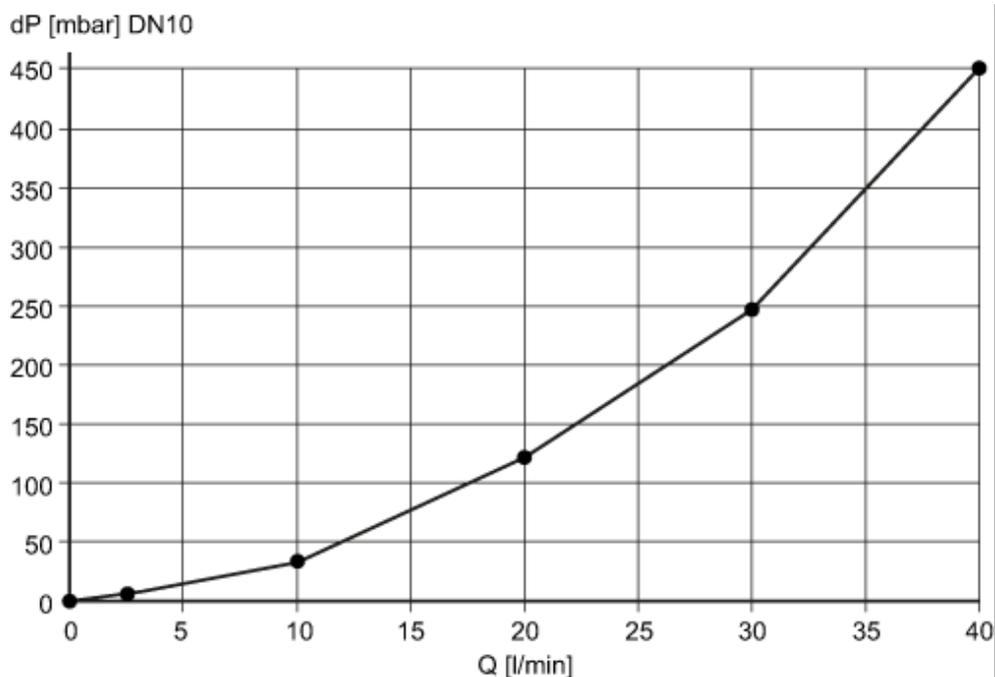
- OUT1: Flow monitoring
- switching output
- frequency output
- IO-Link
- OUT2: flow monitoring and temperature monitoring
- switching output
- frequency output
- colours to DIN EN 60947-5-2

Core colours :

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

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

SV5500



Vortex flow meter with display

SVK12XXXIRKG/US-100

pressure rating (bar)

