

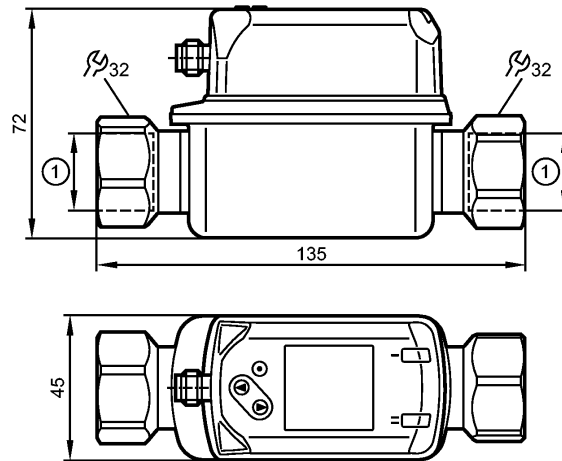


SV7500

SVK34XXXIRKG/US-100



Flow sensors



1: Rc 3/4
DN 20

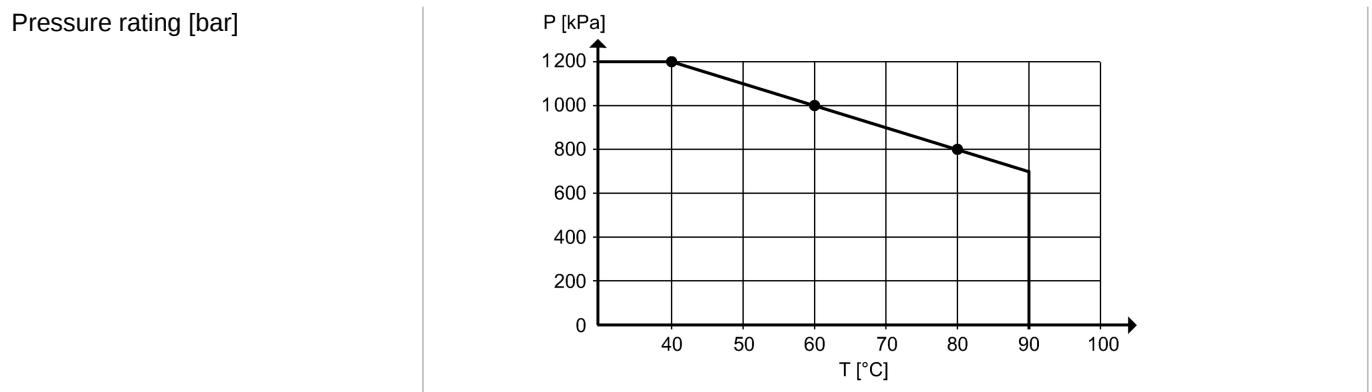


Product characteristics

Vortex flow meter
DN 20
Process connection: Rc 3/4
Measuring range
5...100 l/min
-10...90 °C

Application

Application	Liquids of the fluid group 2 according to the Pressure Equipment Directive (PED): Water, deionised water, cooling water
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Pressure rating [bar]	12; (up to 40 °C)
Medium temperature [°C]	-10...90

Electrical data

Electrical design	DC PNP/NPN
Operating voltage [V]	18...30 DC
Current consumption [mA]	< 30
Insulation resistance [MΩ]	> 100 (500 V DC)
Protection class	III
Reverse polarity protection	yes

Outputs

Output function	OUT1: normally open / normally closed programmable or frequency or IO-Link OUT2: normally open / normally closed programmable or frequency
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Flow sensors

Current rating	[mA]	100
Voltage drop	[V]	2.5
Short-circuit protection		yes
Overload protection		yes

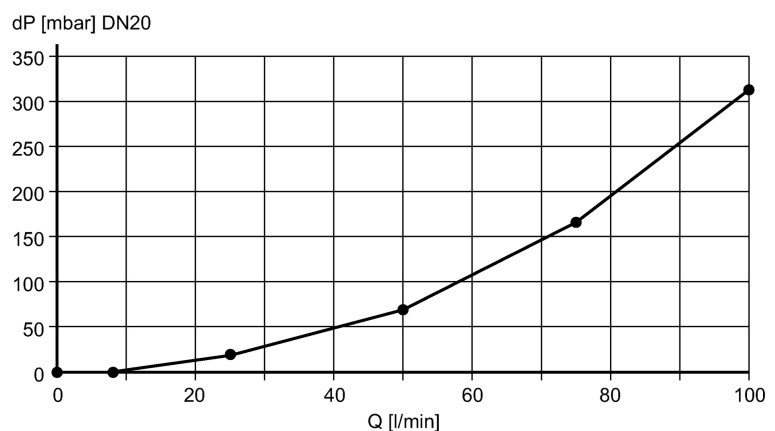
Measuring / setting range

Flow monitoring		
Measuring range	5...100 [l/min]	0.3...6 [m³/h]
Display range	0...120 [l/min]	0...7.2 [m³/h]
Resolution	0.5 [l/min]	0.02 [m³/h]
Set point, SP	6...100 [l/min]	0.36...6 [m³/h]
Reset point, rP	5...99 [l/min]	0.3...5.94 [m³/h]
Frequency end point, FEP	20...100 [l/min]	1.2...6 [m³/h]
in steps of	0.5 [l/min]	0.02 [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
Frequency start point, FSP	[°C]	-10...70
Frequency end point, FEP	[°C]	10...90
in steps of	[°C]	0.5
Frequency at the end point, FrP [Hz]		100...1000

Accuracy / deviations

Flow monitoring	
Accuracy	± 2 % MEW
Repeatability	± 0.5 % MEW

Pressure loss (dP) / flow rate (Q)



Temperature monitoring	
Accuracy	[K] ± 1

Reaction times

Power-on delay time	[s]	< 3
Flow monitoring		
Response time	[s]	< 1 (dAP = 0)



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Flow sensors

Damping, dAP	[s]	0...5
Temperature monitoring		
Response time	[s]	T09 = 6

Software / programming

Programming options	hysteresis / window function; NO / NC; output polarity; frequency output; on delay, off delay; damping; display unit	
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Interfaces

IO-Link Device		
Transfer type	COM2 (38.4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
IO-Link Device ID	492 d / 00 01 EC h	
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

Environment

Ambient temperature	[°C]	0...60, at max. 80 °C medium temperature (0...50 °C at max. 90 °C medium temperature)
Storage temperature	[°C]	-20...80
Protection	IP 65 / IP 67	

Tests / approvals

Pressure equipment directive	sound engineering practice	
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
UL approval number	I001	

Mechanical data

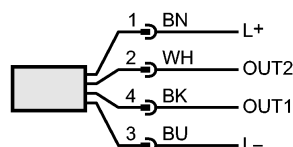
Process connection	Rc 3/4	
Materials (wetted parts)	stainless steel (316L / 1.4404); ETFE; PA 6T; PPS; FKM	
Housing materials	stainless steel (316L / 1.4404); PC; PBT+PC-GF 30; PPS; TPE-U	
Tightening torque	[Nm]	30
Weight	[kg]	0.483

Electrical connection

Connection	M12 connector; gold-plated contacts	
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Wiring

- Core colors
- BK black
 - BN brown
 - BU blue
 - WH white





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Flow sensors

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

Remarks

Remarks	MW = measured value MEW = final value of the measuring range
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Pack quantity	[piece]	1
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