

SV4504



Vortex flow meter with display

SVK12XXX50KG/US-100



1 Rc 1/2
DN 8



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 2	
Measuring range	1...20 l/min	0.06...1.2 m³/h
Process connection	threaded connection Rc 1/2 internal thread DN8	

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 analogue outputs: 2	
Outputs		
Total number of outputs	2	
Output signal	analogue signal	
Number of analogue outputs	2	
Analogue current output	[mA]	4...20
Max. load	[Ω]	500
Short-circuit protection		yes
Overload protection		yes
Measuring/setting range		
Measuring range	1...20 l/min	0.06...1.2 m³/h
Display range	0...24 l/min	0...1.44 m³/h
Resolution	0.1 l/min	0.005 m³/h
Analogue start point ASP	0...16 l/min	0...0.96 m³/h
Analogue end point AEP	4...20 l/min	0.24...1.2 m³/h
In steps of	0.1 l/min	0.005 m³/h
Measuring dynamics	1:20	
Temperature monitoring		
Measuring range	[°C]	-10...90
Display range	[°C]	-30...110
Resolution	[°C]	0.5
Analogue start point	[°C]	-10...70
Analogue end point	[°C]	10...90
In steps of	[°C]	0.5
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)	± 2 % MEW; (water)	
Repeatability	± 0,5 % MEW	
Temperature monitoring		
Accuracy	[K]	± 1



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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	Damping for the analogue output dAA; Display unit	
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	
CPA approval	model number	001VO
	accuracy class	-
	maximum allowable error	± 2 % FS
	Q (min)	0,09 m³/h
	Q (t)	0,24 m³/h
	Q (max)	1,2 m³/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.	I002
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	441.5
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 DN8	
Displays / operating elements		
Display		colour display 1,44", 128 x 128 pixels
		2 x LED, yellow
Remarks		
Remarks	MW = measured value	
	MEW = Final value of the measuring range	
Pack quantity	1 pcs.	

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Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1: analogue output Temperature monitoring
OUT2: analogue output volumetric flow quantity monitoring
colours to DIN EN 60947-5-2 :
Core colours :
BK = black
BN = brown
BU = blue
WH = white

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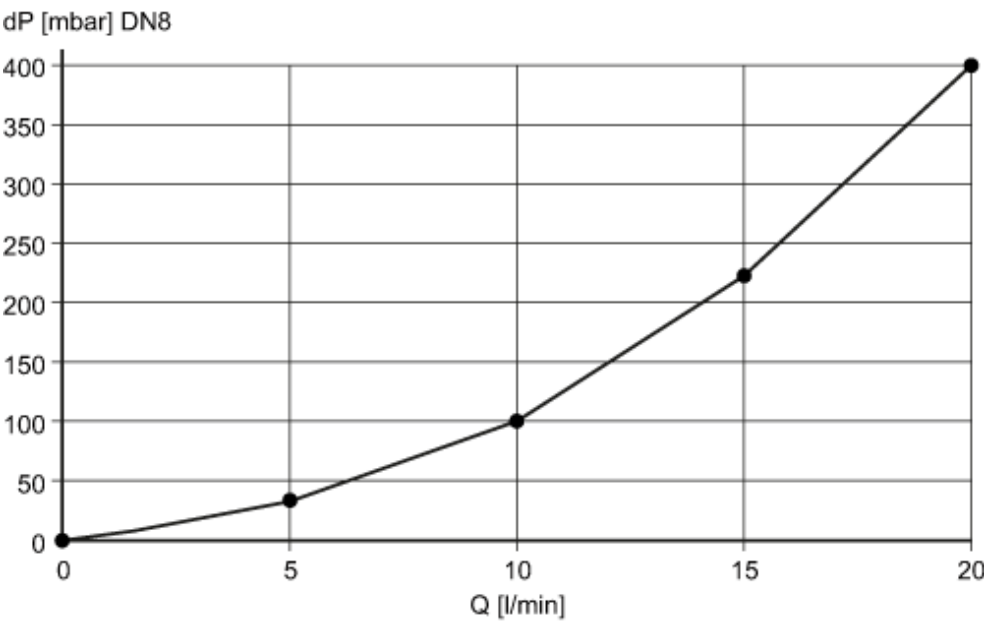


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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

