

SV5204



SV vortex flowmeters with display for water based media

SVR12XXX50KG/US-100



1 G 1/2
DN 10



Product characteristics

Number of inputs and outputs	Number of analog outputs: 2	
Measuring range	2...40 l/min	0.12...2.4 m³/h
Process connection	threaded connection G 1/2 Internal thread DN10	

Application

System	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	
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	
Measuring principle	Vortex	
Inputs / outputs		
Number of inputs and outputs	Number of analog outputs: 2	
Outputs		
Total number of outputs	2	
Output signal	analog signal	
Number of analog outputs	2	
Analog current output [mA]	4...20	
Max. load [Ω]	500	
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
Analog start point ASP	0...32 l/min	0...1.92 m³/h
Analog end point AEP	8...40 l/min	0.48...2.4 m³/h
In steps of	0.2 l/min	0.01 m³/h
Measuring dynamics	1:20	
Temperature monitoring		
Measuring range [°C]	-10...90	
Display range [°C]	-30...110	
Resolution [°C]	0.5	
Analog start point [°C]	-10...70	
Analog 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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Reaction 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 analog 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)	0,15 m³/h
	Q (t)	0,48 m³/h
	Q (max)	2,4 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 number	I002
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	440
Housing	rectangular	
Dimensions	[mm]	110 x 45 x 72
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 G 1/2 Internal thread DN10	
Displays / operating elements		
Display		Color 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: analog output Temperature monitoring
OUT2: analog output Volumetric flow quantity monitoring
Colors to DIN EN 60947-5-2
Core colors :
BK = black
BN = brown
BU = blue
WH = white

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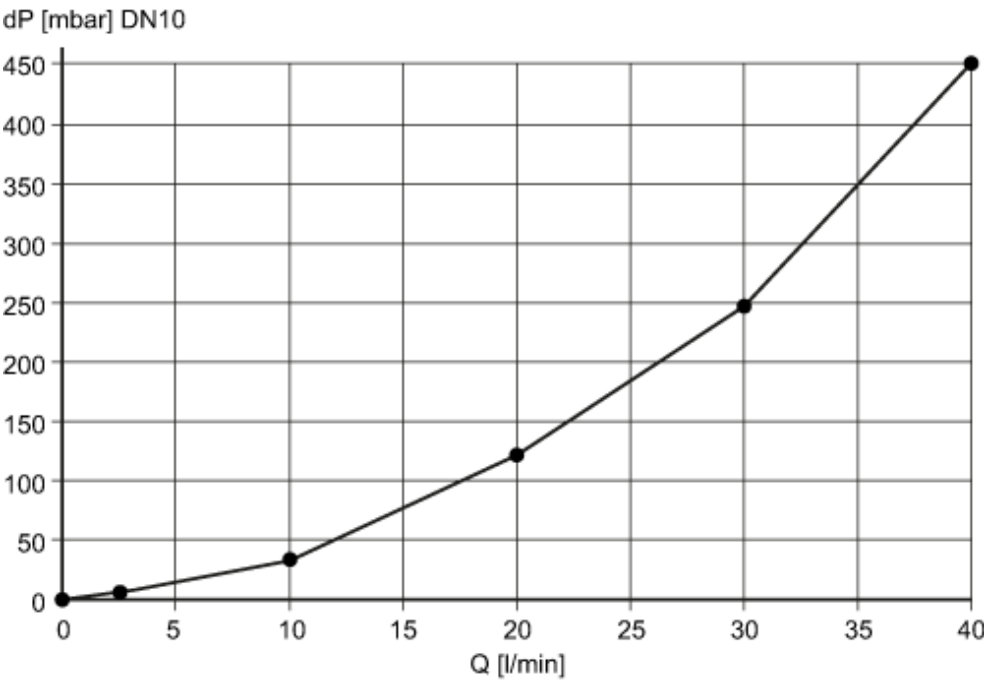


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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

