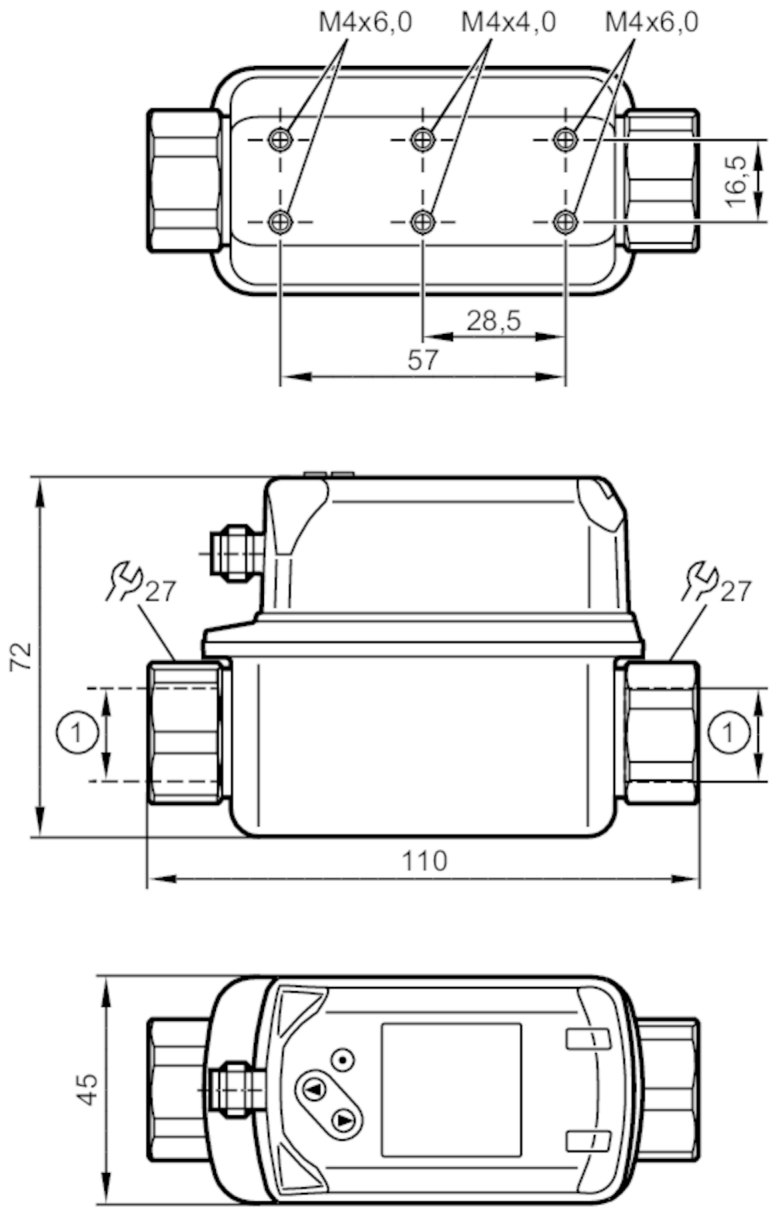
SV4504

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

SV4504

Vortex flow meter with display

SVK12XXX50KG/US-100

Pressure rating	[bar]	12
Pressure rating	[MPa]	1.2
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
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

SV4504

Vortex flow meter with display

SVK12XXX50KG/US-100

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	
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 Rc 1/2 internal thread DN8	
Remarks			
Remarks		MW = measured value	
		MEW = Final value of the measuring range	
Pack quantity		1 pcs.	

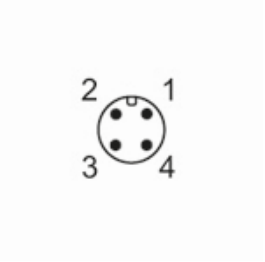
SV4504

Vortex flow meter with display

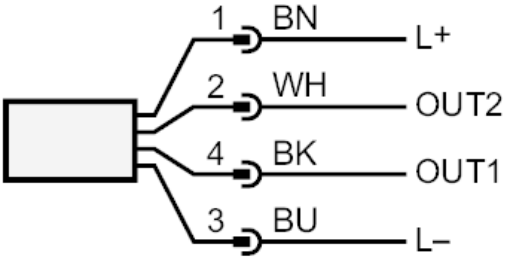
SVK12XXX50KG/US-100

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

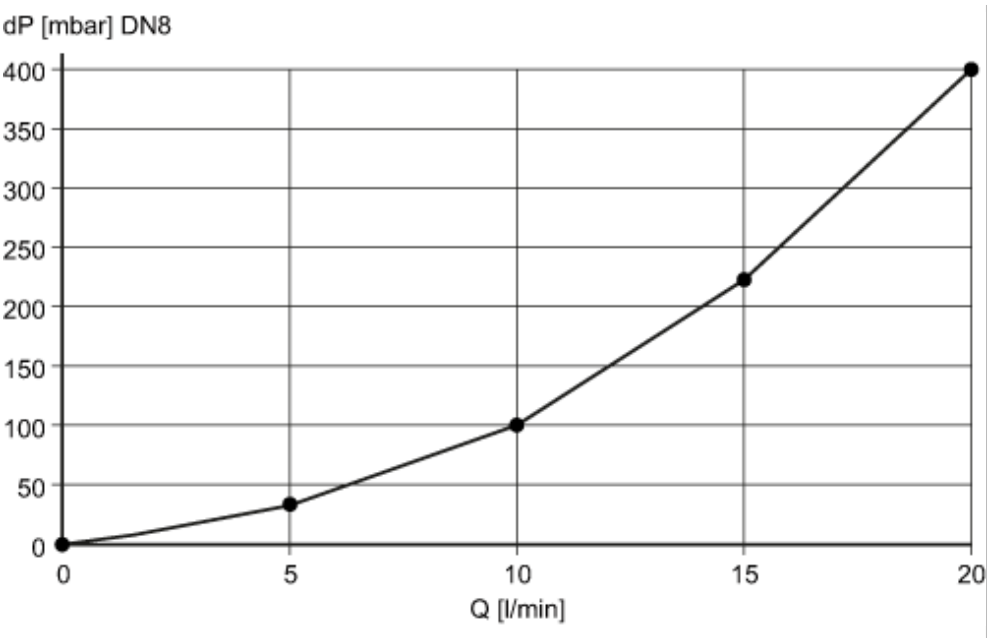
SV4504

Vortex flow meter with display

SVK12XXX50KG/US-100

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

