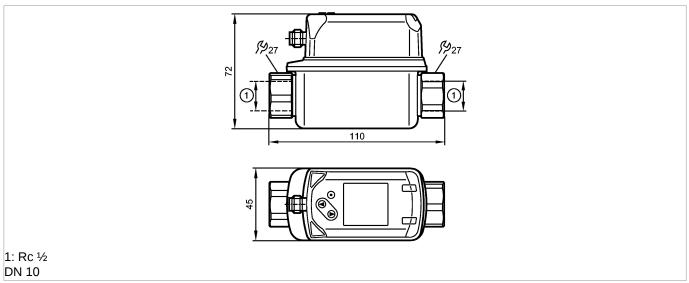
SVK12XXX50KG/US-100



Flow sensors





Product characteristics

Vortex flow meter

DN 10

Process connection: Rc $\frac{1}{2}$

Measuring range

240 l/min				
-1090 °C				
Application				
Application		Liquids of the fluid group 2 according to the Pressure Equipment Directive (PED): Water, deionised water, cooling water		
Pressure rating [bar]		P [kPa] 1200 1000 800 600 400 200 0 40 50 60 70 80 90 100 T [°C]		
Pressure rating	[bar]	12; (up to 40 °C)		
Medium temperature	[°C]	-1090		
Electrical data				
Electrical design		DC		
Operating voltage	[V]	1830 DC		
Current consumption	[mA]	< 30		

Electrical design		bc
Operating voltage	[V]	1830 DC
Current consumption	[mA]	< 30
Insulation resistance	$[M\Omega]$	> 100 (500 V DC)
Protection class		III
Reverse polarity protection		yes

Outputs	
Output function	OUT1 = analogue signal temperature OUT2 = analogue signal flow



SV5504

SVK12XXX50KG/US-100



Flow sensors

Short-circuit protection		yes		
Overload protection		yes		
Analog output		420 mA		
Max. load	[Ω]	500		
Measuring / setting range	:			
Flow monitoring				
Measuring range		240 [l/min]).122.4 [m³/h]	
Display range		048 [l/min]	02.88 [m³/h]	
Resolution		0.2 [l/min]	0.01 [m³/h]	
Analog start point, ASP		032 [l/min] 01.92 [m³/h]		
Analog end point, AEP		840 [l/min] 0.482.4 [m³/h]		
in steps of		0.2 [l/min]	0.01 [m³/h]	
Measuring dynamics		1:20		
Temperature monitoring				
Measuring range	[°C]	-1090		
Display range	[°C]	-30110		
Resolution	[°C]	0.5		
Analog start point, ASP	[°C]	-1070		
Analog end point, AEP	[°C]	1090		
in steps of	[°C]	0.5		
Accuracy / deviations				
Flow monitoring				
Accuracy [% of the fir	nal value]	± 2 % MEW		
Repeatability		± 0.5 % MEW		
Pressure loss (dP) / flow rat	e (Q)	dP [mbar] DN10	_	
		450		
		400		
		350		
		300		
		250		
		200		
		150		
		100		
		50		
		0		
		0 5 10 15 20 25 Q[l/min]	30 35 40	
Temperature monitoring		(
Accuracy	[K]	± 1		
Reaction times	[1-1]			
Power-on delay time	[s]	< 3		
Flow monitoring	[-]	~ 0		
Response time	[s]	< 1 (dAP = 0)		
Damping, dAP	[s]	05		
Temperature monitoring	r-1	55		
Response time	[s]	T09 = 6		



SVK12XXX50KG/US-100



Flow sensors

Software / programming				
Programming options		Damping for the analog output (dAA); Display unit		
Environment				
Ambient temperature	[°C]	060, at max. 80 °C medium temperature (050 °C at max. 90 °C medium temperature)		
Storage temperature	[°C]		-2080	
Protection		IP 65 / IP 67		
Tests / approvals				
Pressure equipment directive	ve	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 1050 Hz: 1 mm with water 502000 Hz: 2 g	
UL approval number		1002		
Mechanical data				
Process connection		Rc ½		
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]		0.446	
Electrical connection				
Connection		M12 con	nector; gold-plated contacts	
Wiring Core colors BK black BN brown BU blue WH white	3 4	1 BN L+ 2 WH OUT: 4 BK OUT: 3 BU L-		
		OUT1: analogue output tem OUT2: analogue output flow Colours to DIN EN 60947-5-	rate	
Remarks Remarks		MW = measured value MEW = final value of the	measuring range	
Pack quantity	[piece]	1		

ifm efector, inc. \bullet 1100 Atwater Drive \bullet Malvern \bullet PA 19355 — We reserve the right to make technical alterations without prior notice. — US — SV5504 — 03.07.2015