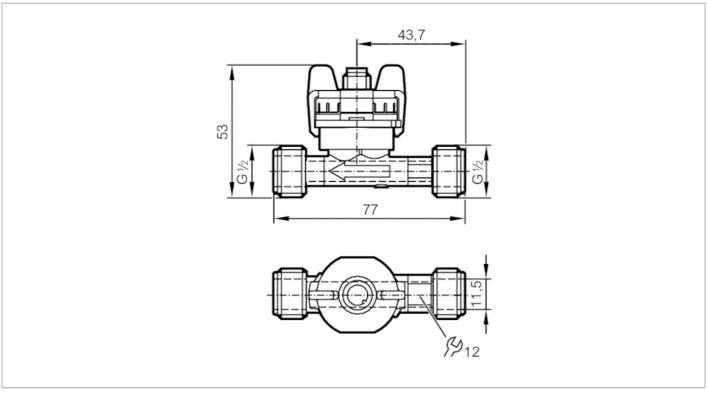
Vortex flow meter

SVM12XXXD0KG/US-100





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Product characteristics			
Number of inputs and outputs		Number of analog outputs: 1	
Measuring range		0.915 l/min 0.1332.21 m/s	
Process connection		threaded connection G 1/2 DN8	
Application			
System		gold-plated contacts	
Measuring element		1 x Pt 1000; (to DIN EN 60751, class B)	
Application		for industrial applications	
Installation		connection to pipe by means of an adapter	
Media		water; glycol solutions; Coolants	
Medium temperature	[°C]	-40100	
Min. bursting pressure	[bar]	25	
Min. bursting pressure	[MPa]	2.5	
Pressure rating	[bar]	12	
Pressure rating	[MPa]	1.2	
Note on pressure rating		up to 40 °C	
Electrical data			
Operating voltage	[V]	833 DC	
Min. insulation resistance	[MΩ]	100; (500 V DC)	
Protection class		III	
Power-on delay time	[s]	< 2	
Inputs / outputs			
Number of inputs and outputs		Number of analog outputs: 1	

Vortex flow meter

SVM12XXXD0KG/US-100



Total number of outputs Coupt signal Coupt signal	Outputs					
Number of analog outputs 1 Analog current output (mA) 420; (Q [l/min] = 0,938 × (1 - 4 mA)) Max. load (Q) < (Ub - 8 V) / 20 mA; Ub = 24 V: 800 Measuring range 0.915 l/min 0.1332.21 m/s Temperature monitoring internal heating temperature probe 1. K/mW Measuring range (°C) -40100 Accuracy / deviations Couracy / deviations Flow monitoring Couracy (in the measuring range) Q < 50 % MEW: < 1 % MEW / Q > 50 % MEW: < 2 % MW; (water) Repeatability 0.2; (% of the final value) Temperature monitoring Q < 50 % MEW: < 1 % MEW / Q > 50 % MEW: < 2 % MW; (water) Response time S 0.5 Postating conditions S 0.5 Response time (S) 0.5 MEW: < 1 % MEW / Q > 50 % MEW: < 2 % MW; (water) Protection (S) 0.5 Descriptions Courage (minerature) C 1585 S Courage (minerature) C 1585 S Courage (minerature) C C P Courage (minerature) C C 1585	Total number of outputs			1		
Analog current output [mA]	Output signal		analo	g signal		
Measuring/setting range 0.915 l/min 0.1332.21 m/s Measuring range 0.915 l/min 0.1332.21 m/s Temperature monitoring Internal heating temperature probe 1 K/mW Measuring range [°C] -40100 Accuracy / deviations Flow monitoring Accuracy (in the measuring range) Q < 50 % MEW: < 1 % MEW / Q > 50 % MEW. < 2 % MW; (water) Repeatability 0,2; (% of the final value) Temperature monitoring Execution times Flow monitoring Execution times Resolutions S Operating conditions O.5 Ambient temperature [°C] -1585 Cavitation P (absolute) discharge / P (difference) > 5.5 to avoid cavitation Tests / approvals EMC EN 61326-2-3 S Shock resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF (years) 380 Temperature (years) Temperature (years) Temperature (years) Temperature (years) Temperature (years) Temperature (years) Temperature (years) </td <td colspan="2">Number of analog outputs</td> <td colspan="2"></td>	Number of analog outputs					
Measuring/setting range 0.915 l/min 0.1332.21 m/s Temperature monitoring Internal heating temperature probe 1 K/mW Measuring range [°C] -40100 Accuracy / deviations Accuracy / deviations Flow monitoring Accuracy (in the measuring range) Q < 50 % MEW: < 1 % MEW / Q > 50 % MEW: < 2 % MW; (water)	Analog current output	[mA]	420; (Q [l/min] = 0,938 x (I - 4 mA))			
Measuring range 0.915 l/min 0.1332.21 m/s Temperature monitoring Internal heating temperature probe 1 K/mW Measuring range (°C) -40100 Accuracy / deviations Flow monitoring Accuracy (in the measuring range) Q < 50 % MEW: < 1 % MEW / Q > 50 % MEW: < 2 % MW; (water) Repeatability 0.2; (% of the final value) Temperature monitoring Accuracy [K] ± 0,3 ± 0,005 x T Reaction times Flow monitoring Flow monitoring Response time (s) 0.5 Operating conditions Ambient temperature [°C] -1585 Storage temperature [°C] -3085 Protection P(absolute) discharge / P(difference) > 5.5 to avoid cavitation Tests / approvals EMC EN 61326-2-3 D(D EN 60068-2-27 30 g (11 ms) Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 612000 Hz 2 g 380 Mechanical data	Max. load	[Ω]				
Temperature monitoring	Measuring/setting range					
Thickmal heating temperature probe 1 K/mW	Measuring range		0.915 l/min	0.1332.21 m/s		
Measuring range C A0100	Temperature monitoring					
Accuracy deviations	Internal heating temperature		1 K/mW			
Process of the measuring range Q < 50 % MEW: < 1 % MEW / Q > 50 % MEW: < 2 % MW; (water)	•	F0.01	·			
Plow monitoring		[°C]	-40100			
Accuracy (in the measuring range) Q < 50 % MEW: < 1 % MEW / Q > 50 % MEW: < 2 % MW; (water) Repeatability 0,2; (% of the final value) Temperature monitoring Accuracy [K] ± 0,3 ± 0,005 x T Reaction times Flow monitoring Response time [S] 0.5 Operating conditions Ambient temperature [°C] -1585 Storage temperature [°C] -3085 Protection IP 65 Cavitation P(absolute) discharge / P(difference) > 5.5 to avoid cavitation Tests / approvals EMC EN 61326-2-3 Shock resistance DIN EN 60068-2-7 30 g (11 ms) Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm MTTF [years] 380 Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] 65 Materials (wetted parts) ETFE; PA 6T; FKM Tightening torque	Accuracy / deviations					
Repeatability	Flow monitoring					
Temperature monitoring			Q < 50 % MEW: $< 1 %$ MEW / $Q > 50 %$ MEW: $< 2 %$ MW; (water)			
Reaction times Flow monitoring Response time S 0.5	Repeatability		0,2; (% of the final value)			
Flow monitoring Response time [s] 0.5 Operating conditions Ambient temperature [°C] -1585 Storage temperature [°C] -3085 Protection IP 65 Cavitation P(absolute) discharge / P(difference) > 5.5 to avoid cavitation Tests / approvals EMC EN 61326-2-3 Shock resistance DIN EN 60068-2-27 30 g (11 ms) Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF [years] 380 Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request weight [g] 65 Material PA 6T Materials (wetted parts) ETFE; PA 6T; FKM Tightening torque [Nm] 12 Process connection threaded connection G 1/2 DN8 Remarks MW = Measured value MEW = Final value of the measuring range	Temperature monitoring					
Flow monitoring Response time [s] 0.5	Accuracy	[K]	± 0,3 ± 0,005 x T			
Response time [s] 0.5 Operating conditions Ambient temperature [°C] -1585 Storage temperature [°C] -3085 Protection IP 65 Cavitation P(absolute) discharge / P(difference) > 5.5 to avoid cavitation Tests / approvals EMC EN 61326-2-3 Shock resistance DIN EN 60068-2-7 30 g (11 ms) Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm MTTF [years] 380 Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] 65 Material PA 6T Materials (wetted parts) ETFE; PA 6T; FKM Tightening torque [Nm] 12 Process connection threaded connection G 1/2 DN8 Remarks MW = Measured value MEW = Final value of the measuring range	Reaction times					
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Storage temperature [°C] Protection Cavitation P(absolute) discharge / P(difference) > 5.5 to avoid cavitation Tests / approvals EMC Shock resistance DIN EN 60068-2-27 30 g (11 ms) DIN EN 60068-2-27 30 g (11 ms) With water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF [years] Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] Material Materials (wetted parts) Tightening torque [Nm] Process connection Remarks Remarks MW = Measured value MEW = Final value of the measuring range	Operating conditions					
Protection Cavitation P(absolute) discharge / P(difference) > 5.5 to avoid cavitation Tests / approvals EMC Shock resistance DIN EN 60068-2-27 30 g (11 ms) Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF [years] Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] Material PA 6T Materials (wetted parts) Tightening torque [Nm] Process connection Remarks Remarks Remarks MW = Measured value MEW = Final value of the measuring range	Ambient temperature	[°C]	-15	585		
Cavitation P(absolute) discharge / P(difference) > 5.5 to avoid cavitation Tests / approvals EMC EN 61326-2-3 Shock resistance DIN EN 60068-2-27 30 g (11 ms) Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF [years] 380 Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] 65 Material PA 6T Materials (wetted parts) ETFE; PA 6T; FKM Tightening torque [Nm] 12 Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range	Storage temperature	[°C]	-3085			
EMC EN 61326-2-3 Shock resistance DIN EN 60068-2-27 30 g (11 ms) Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF [years] 380 Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] 65 Material PA 6T Materials (wetted parts) ETFE; PA 6T; FKM Tightening torque [Nm] 12 Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range	Protection		IP 65			
EMC EN 61326-2-3 Shock resistance DIN EN 60068-2-27 30 g (11 ms) Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF [years] 380 Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] 65 Material PA 6T Materials (wetted parts) ETFE; PA 6T; FKM Tightening torque [Nm] 12 Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range	Cavitation		P(absolute) discharge / P(difference) > 5.5 to avoid cavitation			
Shock resistance Vibration resistance DIN EN 60068-2-27 DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF [years] Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] Material PA 6T Materials (wetted parts) Tightening torque [Nm] Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range	Tests / approvals					
Vibration resistance DIN EN 60068-2-6 with water / 1061 Hz 1 mm with water / 612000 Hz 2 g MTTF [years] Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] Material PA 6T Materials (wetted parts) Tightening torque [Nm] Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range	EMC		EN 61326-2-3			
MTTF [years] 380 Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] 65 Material PA 6T Materials (wetted parts) ETFE; PA 6T; FKM Tightening torque [Nm] 12 Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range	Shock resistance		DIN EN 60068-2-27	30 g (11 ms)		
MTTF [years] 380 Pressure equipment directive sound engineering practice; can be used for group 2 fluids; group 1 fluids on request Mechanical data Weight [g] 65 Material PA 6T Materials (wetted parts) ETFE; PA 6T; FKM Tightening torque [Nm] 12 Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range	Vibration resistance		DIN EN 60068-2-6			
Pressure equipment directive Mechanical data Weight [g] Material PA 6T Materials (wetted parts) Tightening torque Process connection Remarks Remarks Remarks Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request B 65 Material PA 6T ETFE; PA 6T; FKM 12 Process connection Threaded connection G 1/2 DN8 Remarks MW = Measured value MEW = Final value of the measuring range	NATTE					
Mechanical dataWeight[g]65MaterialPA 6TMaterials (wetted parts)ETFE; PA 6T; FKMTightening torque[Nm]12Process connectionthreaded connection G 1/2 DN8RemarksRemarksMW = Measured valueMEW = Final value of the measuring range		yearsJ				
Weight[g]65MaterialPA 6TMaterials (wetted parts)ETFE; PA 6T; FKMTightening torque[Nm]12Process connectionthreaded connection G 1/2 DN8RemarksRemarksMW = Measured value MEW = Final value of the measuring range			sound engineering practice; can be used	tor group 2 fluids; group 1 fluids on request		
Material PA 6T Materials (wetted parts) Tightening torque [Nm] Process connection Remarks Remarks MW = Measured value MEW = Final value of the measuring range						
Materials (wetted parts) Tightening torque [Nm] Process connection Remarks Remarks MW = Measured value MEW = Final value of the measuring range		[g]				
Tightening torque [Nm] 12 Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range						
Process connection threaded connection G 1/2 DN8 Remarks Remarks MW = Measured value MEW = Final value of the measuring range						
Remarks MW = Measured value MEW = Final value of the measuring range		[NM]				
Remarks MW = Measured value MEW = Final value of the measuring range			threaded connection G 1/2 DN8			
MEW = Final value of the measuring range						
	Remarks					
Pack quantity 1 pcs.	Dook quantity					
	rack qualitity	pcs.				

Vortex flow meter

SVM12XXXD0KG/US-100

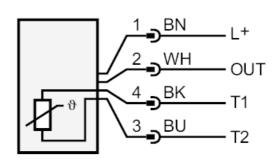


Electrical connection

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



Connection



OUT: analog output

Pt1000 T1 / T2:

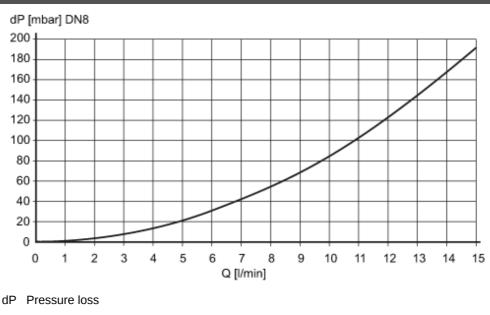
Colors to DIN EN 60947-5-2

Core colors :

BK = black BN = brown BU = blue WH = white

Diagrams and graphs

Pressure loss



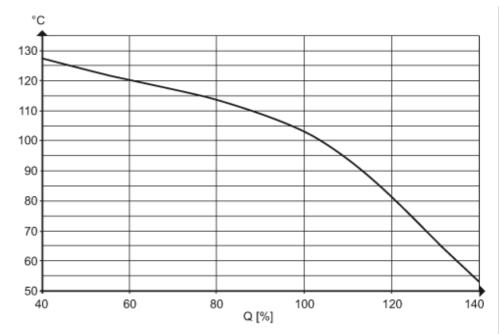
Q volumetric flow quantity

Vortex flow meter

SVM12XXXD0KG/US-100



Minimum lifetime 10 years referred to flow and high medium temperatures



pressure rating (bar)

