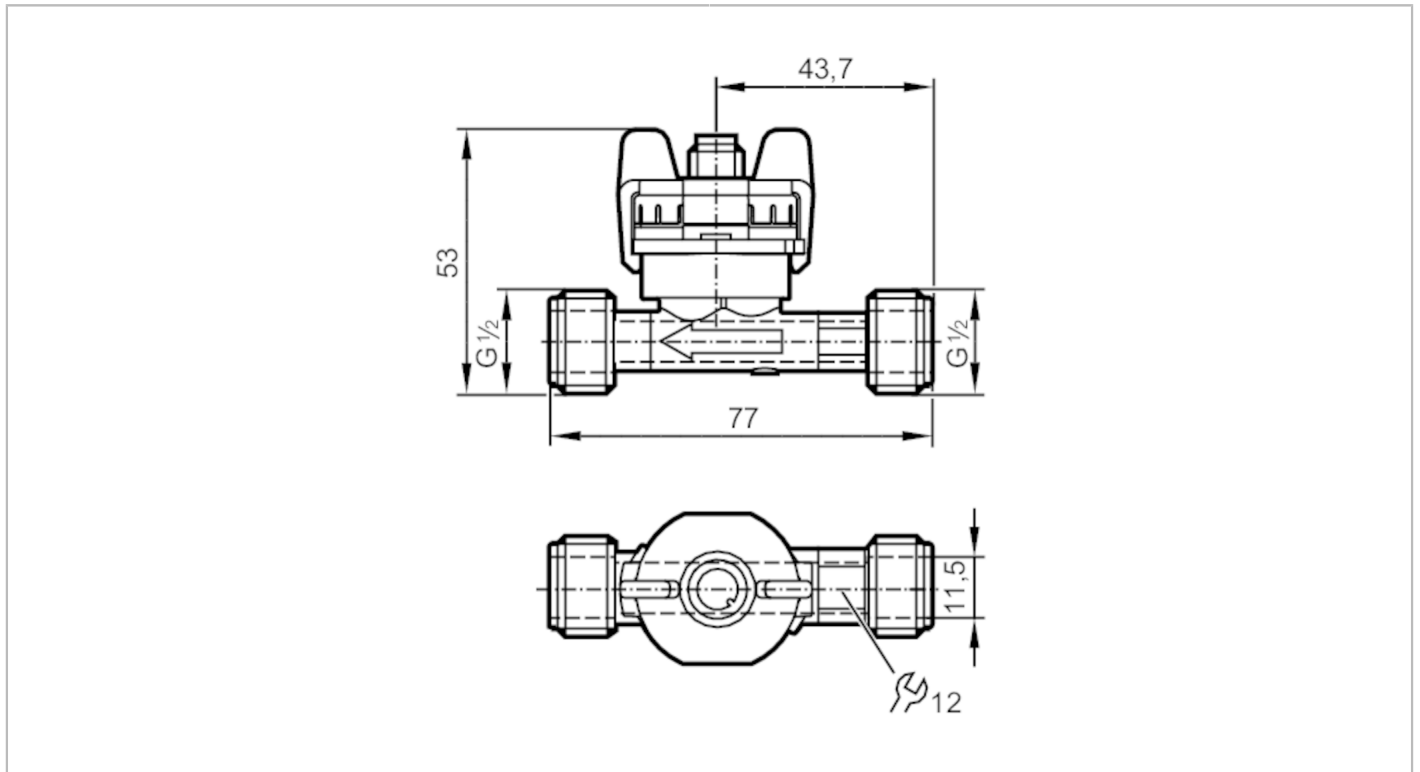


# SV4050



## Vortex flow meter

SVM12XXXD0KG/US-100



### Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1	
Measuring range	0.9...15 l/min	0.133...2.21 m/s
Process connection	threaded connection G 1/2 external thread DN8	

### Application

Special feature	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]	-40...100	
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]	8...33 DC	
Min. insulation resistance [MΩ]	100; (500 V DC)	
Protection class	III	
Power-on delay time [s]	< 2	
Measuring principle	Vortex	

# SV4050



## Vortex flow meter

SVM12XXXD0KG/US-100

Inputs / outputs		
Number of inputs and outputs	Number of analogue outputs: 1	
Outputs		
Total number of outputs	1	
Output signal	analogue signal	
Number of analogue outputs	1	
Analogue current output [mA]	4...20; ( $Q$ [l/min] = 0,938 x (I - 4 mA))	
Max. load [ $\Omega$ ]	< ( $U_b - 8$ V) / 20 mA; $U_b = 24$ V: 800	
Measuring/setting range		
Measuring range	0.9...15 l/min	0.133...2.21 m/s
Temperature monitoring		
Internal heating temperature probe	1 K/mW	
Measuring range [ $^{\circ}$ C]	-40...100	
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]	$\pm 0,3 \pm 0,005 \times T$	
Response times		
Flow monitoring		
Response time [s]	0.5	
Operating conditions		
Ambient temperature [ $^{\circ}$ C]	-15...85	
Storage temperature [ $^{\circ}$ C]	-30...85	
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 / 10...61 Hz 1 mm with water / 61...2000 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	
Housing	rectangular	
Dimensions [mm]	77 x 30.22 x 53	
Materials	PA 6T	
Materials (wetted parts)	ETFE; PA 6T; FKM	
Tightening torque [Nm]	12	
Process connection	threaded connection G 1/2 external thread DN8	

# SV4050



## Vortex flow meter

SVM12XXXD0KG/US-100

### Displays / operating elements

Display	colour display 1,44", 128 x 128 pixels 2 x LED, yellow
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### Remarks

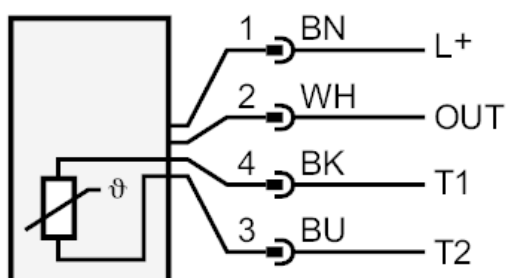
Remarks	MW = measured value MEW = Final value of the measuring range
Pack quantity	1 pcs.

### Electrical connection

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



### Connection



OUT: analogue output

T1 / T2: Pt1000  
colours to DIN EN 60947-5-2

Core colours :

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

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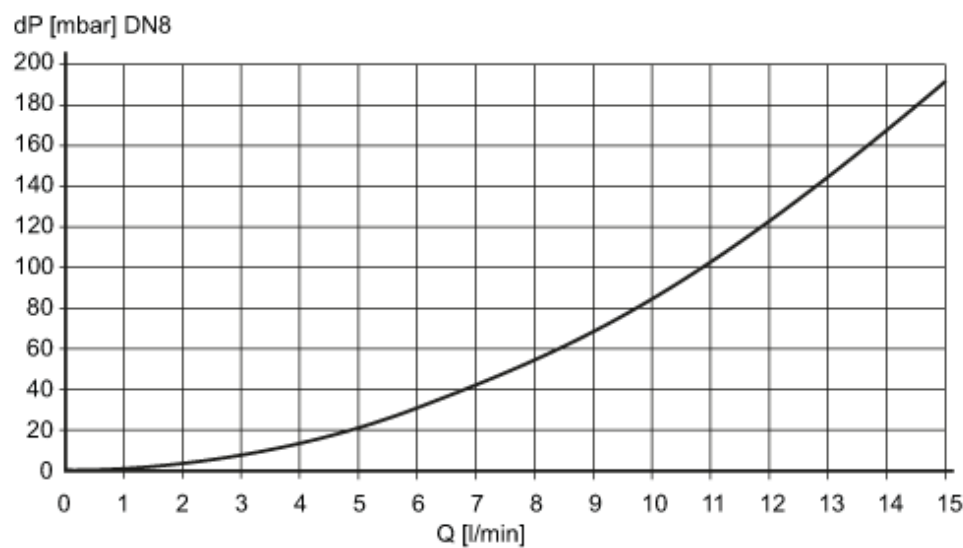


## Vortex flow meter

SVM12XXXD0KG/US-100

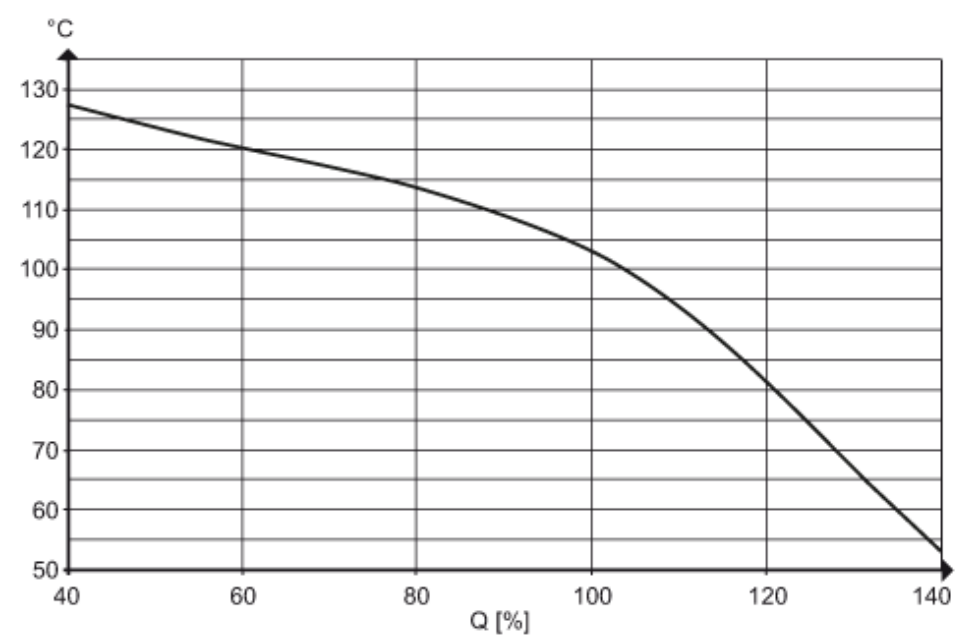
### Diagrams and graphs

Pressure loss



dP Pressure loss  
Q volumetric flow quantity

min. life 10 years referred to flow and high medium temperatures



pressure rating (bar)

