

SV4050

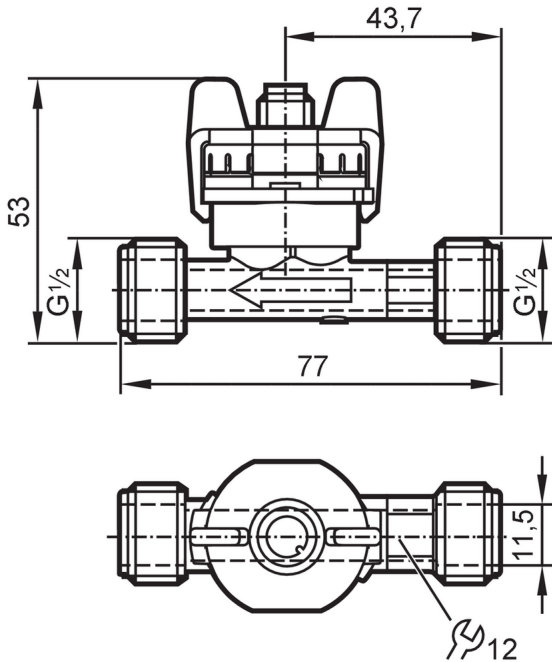


Vortex flow meter

SVM12XXD0KG/US-100

Article to be discontinued
Discontinuation date: 12/31/2025

Alternative articles: SV4051
When selecting an alternative article and accessories please note that technical data may differ!



Product characteristics

Number of inputs and outputs	Number of analog 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. burst pressure	25 bar	2.5 MPa
Pressure rating	12 bar	1.2 MPa
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	

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Inputs / outputs		
Number of inputs and outputs		Number of analog outputs: 1
Outputs		
Total number of outputs		1
Output signal		analog signal
Number of analog outputs		1
Analog current output	[mA]	4...20; (Q [l/min] = 0,938 x (I - 4 mA))
Max. load	[Ω]	< (Ub - 8 V) / 20 mA; Ub = 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		[°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] ± 0,3 ± 0,005 x T
Reaction times		
Flow monitoring		
Response time		[s] 0.5
Operating conditions		
Ambient temperature		[°C] -15...85
Storage temperature		[°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
Material		PA 6T
Materials (wetted parts)		ETFE; PA 6T; FKM
Tightening torque		[Nm] 12
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Remarks

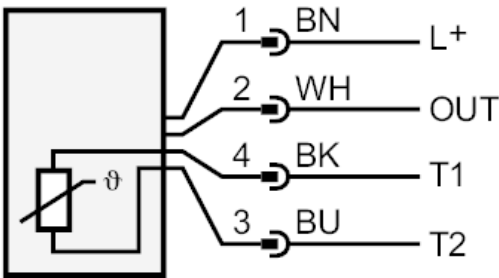
Remarks	MW = Measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated

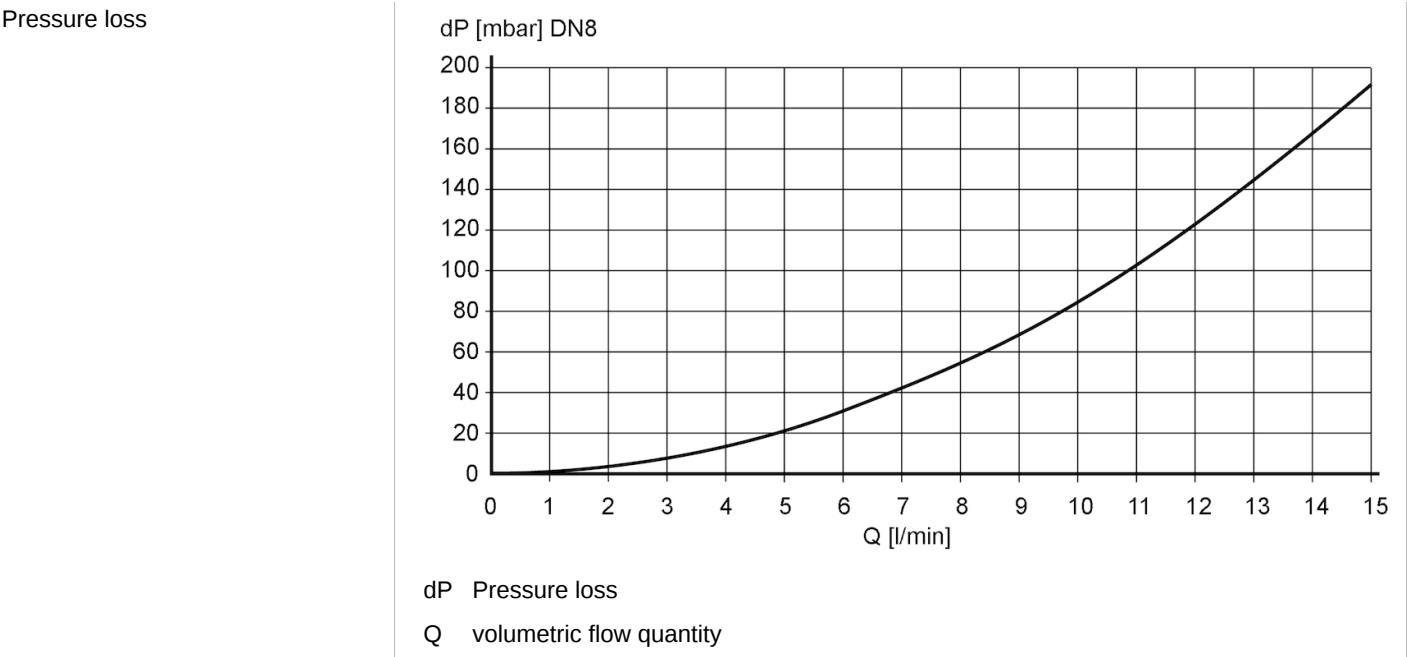


Connection



OUT: analog output
T1 / T2: Pt1000
Colors to DIN EN 60947-5-2
Core colors :
BK = black
BN = brown
BU = blue
WH = white

Diagrams and graphs



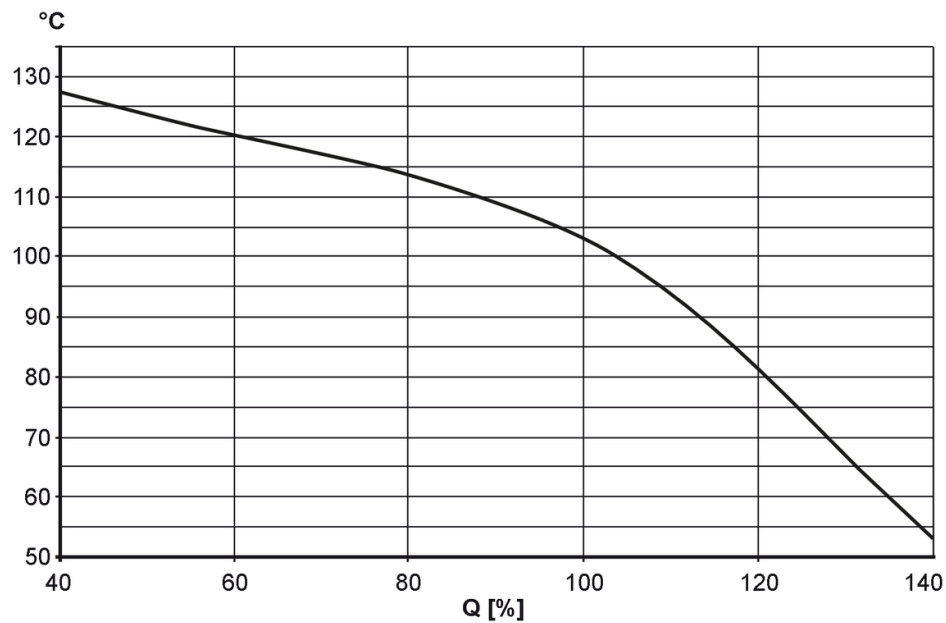
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Minimum lifetime 10 years
referred to flow and high medium
temperatures



pressure rating (bar)

