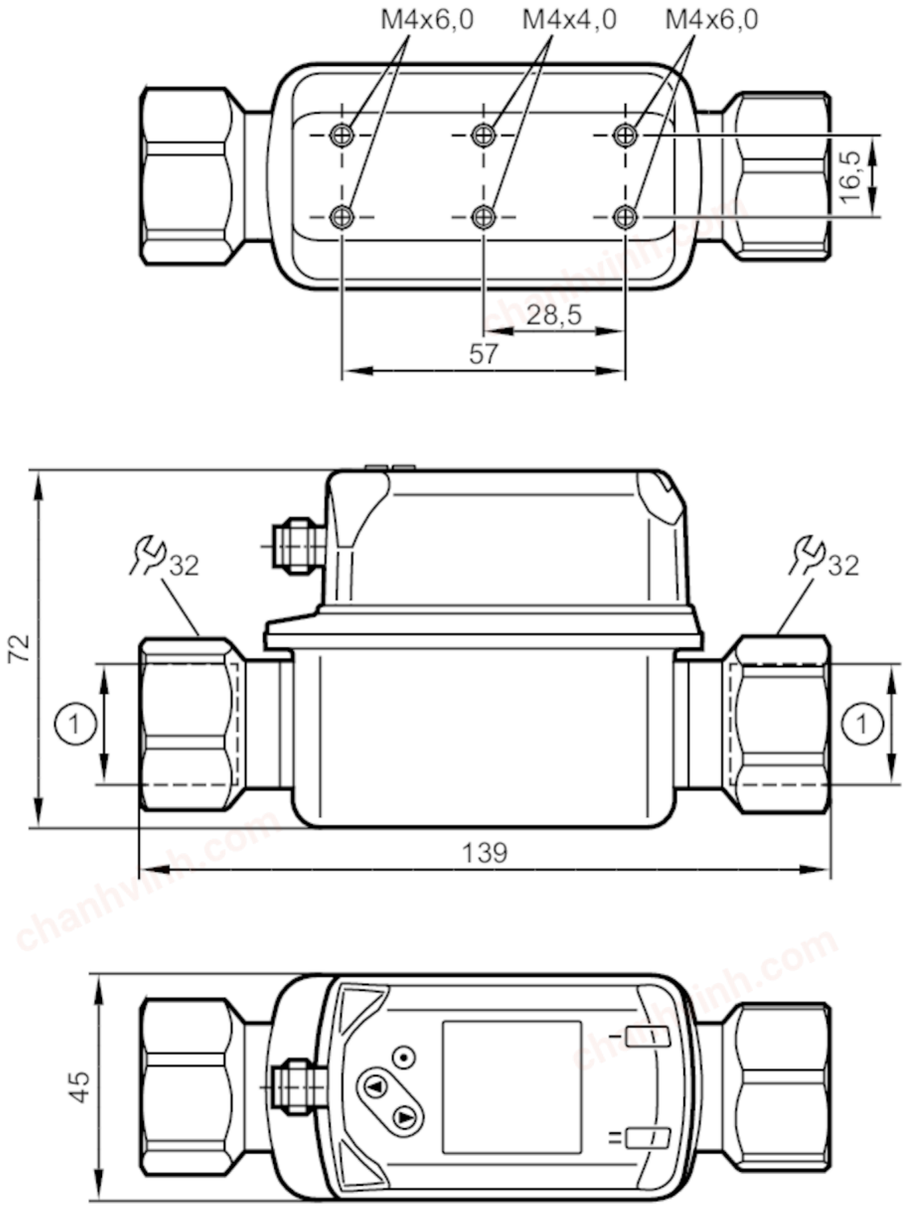
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SV0529

Vortex flow meter with display

SVN34XXXIRKG/US



1 3/4" NPT
DN 20

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	5...100 l/min	0.3...6 m³/h	
Process connection	threaded connection 3/4" NPT internal thread DN20		

Application			
Special feature	Gold-plated contacts		
Application	for industrial applications		
Media	water		
Medium temperature [°C]	-10...90		
Pressure rating	12 bar	1.2 MPa	
Note on pressure rating	up to 40 °C		

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MAWP (for applications according to CRN) [bar]	4.3	
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	
Measuring principle	Vortex	
Inputs / outputs		
Number of inputs and outputs	Number of digital outputs: 2	
Outputs		
Total number of outputs	2	
Output signal	switching signal; frequency signal; IO-Link; (configurable)	
Electrical design	PNP/NPN	
Number of digital outputs	2	
Output function	normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC [V]	2.5	
Permanent current rating of switching output DC [mA]	100	
Short-circuit protection	yes	
Overload protection	yes	
Measuring/setting range		
Measuring range	5...100 l/min	0.3...6 m³/h
Display range	0...120 l/min	0...7.2 m³/h
Resolution	0.5 l/min	0.02 m³/h
Set point SP	6...100 l/min	0.36...6 m³/h
Reset point rP	5...99 l/min	0.3...5.94 m³/h
Frequency end point, FEP	20...100 l/min	1.2...6 m³/h
In steps of	0.5 l/min	0.02 m³/h
Frequency at the end point FRP [Hz]	100...1000	
Measuring dynamics	1:20	
Temperature monitoring		
Measuring range [°C]	-10...90	
Display range [°C]	-30...110	
Resolution [°C]	0.5	
Set point SP [°C]	-9...90	
Reset point rP [°C]	-10...89	
In steps of [°C]	0.5	
Frequency start point, FSP [°C]	-10...70	
Frequency end point, FEP [°C]	10...90	
Frequency at the end point FRP [Hz]	100...1000	

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Accuracy / deviations			
Flow monitoring			
Accuracy (in the measuring range)		± 2 % MEW	
Repeatability		± 0,5 % MEW	
Temperature monitoring			
Accuracy	[K]	± 1	
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		hysteresis / window; normally open / normally closed; switching logic; frequency output; switch-on/switch-off delay; Damping; Display unit	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis	
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	3	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	492
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)	0,36 m³/h
		Q (t)	1,2 m³/h
		Q (max)	6 m³/h
Shock resistance		DIN EN 60068-2-27	5 g (11 ms)

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Vibration resistance		DIN EN 60068-2-6	with water / 10...50 Hz 1 mm
			with water / 50...2000 Hz 2 g
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	519.3	
Housing		rectangular	
Dimensions	[mm]	139 x 45 x 72	
Materials		stainless steel (316L/1.4404); PC; PBT+PC-GF30; PPS; TPE-U	
Materials (wetted parts)		stainless steel (316L/1.4404); ETFE; PA 6T; PPS; FKM	
Tightening torque	[Nm]	30	
Process connection		threaded connection 3/4" NPT internal thread DN20	
Displays / operating elements			
Display			colour display 1,44", 128 x 128 pixels
			2 x LED, yellow
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



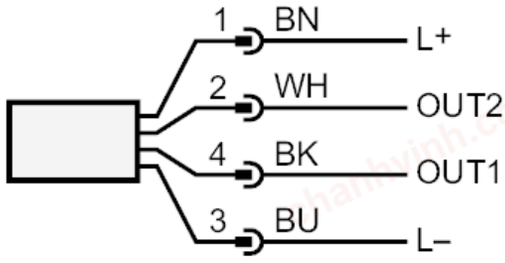
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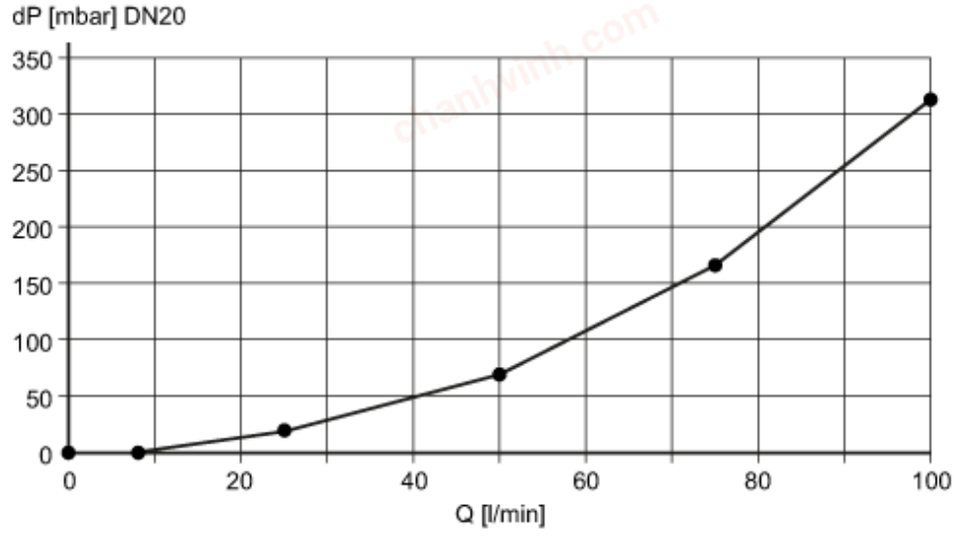
Connection



OUT1:	Flow monitoring
-	switching output
-	frequency output
-	IO-Link
OUT2:	flow monitoring and temperature monitoring
-	switching output
-	frequency output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

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pressure rating (bar)

