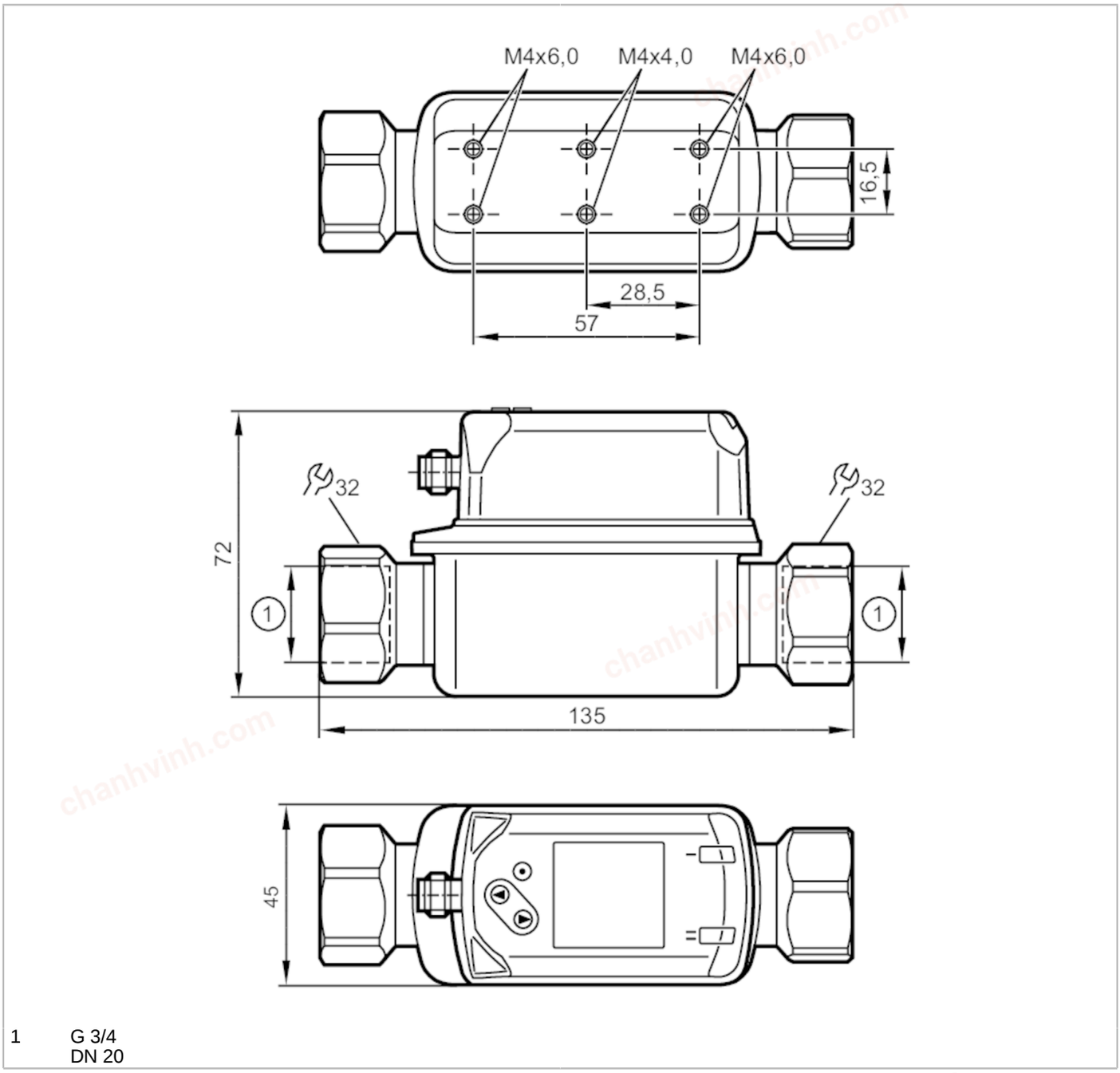
chanhvinh.com

SV7200

Vortex flow meter with display

SVR34XXXIRKG/US-100



1 G 3/4
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 G 3/4 internal thread DN20	
Application			
Special feature		Gold-plated contacts	
Application		for industrial applications	
Media		water; glycol solutions; coolants	
Medium temperature	[°C]	-10...90	

chanhvinh.com

SV7200

Vortex flow meter with display

SVR34XXXIRKG/US-100

Pressure rating		12 bar	1.2 MPa
Note on pressure rating		up to 40 °C	
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	

chanhvinh.com

SV7200

Vortex flow meter with display

SVR34XXXIRKG/US-100

Frequency at the end point FRP [Hz]		100...1000
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)		± 2 % MEW; (water)
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	

chanhvinh.com

SV7200

Vortex flow meter with display

SVR34XXXIRKG/US-100

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)
Vibration resistance		DIN EN 60068-2-6	with water / 10...50 Hz 1 mm
			with water / 50...2000 Hz 2 g
MTTF	[years]	342	
UL approval		UL Approval no.	I001
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data

Weight	[g]	484.5
Housing		rectangular
Dimensions	[mm]	135 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 G 3/4 internal thread DN20

Displays / operating elements

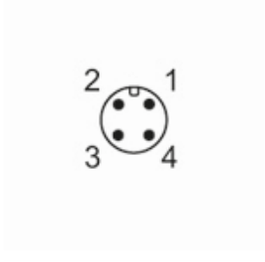
Display		colour display 1,44", 128 x 128 pixels
		2 x LED, yellow

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



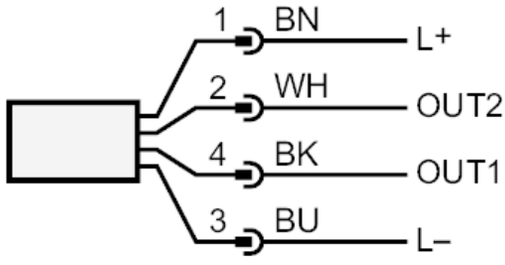
chanhvinh.com

SV7200

Vortex flow meter with display

SVR34XXXIRKG/US-100

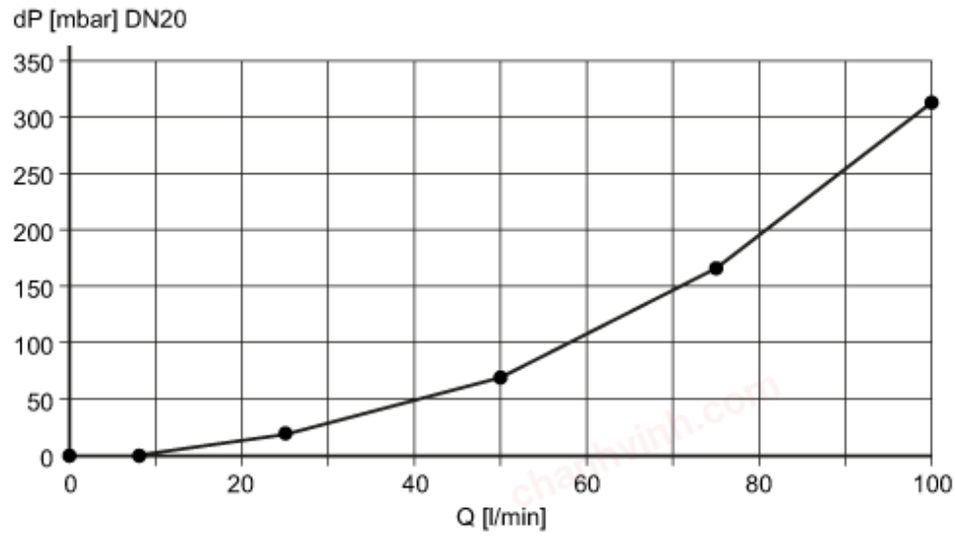
Connection



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

chanhvinh.com

SV7200

Vortex flow meter with display

SVR34XXXIRKG/US-100

pressure rating (bar)

