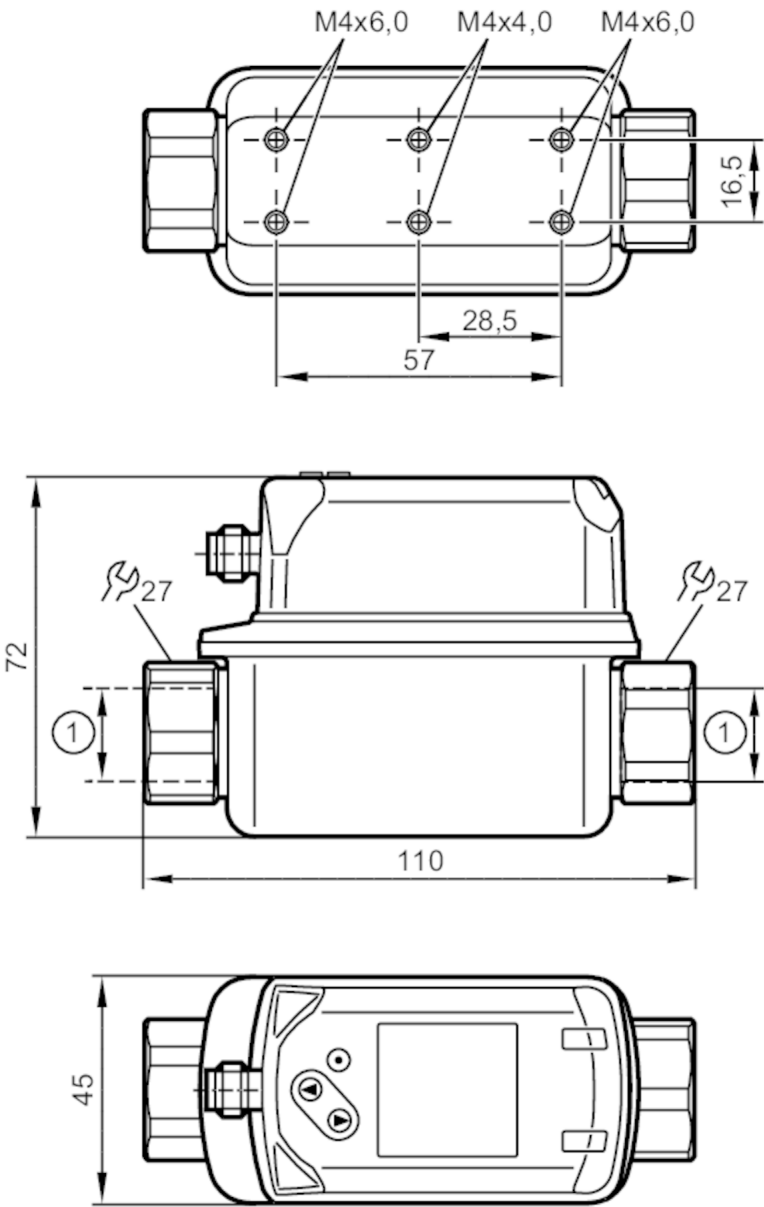


# SV4204



## Vortex flow meter with display

SVR12XXX50KG/US-100



1 G 1/2  
DN 8



### Product characteristics

|                              |                               |                 |
|------------------------------|-------------------------------|-----------------|
| Number of inputs and outputs | Number of analogue outputs: 2 |                 |
| Measuring range              | 1...20 l/min                  | 0.06...1.2 m³/h |
| Process connection           | threaded connection G 1/2 DN8 |                 |

### Application

|                         |                                   |  |
|-------------------------|-----------------------------------|--|
| Special feature         | Gold-plated contacts              |  |
| Application             | for industrial applications       |  |
| Media                   | water; glycol solutions; coolants |  |
| Medium temperature [°C] | -10...90                          |  |



## Vortex flow meter with display

SVR12XXX50KG/US-100

|  |       |             |
|--|-------|-------------|
| Pressure rating                          | [bar] | 12          |
| Pressure rating                          | [Mpa] | 1.2         |
| Note on pressure rating                  |       | up to 40 °C |
| MAWP (for applications according to CRN) | [bar] | 3.9         |

## 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             |

## Inputs / outputs

|                              |                               |
|------------------------------|-------------------------------|
| Number of inputs and outputs | Number of analogue outputs: 2 |
|------------------------------|-------------------------------|

## Outputs

|                              |                 |
|------------------------------|-----------------|
| Total number of outputs      | 2               |
| Output signal                | analogue signal |
| Number of analogue outputs   | 2               |
| Analogue current output [mA] | 4...20          |
| Max. load [Ω]                | 500             |
| Short-circuit protection     | yes             |
| Overload protection          | yes             |

## Measuring/setting range

|                          |              |                 |
|--------------------------|--------------|-----------------|
| Measuring range          | 1...20 l/min | 0.06...1.2 m³/h |
| Display range            | 0...24 l/min | 0...1.44 m³/h   |
| Resolution               | 0.1 l/min    | 0.005 m³/h      |
| Analogue start point ASP | 0...16 l/min | 0...0.96 m³/h   |
| Analogue end point AEP   | 4...20 l/min | 0.24...1.2 m³/h |
| In steps of              | 0.1 l/min    | 0.005 m³/h      |
| Measuring dynamics       |              | 1:20            |

## Temperature monitoring

|                      |      |           |
|----------------------|------|-----------|
| Measuring range      | [°C] | -10...90  |
| Display range        | [°C] | -30...110 |
| Resolution           | [°C] | 0.5       |
| Analogue start point | [°C] | -10...70  |
| Analogue end point   | [°C] | 10...90   |
| In steps of          | [°C] | 0.5       |

## Accuracy / deviations

|                                   |     |                    |
|-----------------------------------|-----|--------------------|
| Flow monitoring                   |     |                    |
| Accuracy (in the measuring range) |     | ± 2 % MEW; (water) |
| Repeatability                     |     | ± 0,5 % MEW        |
| Temperature monitoring            |     |                    |
| Accuracy                          | [K] | ± 1                |



## Vortex flow meter with display

SVR12XXX50KG/US-100

| 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    | Damping for the analogue output dAA; Display unit                                     |                               |
| 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)   | 0,09 m³/h                     |
|                              | Q (t)   | 0,24 m³/h                     |
|                              | Q (max)   | 1,2 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.   | I002                          |
| Pressure Equipment Directive | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request |                               |
| Mechanical data              |   |                               |
| Weight                       | [g]   | 439.5                         |
| Materials                    | stainless steel (1.4404 / 316L); PC; PBT+PC-GF30; PPS; TPE-U                          |                               |
| Materials (wetted parts)     | stainless steel (1.4404 / 316L); ETFE; PA 6T; PPS; FKM                                |                               |
| Tightening torque            | [Nm]  | 30                            |
| Process connection           | threaded connection G 1/2 DN8   |                               |
| Remarks                      |   |                               |
| Remarks                      | MW = measured value   |                               |
|                              | MEW = Final value of the measuring range  |                               |
| Pack quantity                | 1 pcs.  |                               |

# SV4204



## Vortex flow meter with display

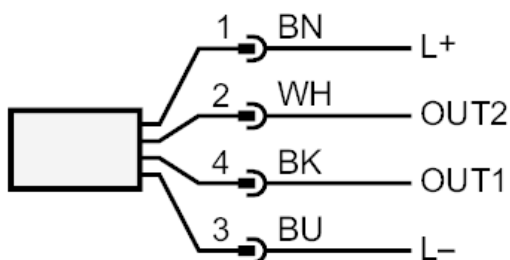
SVR12XXX50KG/US-100

### Electrical connection

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



### Connection



OUT1: analogue output Temperature monitoring  
OUT2: analogue output volumetric flow quantity monitoring  
colours to DIN EN 60947-5-2

Core colours :

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

# SV4204

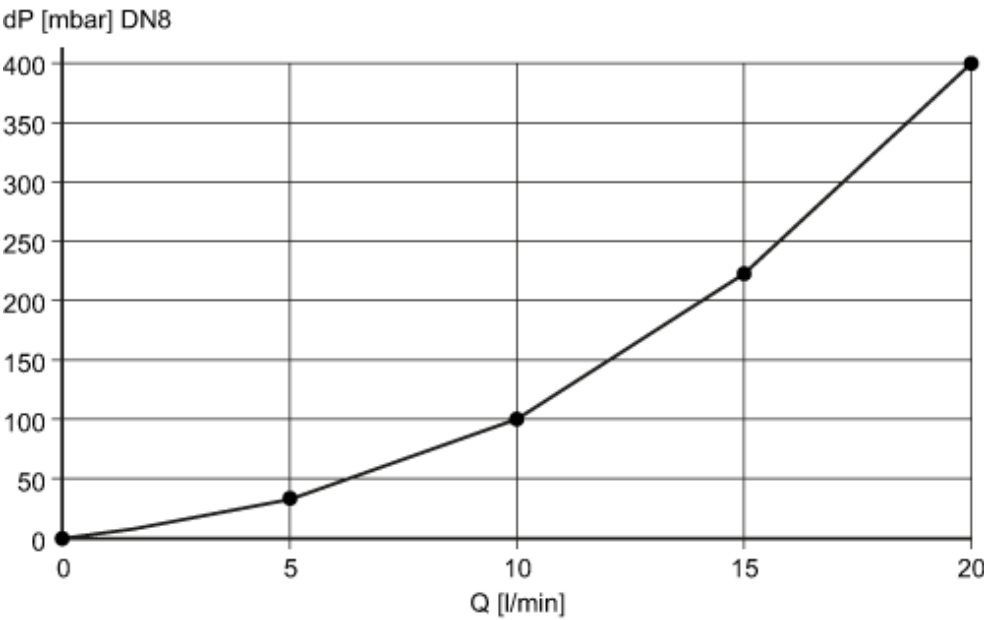


## Vortex flow meter with display

SVR12XXX50KG/US-100

### Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

