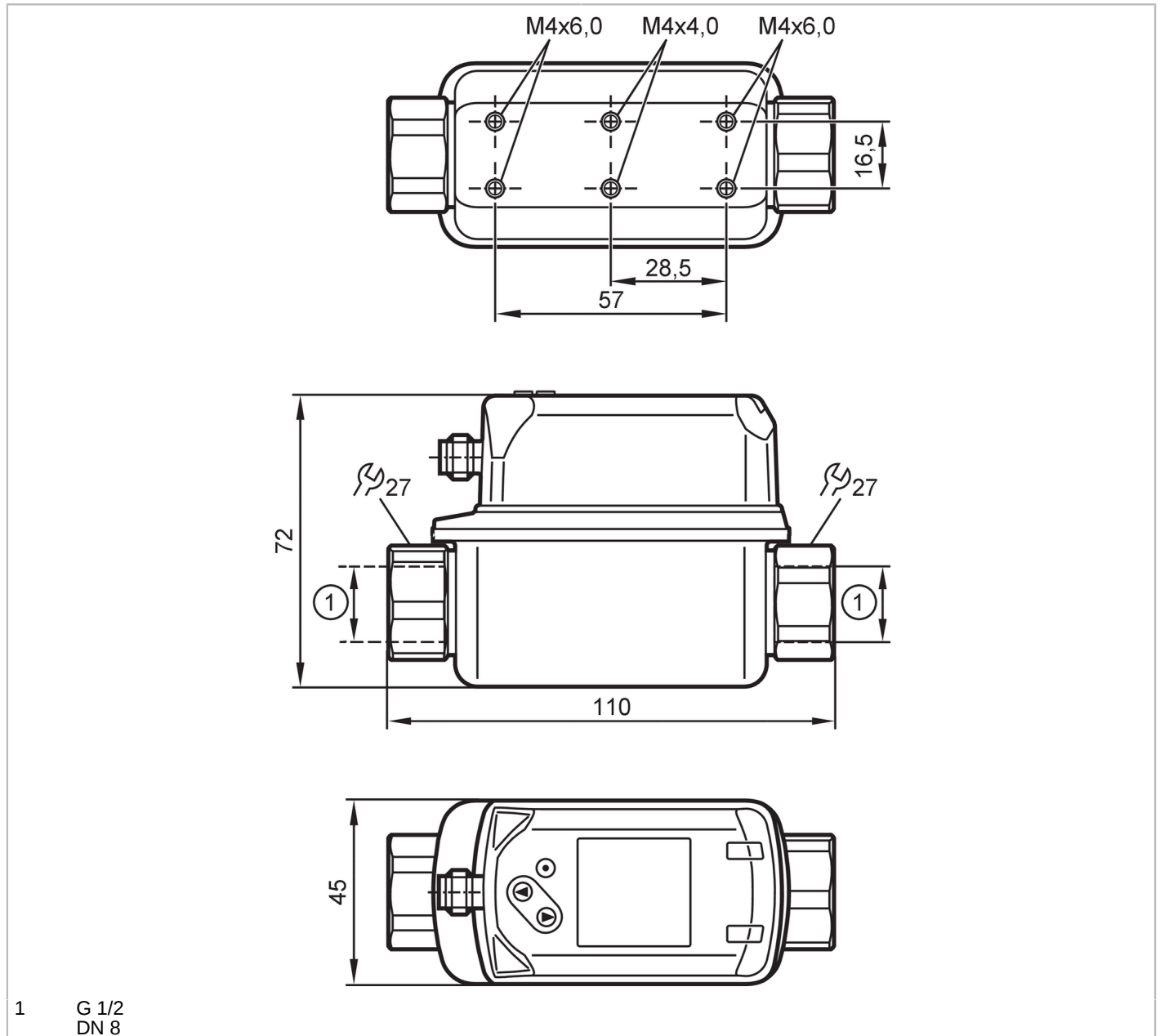


# SV4204



## Vortex flow meter with display

SVR12XXX50KG/US-100



| 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 internal thread DN8 |
| Application                  |   |
| Special feature              | Gold-plated contacts                          |
| Application                  | for industrial applications                   |
| Media                        | water; glycol solutions; coolants             |
| Medium temperature [°C]      | -10...90                                      |
| Pressure rating              | 12 bar      1.2 MPa                           |
| Note on pressure rating      | up to 40 °C                                   |

# SV4204



## Vortex flow meter with display

SVR12XXX50KG/US-100

|  |       |     |
|--|-------|-----|
| 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             |
| Measuring principle         |      | Vortex          |

### 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 |
|----------|-----|-----|

# SV4204



## Vortex flow meter with display

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| 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<br>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<br>DIN EN 61000-6-3   |
| CPA approval                  |         | model number 001VO<br>accuracy class -<br>maximum allowable error ± 2 % FS<br>Q (min) 0,09 m³/h<br>Q (t) 0,24 m³/h<br>Q (max) 1,2 m³/h |
| Shock resistance              |         | DIN EN 60068-2-27 5 g (11 ms)  |
| Vibration resistance          |         | DIN EN 60068-2-6<br>with water / 10...50 Hz 1 mm<br>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  |
| Housing                       |         | rectangular  |
| Dimensions                    | [mm]    | 110 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 1/2 internal thread DN8  |
| Displays / operating elements |         |  |
| Display                       |         | colour display 1,44", 128 x 128 pixels<br>2 x LED, yellow  |
| Remarks                       |         |  |
| Remarks                       |         | MW = measured value<br>MEW = Final value of the measuring range  |
| Pack quantity                 |         | 1 pcs.   |

# SV4204



## Vortex flow meter with display

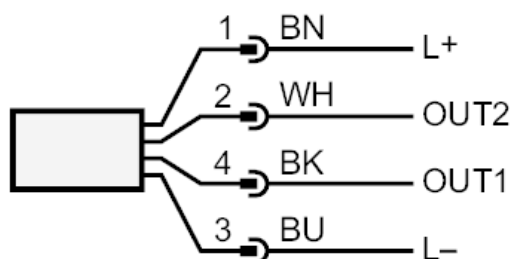
SVR12XXX50KG/US-100

### Electrical connection

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



### Connection



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

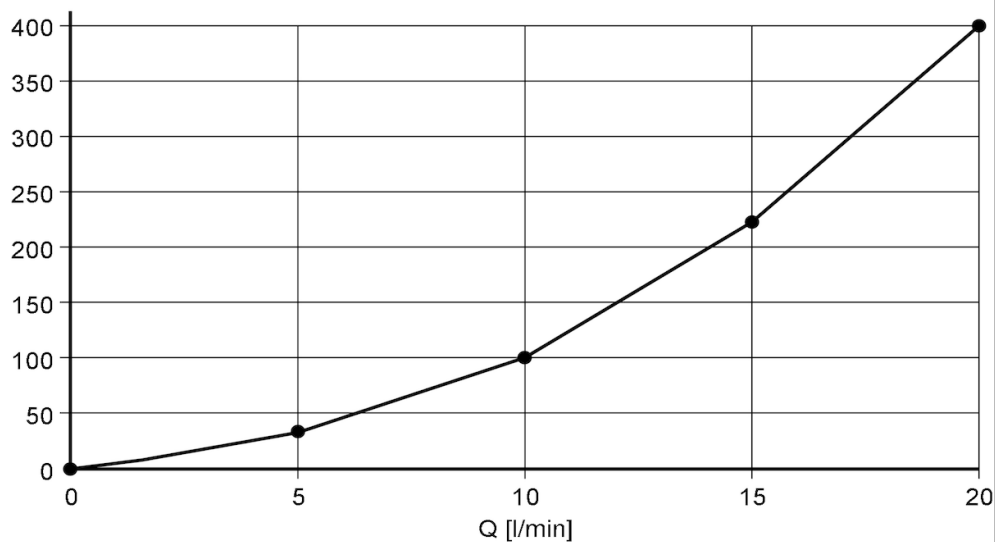
Core colours :

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

### Diagrams and graphs

Pressure loss

dP [mbar] DN8



dP Pressure loss

Q volumetric flow quantity

# SV4204

## Vortex flow meter with display

SVR12XXX50KG/US-100



pressure rating (bar)

