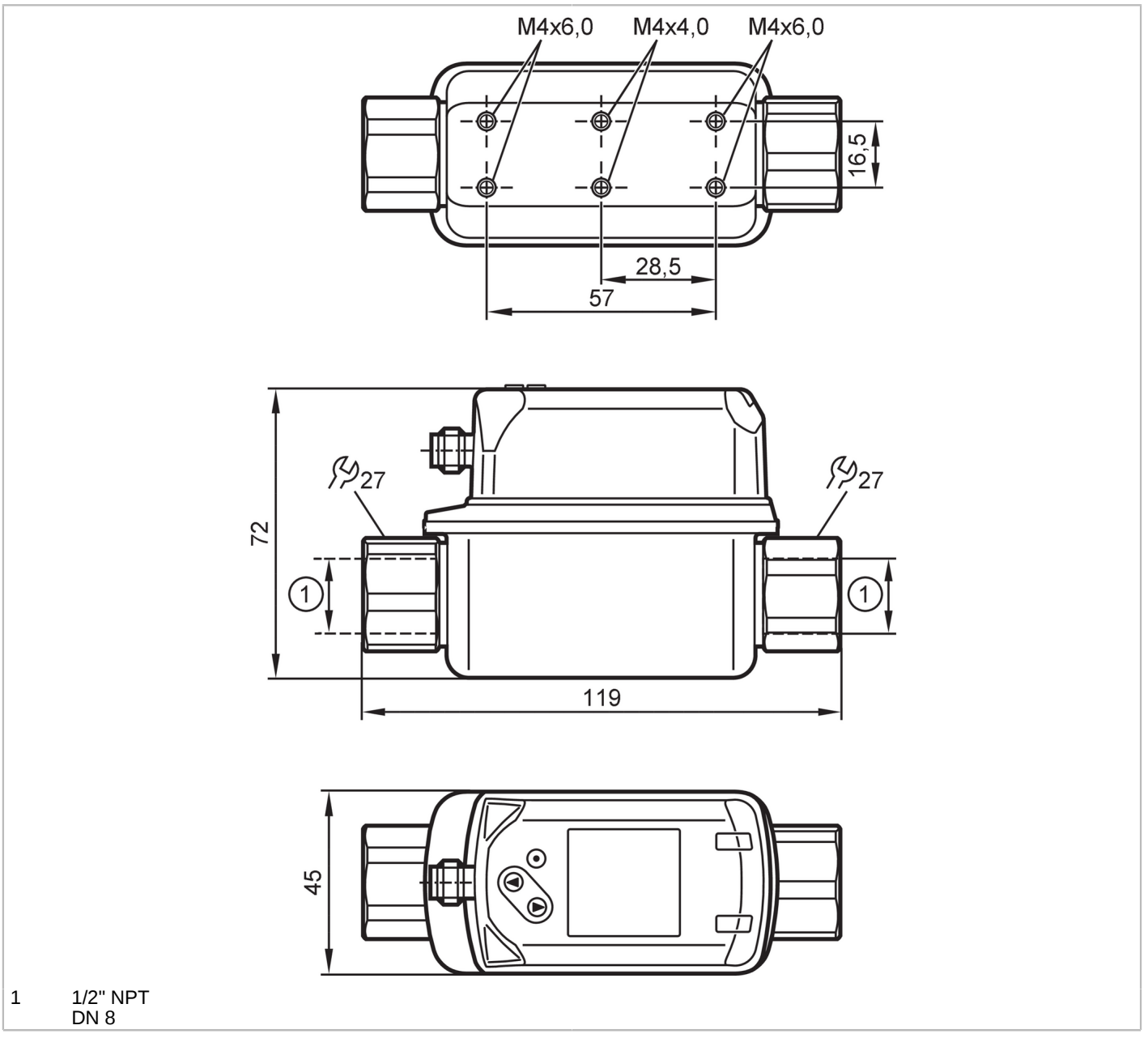
# SV4614

## Vortex flow meter with display

SVN12XXX50KG/US-100




1 1/2" NPT
DN 8

| Product characteristics | | | |
|---|---|---|---|
| Number of inputs and outputs | Number of analogue outputs: 2 | | |
| Measuring range | 16...317 gph | 0.26...5.28 gpm | |
| Process connection | threaded connection 1/2" NPT internal thread DN8 | | |

| Application | | | |
|---|---|---|---|
| Special feature | Gold-plated contacts | | |
| Application | for industrial applications | | |
| Media | water; glycol solutions; coolants | | |
| Medium temperature [°F] | 14...194 | | |
| Pressure rating | 12 bar | 174 psi | 1.2 MPa |
| Note on pressure rating | up to 40 °C | | |

# SV4614

## Vortex flow meter with display

SVN12XXX50KG/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 | | 16...317 gph | 0.26...5.28 gpm |
| Display range | | 0...380 gph | 0...6.34 gpm |
| Resolution | | 1 gph | 0.02 gpm |
| Analogue start point ASP | | 0...254 gph | 0...4.22 gpm |
| Analogue end point AEP | | 63...317 gph | 1.06...5.28 gpm |
| In steps of | | 1 gph | 0.02 gpm |
| Measuring dynamics | | 1:20 | |
| Temperature monitoring | | | |
| Measuring range | [°F] | 14...194 | |
| Display range | [°F] | -22...230 | |
| Resolution | [°F] | 1 | |
| Set point SP | [°F] | 16...194 | |
| Reset point rP | [°F] | 14...192 | |
| In steps of | [°F] | 1 | |
| Frequency start point, FSP | [°F] | 14...158 | |
| Frequency end point, FEP | [°F] | 50...194 | |
| **Accuracy / deviations** | | | |
| Flow monitoring | | | |
| Accuracy (in the measuring range) | | ± 2 % MEW;  (water) | |
| Repeatability | | ± 0,5 % MEW | |
| Temperature monitoring | | | |
| Accuracy | [K] | ± 1 | |

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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 | [°F] | 32...140 | |
| Note on ambient temperature | | medium temperature < 176 °F | |
| | | medium temperature < 194 °F: 32...122 °F | |
| Storage temperature | [°F] | -4...176 | |
| Protection | | IP 65; IP 67 | |
| **Tests / approvals** | | | |
| EMC | | DIN EN 61000-6-2 | |
| | | DIN EN 61000-6-3 | |
| 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] | 481.5 | |
| Housing | | rectangular | |
| Dimensions | [mm] | 119 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 1/2" NPT internal thread DN8 | |
| **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: 4, gold-plated

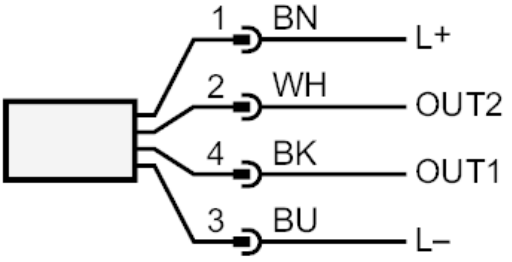


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## Vortex flow meter with display

SVN12XXX50KG/US-100

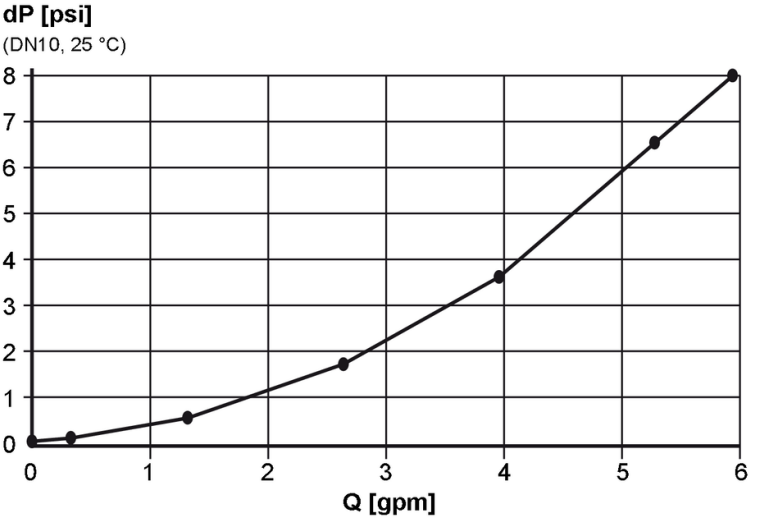
### Connection




| | |
|---|---|
| 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



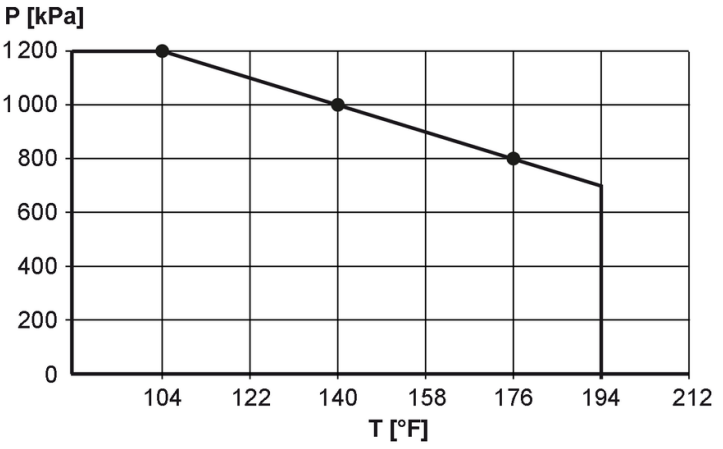

dP Pressure loss

Q volumetric flow quantity

# SV4614

## Vortex flow meter with display

**SVN12XXX50KG/US-100**




pressure rating (bar)

