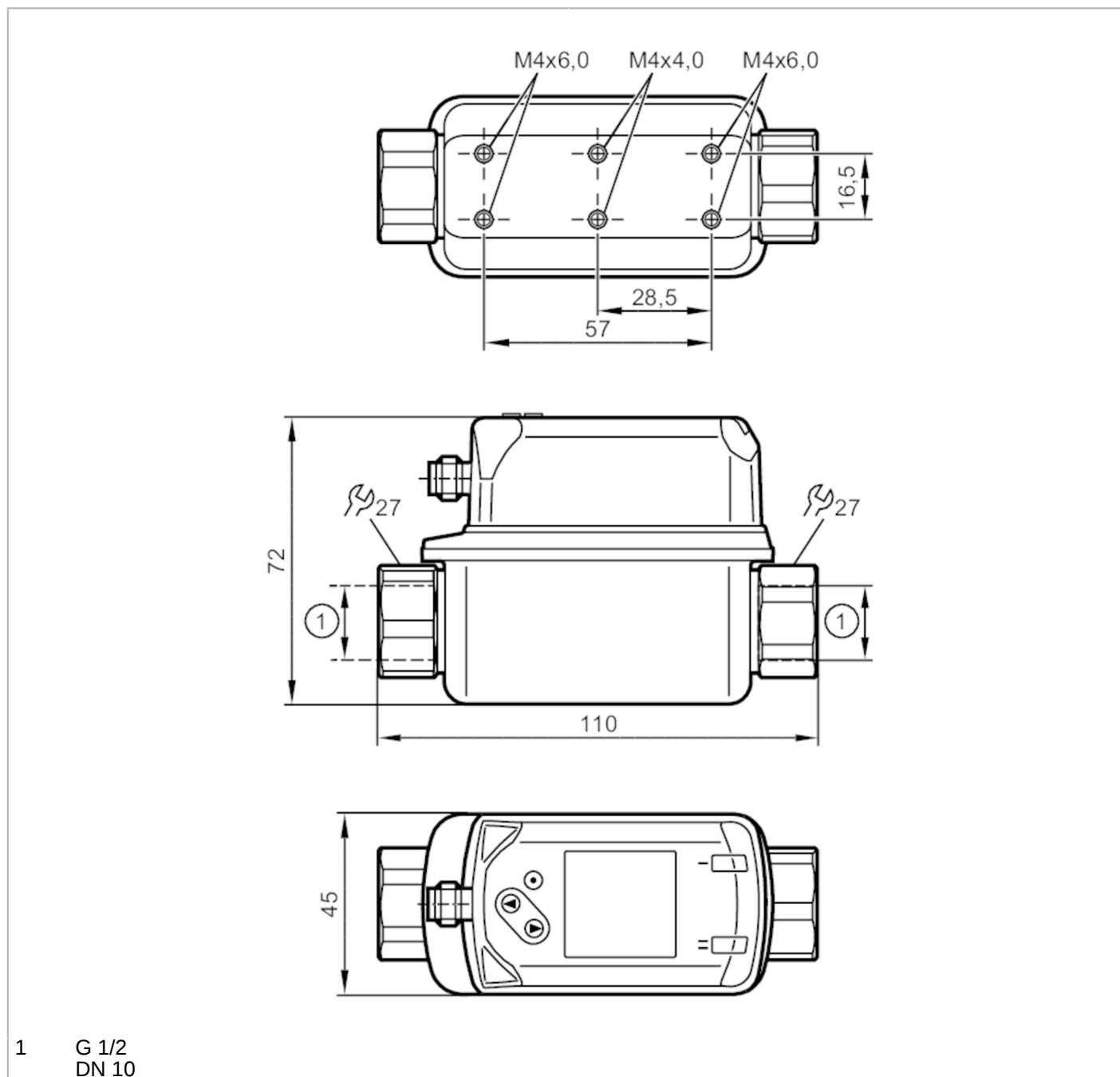


SV5200



Vortex flowmeters with display, Type SV

SVR12XXXIRKKG/US-100



1 G 1/2
DN 10



Product characteristics

| | | |
|------------------------------|--------------------------------|-----------------|
| Number of inputs and outputs | Number of digital outputs: 2 | |
| Measuring range | 2...40 l/min | 0.12...2.4 m³/h |
| Process connection | threaded connection G 1/2 DN10 | |

SV5200



Vortex flowmeters with display, Type SV

SVR12XXXIRKG/US-100

| Application | | |
|--|---|------------------|
| System | gold-plated contacts | |
| Application | for industrial applications | |
| Media | water | |
| Medium temperature [°C] | -10...90 | |
| Pressure rating [bar] | 12 | |
| Pressure rating [Mpa] | 1.2 | |
| Note on pressure rating | up to 40 °C | |
| MAWP (for applications according to CRN) [bar] | 4.8 | |
| 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 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 / closed; (configurable) | |
| 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 | 2...40 l/min | 0.12...2.4 m³/h |
| Display range | 0...48 l/min | 0...2.88 m³/h |
| Resolution | 0.2 l/min | 0.01 m³/h |
| Set point SP | 2.4...40 l/min | 0.14...2.4 m³/h |
| Reset point rP | 2...39.6 l/min | 0.12...2.38 m³/h |
| Frequency end point, FEP | 8...40 l/min | 0.48...2.4 m³/h |
| In steps of | 0.2 l/min | 0.01 m³/h |
| Frequency at the end point FRP [Hz] | 100...1000 | |
| Measuring dynamics | 1:20 | |

SV5200



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| 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 |
| Accuracy / deviations | | |
| Flow monitoring | | |
| Accuracy (in the measuring range) | | ± 2 % MEW |
| Repeatability | | ± 0,5 % MEW |
| Temperature monitoring | | |
| Accuracy | [K] | ± 1 |
| Reaction 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 / 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 class | A | |
| Process data analog | 2 | |
| Process data binary | 2 | |
| Min. process cycle time | [ms] | 3 |
| Supported DeviceIDs | Type of operation | DeviceID |
| | default | 488 |

SV5200



Vortex flowmeters with display, Type SV

SVR12XXXIRKG/US-100

| 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) | 0,15 m³/h |
| | Q (t) | 0,48 m³/h |
| Shock resistance | DIN EN 60068-2-27 | 5 g (11 ms) |
| | 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 number | I001 |
| Pressure equipment directive | sound engineering practice; can be used for group 2 fluids; group 1 fluids on request | |

| Mechanical data | |
|--------------------------|--|
| Weight [g] | 440 |
| Material | 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 DN10 |

| 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



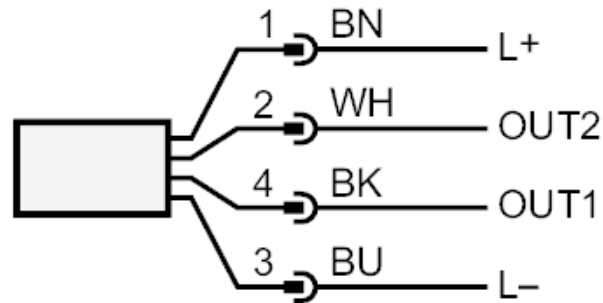
SV5200



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Connection



OUT1:
- Flow monitoring
- Switching output
- Frequency output
- IO-Link

OUT2:
- flow monitoring and temperature monitoring
- Switching output
- Frequency output
Colors to DIN EN 60947-5-2

Core colors :

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

SV5200

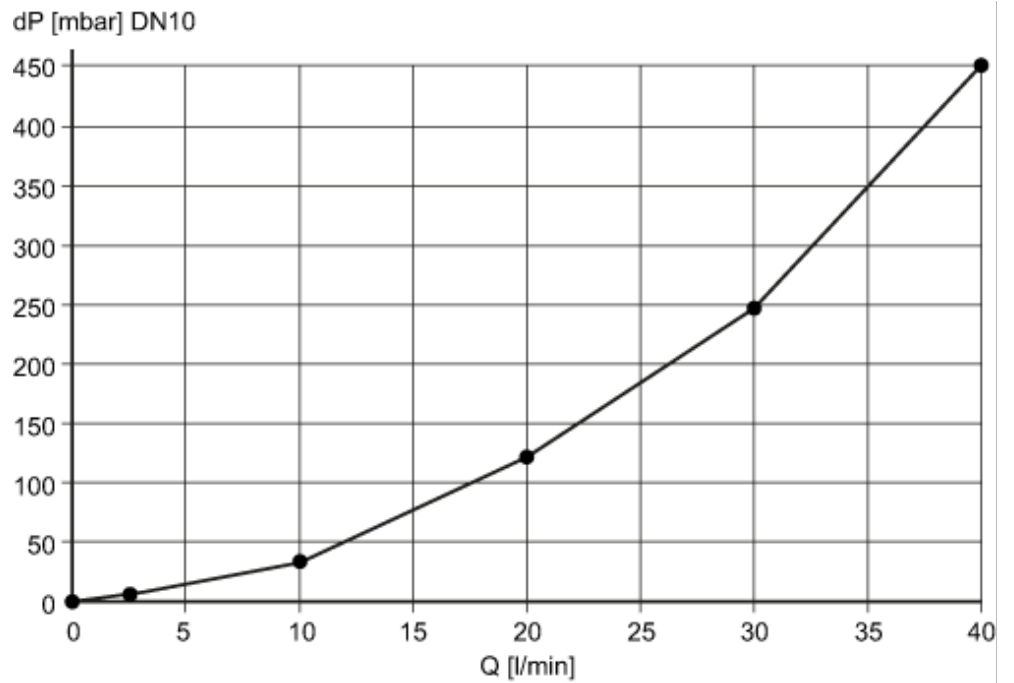


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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

pressure rating (bar)

