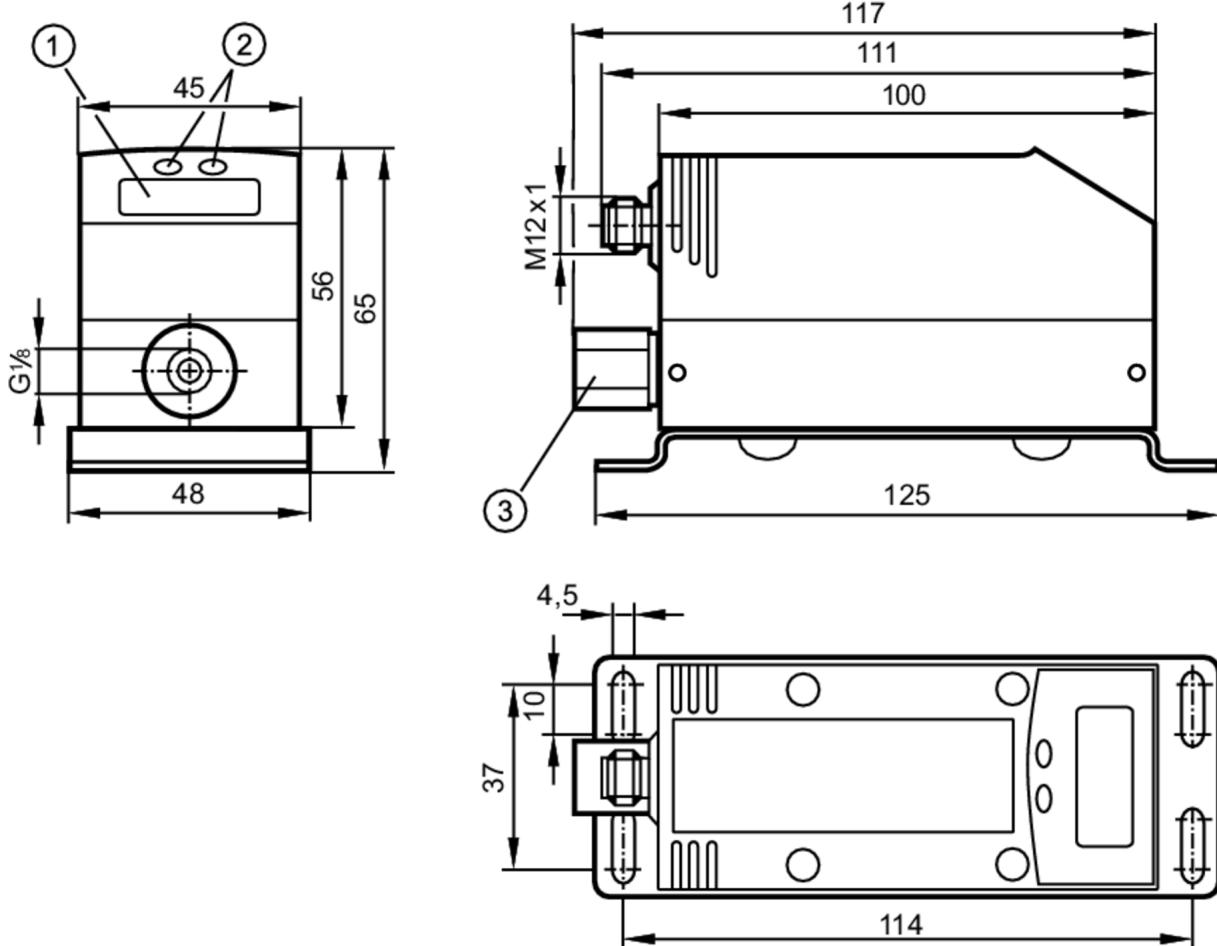


Flow meter

SQR18DXBFPKG/US-100



- 1 alphanumeric display 4-digit
- 2 programming buttons
- 3 flow conditioner



Product characteristics

| | |
|------------------------------|---|
| Number of inputs and outputs | Number of digital outputs: 2; Number of analogue outputs: 1 |
| Measuring range [ml/min] | 1...200 |
| Process connection | threaded connection G 1/8 |

Application

| | |
|-------------------------|----------------------|
| Media | water; hydrous media |
| Medium temperature [°C] | 0..60 |
| Pressure rating [bar] | 10 |

Electrical data

| | |
|-----------------------------|----------------------------|
| Operating voltage [V] | 19...30 DC; (to SELV/PELV) |
| Current consumption [mA] | < 110 |
| Protection class | III |
| Reverse polarity protection | yes |
| Power-on delay time [s] | 5 |

SQ0500



Flow meter

SQR18DXBFPKG/US-100

| Inputs / outputs | | |
|---|----------|---|
| Number of inputs and outputs | | Number of digital outputs: 2; Number of analogue outputs: 1 |
| Outputs | | |
| Total number of outputs | | 2 |
| Output signal | | switching signal; analogue signal; pulse signal; (configurable) |
| Electrical design | | PNP |
| Number of digital outputs | | 2 |
| Output function | | normally open / normally closed; (parameterisable) |
| Max. voltage drop switching output DC | [V] | 2 |
| Permanent current rating of switching output DC | [mA] | 250; (per output) |
| Number of analogue outputs | | 1 |
| Analogue current output | [mA] | 4...20; (scalable) |
| Max. load | [Ω] | 500 |
| Pulse output | | consumed quantity meter |
| Short-circuit protection | | yes |
| Type of short-circuit protection | | pulsed |
| Short-circuit proof | | yes |
| Overload protection | | yes |
| Measuring/setting range | | |
| Measuring range | [ml/min] | 1...200 |
| Display range | [ml/min] | 0...240 |
| Set point SP | [ml/min] | 6...200 |
| Reset point rP | [ml/min] | 1...195 |
| Analogue start point ASP | [ml/min] | 0...150 |
| Analogue end point AEP | [ml/min] | 50...200 |
| In steps of | [ml/min] | 1 |
| Measuring dynamics | | 1:200 |
| Volumetric flow quantity monitoring | | |
| Pulse value | | 0.1...2000000000 ml |
| In steps of | | 0.1...1000000 ml |
| Pulse length | [s] | 0,0125...2 |
| Temperature monitoring | | |
| Measuring range | [°C] | 0...60 |
| Display range | [°C] | 0...72 |
| Set point SP | [°C] | 1.8...60 |
| Reset point rP | [°C] | 0.3...58.5 |
| Analogue start point | [°C] | 0...45 |
| Analogue end point | [°C] | 15...60 |
| In steps of | [°C] | 0.1 |

SQ0500



Flow meter

SQR18DXBFPKG/US-100

Accuracy / deviations

Flow monitoring

| | |
|-----------------------------------|--|
| Accuracy (in the measuring range) | $\pm (15\% \text{ MW} + 2\% \text{ MEW})$; (The values apply for the following conditions;; application: water; Medium temperature: 20 °C; Ambient temperature: 22...28 °C; unit with mounted flow conditioner) |
|-----------------------------------|--|

Repeatability

$\pm 3\% \text{ MW}$

Response times

Flow monitoring

| | |
|--|---|
| Response time [s] | 0.3; (dAP = 0; for rising flow; for falling flow) |
| Damping process value dAP [s] | 1...5 |
| Damping process value dAP in steps [s] | 0 - 0.2 - 0.4 - 0.6 - 0.8 - 1...5 |

Software / programming

| | |
|---------------------------|---|
| Parameter setting options | Flow monitoring; quantity meter; Preset counter; Temperature monitoring |
|---------------------------|---|

Operating conditions

| | |
|--------------------------|----------|
| Ambient temperature [°C] | 0...60 |
| Storage temperature [°C] | -25...85 |
| Protection | IP 65 |

Tests / approvals

| | | |
|----------------------|---------------------------|--------------------|
| EMC | EN 61000-4-2 ESD | 4 kV CD / 8 kV AD |
| | EN 61000-4-3 HF radiated | 10 V/m |
| | EN 61000-4-4 Burst | 2 kV |
| | EN 61000-4-6 HF conducted | 10 V |
| | DIN IEC 68-2-27 | 30 g (11 ms) |
| Vibration resistance | DIN IEC 68-2-6 | 5 g (55...2000 Hz) |
| MTTF [years] | | 231 |

Mechanical data

| | |
|--------------------------|---|
| Weight [g] | 455.5 |
| Materials | stainless steel (316L/1.4404); PC; PBT-GF20; POM; NBR |
| Materials (wetted parts) | stainless steel (316L/1.4404); FKM |
| Process connection | threaded connection G 1/8 |

Displays / operating elements

| | | |
|---------|------------------|---------------------------------|
| Display | Display unit | 3 x LED, green (ml/min, ml, °C) |
| | function | 2 x LED, yellow |
| | switching status | 2 x LED, yellow |
| | measured values | alphanumeric display, 4-digit |
| | programming | alphanumeric display, 4-digit |

Remarks

| | |
|---------------|--|
| Remarks | MW = measured value |
| | MEW = Final value of the measuring range |
| | Pressure drop without flow conditioner: max. 5 mbar. |
| | Pressure drop with flow conditioner: max. 23 mbar. |
| Pack quantity | 1 pcs. |

SQ0500



Flow meter

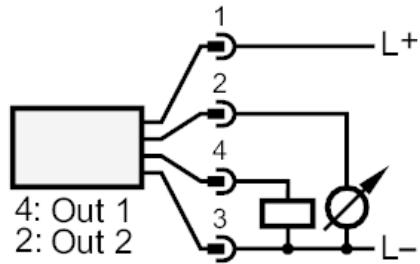
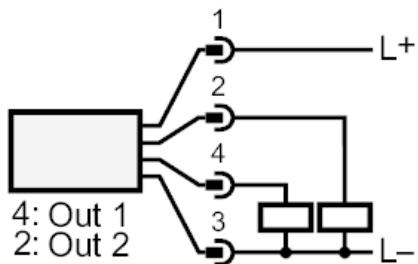
SQR18DXBFPKG/US-100

Electrical connection

Connector: 1 x M12; coding: A



Connection



- OUT1: switching output
Pulse output quantity meter
signal output Preset counter
OUT2: switching output
analogue output