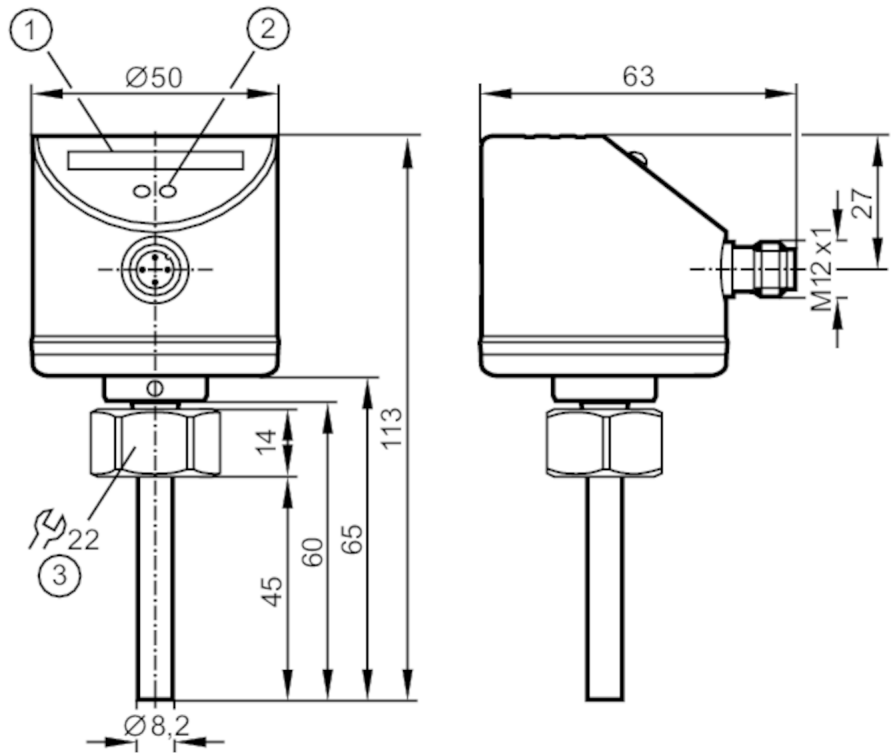


# SI5010



## Flow monitor

SID10ADBFPKG/US-100



- 1 LED bar display
- 2 setting pushbutton
- 3 Tightening torque 25 Nm



| Product characteristics                  |       |                              |
|------------------------------------------|-------|------------------------------|
| Number of inputs and outputs             |       | Number of digital outputs: 1 |
| Process connection                       |       | M18 x 1,5 internal thread    |
| Application                              |       |                              |
| Media                                    |       | Liquids; Gases               |
| Medium temperature                       | [°C]  | -25...80                     |
| Pressure rating                          | [bar] | 300                          |
| MAWP (for applications according to CRN) | [bar] | 208                          |
| Liquids                                  |       |                              |
| Medium temperature                       | [°C]  | -25...80                     |
| Gases                                    |       |                              |
| Medium temperature                       | [°C]  | -25...80                     |
| Electrical data                          |       |                              |
| Operating voltage                        | [V]   | 18...36 DC                   |
| Current consumption                      | [mA]  | < 60                         |
| Protection class                         |       | III                          |
| Reverse polarity protection              |       | yes                          |
| Power-on delay time                      | [s]   | 10                           |



## Flow monitor

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| Inputs / outputs                                |              |                                                              |
|-------------------------------------------------|--------------|--------------------------------------------------------------|
| Number of inputs and outputs                    |              | Number of digital outputs: 1                                 |
| Outputs                                         |              |                                                              |
| Total number of outputs                         |              | 1                                                            |
| Output signal                                   |              | switching signal; IO-Link; (configurable)                    |
| Electrical design                               |              | PNP                                                          |
| Number of digital outputs                       |              | 1                                                            |
| Output function                                 |              | normally open / normally closed; (parameterisable)           |
| Max. voltage drop switching output DC           | [V]          | 2.5                                                          |
| Permanent current rating of switching output DC | [mA]         | 250                                                          |
| Short-circuit protection                        |              | yes                                                          |
| Type of short-circuit protection                |              | pulsed                                                       |
| Overload protection                             |              | yes                                                          |
| Measuring/setting range                         |              |                                                              |
| Probe length L                                  | [mm]         | 45                                                           |
| Liquids                                         |              |                                                              |
| Setting range                                   | [cm/s]       | 3...300                                                      |
| Greatest sensitivity                            | [cm/s]       | 3...100                                                      |
| Gases                                           |              |                                                              |
| Setting range                                   | [cm/s]       | 200...3000                                                   |
| Greatest sensitivity                            | [cm/s]       | 200...800                                                    |
| Accuracy / deviations                           |              |                                                              |
| Repeatability                                   | [cm/s]       | 1...5                                                        |
| Note on repeatability                           |              | for water 5...100 cm/s; 25 °C                                |
|                                                 |              | Factory setting                                              |
| Temperature drift                               | [cm/s x 1/K] | 0.1; (for water 5...100 cm/s; 10...70 °C)                    |
| Temperature gradient                            | [K/min]      | 300                                                          |
| Switch point accuracy                           | [cm/s]       | ± 2...± 10; (for water 5...100 cm/s; 25 °C; Factory setting) |
| Hysteresis                                      | [cm/s]       | 2...5; (for water 5...100 cm/s; 25 °C; Factory setting)      |
| Response times                                  |              |                                                              |
| Liquids                                         |              |                                                              |
| Response time                                   | [s]          | 1...10                                                       |
| Gases                                           |              |                                                              |
| Response time                                   | [s]          | 1...10                                                       |
| Software / programming                          |              |                                                              |
| Adjustment of the switch point                  |              | pushbutton                                                   |
| Interfaces                                      |              |                                                              |
| Communication interface                         |              | IO-Link                                                      |
| Transmission type                               |              | COM2 (38,4 kBaud)                                            |
| IO-Link revision                                |              | 1.1                                                          |



## Flow monitor

SID10ADBFPKG/US-100

|                              |                                                            |          |
|------------------------------|------------------------------------------------------------|----------|
| SDCI standard                | IEC 61131-9                                                |          |
| Profiles                     | Smart Sensor: Process Data Variable; Device Identification |          |
| SIO mode                     | yes                                                        |          |
| Required master port type    | A                                                          |          |
| Process data analogue        | 2                                                          |          |
| Process data binary          | 2                                                          |          |
| Min. process cycle time [ms] | 3                                                          |          |
| Supported DeviceIDs          | Type of operation                                          | DeviceID |
|                              | Default                                                    | 54       |

| Operating conditions     |              |  |
|--------------------------|--------------|--|
| Ambient temperature [°C] | -25...80     |  |
| Storage temperature [°C] | -25...100    |  |
| Protection               | IP 65; IP 67 |  |

| Tests / approvals    |                    |                     |
|----------------------|--------------------|---------------------|
| EMC                  | DIN EN 61000-6-2   |                     |
|                      | DIN EN 61000-6-3   |                     |
| Shock resistance     | DIN IEC 60068-2-27 | 50 g (11 ms)        |
| Vibration resistance | DIN EN 60068-2-6   | 20 g (55...2000 Hz) |
| MTTF [years]         | 298                |                     |

| Mechanical data          |                                                                                       |  |
|--------------------------|---------------------------------------------------------------------------------------|--|
| Weight [g]               | 248.5                                                                                 |  |
| Dimensions [mm]          | M18 x 1.5                                                                             |  |
| Thread designation       | M18 x 1.5                                                                             |  |
| Materials                | stainless steel (1.4404 / 316L); stainless steel (1.4301 / 304); PC; PBT-GF20; EPDM/X |  |
| Materials (wetted parts) | stainless steel (1.4404 / 316L); O-ring: FKM 80 Shore A                               |  |
| Process connection       | M18 x 1,5 internal thread                                                             |  |

| Displays / operating elements |          |                        |
|-------------------------------|----------|------------------------|
| Display                       | function | 10 x LED, three-colour |

| Remarks       |        |  |
|---------------|--------|--|
| Pack quantity | 1 pcs. |  |

## Electrical connection

Connector: 1 x M12; coding: A



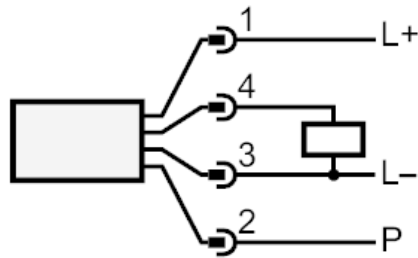
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## Flow monitor

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### Connection



P = programming wire for remote calibration  
Pin 4: IO-Link