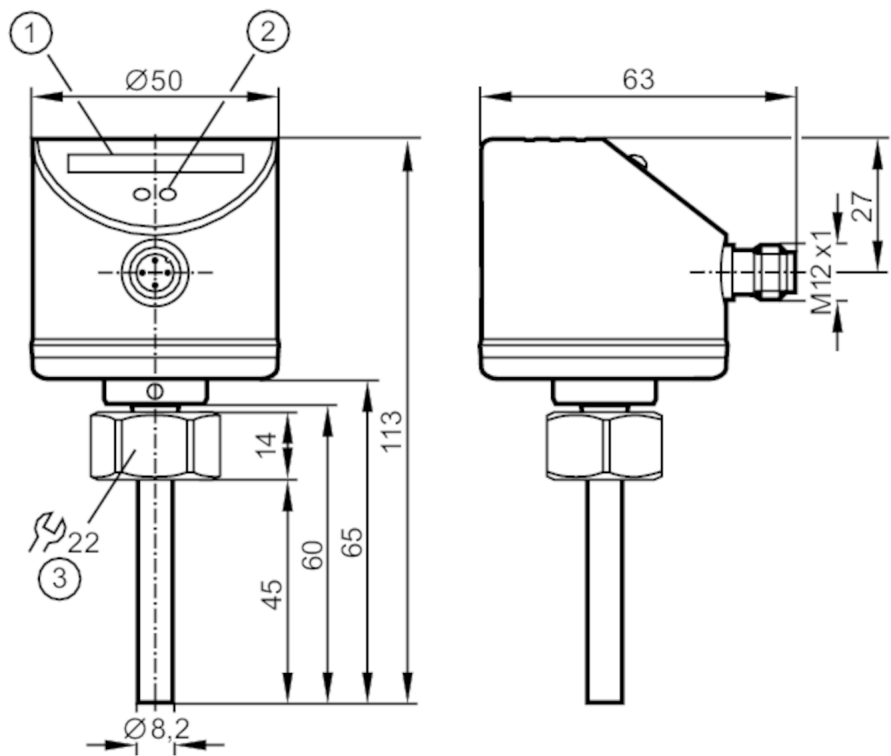




Flow monitor

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: 2                  |
| Process connection           |       | threaded connection M18 x 1,5 internal thread |
| Application                  |       |                                               |
| Media                        |       | Liquids; Gases                                |
| Medium temperature           | [°C]  | -25...80                                      |
| Pressure rating              | [bar] | 300                                           |
| 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                                            |
| Inputs / outputs             |       |                                               |
| Number of inputs and outputs |       | Number of digital outputs: 2                  |



## Flow monitor

SID10ADBFPKG/US-100

| Outputs                                         |              |                                                              |
|-------------------------------------------------|--------------|--------------------------------------------------------------|
| Total number of outputs                         |              | 2                                                            |
| Output signal                                   |              | switching signal; IO-Link; (configurable)                    |
| Electrical design                               |              | PNP                                                          |
| Number of digital outputs                       |              | 2                                                            |
| 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                                  |              |                                                              |
| Response time                                   | [s]          | 1...10                                                       |
| 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                                                          |
| SDCI standard                                   |              | IEC 61131-9                                                  |



## Flow monitor

SID10ADBFPKG/US-100

|                              |                                                            |                 |
|------------------------------|------------------------------------------------------------|-----------------|
| 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          | <b>Type of operation</b>                                   | <b>DeviceID</b> |
|                              | default                                                    | 51              |

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

| Tests / approvals    |                    |                     |
|----------------------|--------------------|---------------------|
| EMC                  | DIN EN 60947-5-9   |                     |
| 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]         | 277                |                     |

| Mechanical data             |                                                                                   |  |
|-----------------------------|-----------------------------------------------------------------------------------|--|
| Weight [g]                  | 247.5                                                                             |  |
| Housing                     | cylindrical                                                                       |  |
| Dimensions [mm]             | Ø 50 / L = 113                                                                    |  |
| Materials                   | stainless steel (316L/1.4404); stainless steel (301/1.4310); PC; PBT-GF20; EPDM/X |  |
| Materials (wetted parts)    | stainless steel (316L/1.4404); O-ring: FKM 80 Shore A                             |  |
| Process connection          | threaded connection M18 x 1,5 internal thread                                     |  |
| Probe diameter [mm]         | 8.2                                                                               |  |
| Installation length EL [mm] | 45                                                                                |  |

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

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

## Electrical connection

Connector: 1 x M12; coding: A



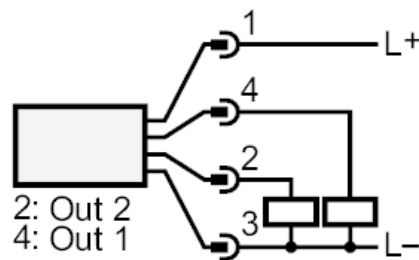
# SI5002

## Flow monitor

SID10ADBFPKG/US-100



### Connection



Pin 4: IO-Link