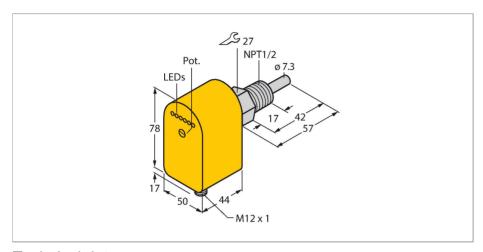
# FCS-N1/2A4P-LIX-H1141 Flow Monitoring – Immersion Sensor with Integrated Processor



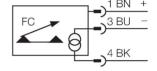
#### Technical data

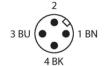
| ID                                    | 6871041                              |
|---------------------------------------|--------------------------------------|
| Туре                                  | FCS-N1/2A4P-LIX-H1141                |
| Mounting                              | Immersion sensor                     |
| Water Operating Range                 | 5150 cm/s                            |
| Stand-by time                         | approx. 10 s                         |
| Setting time                          | 115 s                                |
| Medium temperature                    | -20+80 °C                            |
| Ambient temperature                   | -20+70 °C                            |
| Electrical data                       |                                      |
| Operating voltage U <sub>B</sub>      | 19.228.8 VDC                         |
| Current consumption                   | ≤ 100 mA                             |
| Output function                       | Analog output                        |
| Short-circuit protection              | yes                                  |
| Reverse polarity protection           | yes                                  |
| Current output                        | 420 mA                               |
| Linearity deviation                   | ≤ 10 %                               |
| Load                                  | 200500 Ω                             |
| Protection class                      | IP65                                 |
| Mechanical data                       |                                      |
| Design                                | Immersion                            |
| Housing material                      | Plastic, PBT                         |
| Sensor material                       | Stainless steel, 1.4571 (AISI 316Ti) |
| Max. tightening torque of housing nut | 30 Nm                                |
| Electrical connection                 | Connector, M12 × 1                   |

#### **Features**

- Sensor only for water
- Calorimetric principle
- Adjustments via potentiometer
- ■Status indicated via LED band
- ■With linearized analog output
- ■DC 3-wire, 19.2...28.8 VDC
- ■4...20 mA analog output
- Connector device, M12 × 1

### Wiring diagram





## Functional principle

The function of immersion flow sensors is based on the thermodynamic principle. The sensor is heated up by a few degrees Celsius compared to the flow medium. If the medium flows past the sensor, the heat generated in the sensor is dissipated. The resulting temperature is measured and compared with the temperature of the medium. The flow condition of each medium can be derived from the temperature difference obtained. Thus, TURCK flow sensors reliably and wear-free monitor the flow of liquid or gaseous media.



# Technical data

UL registration number

| Process Pressure   | 100 bar  |
|--------------------|--|
| Process connection | 1/2" NPT   |
| Flow state display | LED chain, red (1x), green (5x)  |
| LED display        | red = 4 mA<br>1x green > 4 mA<br>2x green > 8 mA<br>3x green > 12 mA<br>4x green > 16 mA<br>5x green = 20 mA |
| Tests/approvals    |  |
| Approvals          | cULus  |

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