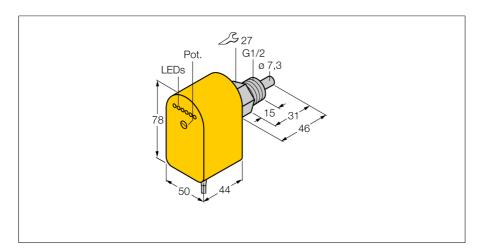
## Flow monitoring Immersion sensor with integrated processor FCS-G1/2A4P-VRX/24VDC





| Mounting conditions | Immersion sonsor      |
|---------------------|-----------------------|
|                     |                       |
| Ident no.           | 6870096               |
| Type designation    | FCS-G1/2A4P-VRX/24VDC |

Mounting conditions Immersion sensor Water Operating Range 1...150cm/s Oil Operating Range 3...300 cm/s Stand-by time typ. 8 s (2...15 s) Switch-on time typ. 2 s (1...15 s) Switch-off time typ. 2 s (1...15 s) Temperature jump, response time max. 12 s Temperature gradient  $\leq$  250 K/min -20...+80 °C Medium temperature

Operating voltage 19.2...28.8 VDC Current consumption  $\leq$  80 mA Output function Relay output, Complementary contact Rated operational current 4 A Short-circuit protection no

| Reverse polarity protection AC switching voltage DC switching voltage Max. AC switching capacity Max. DC switching capacity Protection class | yes  |  |
|--|--|--|
|  | 250 VAC<br>60 VDC<br>1000 VA<br>60 W<br>IP68 |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Housing material   | Plastic, PBT                                 |  |
| Sensor material  | Stainless steel, AISI 316Ti                  |  |
| Max. tightening torque housing nut   | 30 Nm  |  |
|  |  |  |

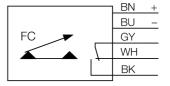
Electrical connection Cable Cable length 2 m Cable cross section 5 x 0.5 mm<sup>2</sup> Pressure resistance 100 bar Process connection G 1/2"

Switching state LED chain green / yellow / red

Flow state display LED chain I FD red Indication: Drop below setpoint Indication: Setpoint reached LED yellow Indication: Setpoint exceeded 4 x LEDs green

- Flow sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer
- **LED** band
- 5-wire DC, 19.2...28.8 VDC
- Changeover contact, relay output
- Cable device

## Wiring Diagram



## **Functional principle**

Our insertion - flow sensors operate on the principle of thermodynamics. The measuring probe is heated by several °C as against the flow medium. When fluid moves along the probe, the heat generated in the probe is dissipated. The resulting temperature is measured and compared to the medium temperature. The flow status of every medium can be derived from the evaluated temperature difference. Thus TURCK's wear-free flow sensors reliably monitor the flow of gaseous and liquid media.