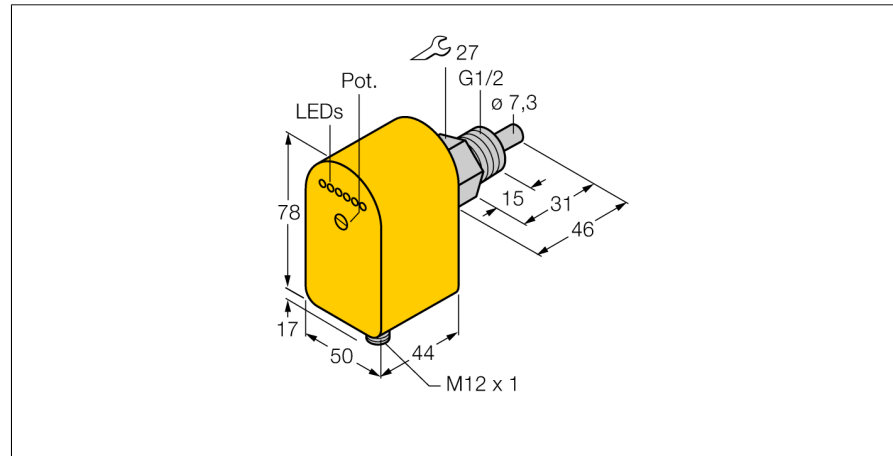
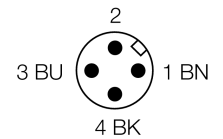
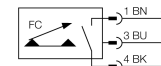


**Flow sensor**  
**Immersion sensor with integrated processor**  
**FCS-G1/2A4P-AP8X-H1141**



- Flow sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer
- LED band
- 3-wire DC, 21...26 VDC
- NO contact, PNP output
- Plug-in device, M12 x 1

**Wiring diagram**



|                                    |                                 |
|------------------------------------|---------------------------------|
| <b>Type code</b>                   | FCS-G1/2A4P-AP8X-H1141          |
| Ident no.                          | 6870092                         |
| <b>Operating range water</b>       | 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               | ≤ 250 K/min                     |
| Medium temperature                 | - 20...80 °C                    |
| <b>Operating voltage</b>           | 21...26VDC                      |
| No-load current I <sub>0</sub>     | ≤ 60 mA                         |
| Output function                    | PNP, NO contact                 |
| Rated operational current          | 0.4 A                           |
| Voltage drop at I <sub>0</sub>     | ≤ 1.5 V                         |
| Short-circuit protection           | yes                             |
| Reverse polarity protection        | yes                             |
| <b>Housing material</b>            | plastic, PBT                    |
| Sensor material                    | stainless steel, AISI 316Ti     |
| Max. tightening torque housing nut | 100 Nm                          |
| Connection                         | male, M12 x 1                   |
| Pressure resistance                | 100 bar                         |
| Process connection                 | G 1/2"                          |
| <b>Switching state</b>             | LED chain green / yellow / red  |
| Flow state display                 | LED chain, red (1x), green (5x) |
| Indication: Drop below setpoint    | LED red                         |
| Indication: Setpoint reached       | LED yellow                      |
| Indication: Setpoint exceeded      | 4 x LEDs green                  |
| LED display                        | red = 4 mA                      |
|                                    | 1 x green > 4 mA                |
|                                    | 2 x green > 8 mA                |
|                                    | 3 x green > 12 mA               |
|                                    | 4 x green > 16 mA               |
|                                    | 5 x green = 20 mA               |

**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.