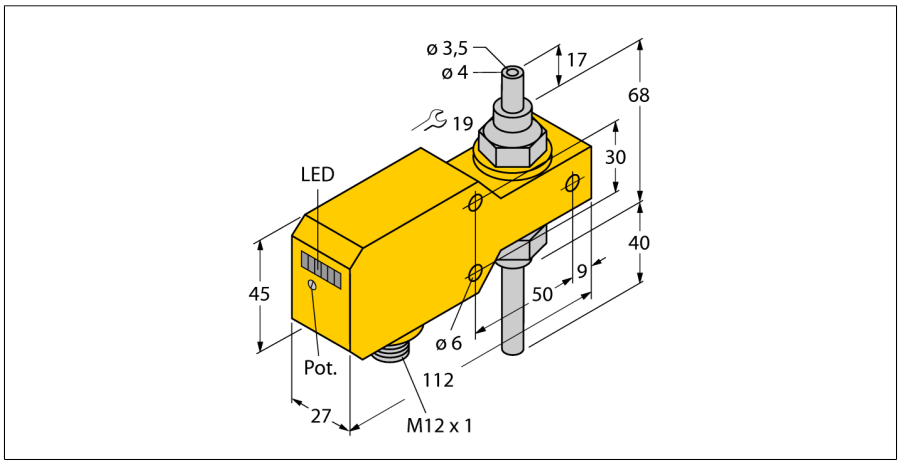
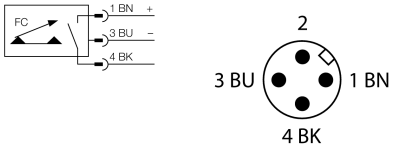
# Flow monitoring
# Inline sensor with integrated processor
# FCI-TCD04A4P-AP8X-H1141

Industrial Automation




- **Flow sensor for liquid media**
- **Calorimetric principle**
- **Adjustment via potentiometer**
- **LED band**
- **Operating range 1…200 ml/min**
- **Mechanical Connection: Barrel, 4 mm**
- **3-wire DC, 21…26 VDC**
- **NO contact, PNP output**
- **Plug-in device, M12 x 1**

### Wiring diagram

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|---|---|
| **Type code** | FCI-TCD04A4P-AP8X-H1141 |
| Ident-No. | 6870656 |
| Ident-No (TUSA) | M6870656 |

| | |
|---|---|
| **Mounting** | inline sensor |
| Flow operating range | 0,001…0,2 l/min. |
| Stand-by time | 5…20 s |
| Switch-on time | 0.5…3 s |
| Switch-off time | 0.5…3 s |
| Temperature gradient | ≤ 400 K/min |
| Medium temperature | 0…60 °C |
| Ambient temperature | 0…60 °C |

| | |
|---|---|
| **Operating voltage** | 21… 26VDC |
| Current consumption | ≥ 50 mA |
| Output function | PNP, NO contact |
| Rated operational current | 0.2 A |
| Voltage drop at $I_e$ | ≤ 1.5 V |
| Short-circuit protection | yes |
| Reverse polarity protection | yes |

| | |
|---|---|
| **Housing material** | plastic, PBT |
| Sensor material | stainless steel, AISI 316Ti |
| Connection | male, M12 x 1 |
| Pressure resistance | 1 bar |
| Process connection | Tube 4 mm |

| | |
|---|---|
| **Switching state** | LED chain green / yellow / red |
| Flow state display | LED chain |
| Indication: Drop below setpoint | LED red |
| Indication: Setpoint reached | LED yellow |
| Indication: Setpoint exceeded | 4 x LEDs green |

### Functional principle

The function of the inline flow sensors is based on the thermo-dynamic principle. Heat is generated in a measuring tube and absorbed by the flowing medium. The transported heat loss is thus a measure of the flow speed. Thus TURCK's wear-free flow sensors reliably monitor the flow of gaseous and liquid media. A low pressure drop and fast response to flow rate variations are the outstanding features of these devices.

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