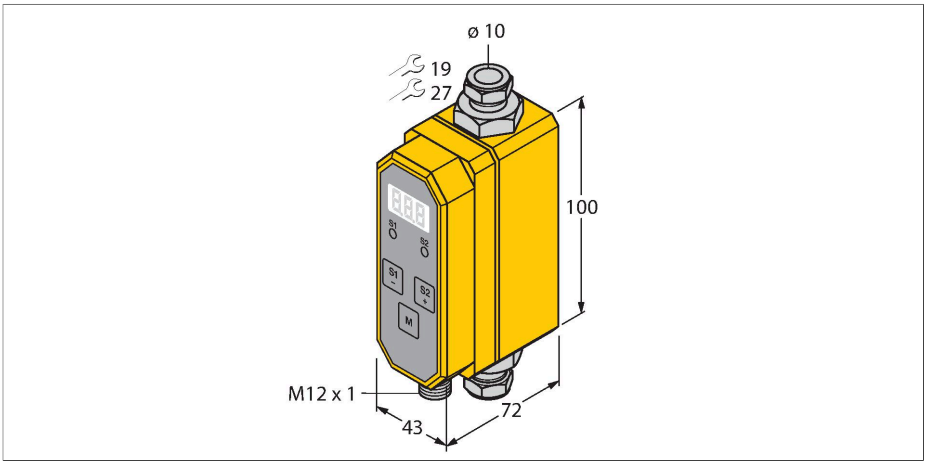
FTCI-10D10A4P-2UP8X-H1141
Flow Rate Monitoring – Inline Sensor with Integrated Processor



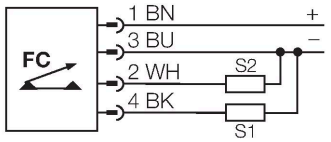
Technical data

ID	6870041
Type	FTCI-10D10A4P-2UP8X-H1141
Mounting	Inline sensor
Application area	flow rate/temperature monitoring of water or water/glycol mix
Flow operating range	1…10 l/min
Stand-by time	6…10 s
Temperature gradient	≤ 400 K/min
Medium temperature	-10…+90 °C
Ambient temperature	0…+60 °C
Electrical data	
Operating voltage U_B	21.6…26.4 VDC
Current consumption	≤ 100 mA
Output function	2 × PNP, NO/NC programmable
Rated operational current	0.2 A
Short-circuit protection	yes
Reverse polarity protection	yes
Protection class	IP65
Mechanical data	
Design	Inline
Housing material	Plastic, PBT
Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Electrical connection	Connector, M12 × 1
Process Pressure	20 bar

Features

- Compact inline flow sensor
- Calorimetric principle
- Monitoring of flow rate
- Monitoring of the medium temperature
- For water/glycol mix
- Parametrized via button
- Protected by software code
- DC 4-wire
- PNP outputs
- NO/NC programmable

Wiring diagram



Functional principle

The FTCIs from TURCK monitor flow rates of liquids passing through the sensor reliably and wear-free. These sensors are designed for flow rate monitoring.
Based on the thermodynamic principle, electrical energy is converted into heat energy. The heat generated in the probe is conducted away by the flowing medium. The dissipated heat quantity is used as a direct measurement of the medium's flow speed. The integrated microprocessor evaluates the data and calculates the flow rate. Based on the applied principle, the media temperature is also indicated to the user.

In addition to the standardized electrical output signals for industrial applications, the TURCK flow meters also indicate the current flow rate on their 3-digit, 7-segment display.

FTCI-10D10A4P-2UP8X-H1141| 01/09/2026 18-15 | technical changes reserved

Technical data

Process connection	Compression fittings for pipes Ø 10 × 1 (EN10305-1)
Flow state display	7-segment display, switching status LED (yellow)
Tests/approvals	

FTCI-10D10A4P-2UP8X-H1141| 01/09/2026 18-15 | technical changes reserved