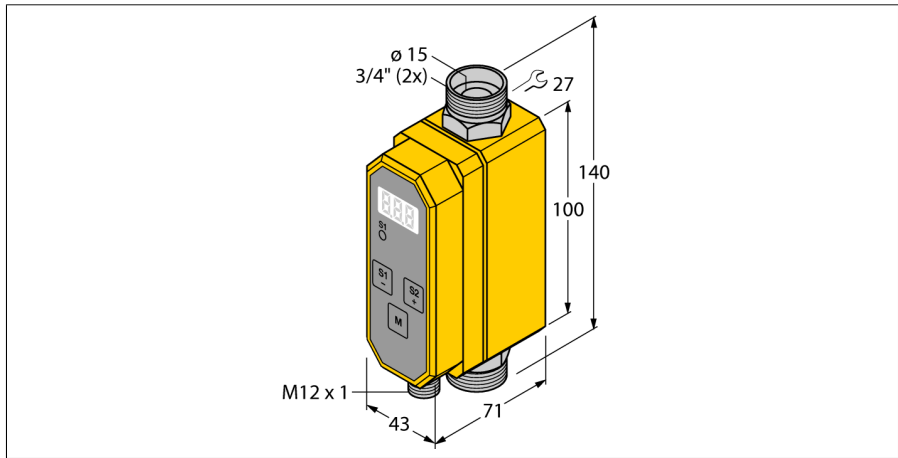


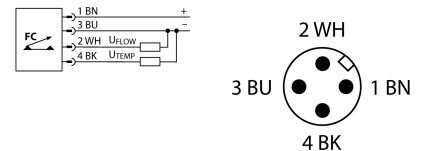
Flow Rate Measurement
Inline sensor with integrated processor
FTCI-3/4D15A4P-2LUX-H1141/D099



- 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
- Default medium: FC 3283 (3M Fluorinert)
- Analog output flow 0... 10 VDC
- Analog output temperature 0...10 VDC
- Electrical connection M12 x 1

Type designation	FTCI-3/4D15A4P-2LUX-H1141/D099
Ident-No.	6878042
Ident-No (TUSA)	M6878042
Mounting	Inline sensor
Application area	flow rate/temperature monitoring of water or water/glycol mix
Flow operating range	2...20 l/min
Stand-by time	6...10 s
Switch-on time	1...8 s
Temperature gradient	≤ 400 K/min
Medium temperature	-10...+90 °C
Ambient temperature	0...+60 °C
Operating voltage	21.6...26.4 VDC
Current consumption	≤ 100 mA
Output function	Analog output
Short-circuit protection	yes
Reverse polarity protection	yes
Voltage output	0...10V
Load resistance voltage output	≥ 10 kΩ
Load	200...500 Ω
Protection class	IP65
Design	Inline
Housing material	Plastic, PBT
Sensor material	Stainless steel, V4A (1.4571)
Electrical connection	Connector, M12 x 1
Pressure resistance	20 bar
Programming options	Glycol concentration, flow rate correction, averaging, access code

Wiring Diagram



Functional principle

The FTCTs from TURCK monitor flow rates of liquids passing through the sensor reliably and wear-free. These sensors are designed for high-precision flow rate measurement rather than simple flow monitoring tasks.

Based on the thermodynamic principle, electrical energy is converted in heat energy. The heat generated in the probe is conducted away by the flowing medium. The dissipated heat quantity is used as a direct measure for the medium's flow speed. The integrated microprocessor evaluates the data and calculates the flow rate. Based on the applied principle, the user is also indicated the media temperature.

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