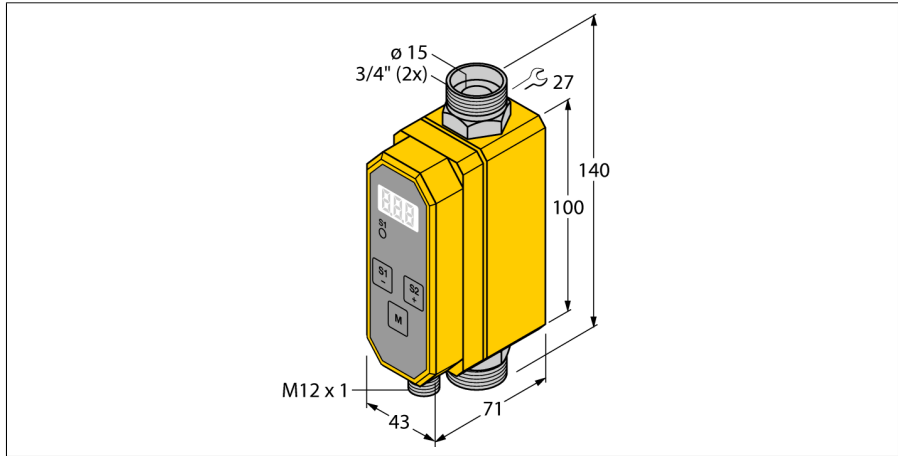


Flow Rate Measurement

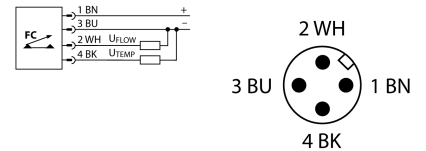
Inline sensor with integrated processor

FTCI-3/4D15A4P-2LUX-H1141/S1344



- Compact inline flow sensor
- Calorimetric principle
- Monitoring of flow rate
- Monitoring of the medium temperature
- Only for water
- Parameterization via pushbutton
- Protected by software code
- Analog output flow 0... 10 VDC
- Analog output temperature 0...10 VDC
- Electrical connection M12 x 1

Wiring Diagram



Type designation	FTCI-3/4D15A4P-2LUX-H1141/S1344
Ident-No.	100000373
Ident-No (TUSA)	M100000373
Mounting	Inline sensor
Application area	flow monitoring of water
Flow operating range	3.8...56.8 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
Process connection	¾" swagelok
Programming options	Flow rate correction, averaging, access code

Functional principle

The FTCTIs 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.