

FTCI-3/8D10A4P-LI-UP8X-H1141 Flow Rate Monitoring – Inline Sensor with Integrated Processor



Technical data

ID	6870809
Туре	FTCI-3/8D10A4P-LI-UP8X-H1141
Mounting conditions	Inline sensor
Application area	Flow rate and temperature monitoring of water; water/glycol mix or Galden fluid HT110/135
Flow operating range	0.24 gpm
Stand-by time	610 s
Switch-on time	050 s
Switch-off time	050 s
Temperature gradient	≤ 400 K/min
Media temperature	14+194 °F
Ambient temperature	32+140 °F
Electrical data	
Operating voltage	21.626.4 VDC
Current consumption	≤ 100 mA
Output function	PNP/Analog output, NO/NC pro- grammable
Rated operational current	0.2 A
Short-circuit protection	yes
Reverse polarity protection	yes
Current output	420 mA
Load	200500 Ω
Protection class	IP65
Mechanical data	
Design	Inline
Housing material	Plastic, PBT

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, 21.6...26.4 VDC
- NO/NC prog., PNP output
- ■4...20 mA analog output
- Analog output provides a current signal proportional to the flow rate for the overall operating range
- Plug-in device, M12 x 1

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 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 aso 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.



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Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Electrical connection	Connector, M12 × 1
Pressure resistance	20 bar
Process connection	3/8" Swagelok
Flow state display	7-segment display, switching status LED (yellow)
Tests/approvals	