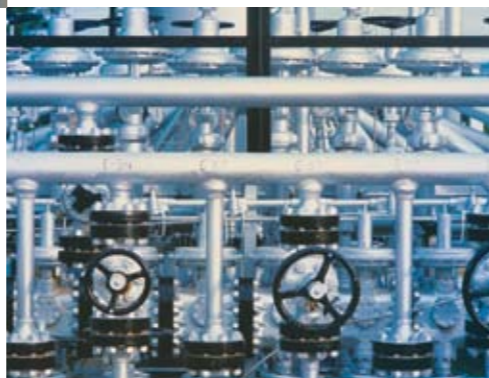


### IN-LINE FLOW SENSORS FTCI WITH DISPLAY MULTIFUNCTIONAL



## INFORMATION - SERVICE & SUPPORT

Sie wünschen weitere Informationen?  
Senden Sie uns dazu die nachfolgende  
Auswahlliste oder nutzen Sie unseren  
umfassenden Internet-Support.

#### Sensortechnik

- Induktive Sensoren
- Induktive Sensoren – *uprox*<sup>®</sup>+
- Induktive Sensoren für Schwenkantriebe
- Magnetfeldsensoren
- Opto-Sensoren
- Geräte für den Personenschutz
- Kapazitive Sensoren
- Ultraschallsensoren
- Strömungssensoren
- Drucksensoren
- Füllstandssensoren *levelprox*<sup>®</sup>
- Temperatursensoren
- Linearwegsensoren
- Drehwegsensoren
- Steckverbinder und Verteiler
- CD-ROM Sensortechnik

#### Interfacetechnik

- Interfacetechnik im Aufbaugehäuse
- Interfacetechnik auf 19"-Karte
- CD-ROM Interfacetechnik
- Miniaturrelais, Industrierelais, Zeitwürfel, Sockel
- Zeit- und Überwachungsrelais
- Ex-Schutz – Grundlagen für die Praxis (Übersichtsposter)

#### Feldbustechnik

- Kompakte Feldbuskomponenten PROFIBUS-DP/DeviceNet™/Ethernet
- piconet*<sup>®</sup> – modulares Feldbus-I/O-System in IP67
- BL67 – modulares Feldbus-I/O-System in IP67
- BL20 – modulares Feldbus-I/O-System in IP20
- Remote-I/O-System *excom*<sup>®</sup>
- Segmentkoppler
- FOUNDATION™ fieldbus-Feldbuskomponenten
- PROFIBUS-PA-Feldbuskomponenten
- Feldbussystem *sensoplex*<sup>®</sup>2/2Ex

You would like to order additional information? Please return the order list below or use our comprehensive Internet support.

#### Sensors

- Inductive sensors
- Inductive sensors – *uprox*<sup>®</sup>+
- Inductive sensors for rotary actuators
- Magnetic-field sensors
- Photoelectric sensors
- Machine safety equipment
- Capacitive sensors
- Ultrasonic sensors
- Flow sensors
- Pressure sensors
- Level sensors *levelprox*<sup>®</sup>
- Temperature sensors
- Linear position sensors
- Rotary position sensors
- Connectors and junctions
- CD-ROM Sensors

#### Interface technology

- Devices in modular housings
- Devices on 19" card
- CD-ROM Interface technology
- Miniature relays, industrial relays, time cubes, sockets
- Programmable relays and timers
- Explosion protection – basics for practical application (overview poster)

#### Fieldbus technology

- Compact fieldbus components PROFIBUS-DP/DeviceNet™/Ethernet
- piconet*<sup>®</sup> – modular fieldbus I/O-system in IP67
- BL67 – modular fieldbus I/O-system in IP67
- BL20 – modular fieldbus I/O-system in IP20
- Remote I/O-system *excom*<sup>®</sup>
- Segment coupler
- FOUNDATION™ fieldbus fieldbus components
- PROFIBUS-PA fieldbus components
- Fieldbus system *sensoplex*<sup>®</sup>2/2Ex

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#### Die TURCK-Produktdatenbank im World Wide Web

Sie suchen eine maßgeschneiderte Lösung für Ihre Applikation oder ein spezielles Produkt? Sie möchten Kataloge, Datenblätter, Handbücher, Software oder Konfigurationsdateien bestellen oder herunterladen? Ausführliche Informationen finden Sie im Internet unter [www.turck.com](http://www.turck.com)

#### TURCK's data base on the worldwide web

No matter whether you are looking for a solution to your specific application problem, you want to know more about a special product, or intend to order or download catalogues, data sheets, software, manuals or configuration files: You will find detailed information on the Internet under [www.turck.com](http://www.turck.com)



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# IN-LINE FLOW SENSORS FTCI WITH DISPLAY - FLOW RATE AND TEMPERATURE MONITORING

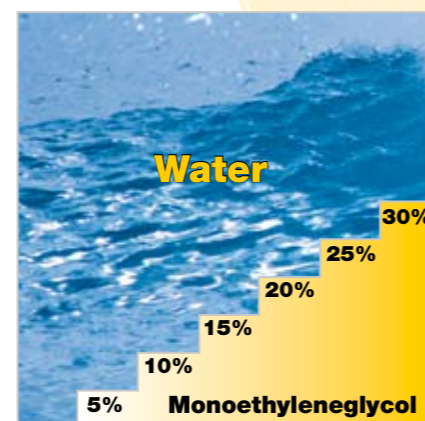
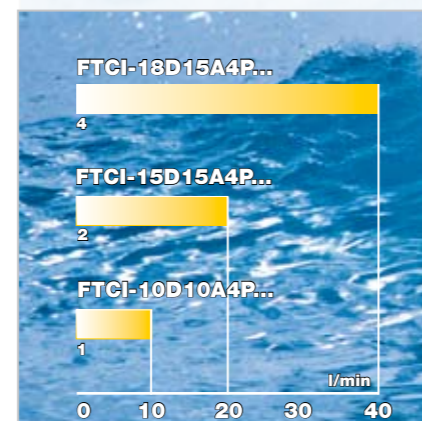


The new thermal in-line flow sensors, series FTCI, are equipped with a 3-digit 7-segment display to indicate the actual flow rate in [l/min]. These sensors are particularly suited for flow rate monitoring within cooling circuits due to their fast response times within seconds and their reliable and stable value display, even if the application is exposed to strong temperature fluctuations.

These practical devices with a multitude of parameterisation options feature an extremely robust PBT housing with compact dimensions of 100 x 43 x 72 mm (h x w x d). The process connection is established via a compression ferrule fitting for smooth pipes with an outer diameter of 10, 15 or 18 mm. Alternatively, it is possible to use an adapter for outer pipe diameters of 10 or 18 mm for conversion to G1/4 or G1/2 threads (see accessories).

## Functions and Features

- Sensor programming via front buttons (access code protection)
- Devices with two switching outputs or with one switching output plus one linear 4...20 mA analogue output
- Programmable normally open/normally closed mode and freely adjustable switch-points within the entire operating range
- Medium selection: 0...30 % glycol
- Switching output either for flow or temperature monitoring (-10...+90 °C)
- Switch-on and switch-off delay adjustable between 0 and 50 s
- Signal filter for measuring signal averaging in a range of 1...8 s
- Reference function for modification of the flow value by ±25 %
- M12 x 1 connection



This sensor series is designed for all kinds of flow monitoring applications, but is particularly suited for continuous flow rate monitoring and display. The sensor's operating range is specified with 1...40 l/min.

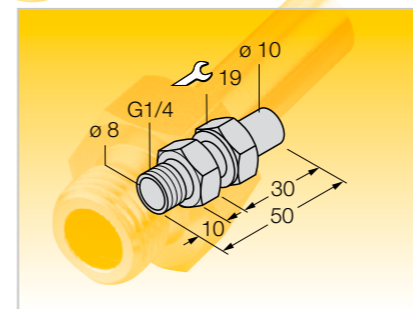
Even if glycol is added to the medium, for instance, to prevent icing of the cooling circuit, the device can be conveniently adapted to the modified thermal properties of the liquid: simply enter the glycol content (0 to 30 %) via the push button and the parameterisation function of the device.

## Technical Data

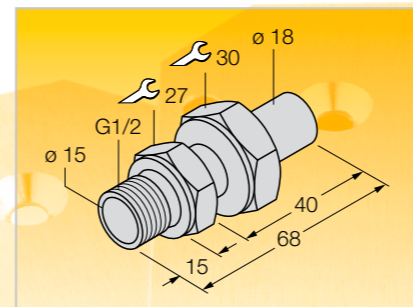
Ident-no.	Type designation	Process connection Outer pipe diameter	Output function	Operating range
6870041	FTCI-10D10A4P-2UP8X-H1141	10 mm	2 x pnp, N.O./N.C.	1...10 l/min
6870042	FTCI-10D10A4P-LI-UP8X-H1141	10 mm	1 x pnp, N.O./N.C. plus 4...20 mA	1...10 l/min
6870043	FTCI-15D15A4P-2UP8X-H1141	15 mm	2 x pnp, N.O./N.C.	2...20 l/min
6870044	FTCI-15D15A4P-LI-UP8X-H1141	15 mm	1 x pnp, N.O./N.C. plus 4...20 mA	2...20 l/min
6870045	FTCI-18D15A4P-2UP8X-H1141	18 mm	2 x pnp, N.O./N.C.	4...40 l/min
6870046	FTCI-18D15A4P-LI-UP8X-H1141	18 mm	1 x pnp, N.O./N.C. plus 4...20 mA	4...40 l/min

Operating voltage 21...26 VDC; Ambient temperature 0...60 °C; Medium temperature -10...+90 °C; Pressure resistance 20 bar

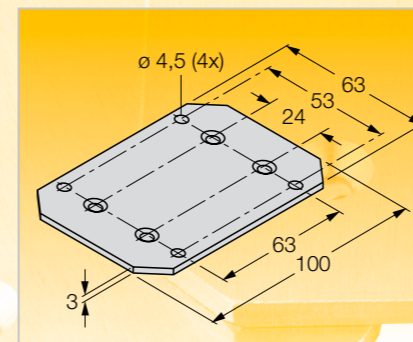
## Accessories



Adapter FTCI-G1/4A4-D10/L050 (Ident-no. 6870151) for conversion from Ø 10 mm to G1/4.



Adapter FTCI-G1/2A4-D18/L068 (Ident-no. 6870150) for conversion from Ø 18 mm to G1/2.



The mounting panel FTCI-MP01AL (Ident-no. 6870040) can be attached to the sensor housing (matching screws supplied). The panel is used for front mounting.

