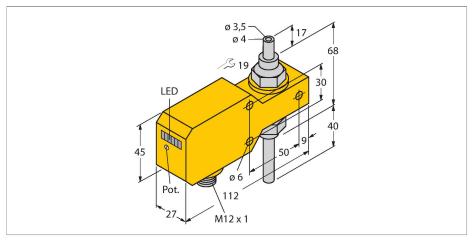


FCI-TCD04A4P-AP8X-H1141 Flow Monitoring – Inline Sensor with Integrated Processor



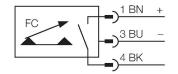
Technical data

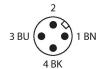
Type FCI-TCD04A4P-AP8X-H1141 Mounting conditions Inline sensor Flow operating range 0.0010.2 l/min Stand-by time 520 s Switch-on time 0.53 s Switch-off time 0.53 s Temperature gradient ≤ 400 K/min Medium temperature 0+60 °C Ambient temperature 0+60 °C Electrical data Operating voltage U₀ 19.228.8 VDC Current consumption ≤ 50 mA Output function PNP, NO contact Rated operational current 0.2 A Voltage drop at I₀ ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Barrel 4 mm Switching state LED chain, Green/yellow/red	ID	6870656
Flow operating range 0.0010.2 l/min Stand-by time 520 s Switch-on time 0.53 s Switch-off time 0.53 s Temperature gradient ≤ 400 K/min Medium temperature 0+60 °C Ambient temperature 0+60 °C Electrical data 0+60 °C Current consumption ≤ 50 mA Output function PNP, NO contact Rated operational current 0.2 A Voltage drop at I₀ ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Process connection Barrel 4 mm	Туре	FCI-TCD04A4P-AP8X-H1141
Stand-by time 520 s Switch-on time 0.53 s Switch-off time 0.53 s Temperature gradient ≤ 400 K/min Medium temperature 0+60 °C Ambient temperature 0+60 °C Electrical data Operating voltage U ₈ 19.228.8 VDC Current consumption ≤ 50 mA Output function PNP, NO contact Rated operational current 0.2 A Voltage drop at I ₈ ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Design Inline Housing material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 barrel 4 mm	Mounting conditions	Inline sensor
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Switch-off time 0.53 s Temperature gradient ≤ 400 K/min Medium temperature 0+60 °C Ambient temperature 0+60 °C Electrical data Operating voltage U _B 19.228.8 VDC Current consumption ≤ 50 mA Output function PNP, NO contact Rated operational current 0.2 A Voltage drop at I _B ≤ 1.5 V Short-circuit protection Reverse polarity protection yes Protection class IP67 Mechanical data Design Inline Housing material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Stand-by time	520 s
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Ambient temperature 0+60 °C Electrical data Operating voltage U _B 19.228.8 VDC Current consumption ≤ 50 mA Output function PNP, NO contact Rated operational current 0.2 A Voltage drop at I _B ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Temperature gradient	≤ 400 K/min
Electrical data Operating voltage U _B 19.228.8 VDC Current consumption ≤ 50 mA Output function PNP, NO contact Rated operational current 0.2 A Voltage drop at I _B Short-circuit protection Protection class Protection class IP67 Mechanical data Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Medium temperature	0+60 °C
Operating voltage Us 19.228.8 VDC Current consumption ≤ 50 mA Output function PNP, NO contact Rated operational current 0.2 A Voltage drop at Is ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Inline Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Ambient temperature	0+60 °C
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Output function PNP, NO contact Rated operational current 0.2 A Voltage drop at I₀ ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Inline Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Operating voltage U _B	19.228.8 VDC
Rated operational current 0.2 A Voltage drop at I₀ ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Inline Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Current consumption	≤ 50 mA
Voltage drop at I₀ ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Inline Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Output function	PNP, NO contact
Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Rated operational current	0.2 A
Reverse polarity protection Protection class IP67 Mechanical data Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Voltage drop at I。	≤ 1.5 V
Protection class IP67 Mechanical data Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Short-circuit protection	yes
Mechanical dataDesignInlineHousing materialPlastic, PBTSensor materialStainless steel, 1.4571 (AISI 316Ti)Electrical connectionConnector, M12 × 1Pressure resistance1 barProcess connectionBarrel 4 mm	Reverse polarity protection	yes
Design Inline Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Protection class	IP67
Housing material Plastic, PBT Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Mechanical data	
Sensor material Stainless steel, 1.4571 (AISI 316Ti) Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Design	Inline
Electrical connection Connector, M12 × 1 Pressure resistance 1 bar Process connection Barrel 4 mm	Housing material	Plastic, PBT
Pressure resistance 1 bar Process connection Barrel 4 mm	Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Process connection Barrel 4 mm	Electrical connection	Connector, M12 × 1
1 1 1	Pressure resistance	1 bar
Switching state LED chain, Green/yellow/red	Process connection	Barrel 4 mm
	Switching state	LED chain, Green/yellow/red

Features

- Flow sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer
- ■LED band
- Operating range 1...200 ml/min
- Mechanical Connection: Barrel, 4 mm
- ■DC 3-wire, 19.2...28.8 VDC
- ■NO contact, PNP output
- ■Connector device, M12 × 1

Wiring diagram





Functional principle

The function of the inline flow sensors is based on the thermo-dynamic principle. Heat is generated in a measuring tube and absorbed by the flowing medium. The transported heat loss is thus a measure of the flow speed. Thus TURCK's wear-free flow sensors reliably monitor the flow of gaseous and liquid media. A low pressure drop and fast response to flow rate variations are the outstanding features of these devices.



Technical data

Flow state display	LED chain
Indication: Drop below setpoint	LED Red
Indication: Setpoint reached	LED Yellow
Indication: Setpoint exceeded	4 × LEDs Green
Tests/approvals	
Approvals	cULus
UL registration number	E210608