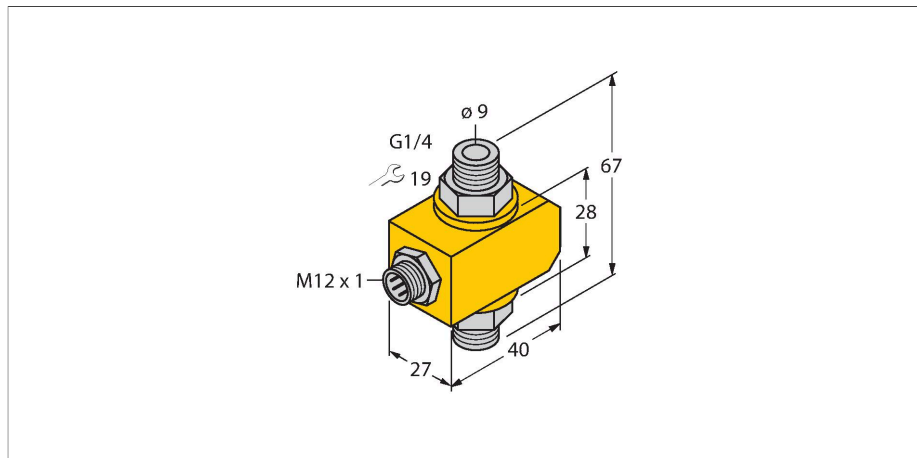# FCI-D10A4P-NA-H1141
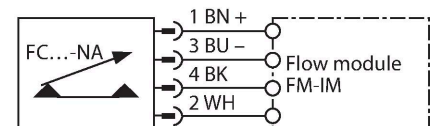# Flow Monitoring –   Inline Sensor without Integrated Processor

Features

- Flow sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer on processor
- Status indicated via LED chain on signal processor
- Operating range 0.1…6 l/min
- No temperature monitoring
- Connector device, M12 × 1
- 4-wire connection to the processor

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

ID	6870629
Type	FCI-D10A4P-NA-H1141
Mounting conditions	Inline sensor
Flow operating range	0.1…6 l/min
Stand-by time	5 s
Switch-on time	0.5…1 s
Switch-off time	0.5…1 s
Temperature jump, response time	max. 12 s
Temperature gradient	≤ 400 K/min
Medium temperature	0…+80 °C
Ambient temperature	-20…+70 °C
Electrical data	
Protection class	IP67
Mechanical data	
Design	Inline
Housing material	Plastic, PBT
Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Max. tightening torque of housing nut	30 Nm
Electrical connection	Connector, M12 × 1
Pressure resistance	20 bar
Process connection	G 1/4"
Tests/approvals	

Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2/TXL	6625503	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TXL	6625515	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-P7X2-10/TXL	6626184	Connection cable, M12 female connector, straight, 4-pin, LED, cable length: 10 m, jacket material: PUR, black; cULus approval

Accessories

Dimension drawing	Type	ID	
	FM-IM-3UP63X	7525100	Signal processor for non-Ex flow sensors from the FC….-NA… family; operating voltage 20…30 VDC; LED bar for displaying flow speed and medium temperature; IO-Link device with transistor outputs for flow, temperature and errors
	FM-IM-3UR38X	7525102	Signal processor for non-Ex flow sensors from the FC….-NA… family; operating voltage 20…250 VAC; LED bar for displaying flow speed and medium temperature; IO-Link device with transistor outputs for flow, temperature and errors
	FM-IM-2UPLI63X	7525104	Signal processor for non-Ex flow sensors from the FC….-NA… family; operating voltage 20…30 VDC; LED bar for displaying flow speed and medium temperature; IO-Link device with analog output for flow and transistor outputs for temperature and errors