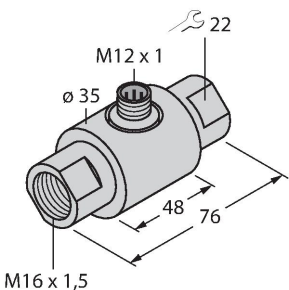


FCI-D09A4-NA-H1141/M16

Flow Monitoring – Inline Sensor without Integrated Processor



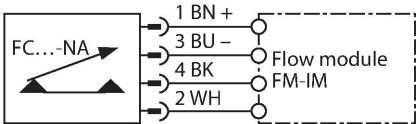
Technical data

ID	6870631
Type	FCI-D09A4-NA-H1141/M16
Mounting conditions	Inline sensor
Flow operating range	0.03...0.9 l/min
Stand-by time	typ. 8 s (2...15 s)
Switch-on time	typ. 2 s (1...15 s)
Switch-off time	typ. 2 s (1...15 s)
Temperature jump, response time	max. 12 s
Temperature gradient	≤ 250 K/min
Medium temperature	-20...+80 °C
Ambient temperature	-20...+70 °C
Electrical data	
Protection class	IP67
Mechanical data	
Design	Inline
Housing material	Stainless steel, 1.4571 (AISI 316Ti)
Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Electrical connection	Connector, M12 × 1
Pressure resistance	16 bar
Process connection	M16 × 1.5
Tests/approvals	

Features

- Flow sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer on processor
- Status indicated via LED chain on signal processor
- Connector device, M12 × 1
- 4-wire connection to the processor

Wiring diagram



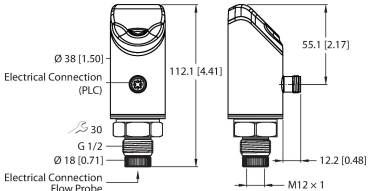
Functional principle

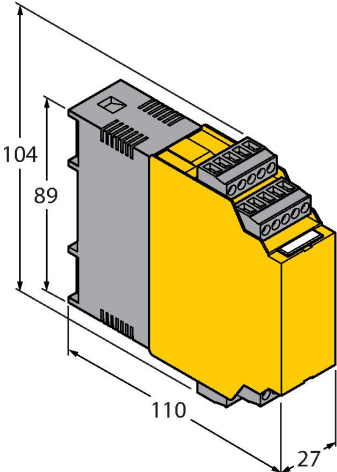
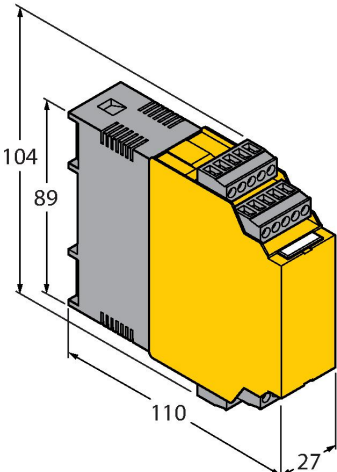
The function of the inline flow sensors is based on the thermo-dynamic principle. Heat is generated in a measuring tube and absorbed by the flowing medium. The transported heat loss is thus a measure of the flow speed. Thus TURCK's wear-free flow sensors reliably monitor the flow of gaseous and liquid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

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	
	FS121-2UPN8-H1141	100047864	Signal processor for non-Ex flow sensors from the FP...-NA-..., FCS...NA..., FCI...NA... product series; operating voltage 17...33 VDC; 12-segment display of flow rate and media temperature; IO-Link device with transistor outputs for flow and temperature

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