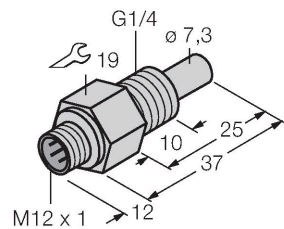


# FCS-G1/4A4-NA-H1141

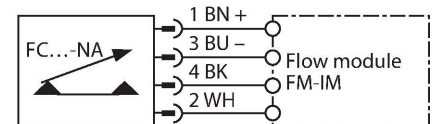
## Flow Monitoring – Immersion Sensor without Integrated Processor



### Features

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

### Wiring diagram




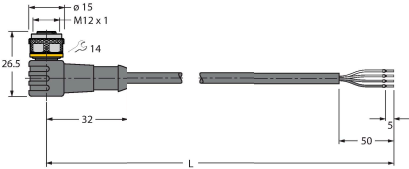
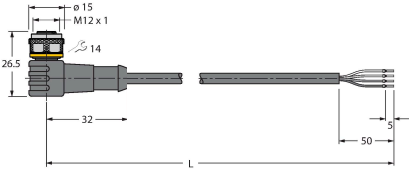
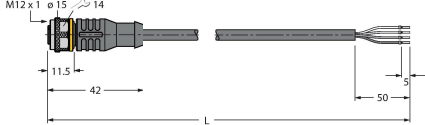
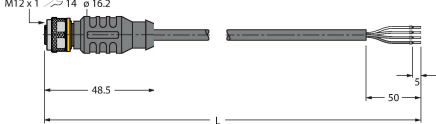
### Functional principle

Our insertion - flow sensors operate on the principle of thermodynamics. The measuring probe is heated by several °C as against the flow medium. When fluid moves along the probe, the heat generated in the probe is dissipated. The resulting temperature is measured and compared to the medium temperature. The flow status of every medium can be derived from the evaluated temperature difference. Thus TURCK's wear-free flow sensors reliably monitor the flow of gaseous and liquid media.

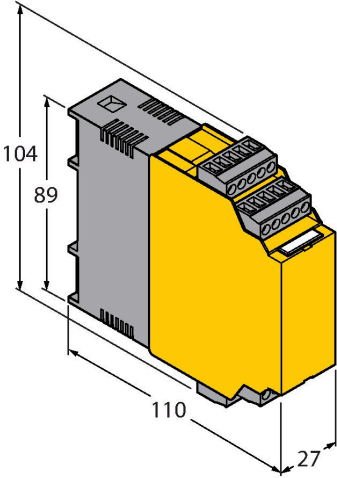
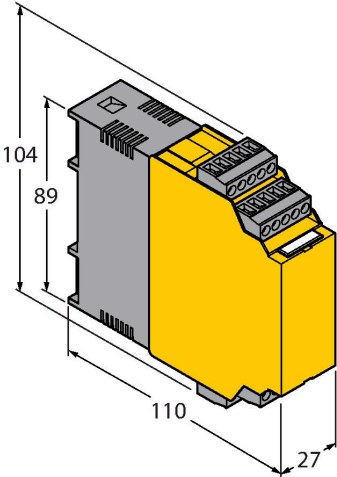
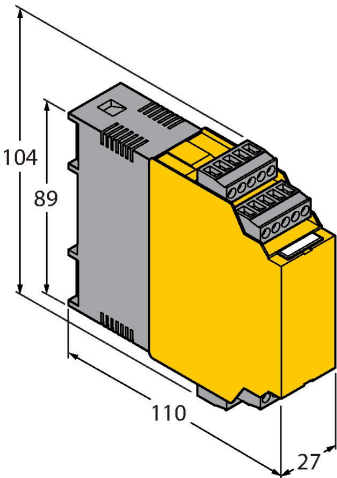
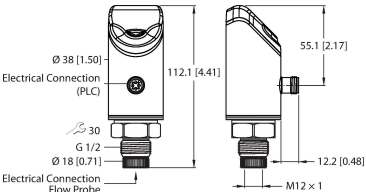
### Technical data

ID	6870304
Type	FCS-G1/4A4-NA-H1141
Mounting conditions	Immersion sensor
Water Operating Range	1...150 cm/s
Oil Operating Range	3...300 cm/s
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
<b>Electrical data</b>	
Protection class	IP67
<b>Mechanical data</b>	
Design	Immersion
Housing material	Stainless steel, 1.4571 (AISI 316Ti)
Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Max. tightening torque of housing nut	30 Nm
Electrical connection	Connector, M12 × 1
Pressure resistance	100 bar
Process connection	G 1/4"

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
	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