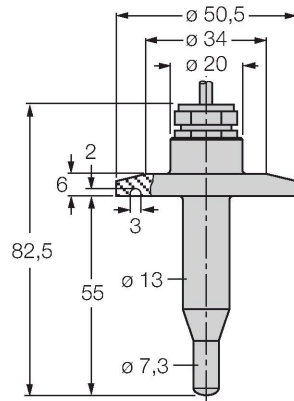


FCS-50A4-NA/D014

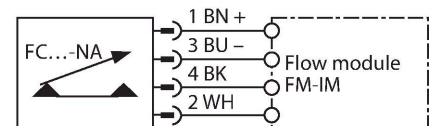
Flow Monitoring – Immersion Sensor without Integrated Processor



Features

- Sensor for liquid media
- Calorimetric functionality
- Adjustment via signal processor
- Status indicated via LED chain on signal processor
- Sensor made of A4 stainless steel (1.4404)
- Mech. connection: Tri-Clamp
- Temperature range: +10...+120 °C
- Cable device
- 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.

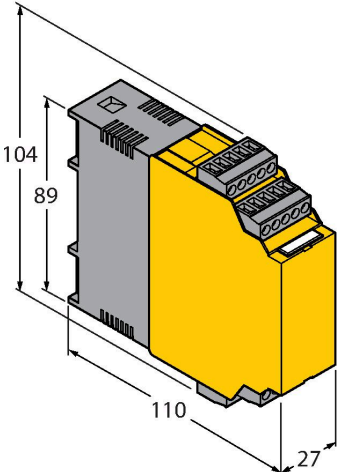
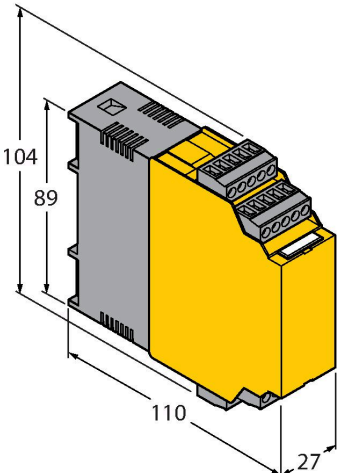
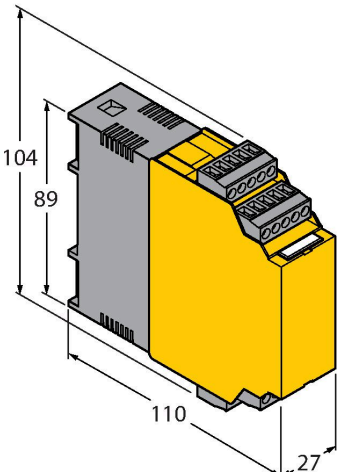
Technical data

ID	6872009
Type	FCS-50A4-NA/D014
Special version	D014 Corresponds to: Food sensor with Tri-Clamp connection (optional with 3A certificate)
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	10...+120 °C
Ambient temperature	-20...+80 °C
Electrical data	
Protection class	IP68
Mechanical data	
Design	Immersion
Housing material	Stainless steel, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L), R _a ≤ 0.8 μm
Max. tightening torque of housing nut	30 Nm
Electrical connection	Cable
Cable length	2 m
Cable Jacket Material	FEP
Core cross-section	4 x 0.25 mm ²

Technical data

Pressure resistance	10 bar
Process connection	Tri-Clamp 1 1/2"

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