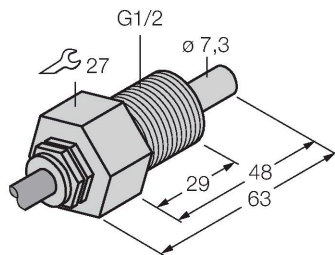


# FCS-GL1/2A4-NA/D100/D455

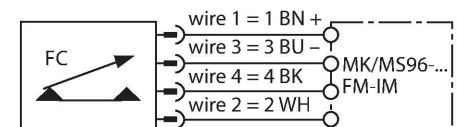
## Flow Monitoring – Immersion Sensor without Integrated Processor



### Features

- Sensor for liquid media
- Calorimetric functionality
- Adjustment via signal processor
- Status indicated via LED chain on signal processor
- Temperature range: +10...+120 °C (up to +135 °C for a short period)
- SABIX® cable black with numbered cores according to EN 45545-2 edition 2013
- 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.

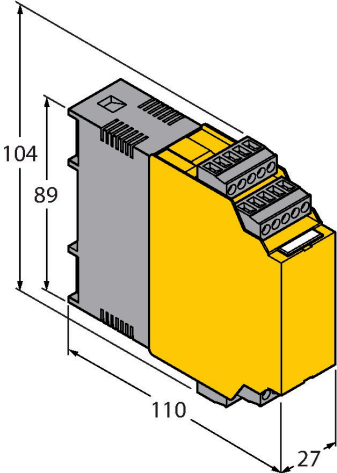
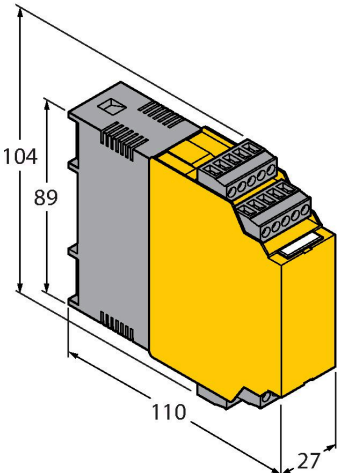
### Technical data

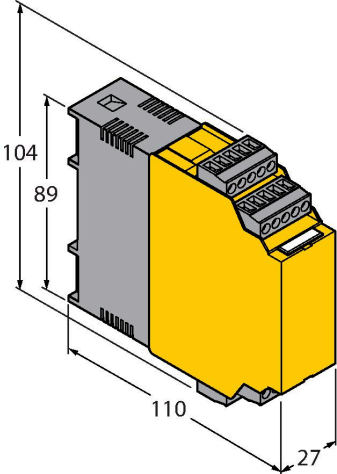
ID	6870400
Type	FCS-GL1/2A4-NA/D100/D455
Special version	D455 Corresponds to: Cable: SABIX CA 280 FRNC X ; max. 125 °C; complies with fire protection requirements R15 (EL1A) in accordance with DIN EN 45545-2 for hazard levels HL1–3 (relevant for rail vehicles). In addition, a 3 mm seal for better alignment.
<b>Mounting conditions</b>	<b>Immersion sensor</b>
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...13 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
<b>Electrical data</b>	
Protection class	IP68
<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	Cable
Cable length	2 m

Technical data

Cable Jacket Material	SABIX®
Core cross-section	4 x 1 mm <sup>2</sup>
Pressure resistance	100 bar
Process connection	G 1/2" long version
Included in delivery	Seal 2 mm, seal 3 mm

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

Dimension drawing	Type	ID	
	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