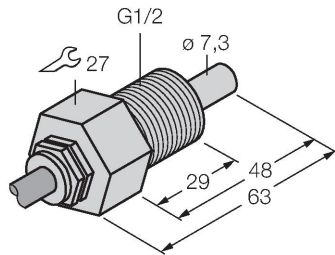


# FCS-GL1/2A4-NA/D100

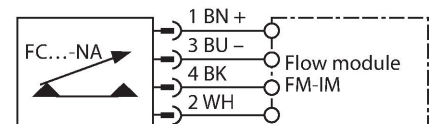
## Flow Monitoring – Immersion Sensor without Integrated Processor



### 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)
- Cable device
- 4-wire connection to the processor

### Wiring diagram



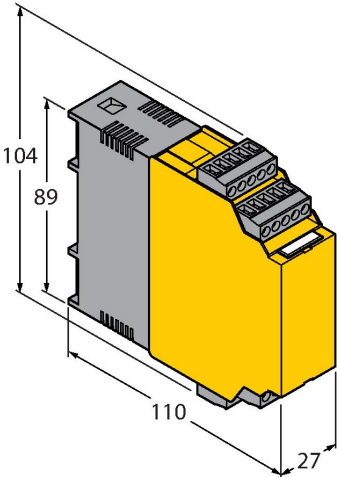
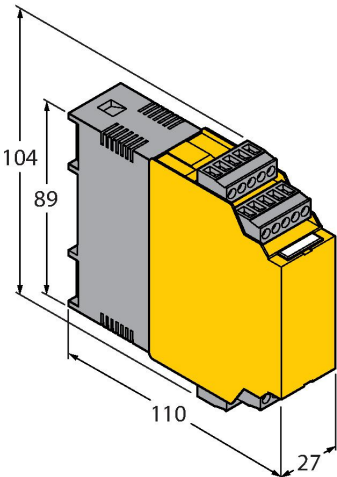
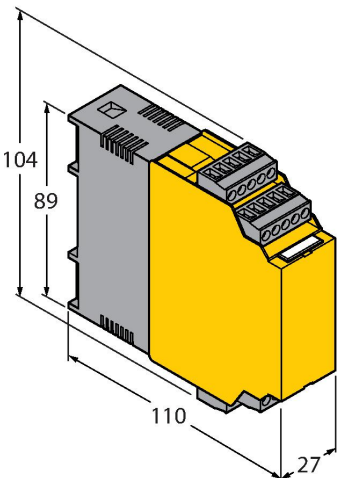
### Functional principle

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                                    | 6870418                                           |
| Type                                  | FCS-GL1/2A4-NA/D100                               |
| Special version                       | D100 Corresponds to:temperature range 10...120 °C |
| 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...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                                      |
| <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                                               |
| Cable Jacket Material                 | FEP                                               |
| Core cross-section                    | 4 x 0.25 mm <sup>2</sup>                          |
| Pressure resistance                   | 100 bar                                           |
| Process connection                    | G 1/2" long version                               |

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 |