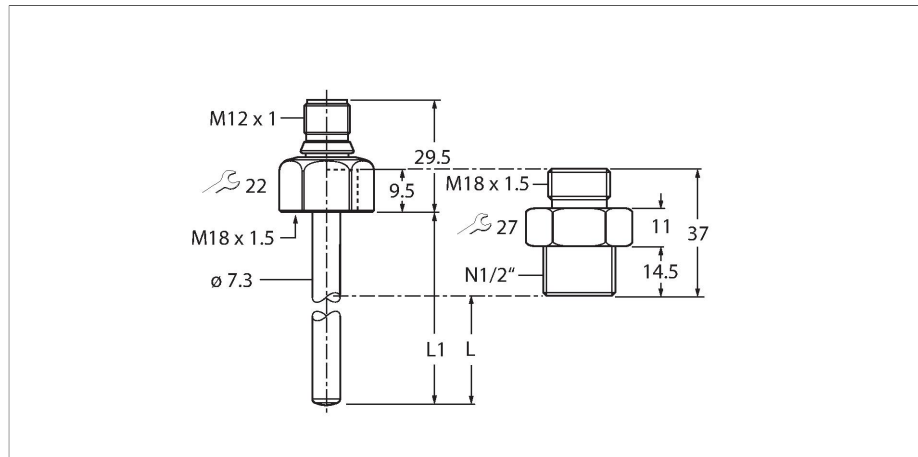


# FP100-300L-16-NA-H1141

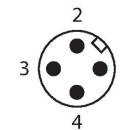
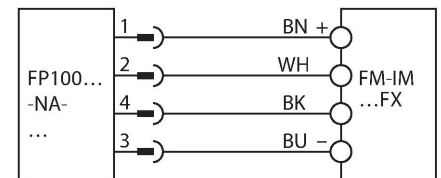
## Flow Meter – Immersion Sensor without Integrated Processing Unit



### Features

- Screw-in adaptor with process connection NPT 1/2" male thread included in delivery
- Housing material: 1.4571 (316Ti)
- Immersion depth 16.9 mm
- Flow monitoring for liquid media
- Protection classes IP66, IP67 and IP69K
- Connector, M12 × 1

### Wiring diagram



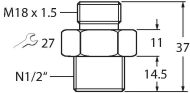
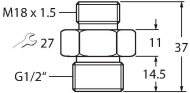
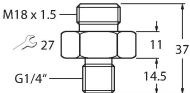
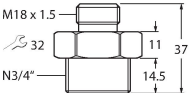
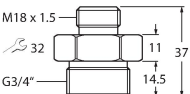
### Technical data

|                                |                                                     |
|--------------------------------|-----------------------------------------------------|
| Type                           | FP100-300L-16-NA-H1141                              |
| ID                             | 100001047                                           |
| Medium temperature             | -25...+85 °C                                        |
| Application area               |                                                     |
| Mounting conditions            | Immersion sensor                                    |
| Application area               | liquids                                             |
| Bar length (L1)                | 45 mm                                               |
| Immersion depth (L)            | 16.9 mm, When using the supplied adapter            |
| Pressure resistance            | 300 bar                                             |
| Standard flow range            | 3...300 cm/s                                        |
|                                | Any axial alignment of the sensor rod in the medium |
| Extended flow range            | 1...300 cm/s                                        |
| Extended flow range comment    | Directed inflow to punch mark ±20 °                 |
| Response time T09              | 6 s                                                 |
| Response time T05              | 3 s                                                 |
| Temperature gradient           | ≤ 300 K/min                                         |
| Mechanical data                |                                                     |
| Housing material               | Stainless steel, 1.4571 (AISI 316Ti)                |
| Adapter material               | Stainless steel 1.4571 (316Ti)                      |
| Materials (contact with media) | Stainless steel 1.4571 (AISI 316Ti), FKM O-ring     |
| Process connection sensor      | M18 x 1.5 female thread                             |
| Process connection adapter     | M18 × 1.5 male thread; 1/2" NPT male thread         |
| Electrical connection          | Connector, M12 × 1                                  |

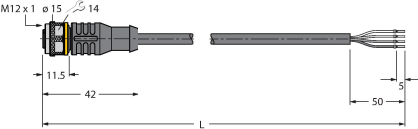
Technical data

|                          |                                           |
|--------------------------|-------------------------------------------|
| Protection class         | IP66<br>IP67<br>IP69K                     |
| Environmental conditions |                                           |
| Ambient temperature      | -40...+80 °C<br>(UL: -25...+80 °C)        |
| Storage temperature      | -40...+80 °C                              |
| Shock resistance         | 50 g (11 ms) DIN EN 60068-2-27            |
| Vibration resistance     | 20 g (55...2000 Hz)DIN EN 60068-2-6       |
| Tests/approvals          |                                           |
| Approvals                | CE<br>cULus                               |
| UL registration number   | E516036                                   |
| MTTF                     | 120 years acc. to SN 29500 (Ed. 99) 40 °C |

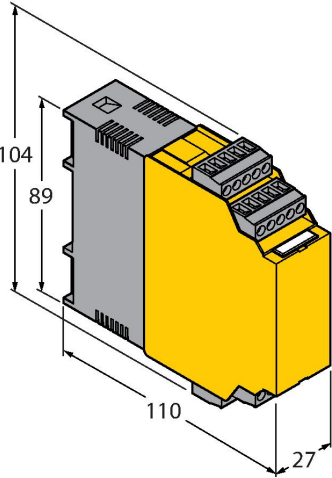
Accessories

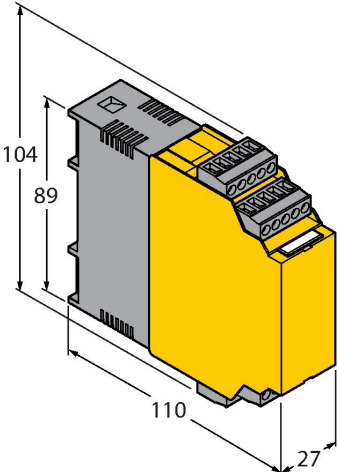
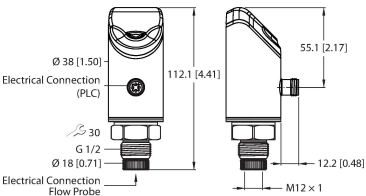
|                                                                                     |           |                                                                                                                                        |                                                                                      |           |                                                                                                                                        |
|-------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------|
| FAA-A1-1.4571                                                                       | 100001987 | Screw-in adapter for immersion sensors from the series FS.., FP..; material: Stainless steel 1.4571 (316Ti); process connection: N1/2" | FAA-80-1.4571                                                                        | 100001988 | Screw-in adapter for immersion sensors from the series FS.., FP..; material: Stainless steel 1.4571 (316Ti); process connection: G1/2" |
|  |           |                                                                                                                                        |  |           |                                                                                                                                        |
| FAA-04-1.4571                                                                       | 100001989 | Screw-in adapter for immersion sensors from the series FS.., FP..; material: Stainless steel 1.4571 (316Ti); process connection: G1/4" | FAA-34-1.4571                                                                        | 100001990 | Screw-in adapter for immersion sensors from the series FS.., FP..; material: Stainless steel 1.4571 (316Ti); process connection: N3/4" |
|  |           |                                                                                                                                        |  |           |                                                                                                                                        |
| FAA-81-1.4571                                                                       | 100001991 | Screw-in adapter for immersion sensors from the series FS.., FP..; material: Stainless steel 1.4571 (316Ti); process connection: G3/4" |                                                                                      |           |                                                                                                                                        |
|  |           |                                                                                                                                        |                                                                                      |           |                                                                                                                                        |

Accessories

| Dimension drawing                                                                   | Type          | ID      |                                                                                                                         |
|-------------------------------------------------------------------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------|
|    | 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 |
|   | WKC4.4T-2/TXL | 6625515 | Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval   |
|  | RKC4.4T-2/TXL | 6625503 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |

Accessories

| Dimension drawing                                                                   | Type          | ID        |                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|---------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | FM-IM-3UP63FX | 100000818 | Signal processor for non-Ex flow sensors from the FP...-...-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 |

| Dimension drawing                                                                   | Type              | ID        |                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------|-------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | FM-IM-3UR38FX     | 100000820 | Signal processor for non-Ex flow sensors from the FP...-...-NA-... family; operating voltage 20...250 VAC; LED bar for displaying flow speed and medium temperature; IO-Link device with relay outputs for flow, temperature and errors                            |
|   | FM-IM-2UPLI63FX   | 100000819 | Signal processor for non-Ex flow sensors from the FP...-...-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 |