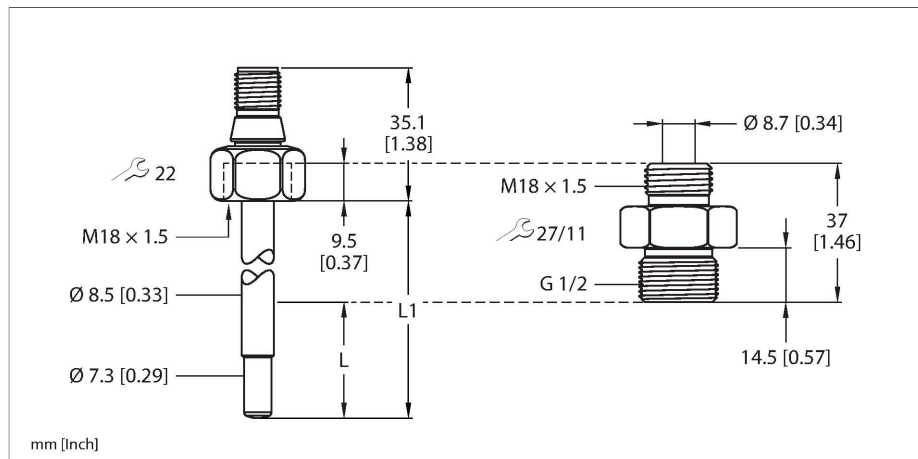


# FP100-300L-30-NA-H1141

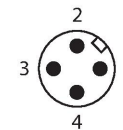
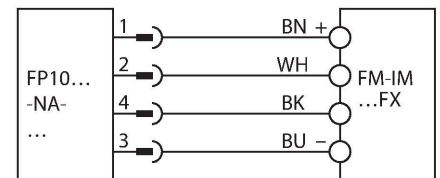
## Flow Meter – Immersion Sensor without Integrated Processing Unit



### Features

- Screw-in adaptor with process connection G1/2" 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



### Functional principle

The flow sensor functions according to the calorimetric principle. The distinctive feature of this principle is that the flow rate correlates directly to the thermal loss of energy in the probe. The increased loss of energy is therefore a direct measure of an increased flow rate.

### Technical data

Type	FP100-300L-30-NA-H1141
ID	100001044
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
Response time T09	6 s
Response time T05	3 s
Standard flow range	3...300 cm/s
Extended flow range	Any axial alignment of the sensor rod in the medium
Extended flow range comment	1...300 cm/s
Temperature gradient	Directed inflow to punch mark ±20 °
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, AFM flat seal
Process connection sensor	M18 x 1.5 female thread
Process connection adapter	M18 × 1.5 male thread; G 1/2" male thread
Electrical connection	Connector, M12 × 1

## Technical data

Protection class	IP66 IP67 IP69K
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### Environmental conditions

Ambient temperature	-40...+85 °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

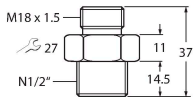
Approvals	CE cULus
UL registration number	E516036
MTTF	120 years acc. to SN 29500 (Ed. 99) 40 °C

## Accessories

FAA-A1-1.4571

100001987

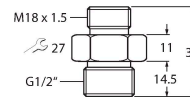
Screw-in adapter for immersion sensors from the series FS.., FP..; material: Stainless steel 1.4571 (316Ti); process connection: N1/2"



FAA-80-1.4571

100001988

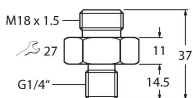
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FAA-04-1.4571

100001989

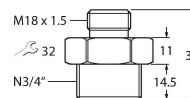
Screw-in adapter for immersion sensors from the series FS.., FP..; material: Stainless steel 1.4571 (316Ti); process connection: G1/4"



FAA-34-1.4571

100001990

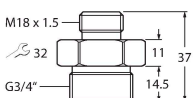
Screw-in adapter for immersion sensors from the series FS.., FP..; material: Stainless steel 1.4571 (316Ti); process connection: N3/4"



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"

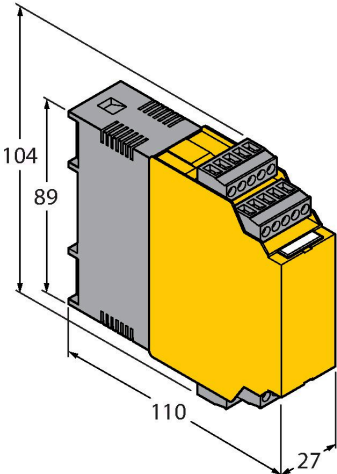
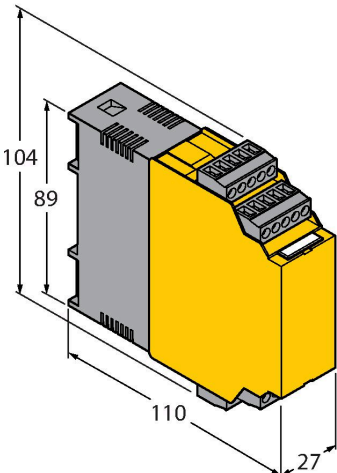


Accessories

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	
 <p>Technical drawing of the FM-IM-3UR38FX signal processor. The drawing shows a yellow rectangular device with a grey top section. Dimensions are indicated: total height is 104, height of the grey section is 89, total width is 110, and the depth of the device is 27. The top section features a terminal block with two rows of terminals, each labeled '00000'.</p>	<p>FM-IM-3UR38FX</p>	<p>100000820</p>	<p>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</p>
 <p>Technical drawing of the FM-IM-2UPLI63FX signal processor. The drawing shows a yellow rectangular device with a grey top section, identical in dimensions to the FM-IM-3UR38FX. Dimensions are indicated: total height is 104, height of the grey section is 89, total width is 110, and the depth of the device is 27. The top section features a terminal block with two rows of terminals, each labeled '00000'.</p>	<p>FM-IM-2UPLI63FX</p>	<p>100000819</p>	<p>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</p>