

# FT01

## Hydrostatic Level Sensor

- compact design
- measuring cell with high overpressure resistance
- optional current or voltage output
- corrosion resistant stainless steel version
- max. temperature: 80 °C
- protection class IP 68
- up to 250 m immersion depth



### Description:

Hydrostatic level sensors measure fluid height and thus its level by means of the hydrostatic pressure applied by the water column directly above the sensor.

A measuring cell at the bottom of the sensor registers this pressure so that the sensor's internal electronics can generate a 4-20 mA or a 0-10 VDC signal proportional to the detected fluid level.

Because all parts of the pressure sensor coming in contact with the liquid being measured are made of stainless steel, this sensor is suitable for unrestricted use in the food industry.

### Typical applications:

The FT01 level sensor is used in measuring applications that require provision of a precise, stable and reliable output signal even under extreme operating conditions.

The high electrical protection rating (IP 68) and its high resistance to corrosion make the FT01 level sensor suitable for use in a vast variety of containers, basins, shafts and tanks.

With its large diaphragm surface area, the FT01 has proven to be especially suitable for monitoring wastewater systems.

## Materials:

<b>Housing:</b>	stainless steel 1.4571
<b>Pressure sensor:</b>	stainless steel 1.4435 / 1.4568
<b>Protective cap:</b>	PA
<b>Cable:</b>	polyurethane coated

## Technical Data:

<b>Process connection:</b>	G 1/2 B
<b>Overload limit:</b>	2 bar up to measuring range R69 4 bar measuring range R70 13 bar measuring range R72-R74 32 bar measuring range R75-R78
<b>max. Medium temp.:</b>	-25...+80 °C
<b>max. Storage temp.:</b>	-40...+100 °C
<b>Compensated range:</b>	0...+70 °C
<b>Temperature influence:</b>	average TK zero point: < 0,2 % FS / 10 K average TK range: < 0,2 % FS / 10 K
<b>Accuracy:</b>	linearity + hysteresis + repeatability: < 0,3 % FS
<b>Response time:</b>	< 10 ms
<b>Cable:</b>	PUR, with pressure compensating capillary tube and strain relief, polyurethane coating
<b>Cable length:</b>	display range + 2,5 m
<b>Lightning protection:</b>	acc. to IEC 801-5

## Electrical Data:

<b>Supply voltage:</b>	12...30 VDC for current output 17...30 VDC for voltage output
<b>Power consumption:</b>	$P_{max} = 0,75$ Watt
<b>Output:</b>	current output 4...20 mA, load (UB-10 V) / 0,02 A voltage output 0...10 V, load 100 kOhm
<b>Protection class:</b>	IP68 acc. to EN 60 529 / IEC 529
<b>Electr. prot. classes:</b>	reverse polarity, overvoltage- and short-circuit proof

## Order Code:

Order number: FT01. 1. 1. R72. 01. 0

Hydrostatic level sensor

Output signal:

1 = 4...20 mA, 2-wire  
2 = 0...10 VDC, 3-wire

Accuracy class:

1 = 0,3 %

Measuring range:

R63 = 0 to 0,1 bar  
R64 = 0 to 0,16 bar  
R65 = 0 to 0,25 bar  
R66 = 0 to 0,4 bar  
R67 = 0 to 0,6 bar  
R69 = 0 to 1 bar  
R70 = 0 to 1,6 bar  
R72 = 0 to 2,5 bar  
R73 = 0 to 4 bar  
R74 = 0 to 6 bar  
R75 = 0 to 10 bar  
R76 = 0 to 16 bar  
R78 = 0 to 25 bar  
9 = special measuring range, please specify in plain text

Cable length:

01 = display range + 2,5 m (standard)  
xx = special length, please specify in plain text

Options and Accessory (multiple selection possible):

0 = without  
1 = stainless steel protective cap 1.4571  
2 = suspension for level probe  
3 = additional weight made of stainless steel 1.4571  
4 = test certificate  
5 = cable box with atmospheric ventilation (IP67)  
9 = please specify in plain text  
VR = housing with extension tube

## Dimensions:

