

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:

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

Technical Data:

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

Electrical Data:

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

