

Pressure / Fill Level Sensor PCE-SLS 20



Stainless Steel Immersion Pressure / fill level sensor with ceramic membrane
4 ... 20 mA / 0 ... 10 V output / Up to 200 mH₂O measurable / $\pm 0.35\%$ accuracy

The stainless steel immersion probe is suitable for measuring the level in the process. The immersion probe is particularly suitable for level measurement of waste water, contaminated or highly viscous media. The stainless steel immersion probe uses a capacitive ceramic measuring cell and determines the fill level in containers via the pressure. Due to the high accuracy of $\pm 0.35\%$ of the measuring range, the stainless steel immersion probe is also suitable for low filling levels. The measuring range of the stainless steel immersion probe extends from 0 ... 0.4 mH₂O to 0 ... 200 mH₂O. This corresponds to a pressure of 40 mbar to 20 bar. The stainless steel immersion probe outputs the measured value as an analog signal, depending on the variant, in 4 ... 20 mA or 0 ... 10 V. This means that the level sensor can be connected to almost any process evaluation device.

- ▶ Nominal pressures **up to 200 mH₂O**
- ▶ Accuracy $\pm 0.35\%$ of the measuring range
- **39.5 mm diameter**
- ▶ Suitable for drinking water production
- ▶ Ceramic sensor
- ▶ Suitable for dirty and viscous media
- ▶ Different configurations possible

Specifications

Nominal pressure	Filling level	Overload
0.04 Bar	0 ... 0.4 mH ₂ O	2 Bar
0.06 Bar	0 ... 0.6 mH ₂ O	2 Bar
0.1 Bar	0 ... 1 mH ₂ O	4 Bar
0.16 Bar	0 ... 1.6 mH ₂ O	4 Bar
0.25 Bar	0 ... 2.5 mH ₂ O	6 Bar
0.4 Bar	0 ... 4 mH ₂ O	6 Bar
0.6 Bar	0 ... 6 mH ₂ O	8 Bar
1 Bar	0 ... 10 mH ₂ O	8 Bar
1.6 Bar	0 ... 16 mH ₂ O	15 Bar
2.5 Bar	0 ... 25 mH ₂ O	25 Bar
4 Bar	0 ... 40 mH ₂ O	25 Bar
6 Bar	0 ... 60 mH ₂ O	35 Bar
10 Bar	0 ... 100 mH ₂ O	35 Bar
16 Bar	0 ... 160 mH ₂ O	45 Bar
20 Bar	0 ... 200 mH ₂ O	45 Bar

Accuracy (selectable)	≤ ±0.35 % of rdg. (standard)
	≤ ±0.25 % of rdg. (option)
Output signal (selectable)	4 ... 20 mA (2-wire)
	0 ... 10 V (3-wire)
Load	$R_{\max} = [(UB - UB \text{ min}) / 0.02 \text{ A}] \Omega$
Influence effects	auxiliary power: 0.05 % FSO / 10 V
	load: 0.05 % FSO / kΩ
Long-term stability	≤ ± 0.1 % FSO / year under reference conditions
Switch-on time	700 ms
Mean response time	≤ 200 ms
Maximum response time	380 ms
Measuring rate	5 Hz
Temperature error	≤ ± 1 % of rdg. (-20 ... 80 °C)
Short-circuit strength	permanent
Reverse polarity protection	no damage, but also no function
Lightning protection	2-wire: integrated
	3-wire: none
Connection cable (selectable)	PVC (-5 ... 70 °C) grey Ø 7.4 mm
	PUR (-25 ... 70 °C) black Ø 7.4 mm
	FEP 4 (-25 ... 70 °C) black Ø 7.4 mm
	TPE-U (-25 ... 125 °C) blue Ø 7.4 mm

Shielded cable with integrated air hose as a reference for the surrounding air pressure.

Free-hanging immersion probes with FEP cables should not be used if effects from highly charging processes are to be expected.

Housing stainless steel 1.4404

More information

More product info



Similar products



Seals (selectable)	FKM EPDM FFKM
Separating membrane (selectable)	ceramic Al ₂ O ₃ 96 % ceramic Al ₂ O ₃ 99.9 %
Max. current consumption	21 mA
Media	water sewage fuels and oils drinking water production sewage treatment plants water treatment
Areas of application	level monitoring in open containers fuel storage tank batteries biogas plants
Operating conditions	-25 ... 125 °C
Lab conditions	-40 ... 40 °C
Dimensions	Ø 39.5 mm x 124 mm
Weight	ca. 400 g (without cable)

Subject to change

