

VEGAWELL S 51

Suspended pressure transmitter for continuous liquid level measurement

- Dry, ceramic-capacitive CERTEC® measuring cell
- Abrasion, shock and overpressure resistant
- Integrated overvoltage protection
- 4 ... 20 mA two-wire system
- Narrow design with only 22 mm diameter

Function

The dry, ceramic measuring cell CERTEC® is the heart of VEGAWELL S 51. The hydrostatic pressure of the liquid column causes a capacitance change in the measuring cell via the deflection of a ceramic diaphragm. This change is converted into a standardized 4 ... 20 mA signal. The complete measuring cell consists of high purity ceramic and is characterized, apart from excellent long term stability, by its very high overload resistance, e.g. when lowering it from a height as it can strike the water surface hard and the shock can initiate an immediate offset error.

Area of application

VEGAWELL S 51 is designed for measurement of liquids in open vented vessels, tanks, boreholes and sumps, especially in applications when foam is on the surface. The rugged measuring cell and special construction means that the sensor is largely resistant to pressure shocks that can occur during installation.

It can be teamed up with VEGAMET 381 which can provide power, a calibrated output, a display, 2 relay switch points and fault relay.

Technical data

Ambient temperature	-40 ... +60 °C
Product temperature	-20 ... +60 °C
Average temperature coefficient of the zero signal	< 0.15 %/10 K
Longterm drift of the zero signal	< 0.1 %/2 years
Deviation of characteristics	0.2 %
Output signal	4 ... 20 mA
Supply voltage	9.6 ... 36 V DC
Nominal leakage current (8/20 µs)	5 kA
Protection transmitter	IP 68
Material, Transmitter	316L
Diaphragm	sapphire-ceramic®
Meas. cell seal	FKM
Wire Configuration	Two wires, breather capillaries, braiding
Wire cross-section	2 x 0.5 mm ²
Diameter	approx. 8 mm

Accessories: Sliding clamp, VEGAMET 381, VEGAMET IP65 Housing