



Pressure probe DS(T) 22

Reliable water level and temperature measurements

- Capacitive, ceramic, relative-pressure sensor for precise water level measurement in ground and surface water
- Robust and slim design (22 mm diameter) made of stainless steel 1.4404 (standard), 1.4539 (optional)
- High measuring accuracy (0.05 % FS) and long-term stability (0.1 %/year)
- Wide availability of measuring ranges (0-2 m / 0-4 m / 0-5 m / 0-10 m / 0-20 m / 0-30 m / 0-40 m / 0-50 m / 0-70 m / 0-100 m / 0-200 m / 0-250 m / 0-300 m)
- digital (RS 485: SDI-12, Modbus, SHWP) or analog output (4-20 mA)
- Optional: Integrated temperature sensor (type DST 22)



B22_Drucksonde_DS_T_S1_2_e 29.10.2024



Pressure probe DS(T) 22

Robust, accurate and long-term stability:

The DS (T) 22 fulfills the the requirements of a modern pressure sensor. The pressure membrane is easy to clean and highly resistant. The capacitive measuring principle ensures a high accuracy (0.05 %) and long-term stability (0.1 %/year)

Uncomplicated:

The DS (T) 22 can be connected to all standard data loggers and controllers (PLCs). Either analog (4-20 mA) or digital output signals (RS 485: SHWP, Modbus, SDI-12) can be ordered.

Saltwater-resistant:

For special applications, e.g. in coastal areas, brackish water or landfills, the DS (T) 22 is also available in high-grade stainless steel 1.4539 form.

Last, but not least:

In addition to the measurement of the water level, upon request, water temperature can also be recorded with a high degree of accuracy: \pm 0,2 °C.



Technical data

Parameters:Water level [cm], [m]Measuring accuracy analog:± 0.1 % FSSensor:Relative pressure probeLong-term stability:± 0.1 %/yearMeasurement principle:Capacitive with ceramic measuring cellParameters:Water temperature [°C], (optional)Measuring range:0-2 m/0-4 m/0-5 m/0-10 m/ 0-20 m/0-30 m/0-40 m/ 0-50 m/0-70 m/0-100 m/ 0-200 m/0-250 m/0-300 m water columnSensor:P11000 SensorMeasuring accuracy digital:± 0.05 % FSMeasuring accuracy:5 °C to +50 °CMeasuring accuracy digital:± 0.05 % FSMeasuring accuracy:± 0.2 °C				
Sensor:Relative pressure probeLong-term stability:± 0.1 %/yearMeasurement principle:Capacitive with ceramic measuring cellParameters:Water temperature [°C], (optional)Measuring range:0-2 m/0-4 m/0-5 m/0-10 m/ 0-20 m/0-30 m/0-40 m/ 0-50 m/0-70 m/0-100 m/ 0-200 m/0-250 m/0-300 m/ vater columnSensor:PT1000 SensorMeasuring accuracy digital:± 0.05 % FSMeasuring accuracy:± 0.2 °C	Parameters:	Water level [cm], [m]	Measuring accuracy analog:	± 0.1 % FS
Measurement principle:Capacitive with ceramic measuring cellParameters:Water temperature [°C], (optional)Measuring range:0-2 m/0-4 m/0-5 m/0-10 m/ 0-20 m/0-30 m/0-40 m/ 0-50 m/0-70 m/0-100 m/ 0-200 m/0-250 m/0-300 m water columnSensor:PT1000 SensorMeasurement principle:resistivDigital:-5 °C to +50 °CAnalogue:-5 °C to +60 °CMeasuring accuracy digital:± 0.05 % FSMeasuring accuracy:± 0.2 °C	Sensor:	Relative pressure probe	Long-term stability:	± 0.1 %/year
Measuring range:0-2m/0-4m/0-5m/0-10m/ 0-20m/0-30m/0-40m/ 0-50m/0-70m/0-100m/ 0-200m/0-250m/0-300m water columnSensor:PT1000 SensorMeasurement principle:resistivDigital:-5 °C to +50 °CAnalogue:-5 °C to +60 °CMeasuring accuracy digital:± 0.05 % FSMeasuring accuracy:± 0.2 °C	Measurement principle:	Capacitive with ceramic measuring cell	Parameters:	Water temperature [°C], (optional)
0-20 m/0-30 m/0-40 m/ Measurement principle: resistiv 0-50 m/0-70 m/0-100 m/ 0-50 m/0-70 m/0-100 m/ Digital: -5 °C to +50 °C 0-200 m/0-250 m/0-300 m water column Analogue: -5 °C to +60 °C Measuring accuracy digital: ± 0.05 % FS Measuring accuracy: ± 0.2 °C	Measuring range:	0-2 m/0-4 m/0-5 m/0-10 m/ 0-20 m/0-30 m/0-40 m/ 0-50 m/0-70 m/0-100 m/ 0-200 m/0-250 m/0-300 m water column	Sensor:	PT1000 Sensor
Digital: -5 °C to +50 °C -200 m/0-250 m/0-300 m water column Analogue: -5 °C to +60 °C Measuring accuracy digital: ± 0.05 % FS Measuring accuracy: ± 0.2 °C			Measurement principle:	resistiv
Measuring accuracy digital:± 0.05 % FSAnalogue:-5 °C to +60 °CMeasuring accuracy:± 0.2 °C			Digital:	-5 °C to +50 °C
Measuring accuracy digital: $\pm 0.05 \%$ FSMeasuring accuracy: $\pm 0.2 \degree$ C			Analogue:	-5 °C to +60 °C
	Measuring accuracy digital:	± 0.05 % FS	Measuring accuracy:	± 0.2 °C

Housing:	Material:V4A standard 1.4404 stainless steel ,or high grade 1.4539 stainless steel (optional)		
	Dimensions:	Ø 22 mm x 182 mm	
	Protection class:	IP 68	
Outputs:	Digital:	RS 485: SHWP, Modbus, SDI-12	
	Analogue:	0-1 V, 4-20 mA	
Power supply:	Digital:	6 30 VDC	
	Analogue:	DS-22: 4-20 mA: 7 30 VDC, 0-1 V: 9 30 VDC DST-22: 4-20 mA: 7 30 VDC, 0-1 V: 9 30 VDC	
Connection:	Either with plug or open cable ends		
Operating temperature:	-5 °C to +60 °C (non-freezing)		
Cable:	Reinforced measuring cable with a pressure compensation line		

The right is reserved to change or amend the foregoing technical specification without prior notic