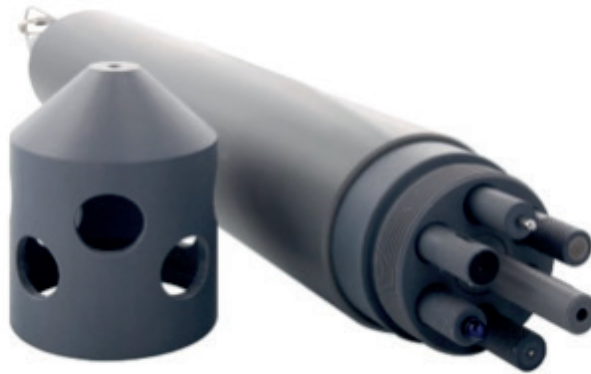




WQOX MULTIPARAMETER PROBE

Configurable sensor for measuring quality parameters of water



PRODUCT DESCRIPTION

The sensor is ready for the assembly of up to 12 sensors, used to measure quality parameters in surface and underground waters. The instrument case, which comprises an integrated temperature sensor, is available in several configurations, from the simplest containing 4 transducers at the most to the complete one containing up to 12 sensors.

All of the transducers are assembled inside a cage made in corrosion-proof material (AISI 316 stainless steel) that also protects them from damage caused by solid bodies carried by the water.

The output cable is adequately reinforced to support the weight of the probe and to withstand the stresses generated by the raving.

OPERATION

The probe is immersed in the waterway, whether flowing or stagnant, and measures in real time and continuously.

The probe also contains a cleaning device that prevents algae or other grime from depositing on the electrodes.

MAIN FEATURES

Customisation:

the probe case, which already contains a temperature sensor, can house from one to 12 transducers as required at the same time, the most widely used of which are:

- Conductivity electrode;
- Dissolved oxygen electrode (amperometric);
- Dissolved oxygen electrode (optic);
- pH electrode;
- Nitrates electrode;
- Ammonium electrode;
- Turbidity electrode;
- Chlorophyll electrode;
- Hydrometric level measurement.

These are just a few of the electrodes available and configurable inside the WQ0X multiparameter probe. More information and monitorable parameters are available upon request.

Sturdy and reliable construction:

the probe case is made in corrosion-proof materials, such as AISI 316 stainless steel or, on request, titanium.

INSTALLATION

Like the piezometric sensors, the sensor in question is usually housed inside surge pipes made in different materials, diameters and lengths, depending on the particular installation context.

COMPONENTS THAT CAN BE ADDED OR BE BUILT INTO THE PRODUCT

The probes chosen are configurable with many electrodes; the same probe can contain up to 12 transducers at the same time.

The probe can also be supplied together with an RS485/PC connection cable complete with data converter for programming, configuration and calibration of the probe (RS485/USB).

TECHNICAL SPECIFICATIONS

Conductivity electrode

Range of measurement: 0 – 200 mS/cm

Precision: +/- 1µS (0...200 µS) +/- 0.5% (> 0...200 µS)

Resolution: 0.001 mS

Calibration interval: about 12 months

Salinity: practical salinity taken from the conductivity

Dissolved oxygen (O₂) electrode amperometric

Scale range: 0.04 – 40 mg/l saturation 0 – 400%

Precision: +/-0.5% of full scale

Resolution: 0.001 mg/l

Calibration interval: 1 month

Dissolved oxygen (O₂) electrode optic

Scale range: 0 – 25 mg/l ; saturation 0 – 400%

Precision: +/-0.2 mg/l for scale ranges <2 mg/l +/- 1% for scale ranges > 2 mg/l

Measurement range for T= 25°C: 0.08 - 25 mg/l

Measurement range for T= 3°C: 0.013 - 25 mg/l

Resolution: 0.001 mg/l

Calibration interval: about 12 months

pH electrode

Range of measurement: 0pH...14.0pH

Precision: ±0.1pH

Resolution: 0,01 pH

Calibration interval: about 1-2 months

Nitrates

Range of measurement: 0.460000 mg/l

Stability: +/- 1 mV (24 h)

Precision: +/- 2mg/l (24h) for scale ranges <40 mg/l +/-5% of the measurement range (24h) for scale ranges >40 mg/l

Resolution: 0.01 mg/l

Calibration interval: 1-2 weeks

Ammonium

Range of measurement: 0.2.....18000 mg/l

Stability: +/- 1 mV (24 h)

Precision: +/- 2 mg/l (24h) for scale ranges <40 mg/l

+/- 5% of the scale range (24 h) (>40 mg/l)

Resolution: 0.01 mg/l

Calibration interval: 1-2 weeks

Turbidity electrode (with brush):

Principle of measurement: light diffusion at 90° process EN27027

Range of measurement: 0 – 1000 NTU standard

Precision: ±0.3% NTU (from 0 to 10 NTU) ±3% (from 10 to 3000 NTU)

Resolution: 0.01 NTU

Calibration interval: about 12 months

Additional scale ranges: 0 – 100 NTU, 0 – 400 NTU, 0 – 3000 NTU

Derived value for TSS (total suspended solids)

Chlorophyll electrode

Range of measurement: 0.03...500 µg/l Chl a

Precision: ± 0.1 µg/l for measurement ranges < 3 µg/l

± 3% for measurement ranges > 3 µg/l

Resolution: 0.01 µg/l

Calibration interval: about 12 months