

#### Please note

Chlorine dioxide can also be determined using a photometer

intended for chlorine. The result must be multiplied by a factor of 1.9.

Ozone can also be determined using a photometer intended for chlorine. The result must be multiplied by a factor of 0.68.

At higher concentrations of disinfectant the DPD colouration may fail to appear.

### 7. Removal

### Warning



- Removal of the sensor can lead to an incorrect measuring value at the input to the measuring and control device, which can cause the control circuit to apply uncontrolled dosing.
- See also safety instructions under section. 5.4, page 22.
- The following instructions must be followed.

### Before removing the sensor:

Switch off the measurement and control system or switch it over to manual operation.

- Close the inlet of the measuring water.
- Close the outlet of the measuring water.
- Remove the electrical connection.

## To disconnect a sensor with a 2-pole screwed terminal block:

- Undo the cable gland.
- ✓ The cable is now free to move.
- Unscrew the hood with the cable gland from the sensor.
- Release the cable cores from the terminals.
- ► Undo the screw fastening and carefully pull the sensor out.

## 8. Maintenance

# $\Lambda$

### Warning

- Misdosing occurs due to wear or premature ageing.
- Observe regular maintenance intervals.
- Monitor their process constantly.
- See also Maintenance overview under Tab 7, page 28.

#### 8.1 Maintenance overview

- ► To ensure optimum performance of the sensor:
- ► Perform the following actions at regular intervals :

Maintenance task	Interval
► Change the electrolyte	• 3-6 months
► Change the membrane cap	Annually
▶ Perform calibration	Weekly After the electrolyte and/or the membrane cap has been changed

Tab 7: Maintenance overview

# 8.2 Changing the electrolyte and membrane cap

- ► Lift the hose ring ① sideways off the membrane cap and slide it down.
- → The valve opening ② is now exposed.
- Unscrew the membrane cap.
- Air can now flow through the valve opening.
- ► Empty electrolyte from the membrane cap.
- ▶ Rinse the membrane cap with mains water.
- ► Rinse the electrode finger with mains water

- 1 Hose ring
- (2) Valve opening

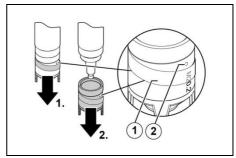


Fig. 10: Lifting off the hose ring

- Lay a piece of special emery paper on a paper wipe.
- ▶ Hold the sensor upright.
- Hold the special emery paper in place and move the tip of the working electrode over it at least twice. Use a fresh area of the emery paper for each pass.

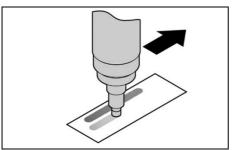


Abb. 11: Using emery paper to clean the working electrode

- Return the hose ring to its original position.
- → The valve opening is now covered.



#### Please note

When changing the membrane cap:

Use a new membrane cap.

Perform the same operations as for commissioning (see section 5, page 18). Maintenance has now been completed and the sensor can be putback into use.

## 9. Troubleshooting

Various factors in the environment can affect the sensor.

If irregularities occur, it may be useful to check these factors:

- Flow rate
- Measuring cable
- Measuring and control device
- Calibration
- Dosing equipment
- Concentration of the disinfectant in the dosing container
- Suitability of the sensor for measuring the disinfectant that is being
- dosed
- Concentration of the disinfectant in the measuring water (determined
- by analytical methods)
- pH value of the measuring water
- Temperature of the measuring water
- Pressure in the flow chamber
- Analytical methods