AQUARIUS

Electrochemical Monitors

SZ 283
Potentiostatic electrode

This sensor is made for the measurement of Free Chlorine, Chlorine dioxide and D.Ozone in water.

The potentiostatic method is an "amperometric" measure with constant potential, made through 2 metal electrodes and a reference electrode dipped in a cell.

The current running through the cell consumes Chlorine or Ozone contents, therefore they must be renewed through a constant liquid flow.

In the traditional amperometric measurement it results difficult to maintain a constant relation between cell current and Chlorine (Ozone) concentration, especially near the zero, because of the ORP and liquid resistance effects. As result frequent zero and sensitivity calibration are needed.

In the potentiostatic measuring, the electrodes potential is electronically controlled in relation to the liquid, providing a linear relationship current/concentration and a very stable zero value in oxidative absence.

The sensor is shaped so that it is easy to clean and replace.

It is suggested to place the sensor in a measurement cell SZ 7231 or SZ 7233 provided with overflow in order to maintain the sample flow constant.
If placed in the SZ 7251 cell or in a pipe-line, in order to avoid an instable measurement, it is necessary for the flow to be constant.

Specifications

Electrodes: 2 Platinum rings
Reference: gel with annular junction
Body: glass
Cable: 3 m
Max pressure: 10 bar at 20°C
Dimensions: 110x12 mm