

Product Information Water Sampling Station DCM 01

Controlled disinfection of bathing water

The water disinfection of public swimming pools and whirlpools is mainly done through chlorine in different forms of usage. For a high water quality a standard and consistent measuring and regulation of the water's chlorine value is inescapable.

Sensors and regulators of the water measuring panel are connected through a water measuring channel to the water circulation and control the dosage device of the disinfectant and other parameters.

Apart from the measured free chlorine, the chlorine excess, the metered value of the bound chlorine, the chlorine connections is an important indication for the contamination of the water. Both metered values are captured by the sensors of the DCM 01 and evaluated by the regulator and, respectively, used as regulation of the disinfectant.

Extensive chlorine value measuring and control

The DCM 01 has been especially developed for public swimming pools. Through the combination of a potentiostatic and a membrane covered measuring cell for measuring of free chlorine and the total chlorine with the powerful multiple channel regulator TOPAX DX, an extensive measuring, display and control of all important parameters for the disinfection is now possible.

The control of, e.g. activated carbon powder, flocculants or the fresh water addition is just as well realizable as the communication of further water measuring panels with a computer.

All elements necessary for measuring and control are unified on the water measuring panel. The clear build-up on the water measuring panel, its simple operation at configuration and calibration respectively and an extensive accessories program complete the range.

High quality equipment

The measuring of free chlorine is done on the basis of a potentiostatic chlorine measuring cell (3-electrode-system, gold-KCl-stainless steel). A zero-point calibration is not necessary. Rotating balls are responsible for a consistent cleaning of the electrodes.

The measuring of the total chlorine is done on the basis of the membrane covered measuring cell GCM in a specially constructed fitting, which guarantees a regular incoming flow of the measuring cell.

The sensors used for the measuring of the pH value, redox potential and the temperature are installed on a transparent multi functional fitting panel.

A hydrostatic flow regulation of the water measuring flow is adjusted through a DN 2.5-needle valve and is responsible for the deposition of gas bubbles.

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- For public swimming pools
- Potentiostatic measurement of free chlorine
- Membrane covered measuring cell for combined chlorine
- Measurement of pH value, redox and temperature
- Powerfull multi-channel controller TOPAX DX
- Flow monitoring
- Hydrostatic flow regulation
- Serial interface for PC communication (optional)



Technical data

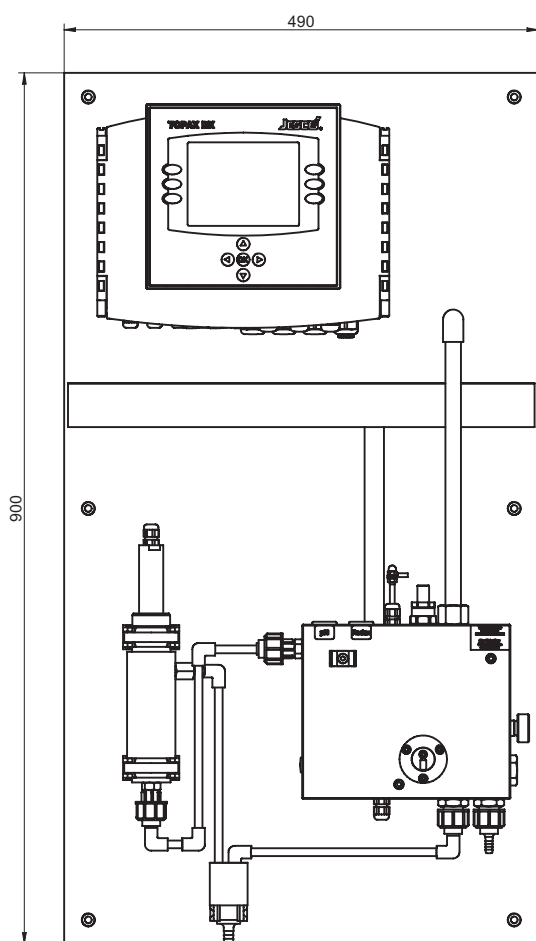
Measuring range free chlorine	up to 2 mg/l, pH balanced
Measuring range pH (optional)	pH 0...14
Measuring range redox (optional)	0...1000 mV
Dimensions (B x H x T)	490 x 900 x ~130 mm
Temperature	5...60 °C
Sample water requirement	approx. 45 l/h
Water pressure	0.2...6.0 bar Outflow sample water must be able to run off
Hydraulic connections	G 1/4 inner thread

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Model variants

Product name	Description	Order no.
Water sampling station DCM 01 for differential chlorine measurement (free and combined chlorine)	Continuous measurement and display of the water parameters free and bound chlorine (pH-value-compensated), pH value, redox, temperature	42100001

Dimensional figure



All measurements are given in mm

Scope of Delivery

Following functional elements and accessories are scope of delivery:

- Membrane covered measuring cell GCM
- Strainer (0.5 mm mesh)
- DN 2.5 needle valve
- Standpipe with overflow and stripper
- Grounding pin
- Swing-type drain for taking of sample water
- Flow monitor (float element and reed contact) for switching-off of controller functions at lack of sample water
- Potentiostatic chlorine measuring cell
- Balls for electrode cleaning
- pH single-rod measuring chain PE 110
- Redox (ORP) single-rod measuring chain ME 110
- Connection cable for all sensors
- 1 set of buffer solutions for calibration

Tubing and wiring are factory-installed.

Accessories

In addition to the water sampling station, the following accessories are available for operation:

Description	Order no.
Filter (80 µm) for Sample Water in transparent housing, hose connections d 6/12 with support brackets	23733816
Water Sampling Device Type A G 1/2, ball valve, Hose 6/12, PVC/FPM	23733813
Tubing 6/12, PVC transparent perlon reinforced	97120
Swimming Pool Photometer measuring parameters: free, bound and total chlorine, chlorine dioxide, pH value, cyanuric acid	23800003