

AQUACON CLO2

Process analyzer for the determination of Chlorine dioxide

The AQUACON CLO2 process analyzer can be used for the monitoring and control of the chlorine dioxide concentration in water. Measurement principle is the determination of chlorine dioxide by dosing a special developed reagent to a buffered water sample until the sample changes its colour (titration). The colour change is detected by a monochromatic photometric detection system. The measurement is selective (no influence from other chlorine species in drinking water relevant concentrations).

The analyzer consists of a control unit with touchscreen and an analysis unit with measuring chamber, valve, dosing pumps and all required tube connections. The control unit includes a microprocessor which controls the automatic measurement incl. sampling, rinsing, reagent dosing and surveillance of the photodetection system. Main applications for the process titrator are the monitoring of the chlorine dioxide concentration in drinking water and cooling water and the survey of the disinfectant capacity in drinking water installations.

Your advantages:

- ⇒ Automatic measurement incl. drift compensation
- ⇒ No external calibration or re-calibration required
- ⇒ Selective chlorine dioxide measurement (other chlorine species don't influence the measurement)
- ⇒ Easy operation via touchscreen
- ⇒ Adjustable limit value and alarm value
- ⇒ Programmable analog output (0/4-20 mA)
- ⇒ Adjustable break time between two analysis or external start/stop
- ⇒ Optional: USB port for easy data storage
- ⇒ Optional: data transfer via wireless network
- ⇒ External plug connections (IP65) for alarm relay, limit relay, analysis relay, external start/stop, analog output
- ⇒ Multi range power supply (110–230 Volt, 50–60 Hz)
- ⇒ Including stable polycarbonate wall cabinet



Order informations:

AQUACON CLO2	0,02 – 0,50 ppm ClO ₂	Order No. 693 2730 01
Reagent CLO2-R1001	(250 ml)	Order No. 101 2730 03
Reagent CLO2-R1002	(500 ml)	Order No. 102 2730 03
Reagent Cleaning solution 1	(500 ml)	Order No. 101 2705 05

Technical Data

Current output	1 x 0/4-20 mA, max. load 500 ohm
Display	240 x 128 dots, touchscreen
Relays	1 x Alarm, potential-free 230 V/50 Hz, 3A 1 x Limit, potential-free 230 V/50 Hz, 3A 1 x Analysis state, potential-free 230 V/50 Hz, 3A
External Switching	potential-free contact, 18 V DC, ca. 4 mA
Power Supply	110 - 230 V -- 50/ 60 Hz
Power Consumption	approx. 16 VA
Dimensions	640 x 315 x 190 mm (H x W x D)
Protection	IP 65 (transmitter housing)
Connections	Plugs with circular connection 1,5 mm ²
Temperature	5° to 45°C, at consumption of reagents within 6 months

Since it is company policy to continuously improve its product range, we reserve the right to make changes in the product design without notification to its users.

Specifications

Parameter	Chlorine dioxide
Description	Automatic microprocessor controlled analyzer for the selective determination of Chlorine dioxide
Typical Applications	Drinking water and cooling water disinfection Protection against Legionella with Chlorine dioxide
Analysis Method:	Photometric determination of Chlorine (DPD method)
Analyzer type	AQUACON CLO2
Measuring Range	0,02 – 0,50 ppm ClO ₂
Resolution	0,02 ppm
Accuracy	5 % of end value
Reproducibility	5 % of end value
Zero-point Stability	automatic adjustment
Number of Samples	1
Sample	
Operating Pressure	0,1 - 10 bar
Temperature	5 - 30 °C
Sample Volume	25 ml per analysis (excluding rinsing)
Sample Condition	clear, filtrated
Chemical Demands	pH 5 –9 Cl ₂ < 2 ppm, Halogenes < 2 ppm, Ozone < 0,01 ppm
Drain	pressure free into open drain
Reagents	
Number	3
Storage Temp.	5 – 25°C
Reagent volume	250 ml / 500 ml / 500 ml
Usage/analysis	Reagent 1: depends of ClO ₂ concentration Reagent 2 and 3: 0,27 ml
Suitable for	appr. 1315 analysis at 0,20 ppm ClO ₂ (Reagent 1) appr. 1850 analysis (Reagent 2 and 3)
Analysis	
Cycle (approx.)	3 - 6 min (excluding flushing time)
Sample interval	1 – 99 min or external start/stop