

# AQUACON CHLORIT

### Process analyzer for the determination of Chlorite

The AQUACON CHLORIT process photometers can be used for the monitoring and control of the chlorite concentration in water. Measurement principle is the photometric determination of chlorite by dosing a special reagent based on N,N-Diethyl-p-phenylendiaminsulfat (DPD) to a water sample. The colour formed as a result of the reaction is detected by a monochromatic photometric detection system. The measurement is not selective and will be influenced by chlorine dioxide and other chlorine species. So these chemical compounds must be removed out of the sample water before the measurement.

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 photometer are the monitoring of the chlorite concentration in drinking water.

#### Your advantages:

- ⇒ Automatic measurement incl. self test and drift compensation
- ⇒ Easy operation via touchscreen
- ⇒ Adjustable limit value and alarm value
- ⇒ Programmable analog output (0/4-20 mA)
- ⇒ Optional: USB port for easy data storage
- ⇒ Optional: data transfer via wireless network
- ⇒ Adjustable break time between two analysis
- ⇒ External start/stop of an analysis possible
- ⇒ No external calibration required
- ⇒ External plug connections (IP65) for alarm relay, limit relay, analysis relay, external start/stop, analog output 0/4-20 mA
- ⇒ Multi range power supply (110–230 Volt, 50–60 Hz)
- ⇒ Including polycarbonate wall cabinet



Example for AQUACON

#### Order informations:

AQUACON CHLORIT	0,02 – 1,00 ppm	Order No. 693 2740 01	
Reagent CLT-R1001	(250 ml)	Order No. 101 2740 01	
Reagent CLT-R1002	(500 ml)	Order No. 102 2740 01	
Reagent CLT-R1003	(500 ml)	Order No. 103 2740 01	



## **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 <sup>2</sup>
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**

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Parameter	Chlorite	
Description	Automatic microprocessor controlled analyzer for the	
	photometric determination of Chlorite	
Typical Applications	Control of chlorine dioxide disinfection	
Analysis Method:	Photometric determination of Chlorite	
	(DPD method, not selective)	
Analyzer type	AQUACON CHLORIT	
Measuring Range	0,02 – 1,00 ppm ClO <sub>2</sub> -	
Resolution	0,01 ppm	
Accuracy	3 % of end value	
Reproducibility	2 % 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	F	
Drain	Cl <sub>2</sub> < 0,01 ppm, ClO <sub>2</sub> < 0,01 ppm	
	pressure free into open drain	
Reagents		
Number	3	
Storage Temp.	5 – 25°C	
Usage/analysis	appr. 0,27 ml / 5,4 ml / 2,16 ml	
Reagent volume	250 ml / 500 ml / 500 ml	
Suitable for	appr. 925 / 92 / 231 analysis	
Analysis		
Cycle (approx.)	8 min (incl. flushing time)	
Sample interval	1 – 99 min or external start/stop	



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