

# AQUACON PH-CL

## Process analyzer for photometric pH value and chlorine measurement

The AQUACON PH80 process photometer can be used for the monitoring and control of the pH value and the chlorine concentration. Measurement principle is the photometric detection of the color formed after adding a specific indicator reagent to a water sample.

Main applications for the photometer are the control of the pH value and of free chlorine in drinking water, cooling water and swimming pool water.

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.

### Your advantages:

- ⇒ Automatic measurement incl. self test and drift compensation
- ⇒ Measurement range for pH: 6,80 – 8,80 pH
- ⇒ Measurement range for  $\text{Cl}_2$ : 0,02 – 2,00 ppm
- ⇒ Easy operation via touchscreen
- ⇒ No external calibration required
- ⇒ Adjustable limit value and alarm value
- ⇒ Programmable analog output (0/4-20 mA), optional with USB port for data storage
- ⇒ Adjustable break time between two analysis or external start/stop possible
- ⇒ 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 PH-CL

Reagent PH80	(500 ml)
Reagent CL2-R1001	(250 ml)
Reagent CL2-R1002	(250 ml)

Order No. 693 8045 01

Order No. 101 3180 01

Order No. 101 2725 01

Order No. 102 2725 01

## Technical Data

Current output	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 2 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

Parameter	pH value and free chlorine
Description	Automatic microprocessor controlled analyzer for the photometric determination of pH value and Cl <sub>2</sub>
Typical Applications	Control of drinking water, cooling water and pool water
Analysis Method:	Photometric pH analysis with specific indicator solution Photometric chlorine analysis (DPD method)
Analyzer type	AQUACON PH-CL
Measuring Range	pH: 6,80 – 8,80; Cl <sub>2</sub> : 0,02 – 2,00 ppm
Resolution	0,01
Accuracy	+/- 0,20 pH; 2 % of range Cl <sub>2</sub>
Reproducibility	+/- 0,05 pH; 1 % of range Cl <sub>2</sub>
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 6,8 – 8,8
Drain	pressure free into open drain
Reagents	
Number	1
Storage Temp.	5 – 25 °C
Usage/analysis	appr. 0,54 ml / 0,27 ml / 0,27 ml
Reagent volume	500 ml / 250 ml / 250 ml
Suitable for	appr. 925 analysis
Analysis	
Cycle (approx.)	3 - 4 min
Sample interval	1 – 99 min or external start/stop