CHEWATEC

CHEWATEC MC II

Reliable solution for measuring and control

Basic water treatment unit

Measured variables pH / ORP / free chlorine / conductivity

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CHEWATEC MC II controller is a 1-channel P/PID controller for the measured variables pH, ORP, chlorine, chlorine dioxide, chlorite, ozone, bromine, peracetic acid**,** hydrogen peroxide, fluoride, dissolved oxygen and conductivity via mA. The sensors for pH and ORP can be directly connected via coaxial cable or using the 4-20 mA sensor input. The controller can bidirectionally control the measured variables, monitor limit values and transmit the measured value via an mA output, e.g. to a PLC Programmable Logic Controller. The mA output can optionally also be configured as an interference variable output. The controller has two pulse frequency outputs to control two metering pumps (raise and lower). Two output relays can optionally be used as limit value relays or to control motor-driven pumps or solenoid valves. An alarm relay signals the occurrence of a fault. A digital input is used to switch off the control or to process a sample water limit contact by remote control. The impact of temperature on the measurements can be provided by temperature measurement or by manual input.

Features

- Flexibility through free selection of variables from all measured variables
- Safety through sensor monitoring of pH for glass breakage and line breakage
- Flexibly upgradable, thanks to subsequent activation option of functions by means of an activation code
- Various installation options: wall-mounted or installation in a control cabinet

Areas of application

- Measurement and control of water parameters in industrial and process water treatment plants
- Waste water neutralisation
- Measurement of the pH value and the disinfection parameters in potable water treatment, food and beverage industry and swimming pools

Technical Information

Measuring ranges

- pH 0.00 ... 14.00
- ORP -1,000 ... +1,000 mV
- Chlorine 0.00 … 100.0 ppm
- Chlorine dioxide: 0.00…0.5 / 2 / 10 …20.0 ppm
- Chlorite: 0.02…0.5 / 0.1…2 ppm
- Bromine: 0.02…2.0 / 0….10.0 ppm
- Ozone: 0.00...2.00 ppm
- Hydrogen peroxide, PER1 sensor: 2.0...200.0/20...2,000 ppm
- Peracetic acid: 1...20/10...200/100...2,000 mg/l
- Dissolved oxygen: 0.1...10/0.1...20 ppm
- pH: 0.00...14.00
- ORP: 0...+1,000 mV
- Conductivity: 0...20/200/1,000 mS/cm, via mA converter
- Temperature: 0...100 °C via mA converter

Resolution

- pH: 0.01 pH
- ORP: 1mV
- Amperometric (e.g. chlorine):0.001/0.1 ppm vol.%

Accuracy

- 0.5 % of the upper measuring range value

Measurement input

- SN6 (input resistance > 0.5 x 1012 Ω)

Correction variable

- Temperature via Pt 100 / Pt 1000

Correction range temperature

- 0…100°C

Control characteristic

- P/PID control

Control

- 2-way control