

Controller DULCOMETER® Compact

Compact yet fully equipped - the basic water analysis unit



The DULCOMETER® Compact controller is a one-channel PID controller for the measured variables pH, ORP, chlorine and inductive conductivity. It can monodirectionally control the measured variable, monitor limit values and transmit the measured value via an mA output, e.g. to a PLC. The mA output can optionally also be configured as a controlled variable output. The controller has one pulse frequency output to control one metering pump. One output relay can optionally

be used as an alarm or limit value or to control motor-driven metering pumps or solenoid valves. 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. Menu-driven operation is language-independent.

Your benefits

- Flexibility in the choice of measured variable with pH and ORP
- Always the optimum measured value resolution by auto-ranging with conductivity measurement
- Depending on the requirement, various display options for conductivity, such as: Conductivity, TDS (Total Dissolved Solids), salinity and specific resistance
- Safety through sensor monitoring of pH for glass breakage and line breakage
- Various installation options: wall-mounted, installation on an upright or in a control cabinet

Field of application

- Measurement and control of water parameters in industrial and process water treatment plants
- Permeate monitoring in reverse osmosis systems
- Measurement and control of the hygiene parameters in swimming pools

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Technical Data

Measuring range	pH: 0 ... 14 ORP: -1000 ... +1000 mV Chlorine: 0.05 ... 5 ppm, intermittent metering up to 10 ppm, max. 12 h Conductive conductivity: 0.5 µS/cm ... 20 mS/cm (auto-ranging) Inductive conductivity with ICT 1: 200 µS/cm ... 1000 mS/cm (auto-ranging) Inductive conductivity with ICT 2: 20 µS/cm ... 2000 mS/cm (auto-ranging) Inductive conductivity with ICT 5: 200 µS/cm ... 2000 mS/cm (auto-ranging)
Resolution	pH: 0.01 pH ORP: 1 mV Chlorine: 0.01 ppm Conductivity: 0.1 µS/cm (depends on the measuring range)
Accuracy	0.5% of the upper range value
Temperature compensation range	0 ... 120 °C, chlorine 1 ... 45 °C
Control	Monodirectional PID control with selectable control direction
Inputs	Sensor input for the relevant measured variable Temperature sensor input: pH: Pt 1000, chlorine and conductivity: Pt 100/ Pt 1000 1 digital input as a remote control input for the functions pause control / sample water fault
Outputs	1 pulse frequency output for the control of metering pumps 1 active 0/4...20 mA output configurable as a measured or control variable, max. load: 400 Ω 1 output relay used as a changeover contact, can be configured as an alarm, limit value or pulse width-modulated control output for motor-driven metering pumps
Cell constant, conductive conductivity	0.05 ... 12.0 cm ⁻¹
Voltage supply	100 ... 230 V, 50/60 Hz, 5 W
Permissible operating temperature	-10 ... +60 °C
Enclosure rating	IP 67, based on NEMA 4 X Indoor
Dimensions	135 x 125 x 75 mm (H x W x D)
Weight	0.5 kg