

Compact measurement and control of pH, redox and chlorine

DULCOMETER® Compact Controller



The measuring and control device DULCOMETER® Compact for pH, redox and (free) chlorine measured variables is fitted with all standard functions for applications in water treatment plants. The operator can switch between the measured variables pH and redox and between the control characteristics P and PID. The control direction can be selected and can be raised or lowered for measured values. Temperature compensation can be carried out for the pH and chlorine values by connecting a Pt 1000 to the temperature sensor input.

Ease of operation is ensured in any language thanks to the use of clear abbreviations. The DULCOMETER® Compact also comes pre-configured.

- It is possible to switch between the measured variables pH and redox on the controller
- Independent of operating language (use of abbreviations, such as CAL, PARAM, CONFIG, ERROR)
- Safe thanks to the display of the operating status using three LEDs
- Sensor monitoring of pH provides enhanced safety
- Optimum adjustment of the controller to the control process by selecting either P or PID control characteristics and control direction
- Temperature sensor input (Pt 1000) for temperature compensation of pH and chlorine values
- Compact universal housing
- Illuminated display
- Pulse frequency relay for control of metering pump
- Power relay can be configured as an alarm, limit value or pulse with modulated control output for metering pumps
- Analogue output 0/4 to 20 mA. Can be configured as a writer output or control output
- Digital input to switch off the controller or to process a sample water limit contact by remote control

Measuring and control system DULCOMETER® Compact

Main applications

- Swimming pool water treatment
- Treatment of drinking water
- Treatment of waste water

Technical data	
Measuring ranges	Type of connection mV: pH 0.00 to 14 Redox -1000 to +1000 mV Chlorine 0.05 to 5 ppm
Resolution pH	pH 0.01 pH Redox 1 mV Chlorine 0.01 ppm
Correction variable	Temperature for pH and chlorine via Pt 1000
Correction range temp.	0 to 120 °C
Control characteristic	P/PID control
Control	1-sided controller with selectable control direction (raise/lower)
Signal current output	1 x 0/4-20 mA electrically isolated max. load 400 Ω , range and assignment (measured or actuating variable) configurable
Control output	1 pulse frequency output for metering pump control 1 relay (alarm, limit value relay or pulse length control) 1 x analog output 0/4 to 20 mA
Electrical connection	90 - 253 V ~
Ambient temperature	-10 to +60 °C
Degree of protection	IP 67
Dimensions	135 x 125 x 75 mm (H x W x D)
Weight	0.5 kg

The complete measuring station comprises:

- Measuring transducer / controller DULCOMETER® Compact
- Sensor
- Fitting: DGMa..., DLG III ..., immersible inline probe housing
- Temperature sensor Pt 1000
- Sensor cable
- Buffer solution
- Photometer