Compact measurement and control of pH and redox

DULCOMETER® compact controller



The DULCOMETER® Compact measuring and control device for pH and redox measured variables is equipped with the standard functions for use in water treatment plants. The operator can switch between the measured variables pH and redox and between P and PID control characteristics and the direction of control can be selected and raised or lowered for specific measured values. A Pt 1000 can be connected to the temperature sensor input for temperature compensation of the pH value and ease of operation is guaranteed, irrespective of the operating language, thanks to the use of abbreviations. The DULCOMETER® Compact also comes pre-configured.

- It is possible to switch between the measured variables pH and redox on the controller
- Operation independent of the 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 compensation of the PH value by temperature sensor input (Pt 1000)

- Compact universal housing
- Illuminated display
- Pulse frequency relay for metering pump control
- Power relay can be configured as an alarm, limit value or pulse with modulated control output for metering pumps
- Analogue output 0/4...20 mA can be configured as a writer output or control output
- Digital input to switch off the control or to process a sample water limit contact by remote control



Measuring and control unit Dulcometer[®] Compact

Main applications

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

Technical data

Measurement range Type of connection mV:

pH 0.00 ... 14

Redox -1000 ... +1000 mV

Resolution of pH pH 0.01 pH

Redox 1 mV

Correction variable Temperature for pH via Pt 1000

Temperature correction range 0 ... 120 °C **Control behaviour** 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 $\boldsymbol{\Omega}$

Range and assignment (measured or actuating variable) can be set

Control outputs 1 pulse frequency output for control of the metering pump

1 relay (alarm or limit value relay or pulse length control)

1 x analogue output 0/4 ... 20 mA

Electrical connection 90 - 253 V \sim Ambient temperature -10 ... +60 °C

Enclosure rating IP 67

Dimensions 135 x 125 x 75 mm (H x W x D)

Weight 0.5 kg

A complete measuring station comprises the following:

- Measuring transducer / controller Dulcometer® Compact
- Sensor
- Fitting DGMa..., DLG III ..., immersible inline probe housing
- Temperature sensor Pt 100 or Pt 1000
- Sensor cable
- Buffer solution
- Photometer

Experts in Chem-Feed and Water Treatment

ProMinent Dosiertechnik GmbH

Im Schuhmachergewann 5-11 69123 Heidelberg

Telephone: +49 6221 842-0 Fax: +49 6221 842-617 info@prominent.com www.prominent.com