

6.0 Controller Packages

DULCOMETER® Compact transmitters with control functions for pH and ORP measured variables provide basic functions for applications in water treatment. They have a fixed configuration with the following features.

Measured variables pH and ORP (can be changed on the controller)

- Operation independent of the operating language (use of abbreviations, such as CAL, PARAM, CONFIG, ERROR)
- Illuminated display
- 3 LED display operating state (relay 1 / 2 active, Error)
- Sensor monitoring for pH
- P and PID control characteristics
- Selectable control direction (raise or lower measured value)
- Pulse frequency relay for control of metering pump
- Power relay can be configured as an alarm, limit value or pulse width modulated control output for metering pumps, (connection function or switch on operating voltage)
- 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
- Temperature sensor input (Pt 1000) for temperature compensation of the pH value



Technical Data

Measurement range:	pH: 0.00 ... 14 ORP: -1000 ... +1000 mV
Resolution:	pH: 0,01 pH ORP: 1 mV
Correction variable:	Temperature for pH via Pt 1000
Correction range:	0 ... 120 °C
Control characteristic:	P/PID
Control:	1-way controller with selectable control direction (raise/lower)
Signal current output:	1 x 0/4-20 mA galvanically isolated max. load 400 Ω 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 ~
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

	Part No.
pH/ORP	DCCaW006PR0010EN
Chlorine	DCCaW006C00010EN
Panel Mounting Kit	1037273

Sensor for Chlorine, **ONLY** for use with **Compact Controller**

APPLICATIONS

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

CLB 2-µA

Part No: 1038902

Measured variable:	free chlorine (hypochlorous acid HOCl)
Measuring range:	0.05 - 5.0 mg/l: linear, can be used for shock chlorination up to 10.0 mg/l
Reference method:	DPD1
pH range:	5.0 ... 9.0
Temperature:	5 ... 45 °C
Max. pressure:	3.0 bar
Intake flow:	30...60 l/h (in DGMA), constant flow needed as flow-dependent signal
Power supply:	16...24 V DC (2-wire)
Output signal:	Non-amplified primary current signal, not temperature-compensated, uncalibrated, not electrically isolated
Temperature compensation:	Pt 1000, integrated, calculation in the compact controller
Typical applications:	Swimming pool, drinking water, can also be used with membrane-free chlorine production electrolysis processes, even with varying media temperatures
Measurement & control equipment:	Compact controller
In-line probe fitting:	DGM, DLG III
Measuring principle:	amperometric, 3 electrodes, no diaphragm
Measuring range:	CLB 2-µA-5 ppm

