

# Controller DULCOMETER D1Cb/D1Cc

## The water analysis workhorse



The controller DULCOMETER D1Cb/D1Cc can be used for control tasks in potable water treatment, wastewater treatment and many other areas. Safe, convenient and clear, thanks to the large illuminated graphic display, plain text operating menu and pH sensor monitoring.

### Technical Details

- Measured variables: pH, ORP, chlorine, chlorine dioxide, chlorite, bromine, conductivity, peracetic acid, hydrogen peroxide, ozone, dissolved oxygen and fluoride
- Method of installation, degree of protection: D1Cb wall mounting IP 65, D1Cc control panel mounting IP 54, 1/4 DIN
- Measurement: 1 measuring channel, temperature compensation for pH
- Control: PID controller, bidirectional controller (e.g. with pH acid and alkali)
- Control inputs: 1 digital control input



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Measuring range	<b>Connection type mV:</b> pH 0.00 ... 14.00 ORP - 1000 ... +1000 mV <b>Connection type mV:</b> Chlorine: 0.00...0.500/2.00/5.00/10.0/20.0/50.0/100.0 ppm Chlorine dioxide: 0.00...0.500/2.00/10.0/20.0 ppm Chlorite: 0.02..0.50/0.1...2 ppm Bromine: 0.02...2.0/0.1...10.0 ppm Ozone: 0.00...2.00 ppm Hydrogen peroxide only with sensor PER1: 2.0...200.0/20...2000 ppm Peracetic acid: 1...20/10...200/100...2000 mg/l Dissolved oxygen: 0.1...10/0.1...20 ppm pH: 0.00...14.00 ORP: 0...+1000 mV Conductivity: 0...20/200/1000 mS/cm via mA transducer Temperature: 0...100 °C via mA transducer
Resolution	pH: 0.01 pH ORP: 1 mV Amperometric analysis (chlorine etc.): 0.001/0.01 ppm, 0.01 vol. %
Accuracy	0.5% of the upper range value
Measurement input	pH/ORP (input resistance > 0.5 x 10 <sup>12</sup> Ω)
Correction variable	Temperature via Pt 100/Pt 1000
Min. temperature correction range	0 °C
Max. temperature correction range	100 °C
Control characteristic	P/PID control
Control	2-way control
Signal current output	1 x 0/4 – 20 mA electrically isolated Max. load 450 Ω Range and assignment (measured, correction or control variable) can be adjusted
Control outputs	2 pulse frequency outputs for controlling the metering pump 2 relays (limit value or pulse length)
Alarm relay	250 V ~3 A, 700 VA contact type, changeover
Electrical Connection	100 – 230 V, 50/60 Hz, 15 VA
Ambient temperature	-5 ... 50 °C
Enclosure rating	Wall-mounted: IP 65 Control panel installation: IP 54
Dimensions	Wall-mounted: 198 x 200 x 76 mm (WxHxD) (D1Cb) Control panel installation: 96 x 96 x 145 mm (WxHxD) (D1Cc)
Weight	0.8 kg