

1.1 Amperometric Sensors DULCOTEST®

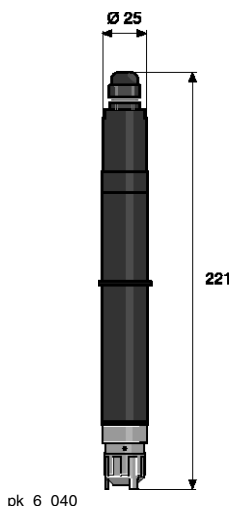


Sensor for Free Chlorine CBR 1-mA

Sensor for free chlorine and bromine in contaminated water, also suitable for high pH values of up to 9.5. For use with controllers with 4-20 mA input

Your benefits

- Measured variable: free chlorine as well as free and combined bromine (bromamines)
- Diaphragm-covered sensor minimises faults caused by changing flow or ingredients in the water
- Resistance to films of dirt and biofilms by electrolyte with antimicrobial effect and large-pore diaphragm
- Use at high pH value of up to 9.5 by optimisation of the electrolyte diaphragm system



| | |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measured variable | free chlorine, free bromine, combined bromine, DBDMH (1,3-dibrom-5,5-dimethyl-hydantoin) |
| Reference method | DPD1 |
| pH-range | 5 ... 9.5 |
| Temperature | 5 ... 10 °C |
| Max. pressure | 1.0 bar |
| Intake flow | 30...60 l/h (in DGM, DLG II) |
| Supply voltage | 16...24 V DC (2-wire) |
| Output signal | 4...20 mA = Measuring range, temperature-compensated, uncalibrated, not electrically isolated |
| Selectivity | Free chlorine as against combined chlorine |
| Disinfection process | Chlorine gas, hypochlorite, electrolysis with diaphragm, bromide + hypochlorite, DBDMH |
| Installation | Bypass: open sample water outlet |
| Sensor fitting | DGM, DLG III |
| Measuring and control equipment | D1C, DAC, AEGIS II |
| Typical applications | Cooling water, process water, waste water, water with higher pH values (stable pH), contaminated swimming pool water. Contaminated swimming pool water. In swimming pools to determine the combined chlorine from the difference: Total chlorine minus free chlorine. Raw water for drinking water treatment. |
| Resistance to | Salts, acids, alkalis, surfactants, dirt films |
| Measuring principle, technology | Amperometric, 2 electrodes, membrane-covered |

| | Measuring range | Order no. |
|-------------------------|----------------------|-----------|
| CBR 1-mA-0,5 ppm | 0.01...0.5 mg/l...* | 1038016 |
| CBR 1-mA-2 ppm | 0.02...2.0 mg/l...* | 1038015 |
| CBR 1-mA-5 ppm | 0.05...5.0 mg/l...* | 1052138 |
| CBR 1-mA-10 ppm | 0.10...10.0 mg/l...* | 1038014 |

* Measuring range based on chlorine. When measuring bromine, the lower and upper limit of the measuring range are increased by the factor 2.25, therefore for example CBR 1-mA-0.5ppm: 0.02 ... 1.1 ppm.

