

Chlorine

Free and Total Chlorine



Due to its chemical properties and its high reactivity, chlorine is very well suited for the disinfection of water and to avoid contamination with bacteria and pathogens. Chlorine in water occurs balanced depending on pH; at neutral pH mainly as hypochlorous acid (HClO). Hypochlorous acid is a strong oxidizing agent: its disinfecting effect is based on the irreversible aggregation of protein of viruses and bacteria - similar to the effect of heat exposure. When the pH value increases, the balance in the water moves to hypochlorite (ClO⁻), which reduces the disinfecting effect.

Fields of application:

- Drinking Water Monitoring
- Pools & Thermal Baths
- Disinfection



see also <https://www.xylymanalytics.com/en/parameters/chlorine>

Analog Sensors

For free and total chlorine

The electrochemical chlorine sensors are developed for measurements in pools and drinking water. Directly connectable to the controller CI 298.



FCML 412 N



- Environmentally friendly - no use of chemicals
- Reliable - protection from contamination through a membrane
- Accurate - pH compensation of the measuring results



FCML 412 N

for measurement of free chlorine

TCML N

for measurement of total chlorine

Ordering Information

Model	Description	Order No.
FCML 412 N	Chlorine electrode according to electrochemical principle, suitable for measurements of free chlorine in drinking water and pools. Measuring range: 0-2 mg/l, pH range 4-9, independent from pH value.	201187
TCML N	Chlorine electrode according to electrochemical principle, suitable for measurements of total chlorine in drinking water and pools. Measuring range: 0-2 mg/l.	201192



For technical data please see datasheet D7.01

Alternatives and accessories see brochure "Product Details" and website

Analog monitors see from page 62

Analog pH Electrodes see from page 16

Analyzer

Chlorine 3017M

Continuous and precise measurement of free and total chlorine according to the DPD method (ISO method 7393-2 and US EPA method 334.0).



Chlorine 3017M



- High accuracy of ± 0.03 mg/l or $\pm 5\%$
- > 30 days unattended runtime
- Can be integrated into existing IQ SENSOR NET via MIQ/IC2



Ordering Information

Model	Description	Order No.
Chlorine 3107M	Online analyzer for photometric measurement of free and total chlorine, according to colorimetric DPD Method (ISO & US EPA); outputs (selectable): 4 to 20 mA or RS 485 Modbus; range: 0-5 mg/l; sample inlet device not included;	860151



For technical data please see datasheet D7.05

Alternatives and accessories see brochure "Product Details" and website

Premounted panels for chlorine measurement see from page 64

Analyzer for turbidity measurement see from page 27