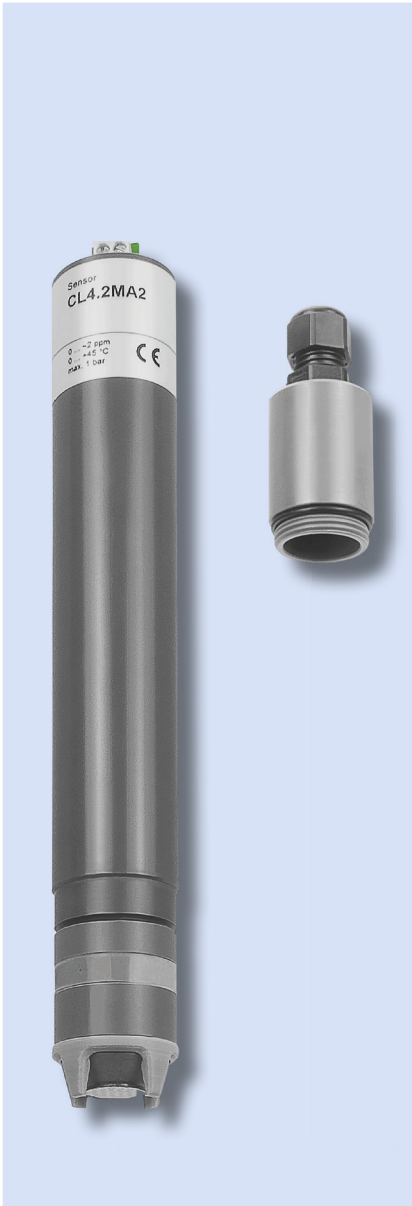


1.1.1.

DOSASens Chlorine sensor CL4.2



Chlorine sensor with membrane-covered, amperometric 2-electrode system. For the measurement of free inorganic chlorine at constant pH.

Product description:

- Measurand(s): NaClO (sodium hypochlorite), Ca(ClO)₂ (calciumhypochlorite), Cl₂ (chlorine gas), chlorine generated by membrane-electrolysis
- Calibration: at the controller, via analytical chlorine determination by DPD-1 method
- Interferences:
 - ClO₂ is being registered with factor 9 of its measured value
 - O₃ is registered
 - with membrane-less chlorine electrolysis interferences may occur
- pH range: 6–8
- Pressure range:
 - Operation without circlip: 0–0.5 bar, no pressure surges and/or vibrations
 - Operation with circlip: 0–1.0 bar, no pressure surges and/or vibrations
- Temperature range: 0–45 °C (no ice crystals in measurement water)
- Integrated automatic temperature compensation
- Response time: T₉₀ ca. 30 seconds
- Absence of the disinfectant: max. 24 h
- Flow rate: approx. 15–30 l/h, low flow-dependence
- Shaft length: standard 190 mm, and up to 220 mm in length (mA-Version)
- Connection: 5-pin M12 screwed plug (mV-, mA-, Modbus RTU-version), 2-pole terminal (mA-Version)
- Material: PVC-U and semipermeable membrane

Areas of application:

- Swimming pool, drinking, service and process water, free of surfactants and with constant pH.

Scope of supply:

- DOSASens CL4.2 sensor, membrane cap, electrolyte, operating manual

Ordering data:

| Type: | Measuring range: ppm | Resolution: ppm | Output signal: | Power supply: | Item number: |
|---------------|-------------------------|--------------------|-----------------------|---------------------------------|--------------|
| CL4.2H-M12 | 0.005–2.00 | 0.001 | 0 to -2000 mV 1 kΩ | ±5 to ±15 VDC 10 mA | 3626010 |
| CL4.2DW-M12 | 0.005–5.00 | 0.001 | | | 3626011 |
| CL4.2N-M12 | 0.05–20.00 | 0.01 | | | 3626012 |
| CL4.2L-M12 | 0.5–200.00 | 0.1 | | | 3626013 |
| CL4.2H-An-M12 | 0.005–2.00 | 0.001 | Modbus RTU | 9 to 30 VDC approx. 20–56 mA | 3626030 |
| CL4.2N-An-M12 | 0.05–20.00 | 0.01 | | | 3626031 |
| CL4.2L-An-M12 | 0.5–200.00 | 0.1 | | | 3626032 |
| CL4.2H-M0c | 0.005–2.00 | 0.001 | | | 3326225 |
| CL4.2N-M0c | 0.05–20.00 | 0.01 | | | 3326226 |
| CL4.2L-M0c | 0.5–200.00 | 0.1 | | | 3326227 |

Ordering data:

| Type: | Measuring range: ppm | Resolution: ppm | Output signal: | Power supply: | Item number: |
|-----------------|-------------------------|--------------------|----------------|------------------------------------|--------------|
| CL4.2MA0,5 | 0.01 – 0.50 | 0.01 | 4–20 mA | 12–30 VDC $R_L = 50–900 \Omega$ | 3326240 |
| CL4.2MA2 | 0.01 – 2.00 | 0.01 | | | 3326241 |
| CL4.2MA5 | 0.01 – 5.00 | 0.01 | | | 3326242 |
| CL4.2MA10 | 0.01 – 10.00 | 0.01 | | | 3326243 |
| CL4.2MA20 | 0.01 – 20.00 | 0.01 | | | 3326244 |
| CL4.2MA-100 | 0.1 – 100 | 0.1 | | | 3326245 |
| CL4.2MA-200 | 0.1 – 200 | 0.1 | | 3326246 | |
| CL4.2MA0,5-M12 | 0.01 – 0.50 | 0.01 | 4–20 mA | 12–30 VDC $R_L = 50–900 \Omega$ | 3326250 |
| CL4.2MA2-M12 | 0.01 – 2.00 | 0.01 | | | 3326251 |
| CL4.2MA5-M12 | 0.01 – 5.00 | 0.01 | | | 3326252 |
| CL4.2MA10-M12 | 0.01 – 10.00 | 0.01 | | | 3326253 |
| CL4.2MA20-M12 | 0.01 – 20.00 | 0.01 | | | 3326254 |
| CL4.2MA-100-M12 | 0.1 – 100 | 0.1 | | | 3326255 |
| CL4.2MA-200-M12 | 0.1 – 200 | 0.1 | | 3326256 | |

Additional technical data:

| Type: | Slope: | Connection: | Special characteristics: | | |
|-----------------|--------------|------------------------|---|------------------------|--|
| CL4.2H-M12 | -1000 mV/ppm | 5-pin M12 screwed plug | Connection only to a controller with galvanically separated power supply. | | |
| CL4.2DW-M12 | -300 mV/ppm | | | | |
| CL4.2N-M12 | -100 mV/ppm | | | | |
| CL4.2L-M12 | -10 mV/ppm | | | | |
| CL4.2H-An-M12 | -1000 mV/ppm | | | | |
| CL4.2N-An-M12 | -100 mV/ppm | | | | |
| CL4.2L-An-M12 | -10 mV/ppm | | | | |
| CL4.2H-M0c | Modbus RTU | 2-pole terminal | Connection only to a controller with galvanically separated power supply. | | |
| CL4.2N-M0c | | | | | |
| CL4.2L-M0c | | | | | |
| CL4.2MA0,5 | 32.0 mA/ppm | | | 5-pin M12 screwed plug | |
| CL4.2MA2 | 8.0 mA/ppm | | | | |
| CL4.2MA5 | 3.20 mA/ppm | | | | |
| CL4.2MA10 | 1.6 mA/ppm | | | | |
| CL4.2MA20 | 0.8 mA/ppm | | | | |
| CL4.2MA-100 | 0.16 mA/ppm | | | | |
| CL4.2MA-200 | 0.08 mA/ppm | | | | |
| CL4.2MA0,5-M12 | 32.0 mA/ppm | 5-pin M12 screwed plug | | | |
| CL4.2MA2-M12 | 8.0 mA/ppm | | | | |
| CL4.2MA5-M12 | 3.20 mA/ppm | | | | |
| CL4.2MA10-M12 | 1.6 mA/ppm | | | | |
| CL4.2MA20-M12 | 0.8 mA/ppm | | | | |
| CL4.2MA-100-M12 | 0.16 mA/ppm | | | | |
| CL4.2MA-200-M12 | 0.08 mA/ppm | | | | |

Spare parts:

| Spare parts: | for sensor type: | Item number: |
|---------------------------|------------------------|--------------|
| Membrane cap M20.2 | CL4.2 all types | 9026001 |
| Electrolyte ECL1 | CL4.2 all types | 9026050 |

Accessories:

| Type: | for sensor type: | Item number: |
|---|---|--------------|
| Sensor simulator pH, Redox, Cl | all sensors with mV signal | 21131100 |
| Sensor simulator SIM11.1n | 0 mV, -100 mV, -1000mV | 9026205 |
| Sensor simulator 4 – 20 mA, current sensor | all sensors with mA signal | 90249000 |
| mV Simulator and mA Tester | all sensors with mV signal or mA signal | 21131105 |
| Photometer for calibration | chlorine, total chlorine, isocyanuric, pH | 90231000 |

