

## 1.1.1 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(OCl)<sub>2</sub> (calcium hypochlorite), Cl<sub>2</sub> (chlorine gas), chlorine generated by membrane-electrolysis,
- Calibration: at the controller, via analytical chlorine determination by DPD-1 method,
- Interferences: ClO<sub>2</sub> is being registered with factor 9 of its measured value; O<sub>3</sub> is registered; with membrane-less chlorine electrolysis interferences may Occur,
- pH range: 6 ... 8,
- Pressure range: 0 ... 1 bar, no pressure surges or fluctuations,
- Temperature range: 5 ... 45 °C ,
- Integrated automatic temperature compensation
- Response time: T<sub>90</sub> ca. 30 seconds,
- Flow rate: approx. 30 l/h, low flow-dependence,
- Shaft length: standard 175 mm, mA-Version 220 mm,
- Connection: standard 4-pole plug, for mA-version 2-pole terminal or M12 female,
- Material: PVC-U and semipermeable membrane,

### Areas of application:

- Fresh water free of surfactants and with constant pH

### Scope of supply:

- **CL4.2:** sensor, membrane cap, electrolyte

### Ordering data:

Type: Chlorine sensor CL4.2	Measuring range: ppm	Resolution: ppm	Output signal:	Power supply:	Item number:
CL4.2H	0.005 ... 2.000	0.001	0 ... 2000 mV 1 kΩ	±5 ... ± 15 V DC 10 mA	3326210
CL4.2DW	0.005 ... 5.00	0.001			3326211
CL4.2N	0.05 ... 20.00	0.01			3326212
CL4.2L	0.5 ... 200.0	0.1			3326033
CL4.2H-An	0.005 ... 2.000	0.001			3326215
CL4.2N-An	0.05 ... 20.00	0.01			3326216
CL4.2L-An	0.5 ... 200.0	0.1	9 ... 30 V DC approx. 20 ... 56 mA	3326217	
CL4.2H-M0c	0.005 ... 2.000	0.001	Modbus RTU	3326225	
CL4.2N-M0c	0.05 ... 20.00	0.01		3326226	
CL4.2L-M0c	0.5 ... 200.0	0.1		3326227	

CL4.2MA0,5	0.01 ... 0.50	0.01	4 ... 20 mA	12...30 VDC Ri: 50 ... 900 Ω	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

#### CL4.2 with M12 male

Type: CL4.2 with M12 female	Measuring range: ppm	Resolution: ppm	Output signal:	Power supply:	Item number:
CL4.2MA0,5-M12	0.01 ... 0.50	0.01	4 ... 20 mA	12...30 VDC Ri: 50 ... 900 Ω	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: Chlorine sensor CL4.2	Slope:	Connection:	Special characteristics:
CL4.2H	-1000 mV/ppm	4-pole plug	Connection only to a controller with galvanically separated power supply.
CL4.2DW	-300 mV/ppm		
CL4.2N	-100 mV/ppm		
CL4.2L	-10 mV/ppm		
CL4.2H-An	-1000 mV/ppm		
CL4.2N-An	-100 mV/ppm		
CL4.2L-An	-10 mV/ppm		
CL4.2H-M0c	Modbus RTU	M12 male	Connection only to a controller with galvanically separated power supply.
CL4.2N-M0c			
CL4.2L-M0c			
CL4.2MA0,5	32.0 mA/ppm	2-pole terminal	
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	M12 male	
CL4.2MA2-M12	8.0 mA/ppm		
CL4.2MA5-M12	3.20 mA/ppm		