
	<h1>CD4.2</h1>
indicator	Chlorine dioxide
Application	Swimming pool water, drinking water, service water, process water The water must not contain any surfactants (tensides)!
appropriate chlorine dioxide production methods	e. g. – Acid/chlorite-method – Chlorine/chlorite-method
Measuring system	Membrane covered, amperometric 2-electrode system with electronic inside
Electronic	<p>Analog version:</p> <ul style="list-style-type: none"> - voltage output - not galvanically isolated electronics - analog internal data processing - output signal: analog (analog-out/analog) <p>Digital version:</p> <ul style="list-style-type: none"> - electronic is completely galvanically isolated - digital internal data processing - output signal: analog (analog-out/digital) or digital (digital-out/digital) <p>mA-version:</p> <ul style="list-style-type: none"> - current output analog - not galvanically isolated electronics - output signal: analog (analog-out/analog)
Information about the measuring range of sensors with 4-20 mA	<p>Slope of a sensor can vary production-related or application-related between 65% and 150% of the nominal slope</p> <p>-> Recommendation to determine the suitable measuring range or the suitable sensor: Concentration to be measured x factor 1.5 = measuring range of the sensor</p> <p>Example: Concentration to be measured 1.6 ppm x 1.5 = 2.4 -> recommended sensor with a measuring range of 5 ppm</p>
Slope drift At repeatability conditions (25 °C, pH 7,2 in drinking water)	approx. <-1% per month
Working temperature	Measuring water temperature: 0 ... +45 °C (no ice crystals in measuring water)
	Ambient temperature: 0 ... +55 °C
Temperature compensation	Automatically, by an integrated temperature sensor Sudden temperature changes must be avoided
Max. allowed working pressure	Operation without retaining ring: 0.5 bar, no pressure impulses and/or vibrations
	Operation with retaining ring: 1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 15-30L/h in FLC, small flow rate dependence is given

Technical Data

1. CD4.2 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is necessary as the sensor electronic is not equipped with a galvanical isolation.


	Measuring range in ppm	resolution in ppm	Output Output resistance	Nominal slope in mV/ppm	Voltage supply	Connection
CD4.2N	0.05...20.00	0.01	0...-2000 mV 1 kΩ	-100	±5 - ±15 VDC 10 mA	4-pole screw connector
CD4.2H	0.005...2.000	0.001		-1000		

(Subject to technical changes!)

2. CD4.2 (analog output, digital internal signal processing)

analog-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.


	Measuring range in ppm	resolution in ppm	Output Output resistance	Nominal slope in mV/ppm	Power supply	Connection
CD4.2H-An	0.005...2.000	0.001	analog 0...-2 V (max. -2.5 V)	-1000	9-30 VDC approx. 56-20 mA	4-pole screw connector
CD4.2N-An	0.05...20.00	0.01	1 kΩ	-100		
CD4.2H-Ap	0.005...2.000	0.001	analog 0...+2 V (max. +2.5 V)	+1000		
CD4.2N-Ap	0.05...20.00	0.01	1 kΩ	+100		

(Subject to technical changes!)

3. CD4.2 (digital output, digital internal signal processing)

digital-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

	Measuring range in ppm	resolution in ppm	Output Output resistance	Power supply	Connection
CD4.2H-M0c	0.005... 2.000	0.001	Modbus RTU	9-30 VDC	5-pole M12 plug-on flange
CD4.2N-M0c	0.05... 20.00	0.01	There are no terminating resistors in the sensor.	approx. 56-20 mA	


(Subject to technical changes!)

4. CD4.2 4-20 mA (analog output, analog internal signal processing)

analog-out / analog


A potential-free electrical connection is necessary as the sensor electronic is not equipped with a galvanical isolation.

4.1 Electrical connection: 2 pole terminal clamp

	Measuring range in ppm	resolution in ppm	Output Output resistance	Nominal slope in mA/ppm	Voltage supply	Connection
CD4.2MA0.5	0.005...0.500	0.001	4...20 mA uncalibrated	32.0	12...30 VDC $R_L 50\Omega \dots R_L 900\Omega$	2-pole terminal (2 x 1 mm ²) Recommended: Round cable ∅ 4 mm 2 x 0.34 mm ²
CD4.2MA2	0.005...2.000	0.001		8.0		
CD4.2MA5	0.05...5.00	0.01		3.2		
CD4.2MA10	0.05...10.00	0.01		1.6		
CD4.2MA20	0.05...20.00	0.01		0.8		

(Subject to technical changes!)

4.2 Electrical connection: 5 pole M12 plug-on flange

	Measuring range in ppm	resolution in ppm	Output Output resistance	Nominal slope in mA/ppm	Voltage supply	Connection
CD4.2MA0.5-M12	0.005...0.500	0.001	4...20 mA uncalibrated	32.0	12...30 VDC R_L 50 Ω ... R_L 900 Ω	5-pole M12 plug-on flange Function of wires: PIN2: +U PIN3: -U
CD4.2MA2-M12	0.005...2.000	0.001		8.0		
CD4.2MA5-M12	0.05...5.00	0.01		3.2		
CD4.2MA10-M12	0.05...10.00	0.01		1.6		
CD4.2MA20-M12	0.05...20.00	0.01		0.8		

(Subject to technical changes!)

Spare Parts

Type	Membrane cap	Electrolyte	emery	O-ring
For all CD4.2	M20.2	ECD4 • ECD7/W, 100 ml	S1	14 x 1.8 NBR

(Subject to technical changes!)