	<h1>TARAbase 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"> <li>- voltage output</li> <li>- not galvanically isolated electronics</li> <li>- analog internal data processing</li> <li>- output signal: analog (analog-out/analog)</li> </ul> <p>Digital version:</p> <ul style="list-style-type: none"> <li>- electronic is completely galvanically isolated</li> <li>- digital internal data processing</li> <li>- output signal: analog (analog-out/digital) or digital (digital-out/digital)</li> </ul> <p>mA-version:</p> <ul style="list-style-type: none"> <li>- current output analog</li> <li>- not galvanically isolated electronics</li> <li>- output signal: analog (analog-out/analog)</li> </ul>
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>-&gt; 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 -&gt; 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 TARAflow 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	resolution	Output Output resistance	Power supply	Connection
	in ppm	in ppm			
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	resolution	Output Output resistance	Nominal slope	Voltage supply	Connection
	in ppm	in ppm		in mA/ppm		
CD4.2MA0.5	0.005...0.500	0.001	4...20 mA uncalibrated	32.0	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pole terminal (2 x 1 mm <sup>2</sup> )  Recommended: Round cable ∅ 4 mm 2 x 0.34 mm <sup>2</sup>
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	resolution	Output Output resistance	Nominal slope	Voltage supply	Connection
	in ppm	in ppm		in mA/ppm		
CD4.2MA0.5-M12	0.005...0.500	0.001	4...20 mA uncalibrated	32.0	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	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 Art. no. 11011.1	ECD4 • ECD7/W, 100 ml Art. no. 11030	S1 Art. no. 11908	14 x 1.8 NBR Art. no. 11806

(Subject to technical changes!)