

Technical data

DIOX-A 1000	
Capacity	1000 g ClO ₂ /h
Weight, empty	190 kg without / 240 kg with booster pump
Need for 1000 g ClO ₂	
▪ HCl (30 – 38 %)	6.6 l
▪ NaClO ₂ solution (24.5 %)	6.6 l
▪ Operating water	Process water + aspiration injector water, see separate table
Product concentration	1.5 – 3.0 g/l (adjustable in 0.1 g/l steps)
Electrical supply without booster pump	1/N/PE AC 230 V, 50 Hz
Electrical supply with booster pump	3/N/PE AC 400/230 V, 50 Hz
Total power consumption	0.3 kVA without / 4,1 kVA with booster pump
Power supply fusing	1 x 20 A without / 3 x 20 A with booster pump
Max. cable cross section single- or multi-wire	16 mm ²
Max. cable cross section with cable end sleeves	10 mm ²
Enclosure rating total generator	IP 54
Ambient temperature during operation	10 - 35 °C
Humidity	5 - 95 %
Temperature operating water	10 - 30 °C
Storage and transport temperature	5 - 55 °C
Connections	
Operating water	PVC DN 25 Chlorine dioxide vent gas PVC DN 15
Product pipe	PVC DN 25 Feed pipe HCl PVC DN 10
Vent gas pipe	PVC DN 25 Feed pipe NaClO ₂ PVC DN 15
Dimensions	
W x H x D	1350 x 1880 x 790 mm
Space for operation and maintenance (min.)	50 cm beside, 60 cm in front, 5 cm behind the unit
Storage tank 500 l, length x width, height incl. acc.	750 mm, 690 mm, 19740 mm
Storage tank 900 l, diameter, height without acc.	1025 mm, 1715 mm
Storage tank 2750 l, diameter, height without acc.	1767 mm, 1820 mm
Storage tank 4600 l, diameter, height without acc.	2270 mm, 1870 mm

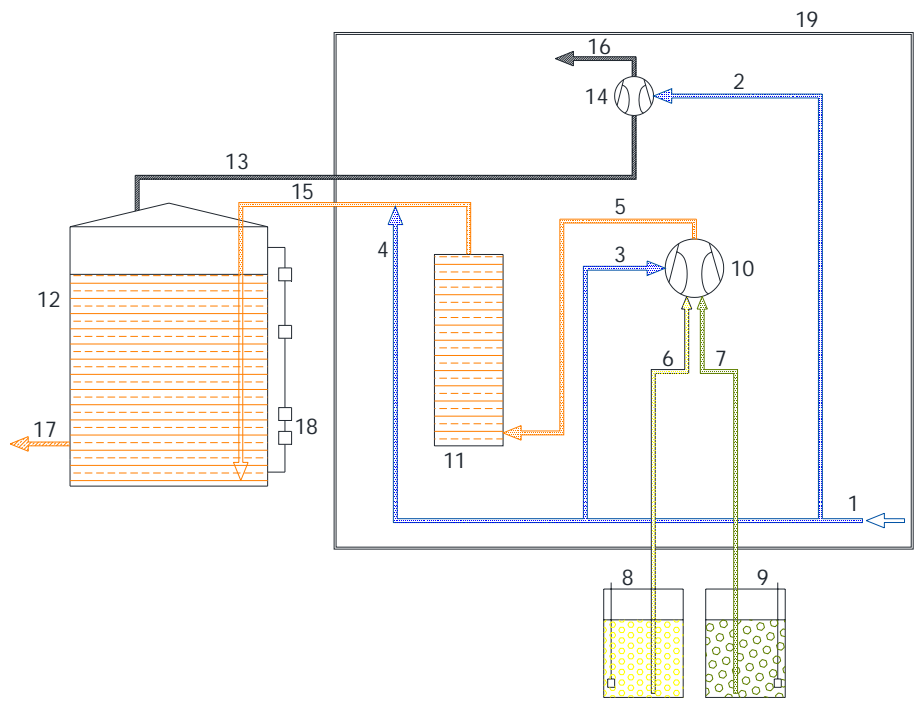
Capacity	Booster pump	Back pressure, max.	permitted pre-pressure	Part No.	Name	Injector water
1000 g/h ClO ₂	no	1.0 bar	5 – 16 bar	W3T320339	1000-N10	2900 l/h
		2.0 bar	10.5 – 16 bar	W3T320340	1000-N20	2100 l/h
		3.0 bar	10.5 – 16 bar	W3T320341	1000-N30	3100 l/h
		4.0 bar	10.5 – 16 bar	W3T320342	1000-N40	4000 l/h
	yes	1.0 bar	0 – 4 bar	W3T320344	1000-D10	2900 l/h
		2.0 bar	0 – 4 bar	W3T320345	1000-D20	2100 l/h
		3.0 bar	1 – 4 bar	W3T320346	1000-D30	3100 l/h
		4.0 bar	2.5 – 4 bar	W3T320347	1000-D40	4000 l/h

ClO ₂ Conc. g/l	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.6	1.5
Process water l/1000 g	340	345	358	370	385	400	417	435	455	476	500	526	555	588	625	667

*1 Drinking water quality according WHO Guidelines for drinking water quality, third edition, temperature 10 - 30 °C, connection according DIN 1988 T4 respectively DIN EN 1717

Installation recommendations	
Storage tank	<p>Usable volume: min. 500 l. Material of tank and pipes: resistant against chlorine dioxide (3.0 g/l at 35 °C) Installation according to DIN EN 13121-4 in collecting basin Volume depends on country specific regulations. Safety equipment to be installed (included in accessories kit W3T232071):</p> <ul style="list-style-type: none"> ■ Temperature sensor W3T242724 ■ Absorber with air intake valve and vacuum switch (overflow ClO₂ tank, air intake ClO₂ tank, aspiration monitoring) W3T251942 ■ Level sensor W3T240930 ■ Flow switch (monitoring overflow) W3T163928 <p>For maintenance and diagnosis a 3-way ball valve W3T264239 must be built into the feed pipe (part of the accessories kit).</p> <p>The annual check of the storage tank by a certified monitoring centre falls to the operator.</p>
Recommended accessories	Chlorine gas leak detector with one flash / horn detector for each generator
Interfaces / connections	RS 485: The Siemens SIMATIC S7-1200 control is prepared for data exchange via PROFIBUS DP to a superior Profibus DP net.

Process design



1. Operating water
2. Operating water gaseous phase aspiration
3. Operating water mixing injector
4. Dilution water
5. Chlorine dioxide, concentrated
6. Sodium chlorite solution
7. Hydrochloric acid solution
8. Storage tank sodium chlorite
9. Storage tank hydrochloric acid
10. Mixing injector
11. Reactor
12. Product tank
13. Chlorine dioxide gaseous phase
14. Gaseous phase aspirating injector
15. Chlorine dioxide solution, post-diluted
16. Gaseous phase discharge
17. to metering unit
18. Level switch
19. DIOX-A 1000 unit

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