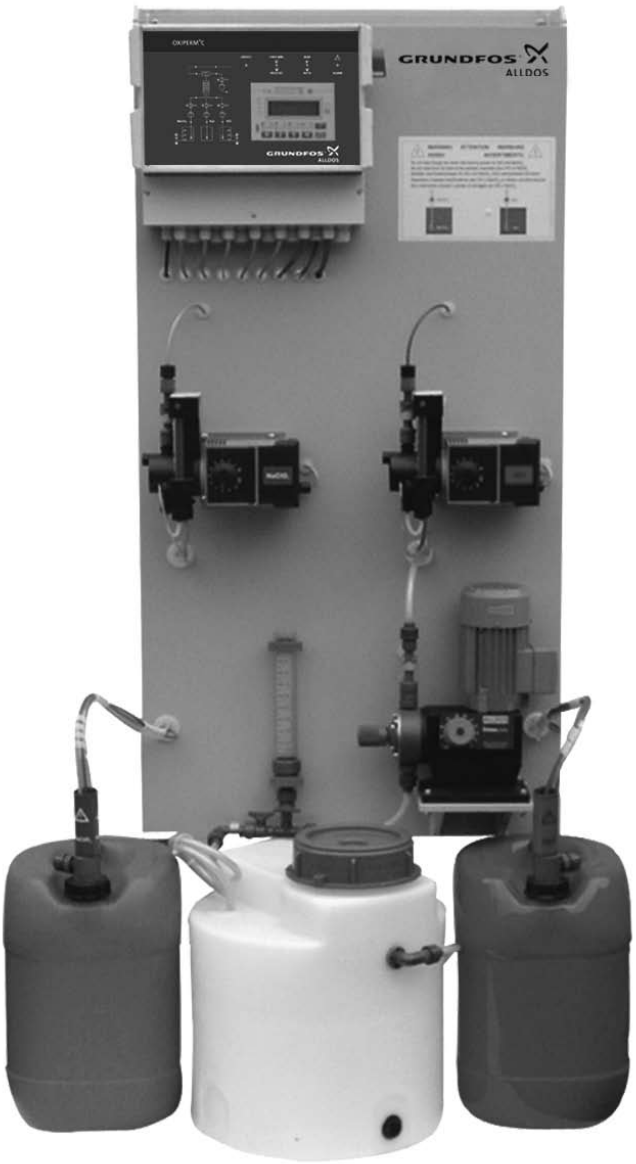
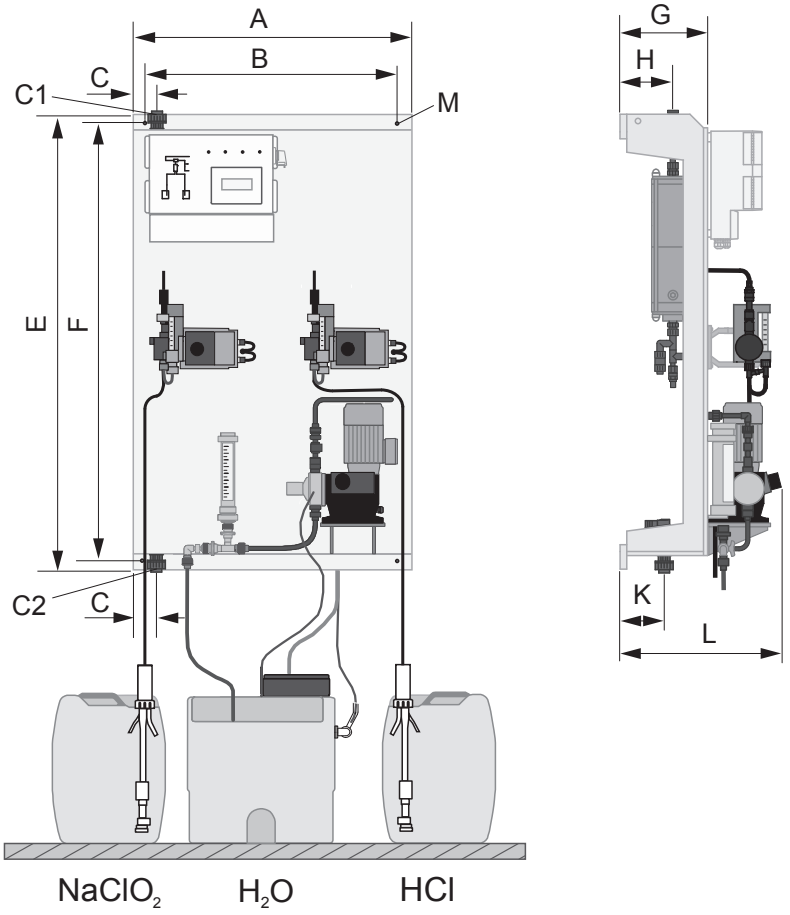
Oxiperm® 164 C for 150 to 2500 g/h

Preparation of chlorine dioxide from concentrated solutions



Measurements



Measurements in mm

A	B	C	E	F	G	H	K	L	M	Connections C1 and C2 Option: NPT 3/4"	Type
820	760	70	1 340	1 300	258	156	130	475	ø 11	DN 20	**164-150C**
820	760	70	1 340	1 300	258	156	130	475	ø 11	DN 20	**164-450C**
820	760	70	1 340	1 300	258	156	130	475	ø 11	DN 20	**164-750C**
850	790	70	1 460	1 420	278	145	130	500	ø 11	DN 20	**164-1300C**
850	790	70	1 460	1 420	278	145	130	520	ø 11	DN 20	**164-2500C**

Types / Technical data

System types

ClO_2 preparation capacity [g/h]	p_{max} [bar]		Consumption of components [l/h]			Consumption of bypass water [l/h] (input pressure < p_{max})			Weight [kg]	Type
						continuous operation	batch operation *)			
	50 Hz	60 Hz	HCl	$NaClO_2$	dil. H_2O		0.5 - 2 g/l	2 - 3.3 g/l		
150	9	6	1.0		5.5	420	70	70 - 39	58	**164-150C**
450	9	6	2.8		16	420	200	200 - 116	62	**164-450C**
750	9	6	4.8		27	900	340	340 - 193	68	**164-750C**
1 300	9	6	8.2		46	900	590	590 - 336	90	**164-1300C**
2 500	7	6	16.0		90	900	1 150	1 150 - 650	110	**164-2500C**

*) In batch operation the concentration is freely adjustable between 0.5 and 3.3 g/l.
Between 2 and 3.3 g/l the system operates at full capacity. From 2 down to 0.5 g/l the system reduces the capacity continuously, because the dosing quantity of the chemical components is regulated if the bypass water quantity is set to constant.

Technical data

Adjustment of the preparation capacity	Manual by menu-controlled operator prompting, automatic by input signals
Protection level	• IP 65 Electronics, dosing pumps, solenoid valve (option), flowmeter • IP 44 Bypass pump (option) • P 67 Dosing controller
Admissible concentration of chemicals	• HCl 33 percent by weight • $NaClO_2$ 24.5 percent by weight
Admissible • **ambient temperature** • **operation water temperature** • **chemicals temperature**	 5 to 40 °C 2 to 30 °C 2 to 30 °C
Admissible relative air humidity	Max. 80 % at 40 °C, not condensing
Connection dilution water inlet	PVC pipe DN 20 / option: 3/4" NPT male thread
Connection ClO_2 solution	PVC pipe DN 20 / option: 3/4" NPT male thread
Safety equipment	• Parallel monitoring of capacity via dosing controller and internal Hall sensor signal for all dosing pumps
Material	Supporting rack PP Fastening Stainless steel Reactor PVC grey, lacquered stainless steel Post mixer PVC grey Pipes PVC grey Gaskets FPM/PTFE

Electrical and electronic data

- Mains voltage 230 V / 50 Hz or 115 V / 60 Hz
- Control: PLC
- 4-line plain text display
- Menu-controlled operator prompting
- Flow-scheme with LED display showing mode and error signal

Power consumption	• up to 750 g/h approx. 550 VA • 1 300 g/h approx. 900 VA • 2 500 g/h approx. 1 100 VA
Analog inputs	0(4) - 20 mA input or free configuration, charge 50 Ohm
Digital inputs	• Contact water meter, 1 to 45 pulses/sec. for control ***)** • MIN contact for main water • Remote On/Off • Error gas warning unit • Preparation tank ClO_2: overflow, MAX, MIN, dry run
Analog outputs	0(4) - 20 mA input or free configuration, max. charge 500 Ohm
Potential-free outputs	• Error messages • Pre-alert: chemicals empty • Dry run ClO_2 solution tank (batch systems) • Automatic/manual operation, max. charge 250 V, 6 A, max. 550 VA

*) **Note:** The water meter has to be designed in a way that the number of input pulses for the control is between 1 - 45 pulses/sec.

Versions

Check valve (reactor)

- System backpressure less than 3 bars
- System backpressure more than 3 bars

System completely for wall mounting

Options

- With solenoid valve, with / without exhaust system
- For batch operation, with / without exhaust system
- With internal bypass pump, with / without exhaust system
- With external centrifugal pump (provided by the customer), with / without exhaust system

Bus system

- Modbus (RS 232 / RS 485)
- Profibus DP module (on request)
- Ethernet TCP/IP module (on request)

Operating languages

Standard: German

Other languages can be selected with the software:

- English, French, Spanish, Italian

Accessories

Suction line systems

- 2 suction lines with 2 tank covers
- With empty signal and pre-alert

Tank size	ø tank opening	Suction line
30 l	45-46 mm	1.3 m, 2.5 m, 5 m
60 l	45-46 / 57-58.5 mm	1.3 m, 2.5 m, 5 m
200 l	56 mm	1.3 m, 2.5 m, 5 m

Water extraction

Material	Connection system	Connection water supply	Order Number
PVC	DN 20	G 1“	521-164.2

Injection unit

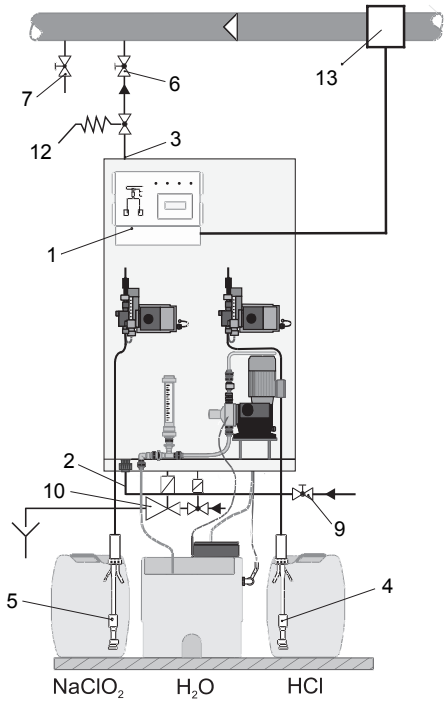
Material	Connection system	Connection injection unit	Order Number
PVC	DN 20	R 1“	522-232

Spare parts sets

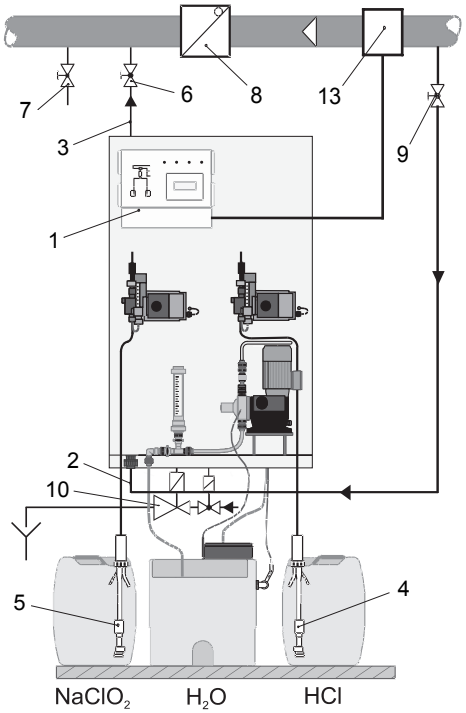
for Oxiperm® Type	System pressure	
	less than 3 bars	more than 3 bars
164-150C	553-740	553-740.1
164-450C	553-741	553-741.1
164-750C	553-742	553-742.1
164-1300C	553-743	553-743.1
164-2500C	553-744	553-744.1

Installation drawings

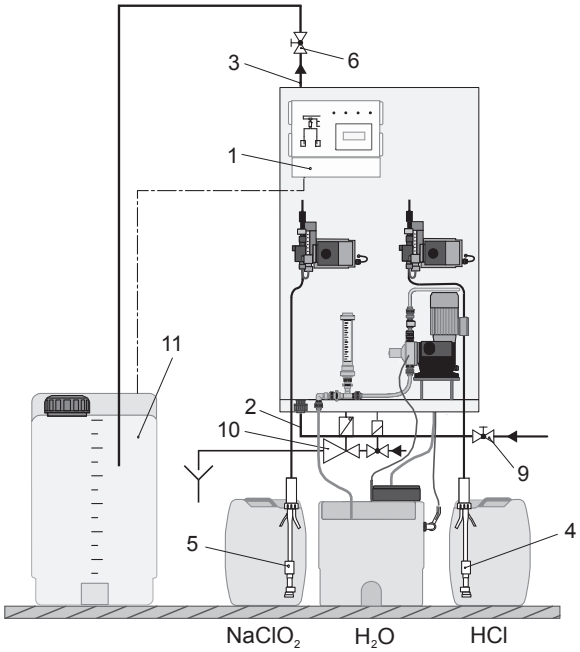
Oxiperm® 164 C
with solenoid valve



Oxiperm® 164 C
with internal bypass pump



Oxiperm® 164 C
batch operation



1 **Oxiperm® 164 C** electronics
2 Connection for bypass water input
3 Connection for the ClO_2 solution line output to the injection unit
4 Suction line for the HCl dosing pump
5 Suction line for $NaClO_2$ dosing pump
6 Shutt-off valve (by customer)
7 Sample extraction (by customer)
8 Check valve (by customer), **for operation with an internal bypass pump**
9 Shut-off valve for bypass water extraction (by customer)
10 Exhaust system for supporting rack (option)
11 Dilution tank with level monitoring (option) **for batch operation**
12 Pressure loading valves (by customer) for system backpressures < 1 bar
13 Inductive flowmeter 4-20 mA or contact water meter for proportional control of the system

Note:
For protection of the drinking water supply, the customer has to provide a pipe disconnector (to DVGW, W624).

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Subject to change

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