

# Oxiperm<sup>®</sup> Pro OCD-162

**Reliable preparation and dosing of chlorine dioxide from diluted solutions for water disinfection**



|   |           |
|---|-----------|
| <b>1. Product introduction</b>                          | <b>3</b>  |
| Applications  | 3         |
| No chance for pathogens                                 | 3         |
| Effectiveness diagram                                   | 3         |
| Product benefits  | 4         |
| Conditions for installation                             | 4         |
| Components overview                                     | 5         |
| <b>2. Identification</b>                                | <b>7</b>  |
| Type key  | 7         |
| <b>3. Installation schemes</b>                          | <b>8</b>  |
| Preparation, one dosing point                           | 8         |
| Preparation, one dosing point, bypass                   | 9         |
| Preparation, two dosing points                          | 10        |
| Preparation, two dosing points, bypass                  | 11        |
| Preparation, several dosing points with batch tank      | 12        |
| <b>4. Construction</b>                                  | <b>13</b> |
| Oxiperm Pro OCD-162-5 and OCD-162-10                    | 13        |
| Oxiperm Pro OCD-162-30 and OCD-162-60                   | 14        |
| <b>5. Technical data</b>                                | <b>15</b> |
| Technical data  | 15        |
| Electrical and electronic data                          | 15        |
| <b>6. Dimensions</b>                                    | <b>16</b> |
| Oxiperm Pro OCD-162-5 and OCD-162-10                    | 16        |
| Oxiperm Pro OCD-162-30 and OCD-162-60                   | 17        |
| <b>7. Product range</b>                                 | <b>19</b> |
| Standard: Oxiperm Pro with chlorine dioxide dosing pump | 19        |
| Oxiperm Pro without chlorine dioxide dosing pump        | 20        |
| <b>8. Accessories</b>                                   | <b>21</b> |
| Collecting trays  | 21        |
| Hoses   | 21        |
| Connections   | 21        |
| Extraction device                                       | 22        |
| Dirt trap   | 22        |
| Flow meters   | 22        |
| Contact water meter                                     | 23        |
| Injection unit  | 23        |
| Bypass mixing module                                    | 23        |
| Measuring module  | 24        |
| Measuring cells   | 24        |
| DIT-L photometer  | 25        |
| Tapping sleeves   | 25        |
| External batch tank                                     | 25        |
| CIU-271 Communication Interface Unit                    | 26        |
| Conex DIA-G gas warning unit                            | 26        |
| Protective equipment                                    | 26        |
| Maintenance kits  | 26        |
| <b>9. Further product documentation</b>                 | <b>27</b> |
| WebCAPS   | 27        |
| WinCAPS   | 28        |

## 1. Product introduction

Oxiper<sup>®</sup> Pro systems produce chlorine dioxide using diluted solutions of sodium chlorite ( $\text{NaClO}_2$  7.5 %) and hydrochloric acid (HCl 9 %). They are available in four capacity levels, producing 5, 10, 30 and 60 g/h of chlorine dioxide respectively. This capacity is sufficient to treat up to 150 m<sup>3</sup> of drinking water per hour at a maximum concentration of 0.4 mg/l  $\text{ClO}_2$ . Chlorine dioxide is produced on demand from diluted solutions using the reliable sodium chlorite/hydrochloric acid, in accordance with the German Drinking Water Directive. The chlorine dioxide solution produced is stored in an integrated or external batch tank and is added to the drinking water pipe as required using the integrated dosing pump or an external dosing pump.

### Applications

Usually, disinfection is the first step of pathogen reduction, in order to continue operating a drinking water installation. An ideal means of ensuring the sterility of drinking water is to use chlorine dioxide as a disinfectant. Chlorine dioxide is highly effective against all types of germs and has a long dwell time in the tubing system, which means it disinfects even without re-dosing. The big advantage of chlorine dioxide over other disinfectants is its effectiveness against biofilms. It destroys the existing biofilm, thus removing the breeding ground for microorganisms, and prevents it from building up again.

Ideal application areas for Oxiper Pro include combating germs and pathogens, such as legionella in building installations, disinfecting cooling water systems, and disinfecting drinking water in water plants or industrial processes.

Chlorine dioxide is often used in the food and beverage industry for disinfection of process water or for CIP and bottle washing because it doesn't change the taste or smell of the treated water.

### Remark

Legislation on the use of disinfection products in water treatment applications is country-specific. Please contact your local Grundfos sales office for further details on the use of our products in your application and area.

### No chance for pathogens

Legionella are rod-shaped bacteria that enter drinking water systems and start to reproduce. Especially in temperatures between 30 °C and 40 °C legionella reproduce quickly. The bacteria can enter the lungs when a person inhales aerosols containing legionella when showering. They can cause a life-threatening form of pneumonia known as legionellosis. The ideal breeding ground for legionella in drinking water systems can be found in biofilm, a slimy layer on the inside of water pipes, where other pathogens also build up and reproduce. Legionella also establish themselves in amoebae, which offer them protection against conventional disinfection methods.

Using Oxiper Pro ensures reliable removal of the biofilm with all pathogens and legionella present in piping and prevents reinfestation. For decontamination, disinfection represents only a part of the accompanying measures, e. g. constructional modifications.

Oxiper Pro OCD-162-5 and -10 systems are designed for small or medium-sized buildings with water flows up to 25 m<sup>3</sup>/h. Oxiper Pro OCD-162-30 and -60 systems are suited for disinfection tasks in waterworks or applications in the food and beverage industry.

### Effectiveness diagram

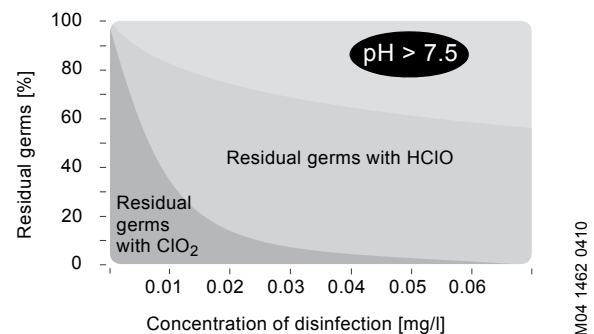


Fig. 1 Effectiveness diagram: hypochlorous acid (HClO) compared with chlorine dioxide ( $\text{ClO}_2$ )

## Product benefits

### Compact system

Oxiperm Pro can also be installed in confined spaces, as operation and maintenance are performed exclusively from the front.

### Low operating costs

This intelligent method for producing chlorine dioxide functions with minimal need for chemicals and thus saves up to 67 % of hydrochloric acid over other systems on the market with comparable capacity. In comparison with thermal disinfection, up to 90 % of the operating costs can be saved.

### Stable product solution

With a chlorine dioxide concentration of 2 g/l (2000 ppm), the product solution can be stored for several days. The low concentration makes the solution safe to handle.

### Integrated measurement value logging device

A chlorine dioxide control unit can be easily retrofitted. The connection for a measuring device for chlorine dioxide as well as pH or Redox (measuring cell) is already in place in the system controller.

### Little installation work

Optional accessories simplify assembly and start-up. In fact, the system can be connected and taken into operation without even interrupting the building's water supply. This represents a decisive cost factor when it comes to decontaminating hospitals or nursing homes.

### Robust design

Oxiperm Pro's robust design ensures high operational reliability and lower maintenance costs.

Furthermore, the control system makes for straightforward and user-friendly operation and opens up a number of application areas for discrete disinfection of drinking water installations.

### Wide field of applications

Besides continuous operation, the optional external batch tank allows the use of Oxiperm Pro for shock disinfection or in cleaning applications, such as CIP.

## Conditions for installation

- No outdoor installation, installation site must be protected against sun and frost, and well-ventilated.
- Protection against unauthorized access.
- The system has to be wall- or floor-mounted vertically, the component containers have to be situated below or next to the Oxiperm Pro.
- Temperature of dilution water 10 to 30 °C.
- Water connection with 3 to 6 bar, floor drain and appropriate mains supply must be provided.

Note: In case of quantity fluctuations in the main water flow, the use of a bypass mixing module (see section 8. *Accessories*, page 21) or the version with digital dosing pump is recommended, in order to optimise the blending and to minimise the risk of corrosion.

Components overview

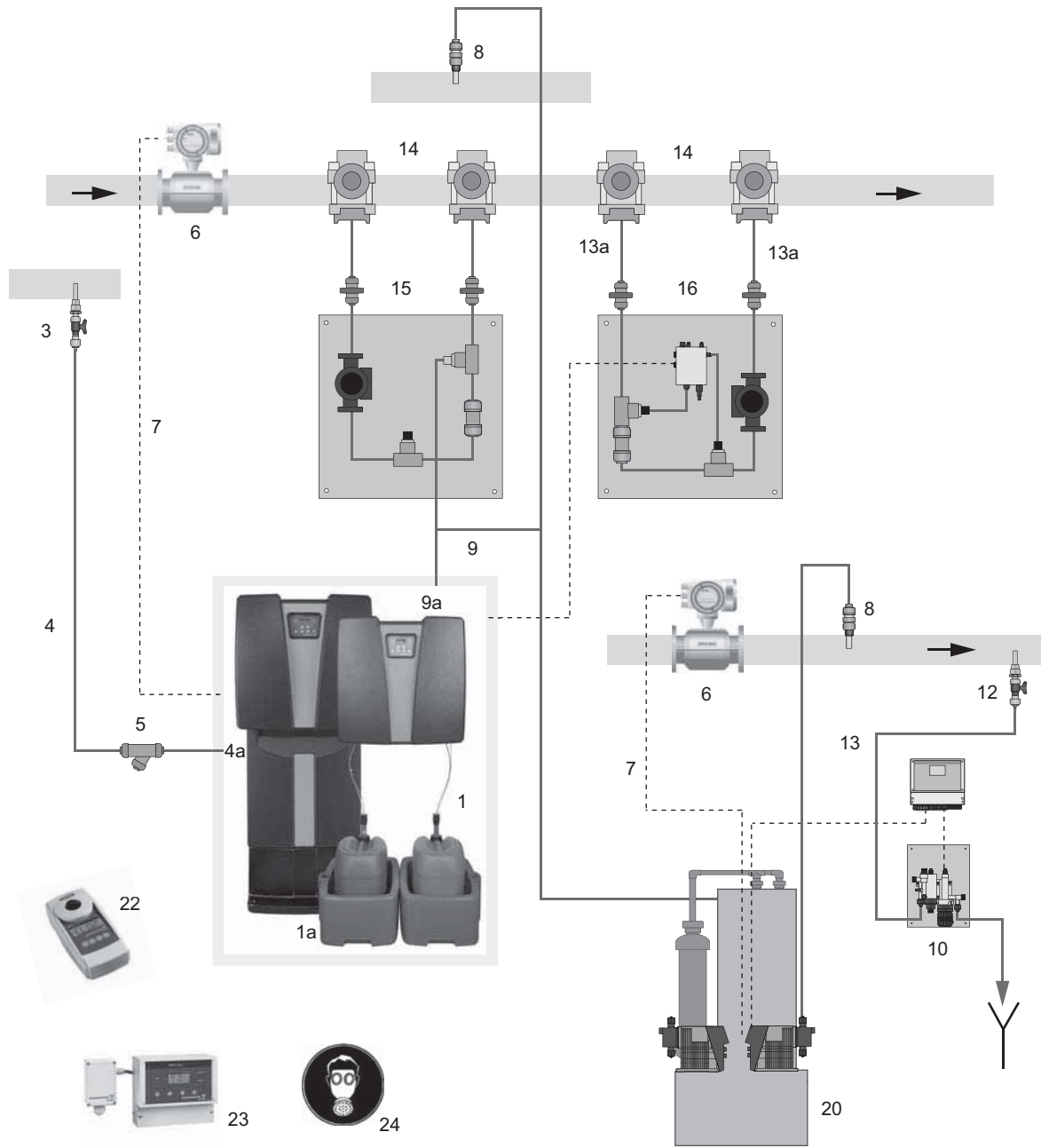


Fig. 2 Components of an installation for chlorine dioxide preparation

TM04 1468 0410

## Checklist of installation components

| No.                                   | Component  | Page  |
|---------------------------------------|--|-------|
| <b>Basic unit</b>                     |  |       |
| 1                                     | Oxiperm Pro chlorine dioxide preparation system  | 13-14 |
| 1a                                    | Collecting tray for chemical container   | 21    |
| <b>Dilution water for Oxiperm Pro</b> |  |       |
| 3                                     | Dilution water extraction device, connection 6/9 mm, (comprised in the bypass module for cold water)                 | 22    |
| 5                                     | Dirt trap for dilution water, connection 6/9 mm  | 22    |
| 4                                     | PE hose 6/9 mm for dilution water connection   | 21    |
| 4a                                    | Dilution water connections for differing measurements  | 21    |
| <b>Flow measurement</b>               |  |       |
| 6                                     | Flow meters or contact water meters  | 22-23 |
| 7                                     | Connection cable for flow meters   | 22    |
| <b>Dosing of chlorine dioxide</b>     |  |       |
| 8                                     | Injection unit for the direct dosing of chlorine dioxide into the water pipe, hose connection PTFE 4/6 mm or 9/12 mm | 23    |
| 15                                    | Bypass modules for pre-mixing with integrated injection unit for hot and cold water, connections DN 20               | 23    |
| 9                                     | PTFE hose 4/6 mm or 9/12 mm for connecting the chlorine dioxide dosing pump with the injection unit                  | 21    |
| 9a                                    | Connections for chlorine dioxide dosing pump with differing measurements   | 21    |
| 14                                    | Tapping sleeves for the connection of extracting or adding devices   | 25    |
| <b>Chlorine dioxide measurement</b>   |  |       |
| 10                                    | Measuring cells for cold water (connection 6/12 mm) or hot water (connection 6/8 mm) with free outlet                | 24    |
| 16                                    | Measuring module for hot water with measuring water recycling (connection DN 20)                                     | 24    |
| 12                                    | Extraction device for dilution water/measuring water (connection 6/12 mm)  | 22    |
| 13                                    | PVC hose 6/12 mm for measuring water extraction device   | 21    |
| 13a                                   | PE hose 6/8 mm for measuring water extraction device   | 21    |
| 22                                    | Compact photometer DIT-L with reagents for check measurement   | 25    |
| 20                                    | External batch tanks for peak demand (50 litres, 100 litres)   | 25    |
| <b>Safety equipment</b>               |  |       |
| 23                                    | Gas warning unit for control of the air in a room  | 26    |
| 24                                    | Personal protective equipment (gloves, apron, goggles), warning signs  | 26    |
| <b>Maintenance</b>                    |  |       |
|                                       | Maintenance kit for Oxiperm Pro  | 26    |

## 2. Identification

### Type key

Example: Oxiperm Pro OCD-162-30-D/G1

Oxiperm Pro    OCD-162

-30

-D

/G

1

#### Max. capacity

|    |        |
|----|--------|
| 5  | 5 g/h  |
| 10 | 10 g/h |
| 30 | 30 g/h |
| 60 | 60 g/h |

#### Chlorine dioxide dosing pump

|   |  |
|---|--|
| D | integrated mechanical dosing pump DMX      |
| P | integrated digital dosing pump DDI *       |
| S | integrated SMART Digital dosing pump DDA * |
| N | without integrated dosing pump             |

#### Supply voltage

|   |                     |
|---|---------------------|
| G | 220-240 V, 50/60 Hz |
| H | 110-120 V, 50/60 Hz |

#### Suction lance

|   |  |
|---|--|
|   | for 30-litre chemical container (length of suction hose 1.3 m)               |
| 1 | for 60-litre chemical container (length of suction hose 3.0 m)               |
| 2 | for 200-litre / 1000-litre chemical container (length of suction hose 6.0 m) |
| 3 | for 55-gallon chemical container (length of suction hose 3.0 m)              |

\* Note: It is recommended to use a digital dosing pump for direct dosing of the product solution.

### 3. Installation schemes

#### Preparation, one dosing point

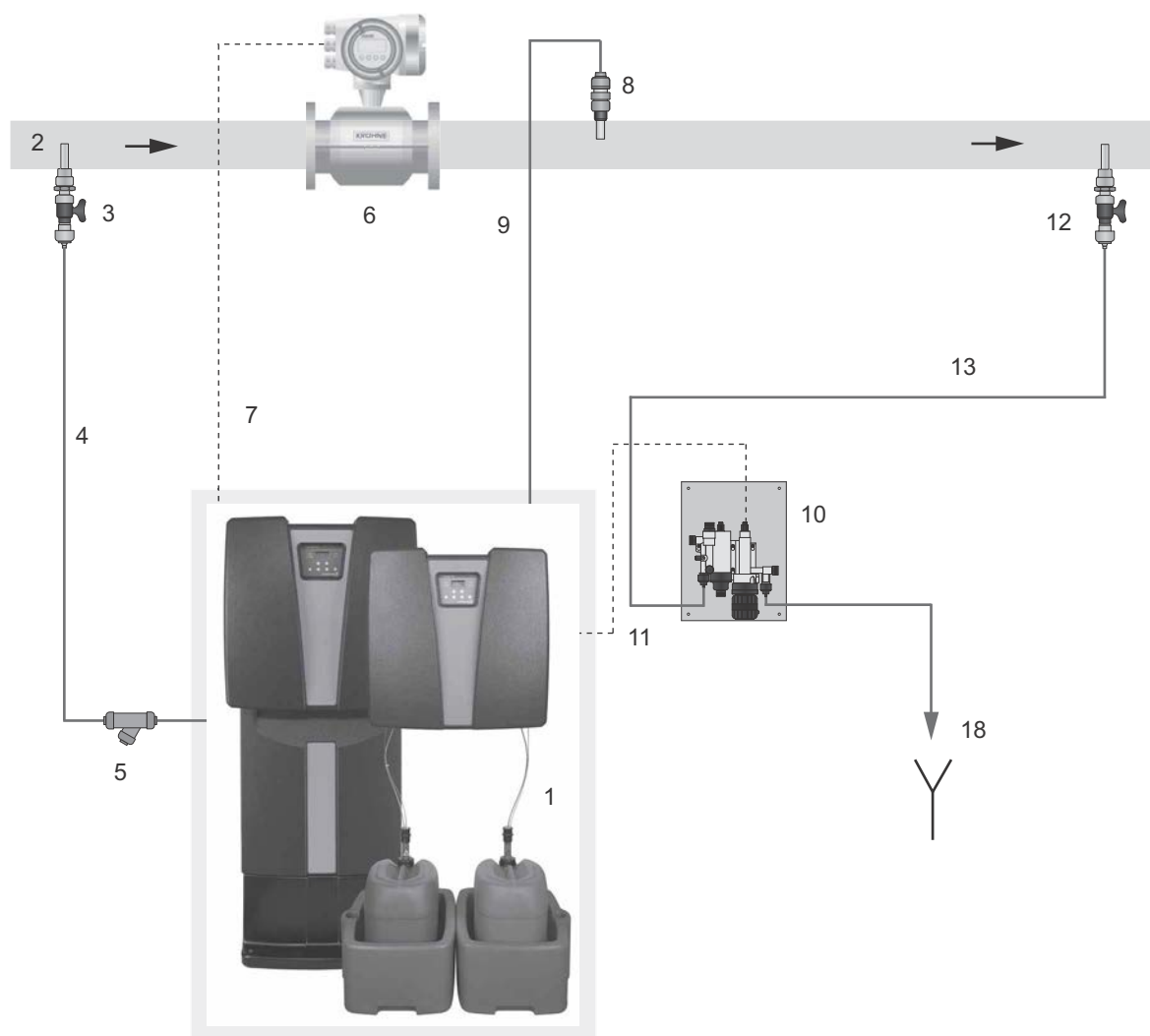


Fig. 3 Oxiperm Pro basic module with optional measuring cell for chlorine dioxide in cold water

#### Legend

|    |   |
|----|---|
| 1  | Oxiperm Pro OCD-162-5, -10, -30 or -60  |
| 2  | Main water pipe   |
| 3  | Dilution water extraction device  |
| 4  | Dilution water pipe   |
| 5  | Dirt trap   |
| 6  | Flow measurement  |
| 7  | Signal line of flow measurement   |
| 8  | Injection unit  |
| 9  | Dosing line   |
| 10 | Chlorine dioxide measuring cell   |
| 11 | Signal line of chlorine dioxide measurement                                   |
| 12 | Measuring water extraction device<br>(minimum distance to injection unit 5 m) |
| 13 | Measuring water pipe  |
| 18 | Drain   |

TM04 1475 0410



### Preparation, one dosing point, bypass

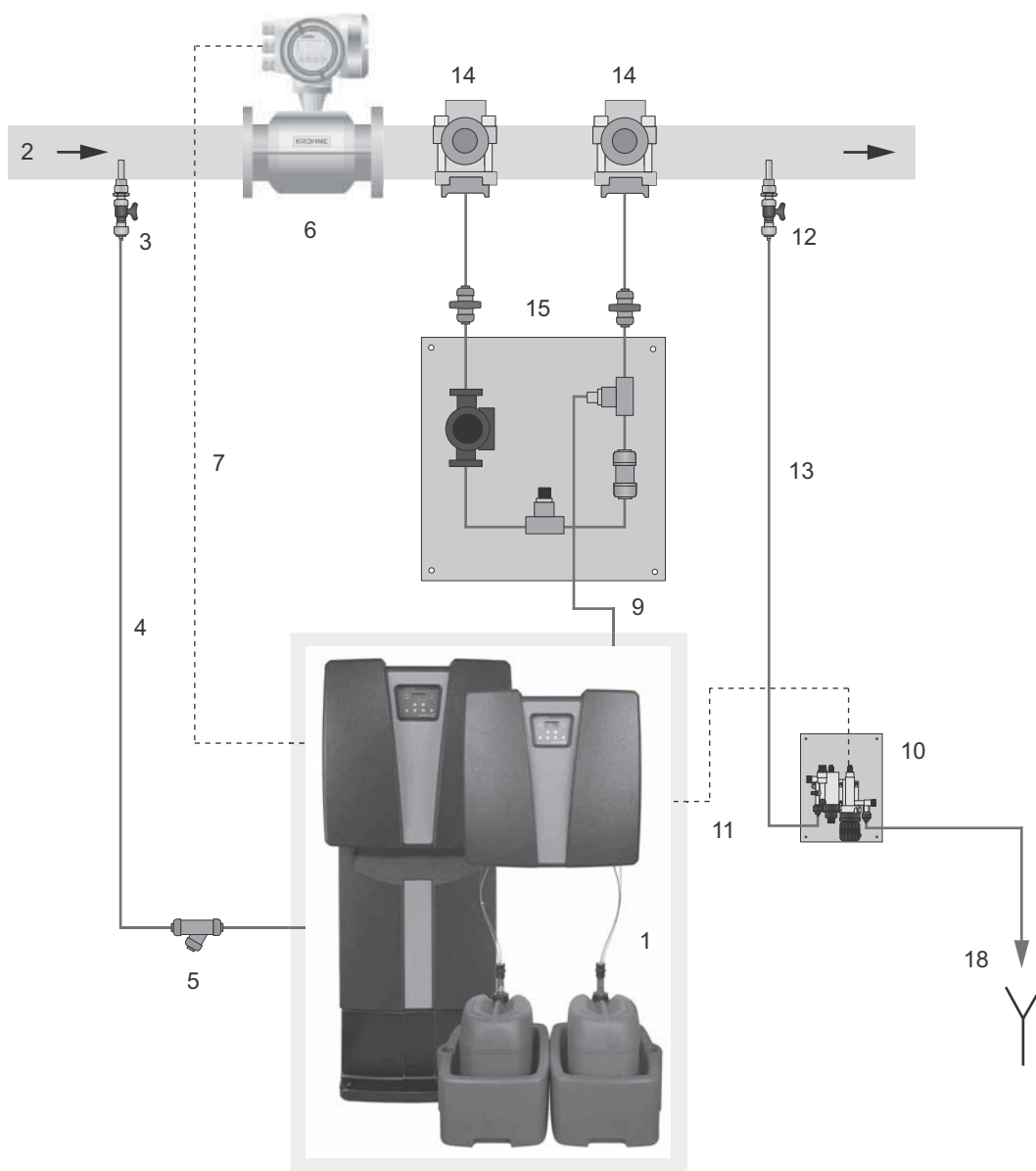


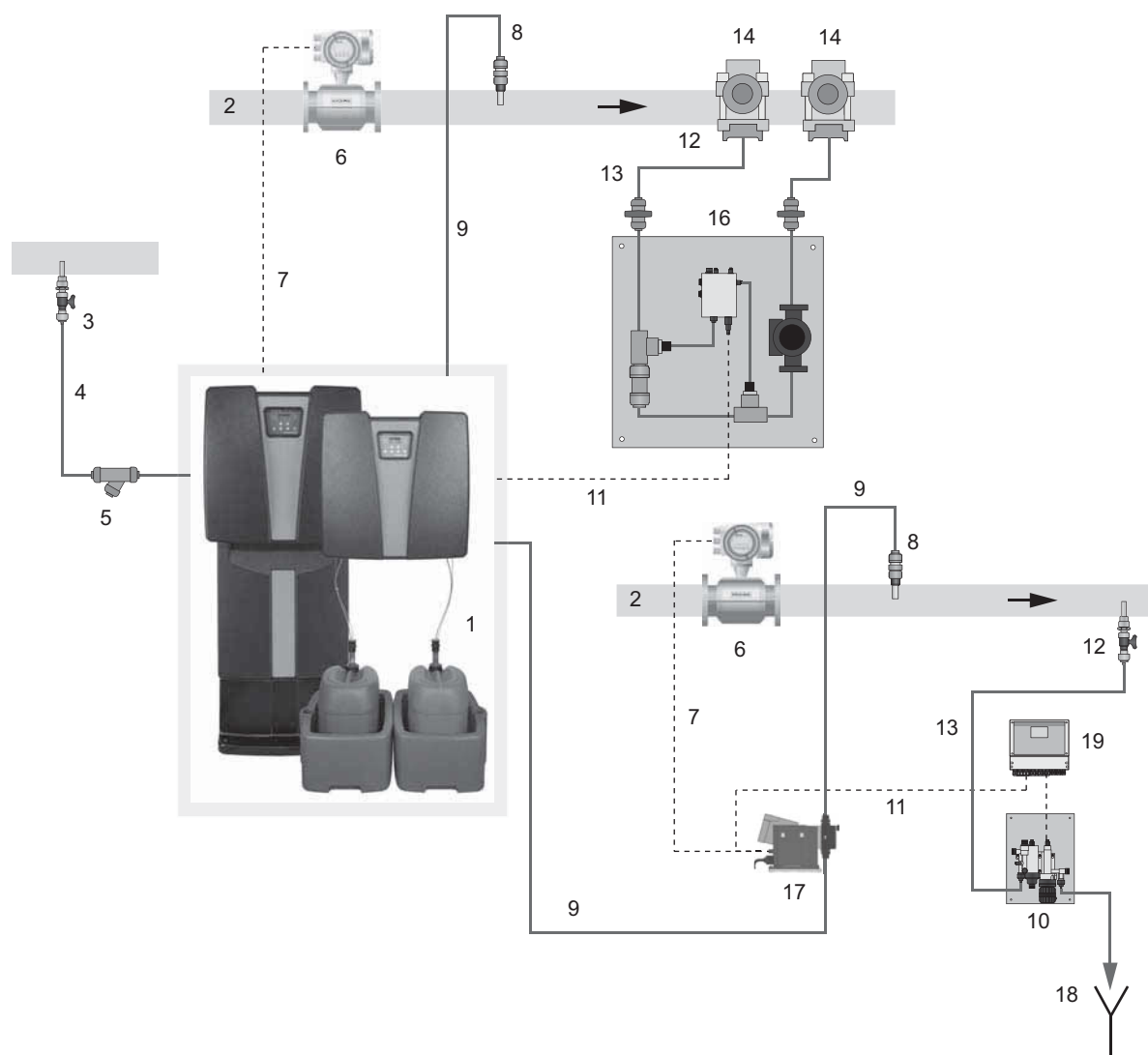
Fig. 4 Oxiperm Pro basic module with optional measuring cell for chlorine dioxide with bypass in cold water

#### Legend

|    |  |
|----|--|
| 1  | Oxiperm Pro OCD-162-5, -10, -30 or -60                                     |
| 2  | Main water pipe  |
| 3  | Dilution water extraction device   |
| 4  | Dilution water pipe  |
| 5  | Dirt trap  |
| 6  | Flow measurement   |
| 7  | Signal line of flow measurement  |
| 9  | Dosing line  |
| 10 | Chlorine dioxide measuring cell  |
| 11 | Signal line of chlorine dioxide measurement                                |
| 12 | Measuring water extraction device (minimum distance to injection unit 5 m) |
| 13 | Measuring water pipe   |
| 14 | Tapping sleeve   |
| 15 | Mixing module  |
| 18 | Drain  |

TM04 1476 0410

## Preparation, two dosing points



TM04 1477 0410

Fig. 5 Oxiperm Pro basic module with additional dosing pump and optional chlorine dioxide measurement

## Legend

|    |   |
|----|---|
| 1  | Oxiperm Pro OCD-162-5, -10, -30 or -60  |
| 2  | Main water pipe   |
| 3  | Dilution water extraction device  |
| 4  | Dilution water pipe   |
| 5  | Dirt trap   |
| 6  | Flow measurement  |
| 7  | Signal line of flow measurement   |
| 8  | Injection unit  |
| 9  | Dosing line   |
| 10 | Chlorine dioxide measuring cell   |
| 11 | Signal line of chlorine dioxide measurement                                   |
| 12 | Measuring water extraction device<br>(minimum distance to injection unit 5 m) |
| 13 | Measuring water pipe  |
| 14 | Tapping sleeve  |
| 16 | Measuring module  |
| 17 | Additional chlorine dioxide dosing pump                                       |
| 18 | Drain   |
| 19 | Measuring amplifier   |

Preparation, two dosing points, bypass

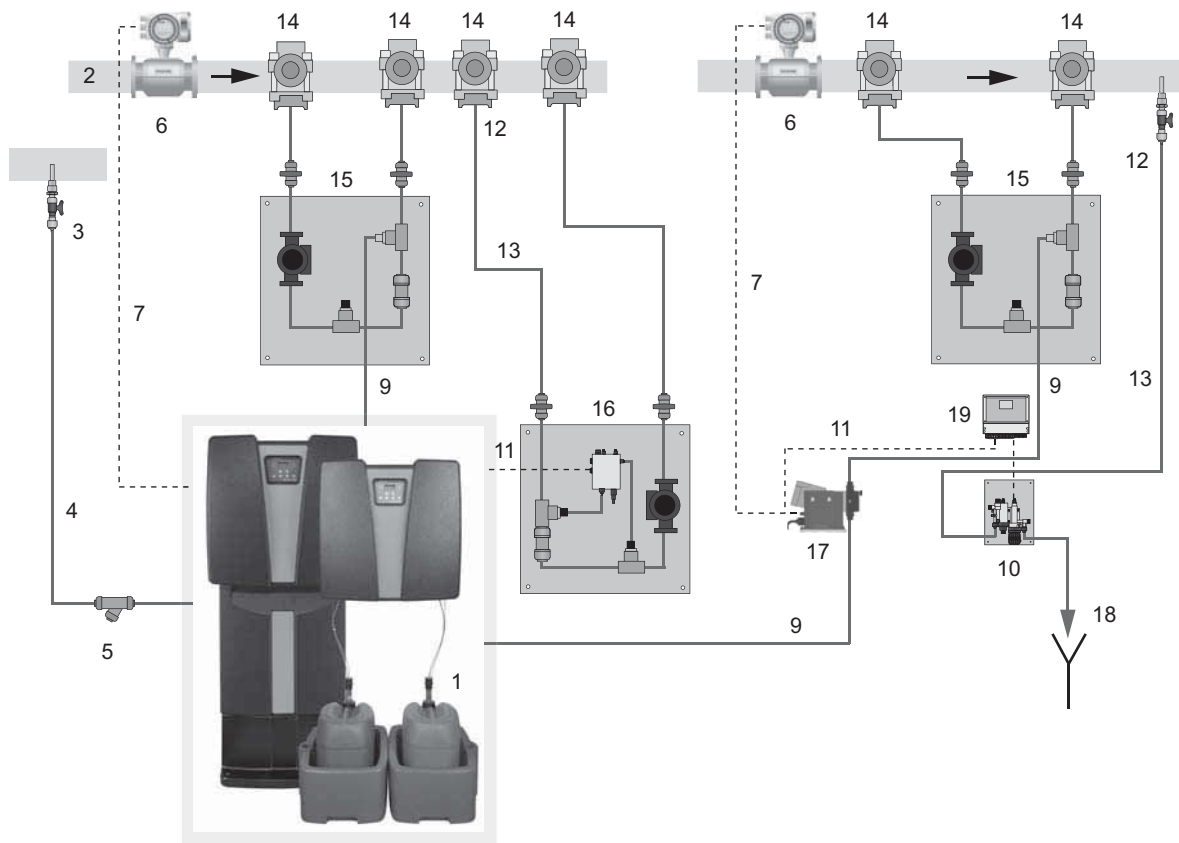


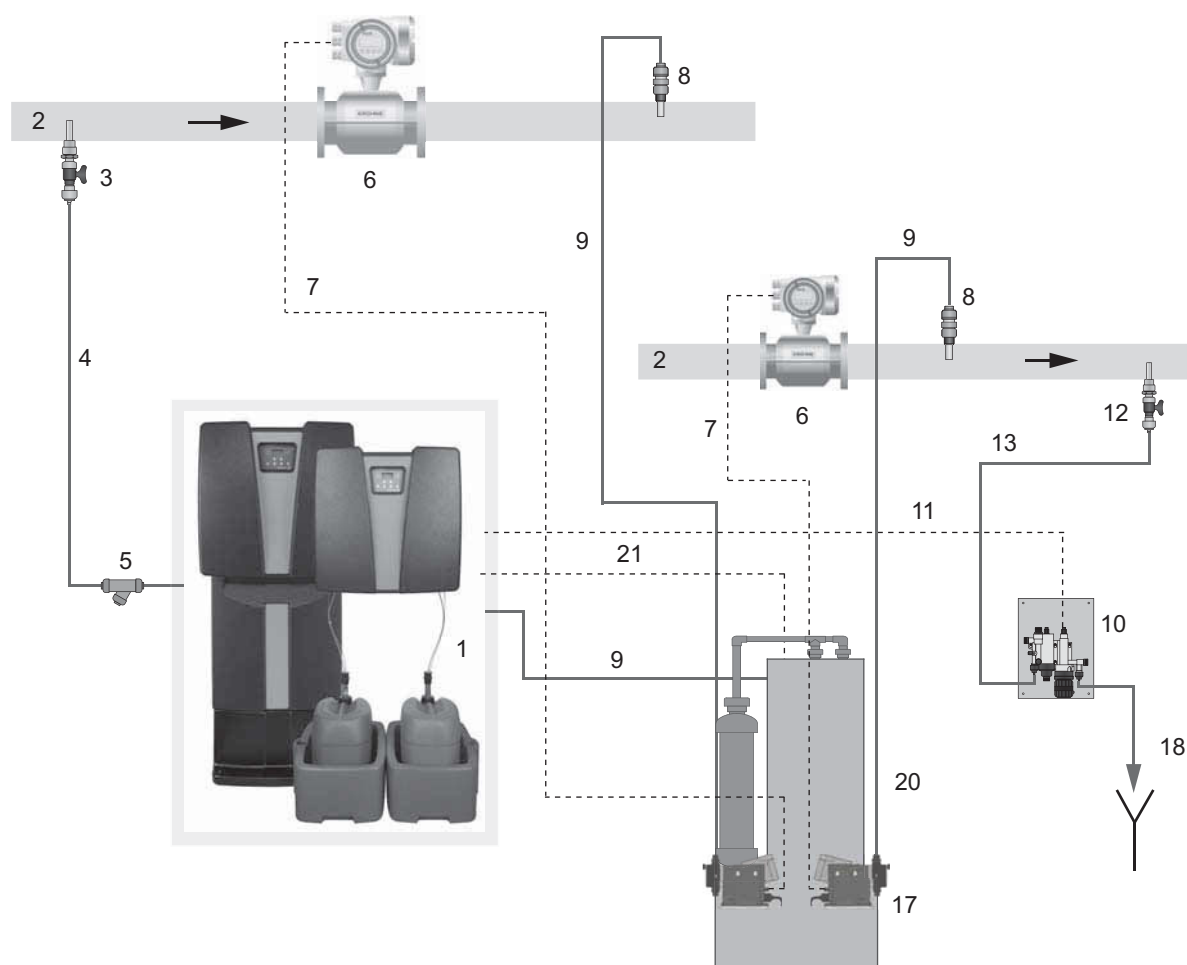
Fig. 6 Oxiperm Pro basic module with additional dosing pump and optional chlorine dioxide measurement with bypass

Legend

|    |   |
|----|---|
| 1  | Oxiperm Pro OCD-162-5, -10, -30 or -60  |
| 2  | Main water pipe   |
| 3  | Dilution water extraction device  |
| 4  | Dilution water pipe   |
| 5  | Dirt trap   |
| 6  | Flow measurement  |
| 7  | Signal line of flow measurement   |
| 9  | Dosing line   |
| 10 | Chlorine dioxide measuring cell   |
| 11 | Signal line of chlorine dioxide measurement                                   |
| 12 | Measuring water extraction device<br>(minimum distance to injection unit 5 m) |
| 13 | Measuring water pipe  |
| 14 | Tapping sleeve  |
| 15 | Mixing module   |
| 16 | Measuring module  |
| 17 | Additional chlorine dioxide dosing pump                                       |
| 18 | Drain   |
| 19 | Measuring amplifier   |

TM04 1478 0410

## Preparation, several dosing points with batch tank



TM04 1479 0410

**Fig. 7** Oxiperm Pro basic module with additional dosing pumps on an external batch tank and optional chlorine dioxide measurement

## Legend

|    |  |
|----|--|
| 1  | Oxiperm Pro OCD-162-5, -10, -30 or -60                                     |
| 2  | Main water pipe  |
| 3  | Dilution water extraction device   |
| 4  | Dilution water pipe  |
| 5  | Dirt trap  |
| 6  | Flow measurement   |
| 7  | Signal line of flow measurement  |
| 8  | Injection unit   |
| 9  | Dosing line  |
| 10 | Chlorine dioxide measuring cell  |
| 11 | Signal line of chlorine dioxide measurement                                |
| 12 | Measuring water extraction device (minimum distance to injection unit 5 m) |
| 13 | Measuring water pipe   |
| 17 | Additional chlorine dioxide dosing pumps                                   |
| 18 | Drain  |
| 20 | External batch tank  |
| 21 | Signal line of external batch tank   |

## 4. Construction

### Oxiperm Pro OCD-162-5 and OCD-162-10

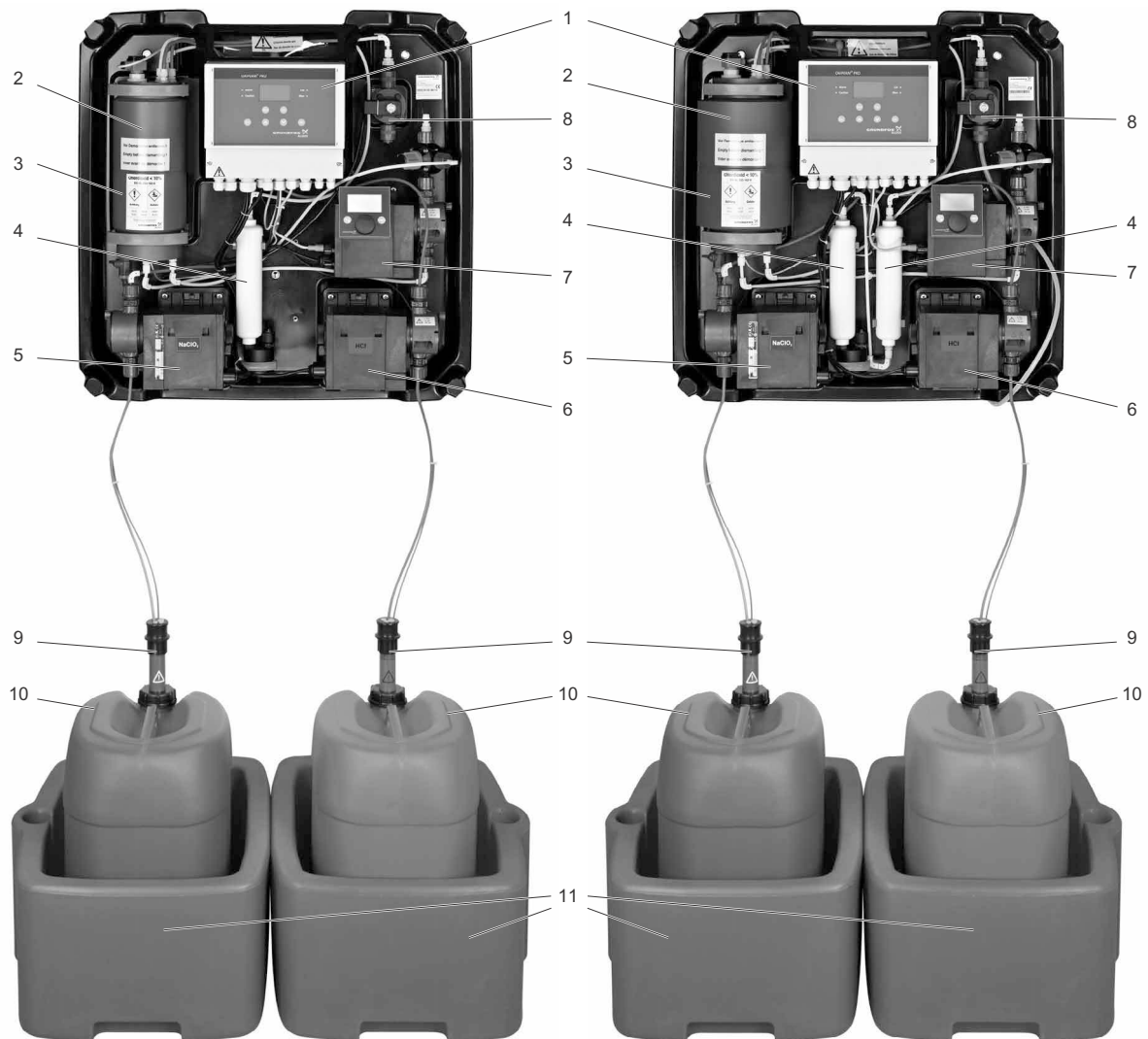


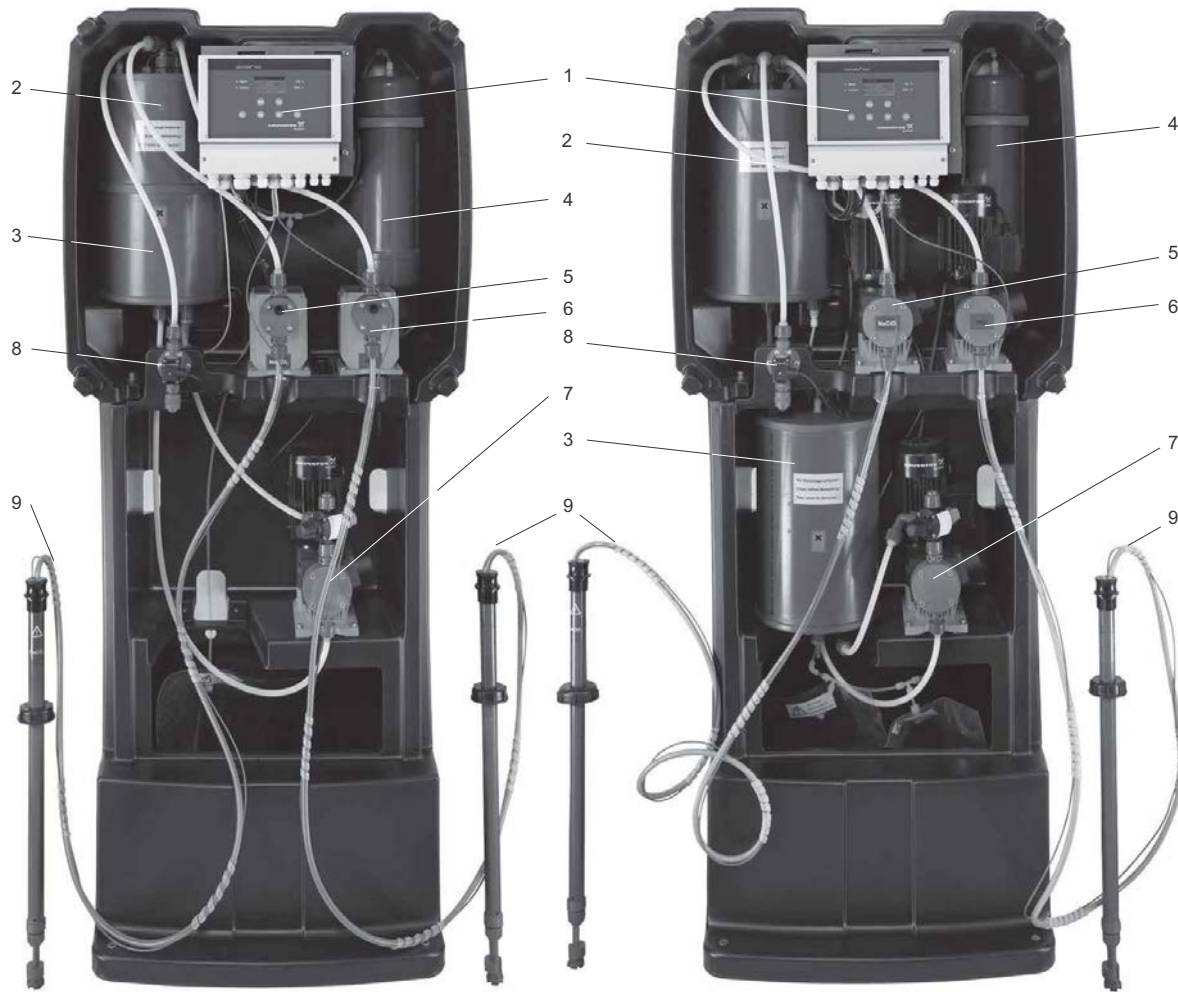
Fig. 8 Oxiperm Pro OCD-162-5 (left) and Oxiperm Pro OCD-162-10 (right) without cover

#### Legend

|    |   |
|----|---|
| 1  | Measuring and control unit                    |
| 2  | Reaction tank                                 |
| 3  | Batch tank                                    |
| 4  | Adsorption filter                             |
| 5  | Dosing pump for sodium chlorite               |
| 6  | Dosing pump for hydrochloric acid             |
| 7  | Dosing pump for chlorine dioxide              |
| 8  | Solenoid valve for dilution water             |
| 9  | Suction lance                                 |
| 10 | Chemical container (not in standard delivery) |
| 11 | Collecting tray (not in standard delivery)    |

TM04 8507 0912

## Oxiperm Pro OCD-162-30 and OCD-162-60



TM04 1483 0410

Fig. 9 Oxiperm Pro OCD-162-30 (left) and Oxiperm Pro OCD-162-60 (right) without cover

### Legend

|   |                                   |
|---|-----------------------------------|
| 1 | Measuring and control unit        |
| 2 | Reaction tank                     |
| 3 | Batch tank                        |
| 4 | Adsorption filter                 |
| 5 | Dosing pump for sodium chlorite   |
| 6 | Dosing pump for hydrochloric acid |
| 7 | Dosing pump for chlorine dioxide  |
| 8 | Solenoid valve for dilution water |
| 9 | Suction lance                     |

## 5. Technical data

### Technical data

|  |  |  |   |         |
|--|--|--|---|---------|
| <b>Adjustment of the preparation capacity</b>  | manual by menu-controlled operator prompting, automatic by input signal  |  |   |         |
| <b>Protection level</b>  | IP 65 (electronics, dosing pumps, solenoid valve)  |  |   |         |
| <b>Required concentration of chemicals</b>   | <ul style="list-style-type: none"> <li>• HCl (according to EN 939)</li> <li>• NaClO<sub>2</sub> (according to EN 938)</li> </ul> | <ul style="list-style-type: none"> <li>• 9 percent by weight</li> <li>• 7.5 percent by weight</li> </ul> |   |         |
| <b>Admissible temperature:</b>   |  |  |   |         |
| <ul style="list-style-type: none"> <li>• ambient temperature</li> <li>• operation water temperature</li> <li>• temperature of chemicals</li> </ul> | <ul style="list-style-type: none"> <li>• 5 to 35 °C</li> <li>• 10 to 30 °C</li> <li>• 10 to 35 °C</li> </ul>                     |  |   |         |
| <b>Admissible operation water pressure</b>   | 3 to 6 bar   |  |   |         |
| <b>Admissible relative air humidity</b>  | max. 80 %, not condensing  |  |   |         |
| <b>Total volume of reaction tank and batch tank</b>  | reaction tank  |  | batch tank (up to max. level alarm)           |         |
|  | OCD-162-5  | 1.00 l   | OCD-162-5                                     | 1.00 l  |
|  | OCD-162-10   | 1.80 l   | OCD-162-10                                    | 1.80 l  |
|  | OCD-162-30   | 6.10 l   | OCD-162-30                                    | 7.00 l  |
| <b>Filling volume of reaction tank and batch tank</b>  | reaction tank  |  | batch tank                                    |         |
|  | OCD-162-5  | 0.87 l   | OCD-162-5                                     | 0.87 l  |
|  | OCD-162-10   | 1.67 l   | OCD-162-10                                    | 1.67 l  |
|  | OCD-162-30   | 5.52 l   | OCD-162-30                                    | 6.50 l  |
|  | OCD-162-60   | 11.96 l  | OCD-162-60                                    | 13.00 l |
| <b>Concentration of chlorine dioxide solution</b>  | approx. 2 g/l (2000 ppm)   |  |   |         |
| <b>Safety equipment</b>  | monitoring of the capacity via level measurement   |  |   |         |
| <b>Material</b>  | system frame   |  | PP  |         |
|  | fastening sleeves  |  | stainless steel                               |         |
|  | solenoid valve   |  | PVC   |         |
|  | reaction/batch tank  |  | PVC   |         |
|  | internal hoses   |  | PTFE  |         |
|  | gaskets  |  | FPM   |         |
| <b>Full-text menu control for</b>  | <ul style="list-style-type: none"> <li>• commissioning</li> <li>• entering operating parameters</li> </ul>                       | <ul style="list-style-type: none"> <li>• flushing</li> <li>• maintenance</li> </ul>                      |   |         |
| <b>Connections</b>   | chlorine dioxide dosing line   | 230 V  | hose 4/6, 6/9 and 9/12                        |         |
|  |  | 115 V  | hose 1/8" x 1/4", 1/4" x 3/8" and 1/3" x 1/2" |         |
|  | dilution water   | 230 V  | hose 6/9 or 6/12 or PVC-pipe DN 8             |         |
|  |  | 115 V  | hose 1/4" x 3/8"                              |         |

### Electrical and electronic data

|                               |  |  |  |
|-------------------------------|--|--|--|
| <b>Mains connection</b>       | 110-120 V, 50/60 Hz or 220-240 V, 50/60 Hz   |  |  |
| <b>Power consumption</b>      | OCD-162-5 and -10: approx. 50 VA<br>OCD-162-30: approx. 180 VA<br>OCD-162-60: approx. 320 VA   |  |  |
| <b>Analog inputs</b>          | <ul style="list-style-type: none"> <li>• input 0(4)-20 mA (water meter)</li> <li>• measuring cell (ClO<sub>2</sub>, pH or Redox, temperature) (option)</li> </ul>  |  |  |
| <b>Digital inputs</b>         | <ul style="list-style-type: none"> <li>• contact water meter (min. 3 pulses/min., max. 50 pulses/sec.)</li> <li>• remote On/Off</li> <li>• fault gas warning unit</li> </ul>   |  |  |
| <b>Analog outputs</b>         | <ul style="list-style-type: none"> <li>• output 0(4) - 20 mA (pump regulation)</li> <li>• measured value chlorine dioxide 0(4)-20 mA</li> </ul>  |  |  |
| <b>Potential-free outputs</b> | <ul style="list-style-type: none"> <li>• alarm relay, 250 V/6 A, max. max. 550 VA (chemicals-empty signal, dosing time monitoring, preparation process time monitoring, wire break current output)</li> <li>• warning relay, 250 V/6 A, max. 550 VA (low level of chemicals, maintenance)</li> <li>• chlorine dioxide dosing pump</li> </ul> |  |  |

## 6. Dimensions

### Oxiperm Pro OCD-162-5 and OCD-162-10

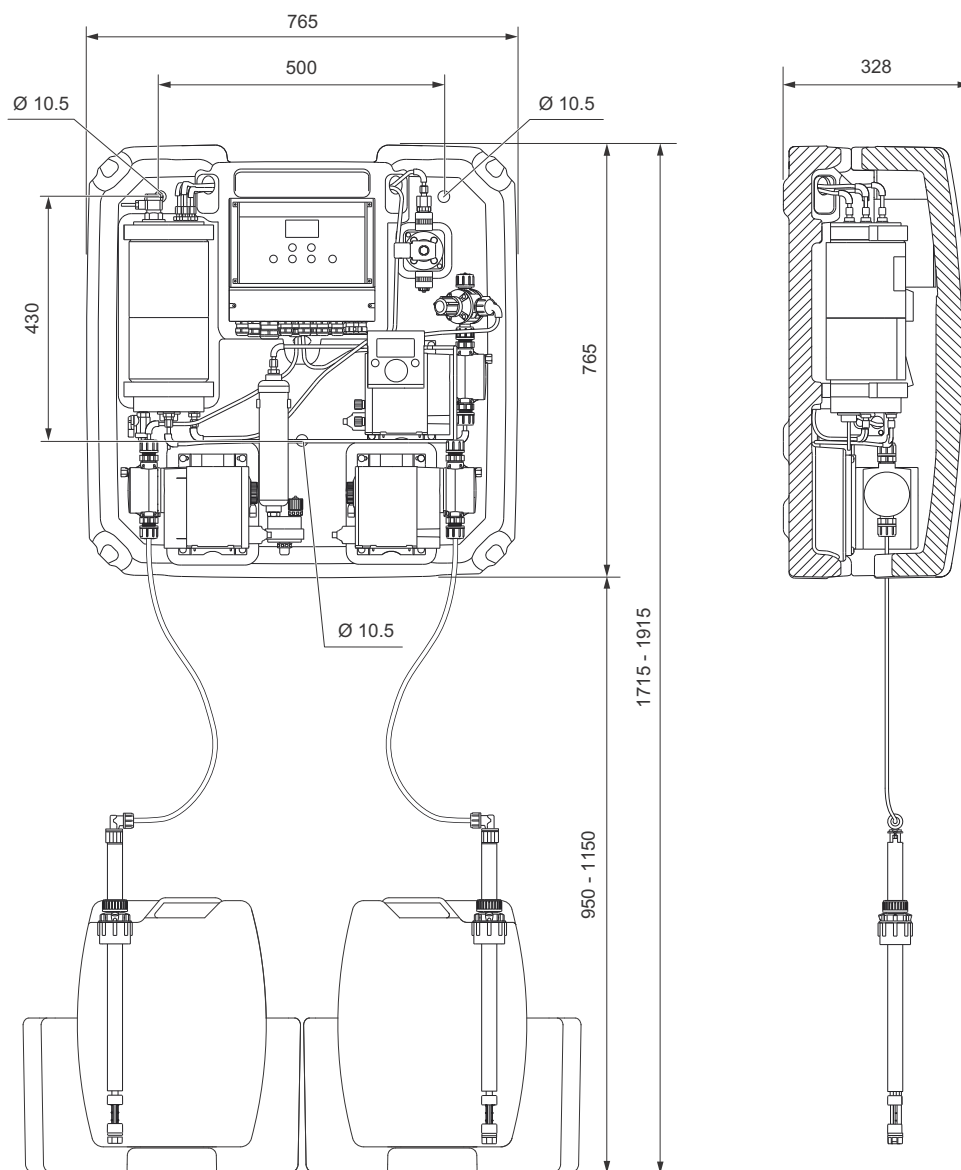


Fig. 10 Oxiperm Pro OCD-162-5 and OCD-162-10

TM04 8508 0912



Oxiperm Pro OCD-162-30 and OCD-162-60

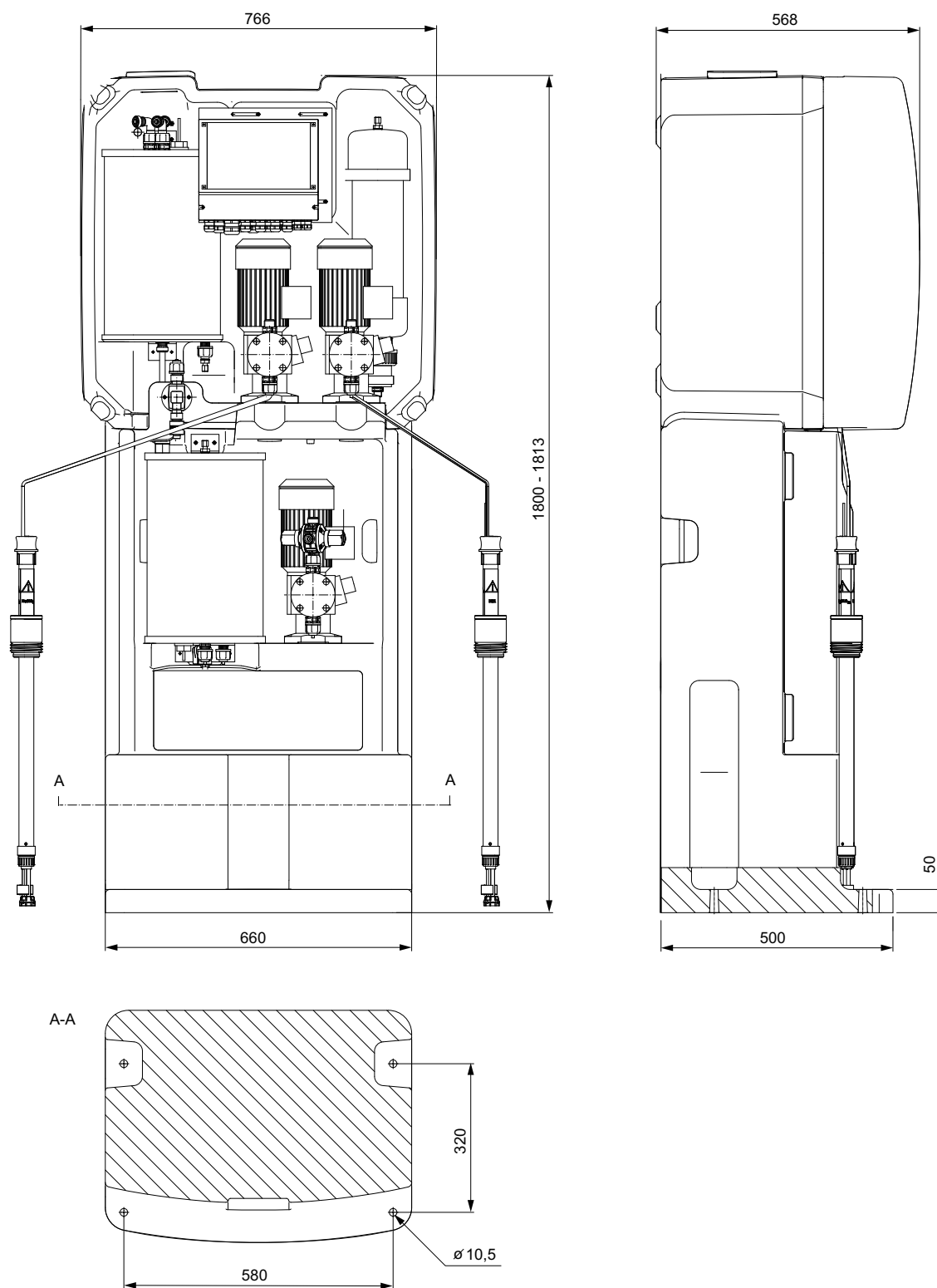
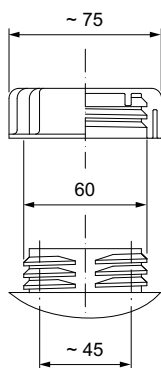


Fig. 11 Oxiperm Pro OCD-162-30 and OCD-162-60

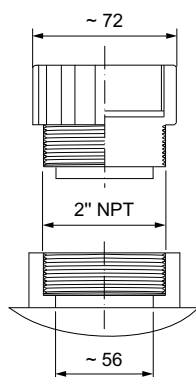
TM04 1294 2109

## Suction lance adaptors for chemical containers

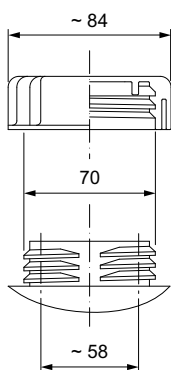
The adaptor suitable for the respective container is included in the standard delivery of the suction lance.



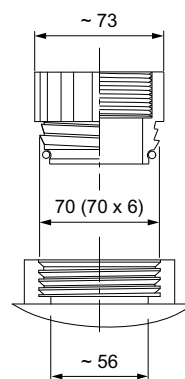
**Fig. 12** Suction lance adaptor for 30-litre container (Oxiperm Pro OCD-162-5, -10, -30)



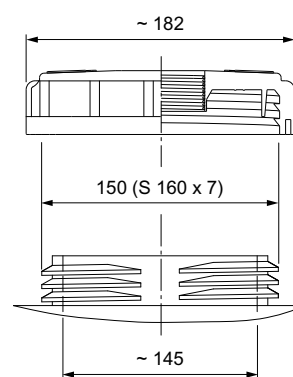
**Fig. 13** Suction lance adaptor for 55-gallon container (Oxiperm Pro OCD-162-5, -10, -30, -60)



**Fig. 14** Suction lance adaptor for 60-litre container (Oxiperm Pro OCD-162-30, -60)



**Fig. 15** Suction lance adaptor for 200-litre container (IBC) (Oxiperm Pro OCD-162-30, -60)



**Fig. 16** Suction lance adaptor for 1000-litre container (IBC) (Oxiperm Pro OCD-162-30, -60)

TM04 8536 1312

TM04 8539 1312

TM04 8537 1312

TM04 8540 1312

TM04 8538 1312

## 7. Product range

### Standard: Oxiperm Pro with chlorine dioxide dosing pump

- For systems in combination with an external batch tank we recommend to use a mechanical dosing pump.
- Digital dosing pumps are designed for direct dosing.

| Preparation capacity<br>[g/h] ClO <sub>2</sub>  | Counterpressure<br>P <sub>max</sub><br>[bar] |       | Consumption of components<br>[l/h] at max. capacity |                    |                         | Chlorine dioxide dosing pump | Weight<br>[kg] | Voltage<br>(50/60 Hz) | Oxiperm Pro     | Product No. |
|---|--|-------|---|--------------------|-------------------------|------------------------------|----------------|-----------------------|-----------------|-------------|
|   | 50 Hz  | 60 Hz | HCl   | NaClO <sub>2</sub> | Dilution water<br>[l/h] |                              |                |                       |                 |             |
| Standard (with chlorine dioxide dosing pump): SMART Digital dosing pump DDA with suction lance for 30-litre container                                   |  |       |   |                    |                         |                              |                |                       |                 |             |
| 5   | 10   | 10    | 0.15  | 0.14               | 2.5                     | DDA                          | 26             | 220-240 V             | OCD-162-5-S/G   | 95735153    |
| 5   | 10   | 10    | 0.15  | 0.14               | 2.5                     | DDA                          | 26             | 110-120 V             | OCD-162-5-S/H   | 95735154    |
| 10  | 10   | 10    | 0.31  | 0.29               | 5                       | DDA                          | 28             | 220-240 V             | OCD-162-10-S/G  | 95735161    |
| 10  | 10   | 10    | 0.31  | 0.29               | 5                       | DDA                          | 28             | 110-120 V             | OCD-162-10-S/H  | 95735162    |
| Standard (with chlorine dioxide dosing pump): mechanical dosing pump DMX or digital dosing pump DDI with suction lance for 60-litre container           |  |       |   |                    |                         |                              |                |                       |                 |             |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DMX                          | 70             | 220-240 V             | OCD-162-30-D/G1 | 95735169    |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DMX                          | 70             | 110-120 V             | OCD-162-30-D/H1 | 95735170    |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DDI                          | 69             | 220-240 V             | OCD-162-30-P/G1 | 95735171    |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DDI                          | 69             | 110-120 V             | OCD-162-30-P/H1 | 95735172    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DMX                          | 85             | 220-240 V             | OCD-162-60-D/G1 | 95718452    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DMX                          | 85             | 110-120 V             | OCD-162-60-D/H1 | 95718453    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DDI                          | 84             | 220-240 V             | OCD-162-60-P/G1 | 95718454    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DDI                          | 84             | 110-120 V             | OCD-162-60-P/H1 | 95718455    |
| Standard (with chlorine dioxide dosing pump): mechanical dosing pump DMX or digital dosing pump DDI with suction lance for 200- or 1000-litre container |  |       |   |                    |                         |                              |                |                       |                 |             |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DMX                          | 70             | 220-240 V             | OCD-162-30-D/G2 | 95735173    |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DMX                          | 70             | 110-120 V             | OCD-162-30-D/H2 | 95735174    |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DDI                          | 69             | 220-240 V             | OCD-162-30-P/G2 | 95735175    |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DDI                          | 69             | 110-120 V             | OCD-162-30-P/H2 | 95735176    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DMX                          | 85             | 220-240 V             | OCD-162-60-D/G2 | 95718456    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DMX                          | 85             | 110-120 V             | OCD-162-60-D/H2 | 95718457    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DDI                          | 84             | 220-240 V             | OCD-162-60-P/G2 | 95718458    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DDI                          | 84             | 110-120 V             | OCD-162-60-P/H2 | 95718459    |
| Standard (with chlorine dioxide dosing pump): mechanical dosing pump DMX or digital dosing pump DDA or DDI with suction lance for 55-gallon container   |  |       |   |                    |                         |                              |                |                       |                 |             |
| 5   | 10   | 10    | 0.15  | 0.14               | 2.5                     | DDA                          | 26             | 110-120 V             | OCD-162-5-S/H3  | 95735155    |
| 10  | 10   | 10    | 0.31  | 0.29               | 5                       | DDA                          | 28             | 110-120 V             | OCD-162-10-S/H3 | 95735163    |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DMX                          | 70             | 110-120 V             | OCD-162-30-D/H3 | 95735177    |
| 30  | 10   | 10    | 0.88  | 0.87               | 14.8                    | DDI                          | 69             | 110-120 V             | OCD-162-30-P/H3 | 95735178    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DMX                          | 85             | 110-120 V             | OCD-162-60-D/H3 | 95720704    |
| 60  | 10   | 10    | 1.71  | 1.63               | 32.5                    | DDI                          | 84             | 110-120 V             | OCD-162-60-P/H3 | 95720705    |

## Oxiperm Pro without chlorine dioxide dosing pump

- Without integrated dosing pump for chlorine dioxide, in case an external dosing pump will be connected.
- A standard delivery comprises multi-function valve and hose connections for product storage containers.

| Preparation capacity<br>[g/h] ClO <sub>2</sub>                                   | Counterpressure<br>P <sub>max</sub><br>[bar] |       | Consumption of components<br>[l/h] at max. capacity |                    |                         | Chlorine dioxide dosing pump | Weight<br>[kg] | Voltage<br>(50/60 Hz) | Oxiperm Pro     | Product No. |
|--|--|-------|---|--------------------|-------------------------|------------------------------|----------------|-----------------------|-----------------|-------------|
|  | 50 Hz  | 60 Hz | HCl   | NaClO <sub>2</sub> | Dilution water<br>[l/h] |                              |                |                       |                 |             |
| Without chlorine dioxide dosing pump, with suction lance for 30-litre container  |  |       |   |                    |                         |                              |                |                       |                 |             |
| 5  | *  | *     | 0.15  | 0.14               | 2.5                     | -                            | 26-30          | 220-240 V             | OCD-162-5-N/G   | 95735156    |
| 5  | *  | *     | 0.15  | 0.14               | 2.5                     | -                            | 26-30          | 110-120 V             | OCD-162-5-N/H   | 95735157    |
| 10   | *  | *     | 0.31  | 0.29               | 5                       | -                            | 28-32          | 220-240 V             | OCD-162-10-N/G  | 95735164    |
| 10   | *  | *     | 0.31  | 0.29               | 5                       | -                            | 28-32          | 110-120 V             | OCD-162-10-N/H  | 95735165    |
| Without chlorine dioxide dosing pump, with suction lance for 60-litre container  |  |       |   |                    |                         |                              |                |                       |                 |             |
| 30   | *  | *     | 0.88  | 0.87               | 14.8                    | -                            | 69-70          | 220-240 V             | OCD-162-30-N/G1 | 95735179    |
| 60   | *  | *     | 1.71  | 1.63               | 32.5                    | -                            | 84-85          | 220-240 V             | OCD-162-60-N/G1 | 95725956    |
| Without chlorine dioxide dosing pump, with suction lance for 200-litre container |  |       |   |                    |                         |                              |                |                       |                 |             |
| 30   | *  | *     | 0.88  | 0.87               | 14.8                    | -                            | 69-70          | 220-240 V             | OCD-162-30-N/G2 | 95735180    |
| 60   | *  | *     | 1.71  | 1.63               | 32.5                    | -                            | 84-85          | 220-240 V             | OCD-162-60-N/G2 | 95725957    |
| Without chlorine dioxide dosing pump, with suction lance for 55-gallon container |  |       |   |                    |                         |                              |                |                       |                 |             |
| 5  | *  | *     | 0.15  | 0.14               | 2.5                     | -                            | 26-30          | 110-120 V             | OCD-162-5-N/H3  | 95735158    |
| 10   | *  | *     | 0.31  | 0.29               | 5                       | -                            | 28-32          | 110-120 V             | OCD-162-10-N/H3 | 95735166    |
| 30   | *  | *     | 0.88  | 0.87               | 14.8                    | -                            | 69-70          | 110-120 V             | OCD-162-30-N/H3 | 95735181    |
| 60   | *  | *     | 1.71  | 1.63               | 32.5                    | -                            | 84-85          | 110-120 V             | OCD-162-60-N/H3 | 95735200    |

\* The counterpressure depends on the dosing pump.

## 8. Accessories

### Collecting trays

- for chemical storage containers



TM04 1469 0410

**Fig. 17** Collecting tray for containers of max. 33 litres

| Description   | Product No. |
|---|-------------|
| Collecting tray, blue, for sodium chlorite containers of max. 33 litres, with support for suction lance.  | 95702450    |
| Collecting tray, red, for hydrochloric acid containers of max. 33 litres, with support for suction lance. | 95702451    |
| Collecting tray, blue, for sodium chlorite containers of max. 60 litres.                                  | 96726830    |
| Collecting tray, red, for hydrochloric acid containers of max. 60 litres                                  | 96726829    |

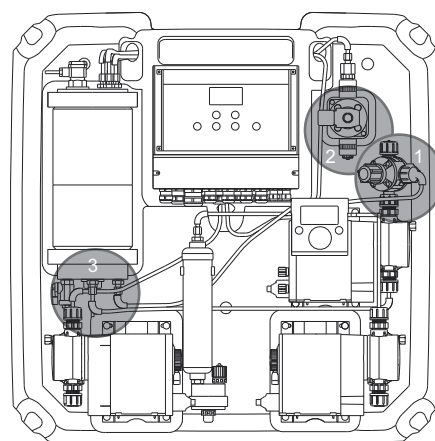
### Hoses

| Description   | Product No. |
|---|-------------|
| Hose PTFE 4/6 ecru, 5 metres<br>(chlorine dioxide solution: multifunction valve to dosing point for OCD-162-5 and -10)    | 96697911    |
| Hose PTFE 4/6 ecru, 10 metres<br>(chlorine dioxide solution: multifunction valve to dosing point for OCD-162-5 and -10)   | 96692437    |
| Hose PTFE 4/6 ecru, 25 metres<br>(chlorine dioxide solution: multifunction valve to dosing point for OCD-162-5 and -10)   | 96727484    |
| Hose PTFE 9/12 ecru, 10 metres<br>(chlorine dioxide solution: multifunction valve to dosing point for OCD-162-30 and -60) | 96727490    |
| Hose PTFE 9/12 ecru, 25 metres<br>(chlorine dioxide solution: multifunction valve to dosing point for OCD-162-30 and -60) | 96727492    |
| Hose PE 6/9 transparent, 10 metres<br>(dilution water inlet solenoid valve)   | 96727412    |
| Hose PVC 6/12, with reinforcement, 10 metres<br>(measuring water connection for measuring cell AQC-D1)                    | 96653571    |
| Hose PE 6/8, ecru, 10 metres<br>(measuring water connection for measuring cell AQC-D6)                                    | 95709108    |

### Connections

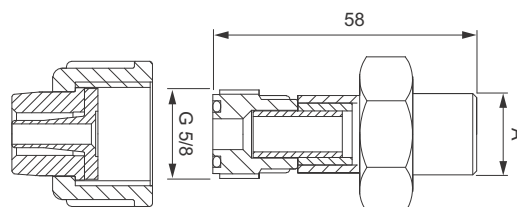
| for   | Description  | Product No. |
|---|--|-------------|
| PTFE hose 4/6, 6/9 or 9/12 (see 1, fig. 18)   | Connection set for multifunction valve DN 8, G 5/8   | 97691904    |
| PTFE hose 1/4" x 3/8" or 1/8" x 1/4" (see 1, fig. 18)   | Connection set for multifunction valve DN 8, G 5/8   | 97691907    |
| PVC hose connection 6/9 or 6/12 with G 5/8 female thread for dilution water (please order separately) | G 1/2 male thread for direct screwing into water supply line and G 5/8 male thread for hose connection (see fig. 19) | 95702448    |
| PVC hose connection 6/9 or 6/12 with G 5/8 female thread for dilution water (please order separately) | G 3/4 male thread for direct screwing into water supply line and G 5/8 male thread for hose connection (see fig. 19) | 95702449    |
| PVC hose 6/9 for dilution water (see 2, fig. 18)  | Hose connection with G 5/8 female thread (see fig. 20)   | 97702488    |

| for  | Description  | Product No. |
|--|--|-------------|
| PVC hose 6/12 for dilution water (see 2, fig. 18)                                    | Hose connection with G 5/8 female thread (see fig. 20) | 97702489    |
| PTFE hose 4/6 for dosing pumps (see 3, fig. 18) (OCD-162-5 and -10)                  | T-piece (3 x 4/6), PVDF                                | 95714891    |
| PTFE hose 6/9, 6/12 or 9/12 for 2 dosing pumps (see 3, fig. 18) (OCD-162-30 and -60) | T-piece (6/9, 6/12 or 9/12), PVDF                      | 95730391    |
| PTFE hose 9/12   | PVC/FKM ball valve, DN 10, with PTFE connection 9/12   | 95721555    |



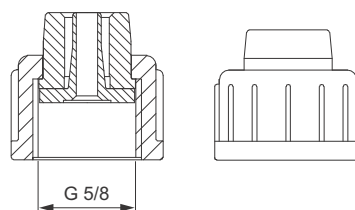
TM04 8529 1212

**Fig. 18** Overview connections



TM04 8530 1212

**Fig. 19** Hose connection (fig. 20) with adaptor G 1/2 or G 3/4, and G 5/8 male thread (95702448 for A = G 1/2 or 95702449 for A = G 3/4)

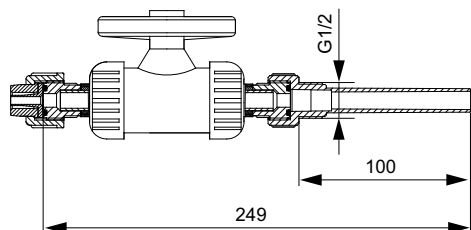


TM04 1288 2109

**Fig. 20** Hose connections G 5/8 female thread (97702488 for PVC 6/9 or 97702489 for PVC 6/12)

## Extraction device

- for dilution water or measuring water
- PVC, max. 10 bar
- with ball valve
- with FKM gasket



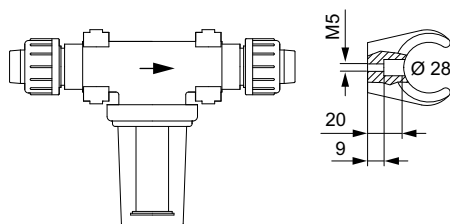
TM04 1299 2109

Fig. 21 Extraction device

| Description                                       | Connection        | Product No. |
|---|-------------------|-------------|
| Connection for 6/9, 6/12 hoses and DN 10 PVC pipe | G 1/2 male thread | 95707159    |

## Dirt trap

External dirt trap for dilution water connection.



TM04 1298 2109

Fig. 22 Dirt trap

| Description                                       | Product No. |
|---|-------------|
| Connection for 6/9, 6/12 hoses and DN 10 PVC pipe | 95709473    |

## Flow meters

- 100-230 V AC, 50/60 Hz
- 4-20 mA analog output and pulse output

### Inductive flow meter

- with annexed flow transformer, PP lining



TM04 1471 0410

Fig. 23 Inductive flow meter

| Description  | Flange | Product No. |
|--|--------|-------------|
| Inductive flow meter G 1/2<br>min. 0.2 m <sup>3</sup> /h, max. 7.6 m <sup>3</sup> /h     | DN 15  | 95702399    |
| Inductive flow meter G 3/4<br>min. 0.3 m <sup>3</sup> /h, max. 13.6 m <sup>3</sup> /h    | DN 20  | 95702400    |
| Inductive flow meter G 1<br>min. 0.5 m <sup>3</sup> /h, max. 21.2 m <sup>3</sup> /h      | DN 25  | 95702401    |
| Inductive flow meter G 1 1/4<br>min. 0.9 m <sup>3</sup> /h, max. 34.7 m <sup>3</sup> /h  | DN 32  | 95702402    |
| Inductive flow meter G 1 1/2<br>min. 1.4 m <sup>3</sup> /h, max. 54.2 m <sup>3</sup> /h  | DN 40  | 95702403    |
| Inductive flow meter G 2<br>min. 2.1 m <sup>3</sup> /h, max. 84.8 m <sup>3</sup> /h      | DN 50  | 95702288    |
| Inductive flow meter G 2 1/2<br>min. 3.6 m <sup>3</sup> /h, max. 143.4 m <sup>3</sup> /h | DN 65  | 95702404    |
| Inductive flow meter G 3<br>min. 5.4 m <sup>3</sup> /h, max. 217.2 m <sup>3</sup> /h     | DN 80  | 95702405    |
| Inductive flow meter G 4<br>min. 8.5 m <sup>3</sup> /h, max. 339.3 m <sup>3</sup> /h     | DN 100 | 95702406    |
| Inductive flow meter G 5<br>min. 13.3 m <sup>3</sup> /h, max. 530.1 m <sup>3</sup> /h    | DN 125 | 95702407    |
| Inductive flow meter G 6<br>min. 19.1 m <sup>3</sup> /h, max. 763.4 m <sup>3</sup> /h    | DN 150 | 95702350    |

### Ultrasonic flow meter

- with separate flow transformer



TM04 1470 0410

Fig. 24 Ultrasonic flow meter

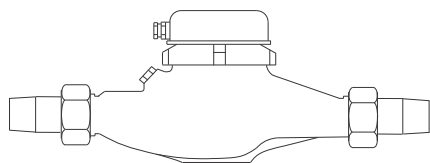
| Description   | Product No. |
|---|-------------|
| Ultrasonic flow meter DN 15-DN 100, min. 0.3 m <sup>3</sup> /h, max. 560 m <sup>3</sup> /h  | 95701808    |
| Ultrasonic flow meter DN 50-DN 400, min. 3.5 m <sup>3</sup> /h, max. 9000 m <sup>3</sup> /h | 95702408    |

### Connection cable for flow meter

| Description  | Product No. |
|--|-------------|
| Flow meter cable, 2-wire, with screening, for all models (per meter) | 96687719    |

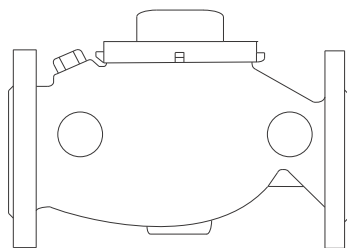
### Contact water meter

Multiple-jet impeller water meter with contactor.



TM04 1455 0210

Fig. 25 Contact water meter with thread



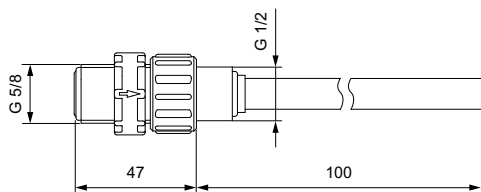
TM04 1454 0210

Fig. 26 Contact water meter with flange

| Description   | Connection           | Product No. |
|---|----------------------|-------------|
| Water meter DN 20, 1 pulse/1 litre, in operation with Oxiperm Pro: min. 180 l/h, max. 5 m <sup>3</sup> /h     | R 3/4" male thread   | 96693258    |
| Water meter DN 25, 1 pulse/1 litre, in operation with Oxiperm Pro: min. 180 l/h, max. 12 m <sup>3</sup> /h    | R 1" male thread     | 96691880    |
| Water meter DN 40, 1 pulse/2 litres, in operation with Oxiperm Pro: min. 360 l/h, max. 20 m <sup>3</sup> /h   | R 1 1/2" male thread | 96728112    |
| Water meter DN 50, 1 pulse/10 litres, in operation with Oxiperm Pro: min. 1800 l/h, max. 30 m <sup>3</sup> /h | DN 50 flange         | 96728115    |

Note: The water meter has to be dimensioned in a way, that more than 3 pulses/min. are emitted.

### Injection unit



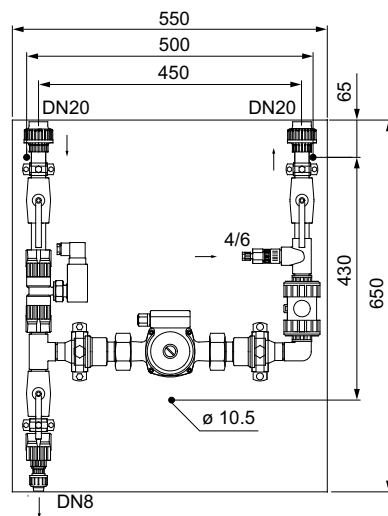
TM04 8531 1212

Fig. 27 Injection unit

| Description   | Product No. |
|---|-------------|
| Injection unit DN 8, PVDF, 16 bar, G 1/2, threaded connection G 5/8 for PTFE hose 4/6, 6/9, 6/12 and 9/12 | 95730932    |

### Bypass mixing module

- for mixing before the main pipe



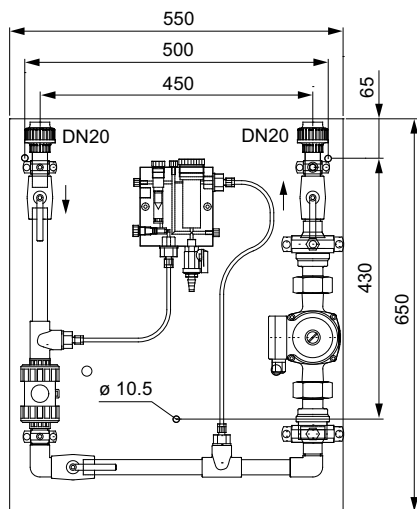
TM04 1291 2109

Fig. 28 Bypass mixing module

| Description   | Product No. |
|---|-------------|
| • for cold water: Material PP-R, max. 30 °C (max. operating water pressure 9 bar when extracting dilution water at max. 6 bar), dilution water connection DN 8, connections inlet and outlet bypass water DN 20, PP-R, operating voltage 230 V, 50 Hz | 95703178    |
| • for hot water: Material PP-R, max. 80 °C (operating water pressure 6 bar), max. operating water pressure 9 bar (at 70 °C), connections inlet and outlet bypass water DN 20, PP-R, operating voltage 230 V, 50 Hz                                    | 95703179    |

## Measuring module

- for chlorine dioxide measurement



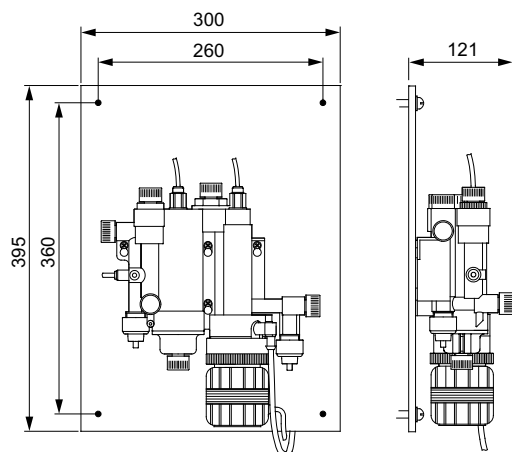
TM04 1296 2109

Fig. 1 Measuring module

| Description   | Product No. |
|---|-------------|
| <ul style="list-style-type: none"> <li>• in cold and hot water, max. 8 bar, max. 70 °C, with measuring water recirculation, pipes PP-R, connections inlet and outlet measuring water DN 20, PP-R, incl. 2 m of connection cable for the measuring cell, operating voltage 230 V, 50 Hz</li> </ul> | 95708029    |

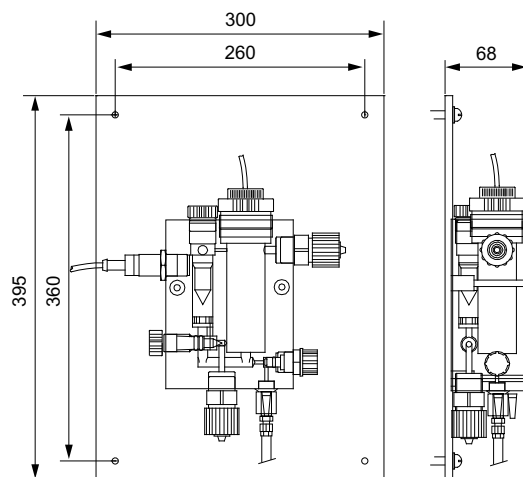
## Measuring cells

- for chlorine dioxide measurement, with free measuring water outlet



TM04 1287 2109

Fig. 2 Measuring cell AQC-D1



TM04 1286 2109

Fig. 3 Measuring cell AQC-D6

| Description   | Product No. |
|---|-------------|
| <b>AQC-D1.AU-X-X.QS-T.G:</b> <ul style="list-style-type: none"> <li>• measurement in cold water (up to 40 °C), connection measuring water inflow (hose 6/12, PVC pipe DN 8), incl. 3 m connection cable, integrated temperature compensation, cleaning motor, 230 V, 50/60 Hz</li> </ul>  | 96622832    |
| <b>AQC-D1.AU-PC-X.QS-T.G:</b> <ul style="list-style-type: none"> <li>• measurement in cold water (up to 40 °C), connection measuring water inflow (hose 6/12, PVC pipe DN 8), incl. 3 m connection cable, integrated temperature compensation, pH electrode, cleaning motor, pH calibrating solution, 230 V, 50/60 Hz</li> </ul>        | 96622838    |
| <b>AQC-D1.AU-X-RCB.QS-T.G:</b> <ul style="list-style-type: none"> <li>• measurement in cold water (up to 40 °C), connection measuring water inflow (hose 6/12, PVC pipe DN 8), incl. 3 m connection cable, integrated temperature compensation, Redox electrode, Redox calibrating solution, cleaning motor, 230 V, 50/60 Hz</li> </ul> | 96622851    |
| <b>AQC-D6:</b> <ul style="list-style-type: none"> <li>• measurement in cold and hot water, up to max. 8 bar, 70 °C, connection measuring water inflow 6/8, incl. 2 m connection cable, integrated temperature compensation</li> </ul>   | 95708118    |

For more detailed information on AQC, please see the data booklet Measurement and control accessories.



## DIT-L photometer

Compact photometer for quick determination of the concentration of chlorine dioxide and chlorite at the extraction point.



TM04 8452 4711

Fig. 4 Photometer DIT-L

| Description   | Product No. |
|---|-------------|
| DIT-L photometer with case  |             |
| • Chlorine dioxide measuring range: 0.02 - 11.0 mg/l  |             |
| • Chlorite measuring range: 0.01 - 6.0 mg/l   |             |
| • Supplied with: 4 batteries, 1 manual, 1 Certificate of Compliance, 3 round vials with cap and gasket, 1 cleaning brush, 1 plastic stirring rod, 1 starter kit for 100 chlorine dioxide measurements | 95727743    |
| Testing reagents for the determination of chlorine dioxide, for 250 measurements:   |             |
| • DPD No. 1 tablets   | 95727747    |
| • DPD No. 3 tablets   | 95727750    |
| • Glycine tablets   | 95727752    |
| Additional testing reagents for the determination of chlorite, for 100 measurements (not included in DIT-L starter kit):  |             |
| • DPD Acidifying tablets  | 98032751    |
| • DPD Neutralising tablets  | 98032752    |

For more detailed information on DIT-L, please see the data booklet DIT-M, DIT-L, DIT-IR

## Tapping sleeves

- for retrofitting injection units etc. in pipework
- outlet to PVC pipe, DN 20



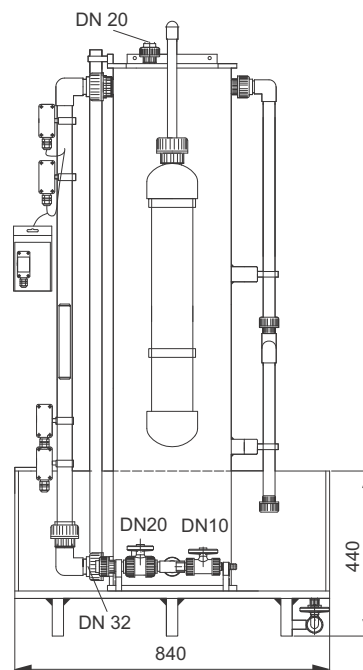
TM04 1472 0410

Fig. 5 Tapping sleeve

| Pipework               | Connection     | Product No. |
|------------------------|----------------|-------------|
| Steel, G 1/2           | G 1/2 female   | 95702386    |
| Steel, G 3/4           | G 1/2 female   | 95702387    |
| Steel, G 1             | G 3/4 female   | 95702388    |
| Steel, G 1 1/4         | G 1 female     | 95702390    |
| Steel, G 1 1/2         | G 1 1/4 female | 95702389    |
| Steel, G 2             | G 1 1/4 female | 95702391    |
| Steel, G 2 1/2         | G 1 1/4 female | 95702392    |
| Steel, G 3             | G 1 1/4 female | 95702393    |
| Stainless steel, 16 mm | G 1/2 male     | 95702394    |
| Stainless steel, 18 mm | G 1/2 male     | 95702395    |
| Stainless steel, 28 mm | G 3/4 female   | 95702396    |
| Stainless steel, 35 mm | G 3/4 female   | 95702397    |
| Stainless steel, 42 mm | G 3/4 female   | 95702398    |

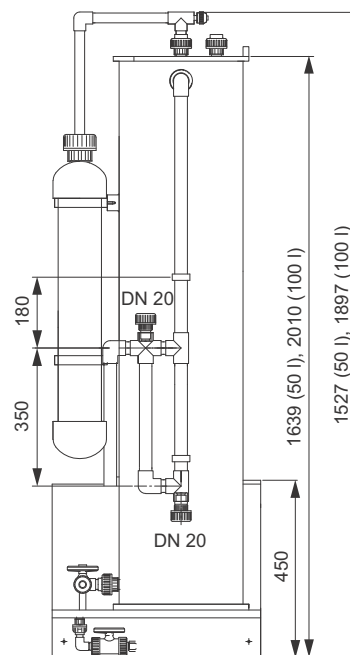
## External batch tank

- PVC, for chlorine dioxide product solution



TM04 1289 2109

Fig. 6 External batch tank, front view



TM04 1290 2109

Fig. 7 External batch tank, lateral view

| Batch tank with                                 | Volume [l] | Diameter [mm] | Product No. |
|---|------------|---------------|-------------|
| Adsorption filter, catchment tray, level switch | 50         | 315           | 96688079    |
|   | 100        | 315           | 96726825    |

## CIU-271 Communication Interface Unit

Communication interface unit for connection to the Oxiperm Pro controller. Reads out the measured chlorine dioxide concentration and emits alarm or warning. Status message can be displayed via web browser or via SMS on mobile phone.



TM04 8528 1212

Fig. 8 CIU

| Description | Fieldbus protocol | Electrical data   | Product No. |
|-------------|-------------------|-------------------|-------------|
| CIU-271     | GSM/GPRS          | 24-240 V, 0-60 Hz | 96898819    |

## Conex DIA-G gas warning unit

- with potentiostatic chlorine dioxide sensor
- measuring range 0.00 to 1.00 ppm



TM04 1289 2109

Fig. 9 Gas warning unit Conex DIA-G

| Description                                  | Product No. |
|--|-------------|
| Conex DIA-G-P,CDP-B,W-J: 110/240 V, 50-60 Hz | 95700854    |

For more detailed information on Conex DIA-G, please see the data booklet Conex DIA-G, DIS-G

## Protective equipment

| Description          | Product No. |
|----------------------|-------------|
| Protective gloves    | 96727012    |
| Protective apron     | 96727013    |
| Protective goggles   | 96727014    |
| Set of warning signs | 95701992    |

## Maintenance kits

- for Oxiperm Pro OCD-162-5 before June 2012

| Maintenance kit for Oxiperm Pro OCD-162-5 | Product No. |
|---|-------------|
| with mechanical and digital dosing pump   | 95702445    |
| without chlorine dioxide dosing pump      | 95702446    |

- for Oxiperm Pro OCD-162-5 after June 2012

| Maintenance kit for Oxiperm Pro OCD-162-5 | Product No. |
|---|-------------|
| with SMART Digital DDA dosing pump        | 98153636    |
| without chlorine dioxide dosing pump      | 98153651    |

- for Oxiperm Pro OCD-162-10 before June 2012

| Maintenance kit for Oxiperm Pro OCD-162-10 | Product No. |
|--|-------------|
| with DMI mechanical dosing pump            | 95702500    |
| with DDI digital dosing pump               | 95707853    |
| without chlorine dioxide dosing pump       | 95702499    |

- for Oxiperm Pro OCD-162-10 after June 2012

| Maintenance kit for Oxiperm Pro OCD-162-10 | Product No. |
|--|-------------|
| with SMART Digital DDA dosing pump         | 98153962    |
| without chlorine dioxide dosing pump       | 98153966    |

- for Oxiperm Pro OCD-162-30 before June 2012

| Maintenance kit for Oxiperm Pro OCD-162-30 | Product No. |
|--|-------------|
| with DMX mechanical dosing pump            | 95717915    |
| with DDI digital dosing pump               | 95717916    |
| without chlorine dioxide dosing pump       | 95717917    |

- for Oxiperm Pro OCD-162-30 after June 2012

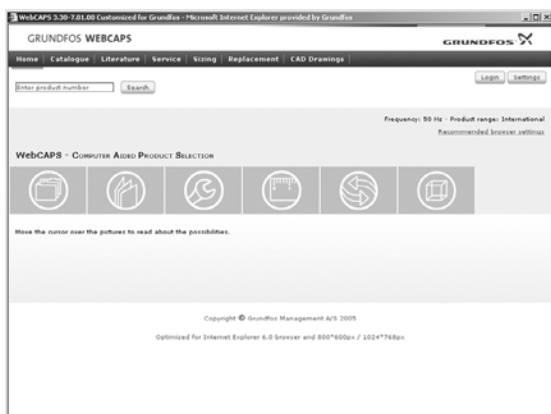
| Maintenance kit for Oxiperm Pro OCD-162-30 | Product No. |
|--|-------------|
| with DMX mechanical dosing pump            | 98162637    |
| with DDI digital dosing pump               | 98162644    |
| without chlorine dioxide dosing pump       | 98162647    |

- for Oxiperm Pro OCD-162-60

| Maintenance kit for Oxiperm Pro OCD-162-60 | Product No. |
|--|-------------|
| with DMX mechanical dosing pump            | 95717919    |
| with DDI digital dosing pump               | 95717920    |
| without chlorine dioxide dosing pump       | 95717921    |

# 9. Further product documentation

## WebCAPS

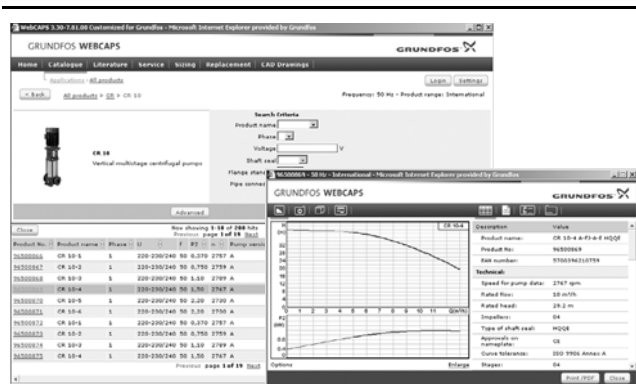


WebCAPS is a **Web**-based **Computer Aided Product Selection** program available on grundfos.com.

WebCAPS contains detailed information on more than 220,000 Grundfos products in more than 30 languages.

Information in WebCAPS is divided into six sections:

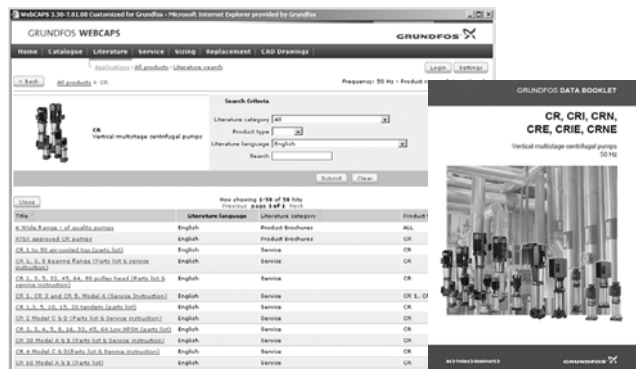
- Catalogue
- Literature
- Service
- Sizing
- Replacement
- CAD drawings.



### Catalogue

Based on fields of application and pump types, this section contains the following:

- technical data
- curves (QH, Eta, P1, P2, etc.) which can be adapted to the density and viscosity of the pumped liquid and show the number of pumps in operation
- product photos
- dimensional drawings
- wiring diagrams
- quotation texts, etc.



### Literature

This section contains all the latest documents of a given pump, such as

- data booklets
- installation and operating instructions
- service documentation, such as Service kit catalogue and Service kit instructions
- quick guides
- product brochures.



### Service

This section contains an easy-to-use interactive service catalogue. Here you can find and identify service parts of both existing and discontinued Grundfos pumps.

Furthermore, the section contains service videos showing you how to replace service parts.



### Sizing

This section is based on different fields of application and installation examples and gives easy step-by-step instructions in how to size a product:

- Select the most suitable and efficient pump for your installation.
- Carry out advanced calculations based on energy, consumption, payback periods, load profiles, life cycle costs, etc.
- Analyse your selected pump via the built-in life cycle cost tool.
- Determine the flow velocity in wastewater applications, etc.



### Replacement

In this section you find a guide to selecting and comparing replacement data of an installed pump in order to replace the pump with a more efficient Grundfos pump. The section contains replacement data of a wide range of pumps produced by other manufacturers than Grundfos.

Based on an easy step-by-step guide, you can compare Grundfos pumps with the one you have installed on your site. When you have specified the installed pump, the guide will suggest a number of Grundfos pumps which can improve both comfort and efficiency.



### CAD drawings

In this section, it is possible to download 2-dimensional (2D) and 3-dimensional (3D) CAD drawings of most Grundfos pumps.

These formats are available in WebCAPS:

2-dimensional drawings:

- .dxf, wireframe drawings
- .dwg, wireframe drawings.

3-dimensional drawings:

- .dwg, wireframe drawings (without surfaces)
- .stp, solid drawings (with surfaces)
- .eprt, E-drawings.

## WinCAPS



Fig. 10 WinCAPS DVD

WinCAPS is a **Windows-based Computer Aided Product Selection** program containing detailed information on more than 220,000 Grundfos products in more than 30 languages.

The program contains the same features and functions as WebCAPS, but is an ideal solution if no internet connection is available.

WinCAPS is available on DVD and updated once a year.

Subject to alterations.







|                      |
|----------------------|
| <b>95718614</b> 0512 |
|----------------------|

|              |
|--------------|
| ECM: 1084917 |
|--------------|

The name Grundfos, the Grundfos logo, and the payoff Be–Think–Innovate are registered trademarks owned by Grundfos Management A/S or Grundfos A/S, Denmark. All rights reserved worldwide.