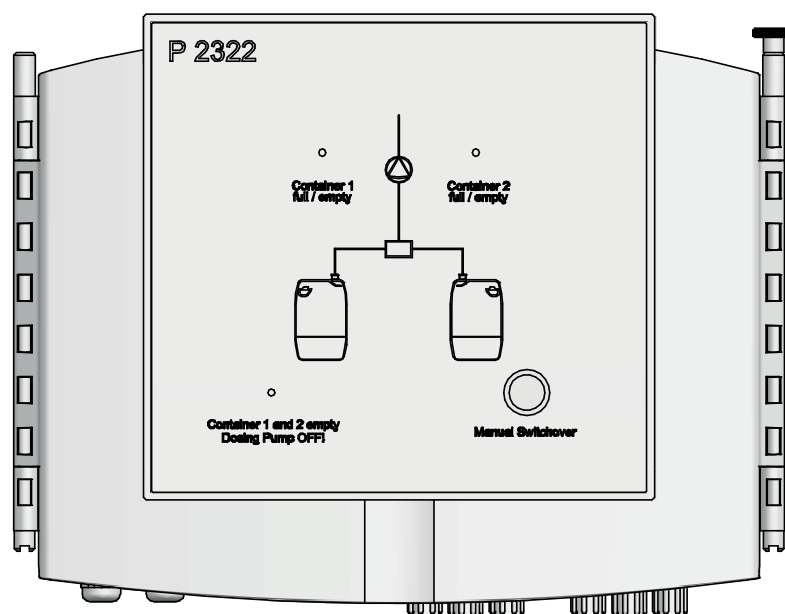


Container changeover unit **P 2322** Operating instructions



Read the operating manual!

The user is responsible for installation and operation related mistakes!

Table of Contents

| | | |
|-----------|--|-----------|
| 1 | Notes for the Reader | 4 |
| 1.1 | General non-discrimination | 4 |
| 1.2 | Explanation of the signal words | 4 |
| 1.3 | Explanation of the warning signs | 4 |
| 1.4 | Identification of warnings | 4 |
| 1.5 | Identification of action instructions | 4 |
| 2 | Safety | 5 |
| 2.1 | General warnings | 5 |
| 2.2 | Working in a safety-conscious manner | 5 |
| 2.3 | Personnel qualification | 5 |
| 3 | Intended use | 7 |
| 3.1 | Notes on product warranty | 7 |
| 3.2 | Intended purpose | 7 |
| 3.3 | Principles | 7 |
| 3.4 | Prohibited dosing media | 7 |
| 3.5 | Foreseeable misuse | 7 |
| 4 | Product description | 9 |
| 4.1 | Scope of delivery | 9 |
| 4.2 | Function description | 9 |
| 4.3 | Rating plate | 9 |
| 5 | Technical data | 10 |
| 6 | Dimensions | 11 |
| 7 | Installation | 12 |
| 7.1 | Installation location | 12 |
| 7.2 | Mounting the device on the wall | 12 |
| 7.3 | Connecting the container changeover unit to a dosing pump | 12 |
| 7.4 | Connecting a suction line to the container changeover unit | 13 |
| 7.5 | Electrical installation | 14 |
| 7.6 | Completing the installation | 14 |
| 8 | Operation | 15 |
| 8.1 | Commissioning the container changeover unit | 15 |
| 8.2 | Decommissioning the container changeover unit | 15 |
| 8.3 | Shutting down in an emergency | 15 |
| 8.4 | Storage | 16 |
| 8.5 | Disposal | 16 |
| 8.6 | Check intervals | 16 |
| 9 | Maintenance | 17 |
| 9.1 | Replacing the solenoid valve | 17 |
| 10 | Troubleshooting | 18 |
| 10.1 | Pump not delivering | 18 |
| 10.2 | Container changeover unit does not switch | 18 |
| 11 | EU Declaration of Conformity | 19 |
| 12 | Warranty claim | 20 |
| 13 | Declaration of no objection | 21 |

1 Notes for the Reader

This operating manual contains information and behaviour rules for the safe and designated operation of the device.

Observe the following principles:

- Read the entire operating manual prior to starting-up the device.
- Ensure that everyone who works with or on the device has read the operating manual and follows it.
- Maintain the operating manual throughout the service life of the device.
- Pass the operating manual on to any subsequent owner of the device.

1.1 General non-discrimination

In this operating manual, only the male gender is used where grammar allows gender allocation. The purpose of this is to make the text easy to read. Men and women are always referred to equally. We would like to ask female readers for understanding of this text simplification.

1.2 Explanation of the signal words




Different signal words in combination with warning signs are used in this operating manual. Signal words illustrate the gravity of possible injuries if the risk is ignored:

| Signal word | Meaning |
|-------------|---|
| DANGER! | Refers to imminent danger. Ignoring this sign may lead to death or the most serious injuries. |
| WARNING | Refers to a potentially hazardous situation. Failure to follow this instruction may lead to death or severe injuries. |
| CAUTION! | Refers to a potentially hazardous situation. Failure to follow this instruction may lead to minor injury or damage to property. |
| PLEASE NOTE | Refers to a danger which, if ignored, may lead to risk to the machine and its function. |

Tab. 1: Explanation of the signal words

1.3 Explanation of the warning signs

Warning signs represent the type and source of a danger:

| Warning sign | Type of danger |
|---|--|
|  | General danger |
|  | Danger from electrical voltage |
|  | Danger of damage to machine or functional influences |

Tab. 2: Explanation of the warning signs

1.4 Identification of warnings

Warnings are intended to help you recognise risks and avoid negative consequences.

This is how warnings are identified:

| Warning sign | SIGNAL WORD |
|---|-------------|
| Description of danger. Consequences if ignored. ⇒ The arrow signals a safety precaution to be taken to eliminate the danger. | |

1.5 Identification of action instructions

This is how pre-conditions for action are identified:

- ✓ Pre-condition for action which must be met before taking action.
- ✘ A resource such as a tool or auxiliary materials required to perform the operating instructions.

This is how instructions for action are identified:


- ➔ Separate step with no follow-up action.
- 1. First step in a series of steps.
- 2. Second step in a series of steps.
 - ▶ Result of the above action.
- ✓ Action completed, aim achieved.


2 Safety


2.1 General warnings

The following warnings are intended to help you eliminate the dangers that can arise while handling the device. Risk prevention measures always apply regardless of any specific action.

Safety instructions warning against risks arising from specific activities or situations can be found in the respective sub-chapters.

| | |
|---|----------------|
|  | DANGER! |
| <p>Mortal danger from electric shock!</p> <p>Wrongly connected or located cables or damaged ones can injure you.</p> <ul style="list-style-type: none"> ⇒ Connect the device only to a SCHUKO socket outlet protected by a ground fault circuit interrupter (GFCI). ⇒ Replace damaged cables without delay. ⇒ Do not use extension cables. ⇒ Do not bury cables. ⇒ Secure cables to avoid being damaged by other equipment. | |

| | |
|---|-----------------|
|  | CAUTION! |
| <p>Increased risk of accidents due to insufficient qualification of personnel!</p> <p>The device may only be installed, operated and maintained by personnel with sufficient qualifications. Insufficient qualification will increase the risk of accidents.</p> <ul style="list-style-type: none"> ⇒ Ensure that all action is taken only by personnel with sufficient and corresponding qualifications. ⇒ Prevent access to the system for unauthorised persons. | |

| | |
|---|--------------------|
|  | PLEASE NOTE |
| <p>Water residue in the components.</p> <p>The device is tested for correct function before shipping. This means that water residue can be present in the hoses during the first installation. This residue is entirely harmless and does not compromise the start-up.</p> | |

2.2 Working in a safety-conscious manner

Besides the safety instructions specified in this operating manual, further safety rules apply and must be followed:

- accident prevention regulations
- Safety and operating provisions
- safety regulations on handling hazardous substances,
- Environmental protection provisions,
- applicable standards and legislation.

2.3 Personnel qualification

Any personnel who work on the device must have appropriate special knowledge and skills.

Anybody who works on the device must meet the conditions below:

- Attendance at all the training courses offered by the owner,
- Personal suitability for the respective activity
- Sufficient qualification for the respective activity
- Training in how to handle the device
- knowledge of safety equipment and the way this equipment functions
- Knowledge of this operating manual, particularly of safety instructions and sections relevant for the activity.
- Knowledge of fundamental regulations regarding health and safety and accident prevention

All persons must generally have the following minimum qualification:

- Training as specialists to carry out work on the device unsupervised
- Sufficient training that they can work on the device under the supervision and guidance of a trained specialist

These operating instructions differentiate between these user groups:

2.3.1 Qualified persons

A qualified person is someone whose professional training, knowledge, experience and knowledge of the relevant specifications, is able to perform the job allocated to them and recognise and/or eliminate any possible dangers by themselves.

2.3.2 Trained electricians

Due to their professional training, knowledge and experience as well as knowledge of specific standards and provisions, trained electricians are able to do the electrical work assigned to them and to recognise and avoid any potential dangers by themselves.

They are specially trained for their specific working environment and are familiar with relevant standards and provisions.

They must comply with the legally binding regulations on accident prevention.

2.3.3 Trained persons

Trained persons have received training from the operator about the tasks they are to perform and about the dangers stemming from improper behaviour.

Trained persons have attended all trainings offered by the operator.

2.3.4 Personnel tasks

In the table below, you can check what personnel qualifications are required for the respective tasks. Only people with appropriate qualifications are allowed to perform these tasks!

| Qualification | Activities |
|----------------------|---|
| Qualified persons | <ul style="list-style-type: none">■ Assembly■ Hydraulic installations■ Commissioning■ Taking out of operation■ Fault rectification■ Maintenance■ Repairs■ Disposal |
| Trained electricians | <ul style="list-style-type: none">■ Electrical installation■ Rectifying electrical faults■ Electrical repairs |
| Trained persons | <ul style="list-style-type: none">■ Storage■ Transportation■ Control■ Taking out of operation |

Tab. 3: Personnel qualification

3 Intended use

3.1 Notes on product warranty

Any non-designated use of the device can impair its function and the protection provided. This leads to invalidation of any warranty claims!

Please note that liability is on the side of the user in the following cases:

- The container changeover unit P 2322 is operated in a fashion which does not accord with these operating instructions.
- If people operate the product who are not adequately qualified to carry out their respective activities.
- No original spare parts or accessories of Lutz-Jesco GmbH are used.
- Unauthorised changes are made to the product by the user.
- The user uses different dosing media than those indicated in the order.
- The user does not use dosing media under the conditions agreed with the manufacturer such as modified concentration, density, temperature, contamination, etc.

3.2 Intended purpose

The container changeover unit P 2322 is intended for this purpose: Automatic switching between two containers to ensure continuous dosing of liquid dosing media.

3.3 Principles

Before delivery, the manufacturer inspected the container changeover unit and operated it under specific conditions (with a specific dosing medium with a specific density and temperature, with specific pipe dimensions, etc.) Since these conditions vary at every installation location, the container changeover unit should be checked when commissioning.

3.4 Prohibited dosing media

- Gaseous media
- Solid substances
- Combustible media
- Radioactive media
- All other media which are not suitable for flowing through the changeover unit.

3.5 Foreseeable misuse

The following section provides information regarding the applications which are classified as non-intended use. This section is intended to allow you to detect possible misuse in advance and to avoid it.

Foreseeable misuse is assigned to the individual stages of the product lifetime:

3.5.1 Incorrect wall mounting

- Unstable or unsuitable mounting of the device on the wall

3.5.2 Incorrect hydraulic installation

- Damage to dosing connections from over-tightening

- Kinked hose lines
- Using damaged parts
- Reversed suction lines or connections

3.5.3 Incorrect electrical installation

- Connecting the device to an unsecured mains or one that does not conform to standards
- Not possible to immediately or easily disconnect the power supply
- Protective earth removed

3.5.4 Incorrect start-up

- Commissioning of a damaged device
- Closed suction line, e. g. due to blockages
- Operating personnel not trained on the device
- System was recommissioned after maintenance without all the protective equipment and fixtures, etc. being reconnected.
- Inadequate protective clothing or none at all

3.5.5 Incorrect operation

- Protective equipment not functioning correctly or dismantled
- Unauthorised modification of the container changeover unit
- Ignoring operational disturbances
- Deposits in the lines due to inadequate purging
- Operation not possible due to dirty or illegible display of the dosing pump
- Delivery of dosing media for which the system is not designed
- Delivery of particulate or contaminated dosing media
- Inadequate protective clothing or none at all

3.5.6 Incorrect maintenance

- Carrying out maintenance during ongoing operation
- Carrying out work that is not described in the operating manual
- No adequate or regular inspection of correct functioning
- No replacement of damaged parts or cables with inadequate insulation
- No securing against reactivation during maintenance work
- Using cleaning materials that can cause reactions with the dosing media
- Inadequate cleaning of the system
- Unsuitable purging medium
- Detergents left in system parts
- Using unsuitable cleaning equipment
- Using the wrong spare parts
- Pulling off sections of the plant
- Reversed connections
- Damaging or not installing all the seals
- Not renewing seals
- Not paying attention to safety data sheets
- Inadequate protective clothing or none at all

3.5.7 Incorrect decommissioning

- Not completely removing the dosing medium
- Disconnecting cables before the device has been disconnected from the power supply
- Device not disconnected from the power supply
- Using the wrong dismantling tools
- Inadequate protective clothing or none at all

3.5.8 Incorrect disposal

- Incorrect disposal of dosing media and other materials
- No labelling of hazardous substances

4 Product description

4.1 Scope of delivery

Please compare the delivery note with the scope of delivery. The following items are part of the scope of delivery:

- Container Changeover Unit P 2322
- Mounting set for wall mounting
- Hose material Ø4/Ø6
- Operating instructions

4.2 Function description

Dosing media must be permanently ready for operation to permit sufficient water treatment at any time. As a result, dosing systems can be fitted with two containers or packages. Samples are taken from the first container, while the second container is immediately available as a reserve if required.

The container changeover unit P 2322 enables automatic changeover between the two containers. The controller monitors the container level by means of the level contact in the suction line. When the level contact signals that the container is empty, the control system electrically actuates a solenoid valve and thus automatically switches over to extraction from the second container. If the second container is also empty, the control system transmits the empty message to the dosing pump and stops the dosing.

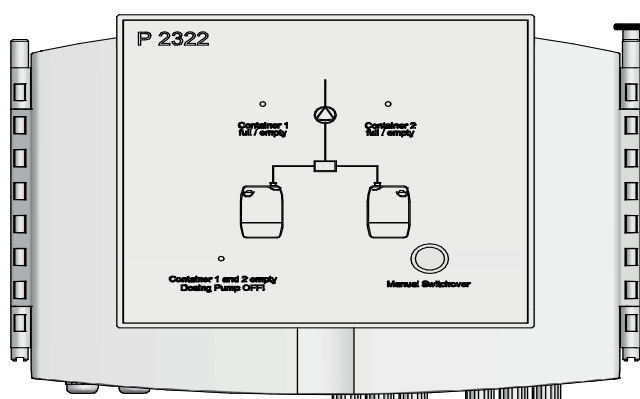


Fig. 1: Container Changeover Unit P 2322

On the front of the container changeover unit, a flow diagram with status LEDs informs about the current operating status of the changeover unit. The meaning of the colour and blinking time of the LEDs is shown in the following table "LED code". With the key "manual changeover" the changeover process can also be performed manually at any time. This makes it possible, for example, to vent the suction line after changing the container.

| Name of the LED | Illumination | Description |
|--|--------------|-------------------------------|
| Container 1/ container 2 | permanently | Full container, no extraction |
| | blink | Full container, extraction |
| | Off | Reservoir empty |
| Container 1 and 2 empty, dosing pump off | blink | Both reservoirs empty |

Tab. 4: LED code

4.3 Rating plate

There is information on the equipment about safety or the product's way of functioning. The information must stay legible for the duration of the service life of the product.

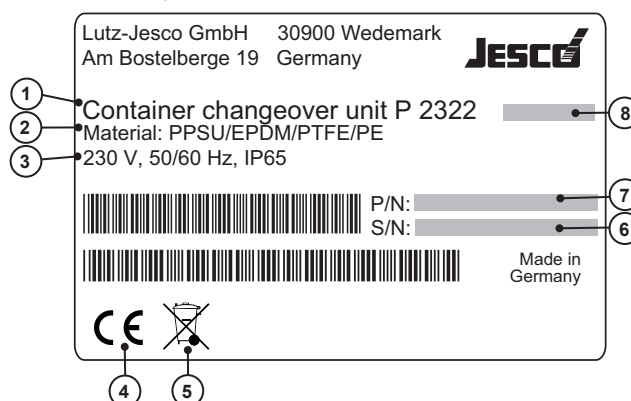


Fig. 2: Rating plate P 2322

| Item | Description |
|------|--|
| 1 | Product name |
| 2 | Material |
| 3 | Voltage supply |
| 4 | Label showing conformity with applicable European directives |
| 5 | WEEE label |
| 6 | Serial number |
| 7 | Part number |
| 8 | Month / year of manufacture |

Tab. 5: Rating plate

5 Technical data

| Container Changeover Unit P 2322 | | Value |
|--|--------------------|--------------------------------------|
| Operating pressure | bar | max. 3 |
| Flow rate (at $\Delta p = 0,5$ bar) | l/h | max. 25 |
| Connection socket for dosing pump and level monitoring | | M12x1, A-coded |
| Hose clamp connection | mm | $\varnothing 4/\varnothing 6$ |
| Components coming into contact with the media | | PTFE, FKM (EPDM) |
| Voltage supply | | 100 – 240 V AC $\pm 10\%$, 50/60 Hz |
| Power consumption | W | max. 40 |
| Protection class | | IP65 |
| Ambient temperature | $^{\circ}\text{C}$ | 0 – 50, no direct sunlight |
| Max. temperature of the medium | $^{\circ}\text{C}$ | 35 |
| Housing material | | ABS |
| Weight | kg | 3 approx. |

Tab. 6: Technical data

6 Dimensions

All dimensions in mm

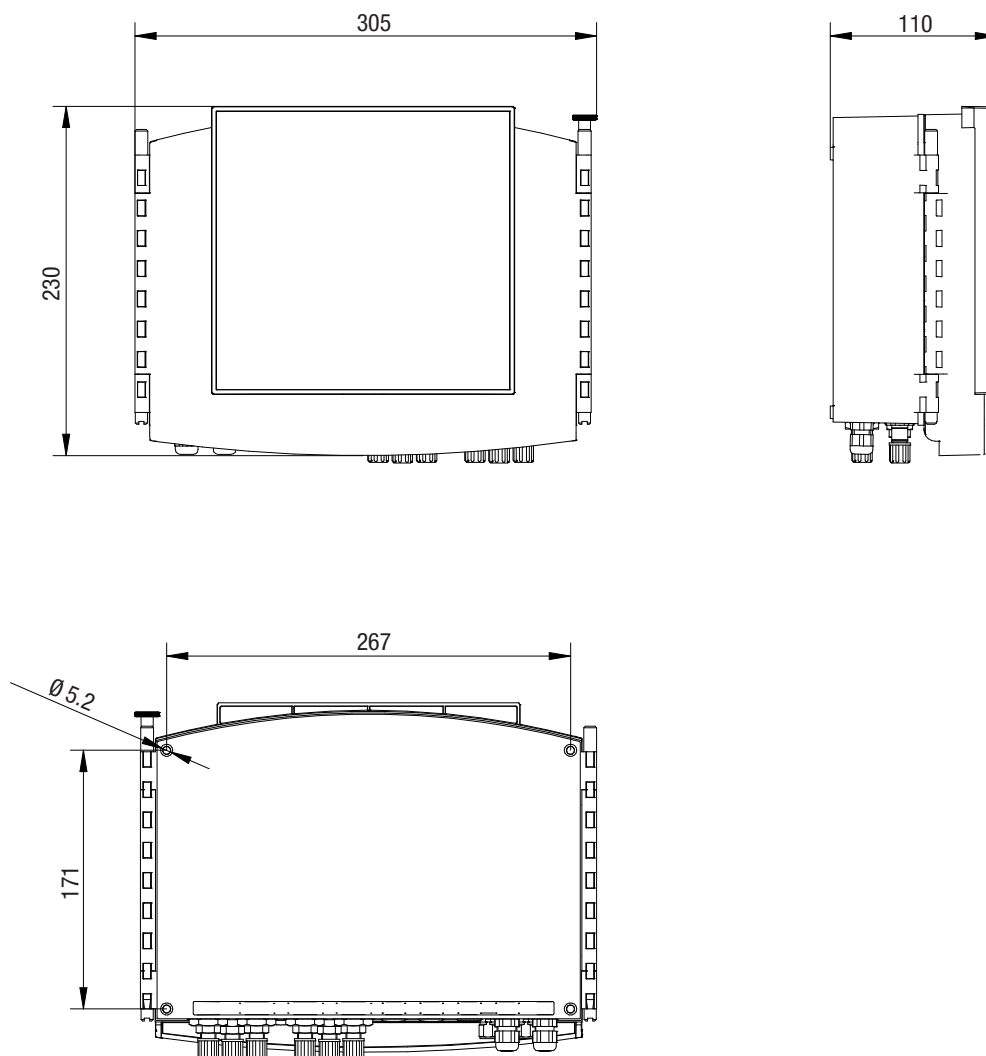


Fig. 3: Outside dimensions

7 Installation

7.1 Installation location

The unit is mounted on the wall near the containers at a height suitable for operation. The installation location must fulfil the following requirements:

- Secured against unauthorised access.
- Protected against weather.
- The climactic conditions are complied with (see chapter 5 "Technical data" on page 10).
- The wall is flat and can bear the weight.
- The distance from the side of the container changeover unit to a wall or to other devices must be at least 3 cm to allow easy installation.

7.2 Mounting the device on the wall

For wall mounting of the instrument there are four fastening holes in the back of the housing (see Fig. 3 "Outside dimensions" on page 11)

Resources required:

- ✂ Mounting set
- ✂ Drill
- ✂ Slotted screwdriver

Pre-conditions for actions:

- ✓ The installation location complies with the requirements specified in chapter 7.1 "Installation location" on page 12.
- ✓ Suitable mounting material is available.
- ✓ The device is voltage-free.

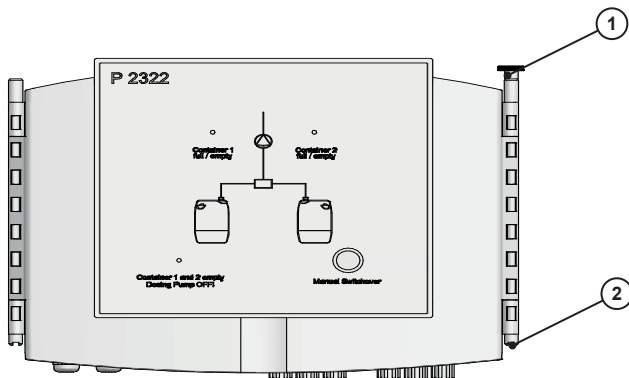


Fig. 4: Wall mounting

Perform the following working steps:

1. Open the front housing of the device by removing the right pivot (1). To do this, unscrew the knob (2) at the end of the pivot.
2. Hold the back of the housing against the wall and mark the mounting points for the device on the wall.
3. Put the device aside.
4. Drill the marked holes with a Ø6 drill bit (drilling depth > 40 mm) and insert the rawlplug from the mounting set.
5. Hold the device against the wall at the back of the housing and fasten the device with the screws from the mounting set.

- ✓ The device is fitted on the wall.

7.3 Connecting the container changeover unit to a dosing pump

7.3.1 Hydraulic installations



The container changeover unit can be used for dosing liquids with any dosing pump or as an extension unit for the CHC dosing station EASYCHLORMIX.

Pre-conditions for actions:

- ✓ The device has been mounted on the wall in accordance with the specifications of 7.2 "Mounting the device on the wall" on page 12.
- ✓ A dosing pump was installed according to its operating instructions, but was not connected to an external power supply and thus deactivated.
- ✓ An injection nozzle was connected to the dosing pump according to the operating instructions of the injection nozzle.
- ✓ Two full containers with dosing medium were placed in collecting pans.
- ✓ A suction line with level contact was installed in each container.
- ✓ A suitable 4/6 hose is provided in sufficient length for connection to the dosing pump.

Resources required:

- ✂ 4/6 hose
- ✂ Cutting tool



For use with an EASYCHLORMIX CHC dosing station, the unit has a second 3-way solenoid valve and correspondingly additional hose clamp connections. Air from the pump is drawn from the pump via these connections and through the suction line into the medium to be dosed; this ensures an equal solution.

7.3.1.1 Connecting the hose for the dosing media

Perform the following working steps:

1. Shorten the 4/6 hose to a length corresponding to the distance between the unit and the dosing pump. Make sure that the cut is clean and at right angles.
2. Unscrew the union nut with the clamping ring from connection P of the right-hand solenoid valve.
3. Place the union nut and the clamping ring on the hose.
4. Plug the hose all the way in to the grommet of connector P.
5. Push the clamping ring onto the grommet of connector P and screw it to the union nut.
6. Connect the other end of the hose to the dosing pump according to the instructions in the operating manual.

7.3.1.2 Connecting hose for the air (only when using a CHC dosing station EASYCHLORMIX)

Perform the following working steps:

1. Shorten the 4/6 hose to a length corresponding to the distance between the unit and the dosing pump. Make sure that the cut is clean and at right angles.
2. Unscrew the union nut with the clamping ring from connection P of the left-hand solenoid valve.
3. Place the union nut and the clamping ring on the hose.
4. Plug the hose all the way in to the grommet of connector P.
5. Push the clamping ring onto the grommet of connector P and screw it to the union nut.
6. Connect the other end of the hose to the dosing pump according to the instructions in the operating manual.

✓ **Container changeover unit hydraulically connected with dosing pump.**

7.4 Connecting a suction line to the container changeover unit

i When using the container changeover unit with an EASYCHLORMIX system, the suction line provided for this purpose must be used, as only this suction line has the required second connection for the air.

Pre-conditions for actions:

- ✓ The operating instructions of the suction line is at hand.
- ✓ The suction line is installed in the container.
- ✂ A cutting tool is at hand.

Perform the following working steps:

1. Shorten the hose supplied with the suction line to a length corresponding to the distance between the suction line and the device. Make sure that the cut is clean and at right angles.
2. Connect one end of the hose to the suction connection of the suction line.
3. Connect the other end of the hose to the connection S of the right-hand solenoid valve.
4. When connecting the second suction line, proceed as described in steps 1 – 3.

Only for EASYCHLORMIX system

5. Fit an air hose to the second connection nozzle of the suction line.
6. Unscrew the union nut with the clamping ring from connection S of the left-hand solenoid valve.
7. Place the union nut and the clamping ring on the hose.
8. Plug the hose all the way in to the grommet of connector S.
9. Push the clamping ring onto the grommet of connector S and screw it to the union nut.
10. When connecting the second air hose, proceed as described in steps 5 – 9.

✓ **Container changeover unit connected with suction line.**

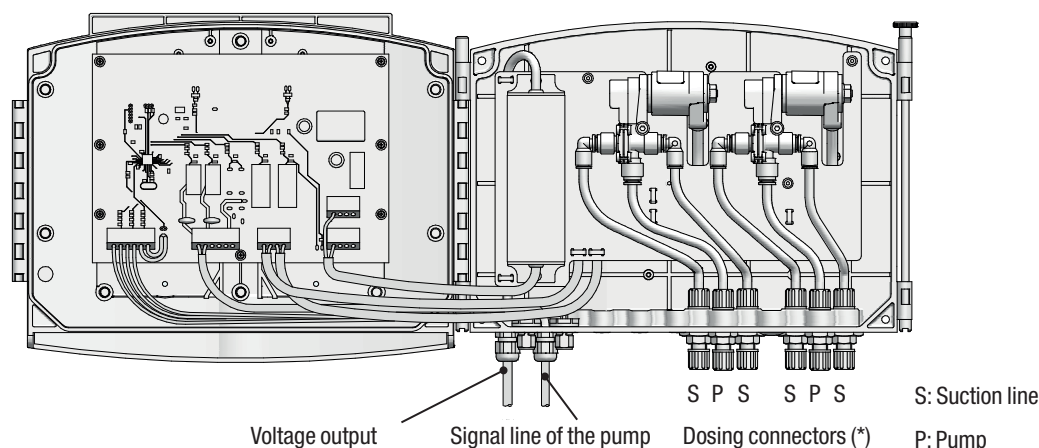


Fig. 5: Internal view container changeover unit

(*) Version with two valves for use with the CHC dosing station EASYCHLORMIX

7.5 Electrical installation

Pre-conditions for actions:

- ✓ The operating instructions of the dosing pump and the suction line are at hand.
- ✓ All components of the system have been installed correctly.
- ✓ The container changeover unit and the dosing pump are not connected to any external power supply.
- ✓ The level input of the dosing pump was released according to the operating manual.



Perform the following working steps:

1. Connect the connecting cable with the A-coded plug of the container changeover unit to the level input of the dosing pump.
 2. Connect the connecting cable with the A-coded plug of the respective suction line to one of the connection sockets of the container changeover unit.
 3. Connect the container changeover unit and the dosing pump to secured mains that conform to standards. The respective supply voltage can be found on the rating plate on the devices.
- ✓ **Container changeover unit electrically installed.**

7.6 Completing the installation

- ➔ Check all electrical and mechanical connections for their correct connection.

8 Operation

| | |
|--|-----------------|
|  | CAUTION! |
| <p>Increased risk of accidents due to insufficient qualification of personnel!</p> <p>The container changeover unit and the dosing pump may only be installed, operated and maintained by personnel with sufficient qualifications. Insufficient qualification will increase the risk of accidents.</p> <ul style="list-style-type: none"> ⇒ Ensure that all action is taken only by personnel with sufficient and corresponding qualifications. ⇒ Prevent access to the system for unauthorised persons. | |
| <p> The container changeover unit does not have an ON/OFF switch. The device is immediately ready for operation after it has been connected to the electrical mains.</p> | |

8.1 Commissioning the container changeover unit

Pre-conditions for actions:

- ✓ All components of the dosing system have been properly installed according to their operating instructions.
- ✓ All the hydraulic sections have been inspected to ensure they are adequately leak-proof and that the through flow direction is correct.


Perform the following working steps:

1. Startup the dosing pump. The necessary settings are specified in the operating instructions of the dosing pump.
 - ▶ The dosing pump starts to suck the dosing medium out of the container whose LED blinks.
 2. Press the key "Manual Switchover" on the container changeover unit as soon as a continuous flow without air bubbles is visible in the dosing lines.
 - ▶ The LED of container 2 starts to blink, while the LED of container 1 is permanently on. The dosing pump starts to suck the dosing medium from container 2.
 3. As soon as a continuous flow without air bubbles is visible in the dosing lines, press the "Manual changeover" button on the container changeover unit.
 - ▶ The dosing pump starts to suck the dosing medium from container 1 again.
- ✓ **Container changeover unit commissioned.**

8.2 Decommissioning the container changeover unit

Resources required:

- ✂ A container with a minimum of 2 litre of clear water is ready.

| | |
|---|--------------------|
|  | PLEASE NOTE |
| <p>Soiled dosing line!</p> <p>Depending on the dosing medium, it is possible that clear water is not sufficient to completely free the dosing line from residues of the dosing medium.</p> <ul style="list-style-type: none"> ➔ Use a more suitable detergent instead. ➔ Ensure that the detergent is compatible with the dosing medium and the parts of the container changeover unit that come into contact with the medium. | |

Perform the following working steps:

1. Stop the dosing pump.
 2. Deinstall the suction line from the first container and submerge it in a container with clear water. Seal the container with the original cover.
 3. Start the dosing pump and wait until it has pumped about 1 litre of clear water.
 4. Stop the dosing pump.
 5. Repeat the procedure with the second suction line.
 6. Stop the dosing pump.
 7. Disconnect the dosing pump and the container changeover unit from the power supply.
 8. Remove all dosing lines from the pump and the suction line from the device.
 9. Place the suction line in the corner of the collection pan provided for this purpose.
- ✓ **Container changeover unit decommissioned.**

8.3 Shutting down in an emergency

In an emergency, the device itself does not pose any danger to persons or damage to the dosing system.

8.4 Storage

Storing the device correctly will extend its service life. Avoid negative influences such as extreme temperatures, high humidity, dust, chemicals, etc.

Pre-conditions for actions:

- ✓ The container changeover unit was shut down in accordance with section 8.2 "Decommissioning the container changeover unit" on page 15.

Ensure ideal storage conditions where possible

- The storage place must be cold, dry, dust-free and generously ventilated.
- The temperatures lie between 0 °C and + 50 °C.
- Relative air humidity does not exceed 90 %.

8.5 Disposal

Pre-conditions for actions:

- ✓ The container changeover unit was shut down in accordance with section 8.2 "Decommissioning the container changeover unit" on page 15.

The device must be disposed of in accordance with applicable local laws and regulations. It should not be included with domestic waste. As the disposal regulations may differ from country to country, please consult your supplier if necessary.

In Germany, the manufacturer must provide free-of-charge disposal provided the device has been safely returned along with a declaration of no objection (see chapter 13 "Declaration of no objection" on page 21).

8.6 Check intervals

Under normal operating and environmental conditions the device is maintenance-free. Regularly, check the device for leaks.

The legislator also stipulates that electrical systems and equipment must be checked for proper condition by a qualified electrician (DGUV regulation 3). These tests must be carried out as follows:

- Before the first commissioning
- After a modification or repair before recommissioning
- At certain intervals

The time limits are to be calculated in such a way that any defects that may arise and which are to be expected are detected in good time.

9 Maintenance

Container changeover units are produced to the highest quality standards, and are maintenance-free under normal operating and ambient conditions. Nevertheless, device components in contact with the medium, such as the solenoid valve, are subject to operational wear and must be replaced after some time.

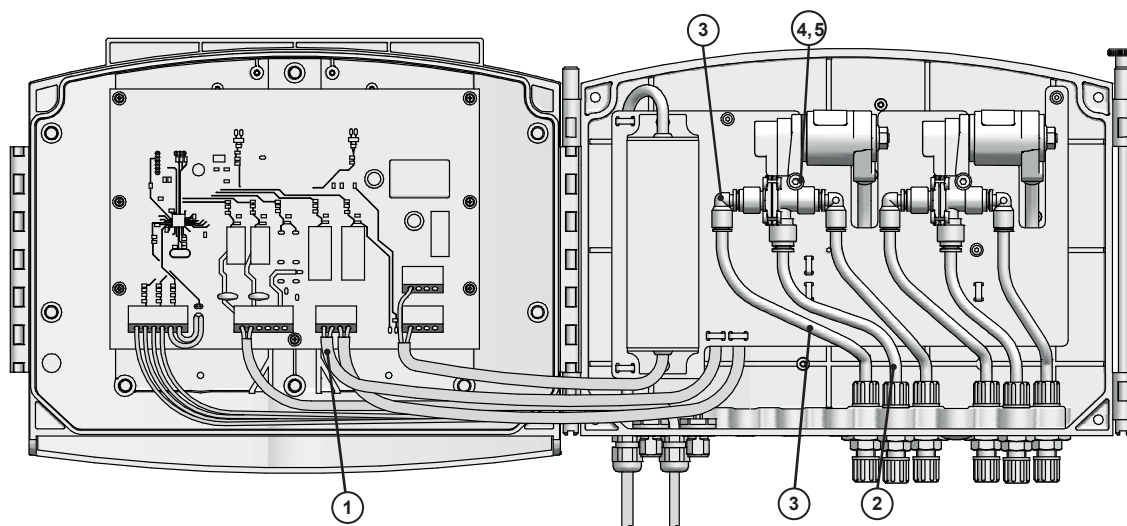


Fig. 6: Internal view container changeover unit

9.1 Replacing the solenoid valve

Pre-conditions for actions:

- ✓ The dosing pump was stopped.

Resources required:

- ✂ Spare solenoid valve
- ✂ A container with a minimum of 2 litre of clear water is ready.

Perform the following working steps:

1. Remove the suction line from the container from which the dosing pump can still deliver.
2. Submerge the suction line in a container with clear water.
3. Start the dosing pump and wait until it has pumped about 1 litre of clear water.
4. Stop the dosing pump.
5. Disconnect the container changeover unit from the power supply.
6. Loosen the union nuts on the hose clamp fittings (2) with the clamping ring and pull the hoses from the nozzles of the hose clamp fitting. Be aware that there may still be dosing medium in the hose on the closed side of the solenoid valve.
7. Open the housing cover of the container changeover unit.

8. Disconnect the 2-wire cable of the solenoid valve from the terminal strip (1).
 9. Loosen the fixing screw (4) and the washer (5).
 10. Loosen the three hoses directly on the solenoid valve and remove the defective solenoid valve.
 11. Take a new solenoid valve and mount it in the container changeover unit in reverse order.
 12. Connect the container changeover unit to the power supply.
 13. Test the switching of the solenoid valve with the "manual switchover" button on the front of the device.
 14. Start the dosing pump and test the hose connections for leakage by switching manually several times.
 15. Close the container changeover unit.
- ✓ **Solenoid valve replaced.**

10 Troubleshooting

See below for information about how to rectify faults on the device or the system. If you cannot eliminate the fault, please consult with the manufacturer on further measures or return the device for repair.

10.1 Pump not delivering

| Possible cause | Remedy |
|---|--|
| Hose to dosing pump off or clogged | Check hose line. When clogged: Clean hose line |
| Solenoid valve clogged | Flush solenoid valve, otherwise: Install new valve |
| Hose of the suction line is blocked | Clean the hose of the suction line |
| Container changeover unit has stopped the dosing pump since both containers are empty | Replace containers |
| No power supply | Reconnect the current supply |

Tab. 7: Troubleshooting pump not delivering

10.2 Container changeover unit does not switch

| Possible cause | Remedy |
|--|---|
| Relay defective | Opening the device Check if the LED of the relay is lit on the board. If not, send the device in for repair. |
| Defective solenoid valve | Check whether switching noises of the solenoid valve can be heard when switching manually. If not, install new solenoid valve. |
| Level monitoring of the suction line is defective. | Check whether the plug of the level monitoring has been fitted correctly on the container changeover unit. If not install new suction line. |
| No power supply | Reconnect the current supply |

Tab. 8: Troubleshooting container changeover unit does not switch

11 EU Declaration of Conformity



(DE) EU-Konformitätserklärung

Hiermit erklären wir, dass das nachfolgend bezeichnete Gerät aufgrund seiner Konzipierung und Bauart sowie in der von uns in Verkehr gebrachten Ausführung den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der aufgeführten EU-Richtlinien entspricht. Bei einer nicht mit uns abgestimmten Änderung am Gerät verliert diese Erklärung ihre Gültigkeit.

(EN) EU Declaration of Conformity

We hereby certify that the device described in the following complies with the relevant fundamental safety and sanitary requirements and the listed EU regulations due to the concept and design of the version sold by us.

If the device is modified without our consent, this declaration loses its validity.

(FR) Déclaration de conformité UE

Nous déclarons sous notre propre responsabilité que le produit ci-dessous mentionné répond aux exigences essentielles de sécurité et de santé des directives UE énumérées aussi bien sur le plan de sa conception et de son type de construction que du modèle que nous avons mis en circulation.

Cette déclaration perdra sa validité en cas d'une modification effectuée sur le produit sans notre accord explicite.

(ES) Declaración de conformidad UE

Por la presente declaramos que, dados la concepción y los aspectos constructivos del modelo puesto por nosotros en circulación, el aparato mencionado a continuación cumple con los requisitos sanitarios y de seguridad vigentes de las directivas de la U.E. citadas a continuación.

Esta declaración será invalidada por cambios en el aparato realizados sin nuestro consentimiento.

(PT) Declaração de conformidade UE

Declaramos pelo presente documento que o equipamento a seguir descrito, devido à sua concepção e ao tipo de construção daí resultante, bem como a versão por nós lançada no mercado, cumpre as exigências básicas aplicáveis de segurança e de saúde das directivas CE indicadas.

A presente declaração perde a sua validade em caso de alteração ao equipamento não autorizada por nós.

Bezeichnung des Gerätes:

Behälter-Umschalter

Description of the unit:

Container Changeover

Typ:

P 2322

Type:

EU-Richtlinien:

2006/42/EG

EU directives:

2014/30/EU

Die Schutzziele der Niederspannungsrichtlinie 2014/35/EU wurden gemäß Anhang I, Nr. 1.5.1 der Maschinenrichtlinie 2006/42/EG eingehalten.

The protective aims of the Low Voltage Directive 2014/35/EU were adhered to in accordance with Annex I, No. 1.5.1 of the Machinery Directive 2006/42/EC.

Harmonisierte Normen:

DIN EN ISO 12100: 2010

Harmonized standards:

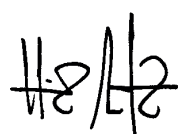
DIN EN 61000-6-2: 2005

DIN EN 61000-6-4:2007

Dokumentationsbevollmächtigter:

Lutz-Jesco GmbH

Authorized person for documentation:



Heinz Lutz
Geschäftsführer / Chief Executive Officer
Lutz-Jesco GmbH
Wedemark, 24.02.2020

Lutz-Jesco GmbH
Am Bostelberge 19
30900 Wedemark
Germany

12 Warranty claim

Warranty claim

Please copy and send it back with the unit!

If the device breaks down within the period of warranty, please return it in a cleaned condition with the complete warranty claim.

Sender

Company: Phone: Date:

Address:

Contact person:

Manufacturer order no.: Date of delivery:

Device type: Serial number:

Nominal capacity / nominal pressure:

Description of fault:

.....

.....

.....

.....

.....

.....

.....

.....

Service conditions of the device

Point of use / system designation:

.....

.....

Accessories used (suction line etc.):

.....

.....

.....

.....

Commissioning (date):

Duty period (approx. operating hours):

Please describe the specific installation and enclose a simple drawing or picture of the chemical feed system, showing materials of construction, diameters, lengths and heights of suction and discharge lines.

13 Declaration of no objection

Declaration of no objection

Please fill out a separate form for each appliance!

We forward the following device for repairs:

Device and device type: Part-no.:

Order No.: Date of delivery:

Reason for repair:

.....

.....

Dosing medium

Description: Irritating: ☐ Yes ☐ No

Properties: Corrosive: ☐ Yes ☐ No

We hereby certify, that the product has been cleaned thoroughly inside and outside before returning, that it is free from hazardous material (i.e. chemical, biological, toxic, flammable, and radioactive material) and that the lubricant has been drained.

If the manufacturer finds it necessary to carry out further cleaning work, we accept the charge will be made to us.

We assure that the aforementioned information is correct and complete and that the unit is dispatched according to the legal requirements.

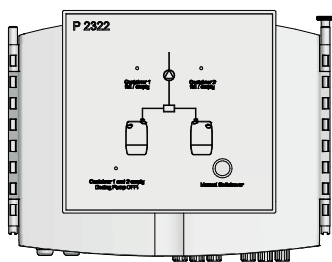
Company / address: Phone:

..... Fax:

..... Email:

Customer No.: Contact person:

Date, Signature:



Lutz-Jesco GmbH

Am Bostelberge 19
D-30900 Wedemark

Phone: +49 5130 5802-0
info@lutz-jesco.com
www.lutz-jesco.com

Operating instructions
Container Changeover Unit P 2322