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Detergent pump with cleaning agent lance

1 Introduction

These installation instructions put you in the position to install the detergent pump with cleaning agent lance safely as intended.

- > Please read these installation instructions carefully before installing the detergent pump with cleaning agent lance.
- > Keep these installation instructions ready and available at all times.
- > Comply with all safety instructions in these installation instructions at all times.
- > Please also observe the original operating manual for the automatic feeder.



2 For your safety

2.1 Target group

2.1.1 Necessary qualifications of the service technician

Only trained service technicians are authorized to install the detergent pump with cleaning agent lance and put them into service.




Service technicians are electricians with appropriate qualifications, i.e. they are able to assess the work assigned to them and detect potential risks on the basis of their technical training as well as their knowledge of the relevant standards.

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This also includes knowledge of relevant accident prevention regulations, generally accepted safety regulations, EC guidelines and country-specific standards and provisions.

2.2 Indication of hazards

Hazards are indicated by a key word and a corresponding symbol, depending on the severity and probability:

	Danger! For an imminent danger, resulting in serious injuries or death.
	Warning! For a potentially dangerous situation which may cause serious injuries or even death.
	Caution! For a potentially dangerous situation which may cause minor injuries or material damage.
Attention	For a potentially harmful situation in which the product or an item can become damaged within its environment.
Note	For application notes and other useful information.

However, it is just as important to comply with any other notes and information which are not highlighted, so as to avoid failures which in turn may cause direct or indirect injuries or material damage.

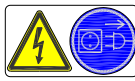
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2.3 Safety signs on the product

The safety signs on the product are an important part of the safety concept and help prevent accidents.

They indicate danger areas at the machine and warn against residual risks.

Keep all safety signs completely in legible condition and renew them if they become unreadable.


	<p>Danger due to live electrical components.</p> <p>Risk of fatal injury from electric shock.</p> <ul style="list-style-type: none"> • Always disconnect the power plug before opening the housing of the detergent pump and the control box of the automatic feeder.
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	<p>Warning of damaging or irritant materials.</p> <p>Risk of fatal injury from hazardous materials.</p> <ul style="list-style-type: none"> • Pay attention to the manufacturer's information and national regulations regarding the handling, use, storage and installation location of the cleaning agent you are using.
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2.4 Safety instructions

Remember:

- You must follow all safety instructions in the safety data sheet for the cleaning agent you are using.
- You must always wear the protective gear, such as protective goggles and gloves, specified in the safety data sheet for the cleaning agent you are using.

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- Undiluted cleaning agent may not be drained into the ground water or sewage system. Observe the recommendations in the safety data sheet for your cleaning agent and contact your water utility company and your sewage disposal company to find out which regulations apply to you.
- Observe the manufacturer's instructions and national regulations for use, storage and installation site of the cleaning agent used.
- Only use the cleaning agents recommended in this operating manual.
- Observe the manufacturer's guidelines regarding the amount, temperature and concentration of cleaning agent used.


3 Cleaning agents

Only use the following cleaning agent:

- HyClean K45

⚠ WARNING Beware of Chemical burns from cleaning agents. The cleaning agent can cause chemical burns to your eyes or hands. Always wear goggles and protective gloves when using cleaning agents. Follow all the safety instructions listed in the safety data sheet for the cleaning agent and wear the specified safety equipment.

⚠ ATTENTION Never use cleaning agents containing chlorine, as they can attack the materials of the automatic feeder and impair its function. If this happens, your calves may not

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receive enough feed. This can lead to malnutrition, which can cause impaired growth and development, increased susceptibility to illness or even the death of your calves.

ATTENTION The cleaning agent tank must be positioned so that it cannot tip over and it cannot be accessed by calves, unauthorised persons and children.

4 Disposal

All components, liquids and solids must be disposed of in compliance with the official local regulations for waste prevention and appropriate waste recycling or disposal which apply in the your country. Also observe the corresponding safety data sheets.

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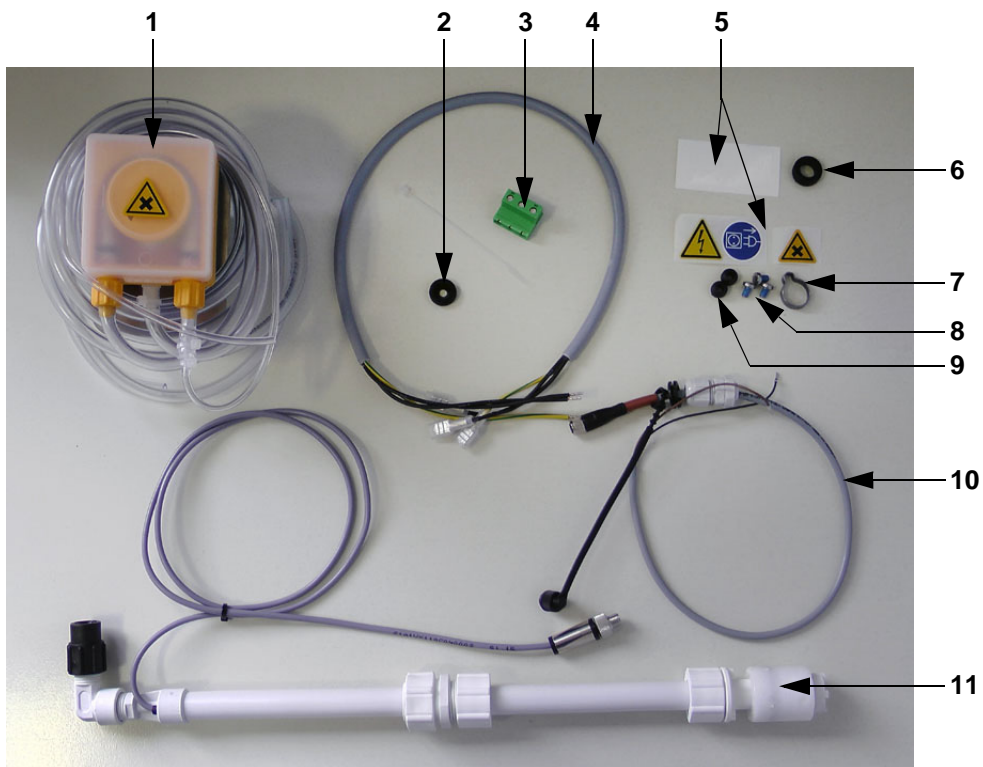
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5 Scope of delivery



1 Detergent pump	2 Ear clamp
2 Fitting	3 Screws
3 Terminal	4 Grommets
4 Connecting cable for detergent pump	5 Connecting cable for cleaning agent lance
5 Pictograms	6 Cleaning agent lance
1 Grommet	

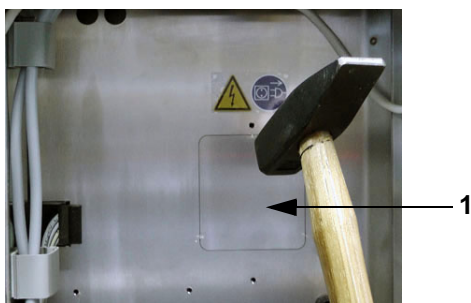
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6 Installing the detergent pump

⚠ WARNING The automatic feeder is electrically operated.

Switch off the automatic feeder and disconnect the power plug before starting the retrofit process.

1. Undo the screws that attach the powder hopper to the feeder housing. The screws are located to the left and right of the feeding box.
2. Undo the screws that attach the earthing cable to the powder hopper attachment.
3. Carefully lift the powder hopper from the feeder housing and disconnect the device socket from the geared motor.
4. Open the left door of the automatic feeder.
5. Attach the supplied pictograms to the automatic feeder.
6. Knock the metal piece for the detergent pump out of the intermediate panel in the automatic feeder.



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7. Insert the detergent pump and screw it on tightly using the mounting screws.
8. Remove the left dummy plug from the rear panel of the feeder and insert a grommet.



- 1 Opening for cleaning agent




This symbol on the back of the automatic feeder labels the hose and the opening for the cleaning agent.

9. Remove the left dummy plug from the intermediate panel of the feeder and insert a grommet.



- 1 Dummy plug

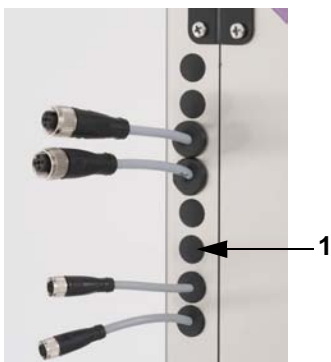
10. Remove the right dummy plug from the bottom of the feeder.

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1 Dummy plug

11. Remove the third dummy plug (counting from the bottom) on the left side of the automatic feeder.



1 Dummy plug

12. Insert a grommet and feed the connecting cable of the cleaning agent lance into the feeder housing.

13. Open the left door of the automatic feeder and feed the connecting cable through PG screw fitting into the control box (see circuit diagram).

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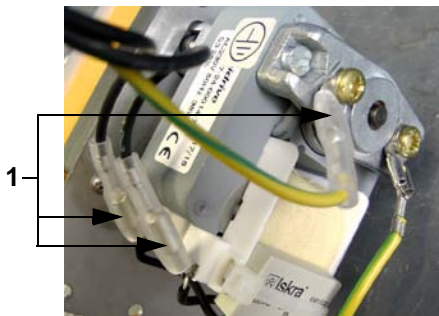
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1 Screw fitting

14. Open the control box of the automatic feeder and connect the connecting cable according to the circuit diagram.



15. Connect the female quick disconnects of the control cable onto the tabs of the detergent dosing pump.



1 Female quick disconnects

16. Connect the cable of the detergent pump according to the circuit diagram.

17. Close the control box.

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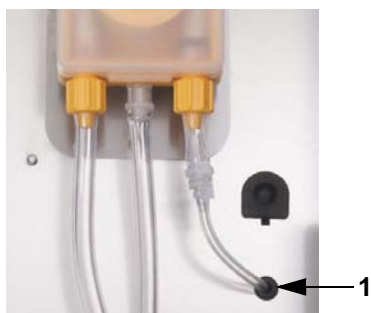
18. Feed the left detergent hose of the cleaning agent pump outward through the grommet in the rear panel of the feeder.



1 Cleaning agent hose

19. Push the centre drain hose through the grommet in the bottom of the feeder housing.

20. Push the right detergent hose through the grommet in the intermediate panel into the feeder housing.



1 Grommet in the intermediate panel

21. Replace the dummy plug next to the water outlet with a grommet and push the detergent hose through the fitting and out of the feeder housing.

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1 Hose from feeder housing

22. Push the ear clamp over the water outlet.



23. Insert a 4.2 mm rod or an appropriately sized drill bit into the remaining clamp opening and fasten the clamp slightly above the expanded outlet.



24. Push the detergent hose through the reduced clamp opening.

Note: There must be noticeable resistance. Otherwise, reduce the opening further.

25. Turn the clamp on the rear of the water outlet and fasten the clamp using a suitable (instant) adhesive.

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26. Cut the detergent hose diagonally so that residual detergent can be removed by the water jet at the end of the cleaning cycle.





27. Unscrew the elbow grommet of the cleaning agent lance and remove the upper threaded couplings.

28. Install the cover cap of the elbow grommet on the end of the hose coming from the rear panel of the automatic feeder.



29. Drill a hole (25 mm diameter) for the cleaning agent lance in the lid of your cleaning agent tank.

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30. Guide the cleaning agent lance from below into the lid of your cleaning agent tank. Thread the upper threaded couplings onto the lance from above and tighten them.



Note: The height of the sensor can be adjusted by loosening the two threaded couplings.

31. Connect the cover cap to the elbow grommet and reattach it to the cleaning agent lance.






32. Connect the cable of the cleaning agent lance to the connecting cable on the automatic feeder.

33. Place cleaning agent tank in the appropriate position.





ATTENTION The cleaning agent tank must be positioned so that it cannot tip over and it cannot be accessed by calves, unauthorised persons and children.

34. Connect the automatic feeder to the power source.



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7 Activating the detergent pump

The detergent pump must be activated in the setup for the automatic feeder.




1. Press  and keep this key pressed when you switch on the feeder.
After a short time, the Setup menu appears on the display.
2. Open the **Equipment** menu item.
3. In the **Det. pump** menu, set the value to **yes** and confirm by choosing .
4. If necessary, activate the cleaning agent empty signal under **Det. Sensor** and set the value to **yes**.
5. To exit setup, press  until the message **Exit setup?** appears. Choose  to confirm.
6. Check the position of the float switch. Hold the cleaning agent lance vertical.
 - If float is down by sieve: **Detergent empty** warning appears.
 - If float is up: no warning

Note: If the warning appears when the float is up, you must remove the sieve, turn the float by 180° and reattach the sieve.
7. Install the cleaning agent lance in the lid of your cleaning agent container.

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Note: Small ventilation holes in the lid prevent the cleaning agent container from contracting. For more information, refer to the manufacturer's specifications and national regulations.

8. Choose  > **Diagnosis** to go to the **Motors** submenu.
9. Place the calibration box back into the feeding box.
10. Confirm **Detergent start?** by choosing  and hold down the key until the liquid additive is dispensed into the calibration box.
11. Calibrate the cleaning agent by choosing  > **Calibration** > **Components** > **Detergent**.
For more information, see the **operating manual of your automatic feeder**.
12. Run a mixer cleaning cycle.