

Service info

Retrofitting suction hose trace heating

S24.1e



1 Introduction

These installation instructions put you in the position to safely install the suction hose trace heating as intended.

- Please read these installation instructions carefully before installation.
- Keep these installation instructions close to hand at all times.
- Comply with all of the safety instructions in these installation instructions at all times.
- In addition, follow the instructions in the original operating manual of the automatic feeder.

2 Important safety instructions

2.1 Necessary qualifications of the service technician

Only trained service technicians are authorized to install and replace the suction hose trace heating.

Service technicians are specialists with appropriate qualifications. 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. They have knowledge of relevant accident prevention regulations, generally accepted safety regulations and country-specific standards and provisions.


2.2 How am I warned of hazards?

2.2.1 What are the components of a hazard description?

A hazard description always consists of the following elements:

- Hazard word (danger, warning, caution, attention)
- Type of hazard (what can happen?)
- Location of hazard (where can it happen?)
- Actions necessary for preventing the hazard (what should I do?).

2.2.2 Potentially fatal hazards or health hazards

A hazard symbol  (warning triangle with an exclamation mark) and the following hazard words indicate the risk of fatal injury or detrimental effects on health.

DANGER!

The word **DANGER** indicates an immediate danger that can cause loss of life or injury.

Marking in the installation instructions: **DANGER** (white font on red background).

WARNING!

The word **WARNING** indicates a potentially dangerous situation that can result in loss of life or severe injury.

Marking in the installation instructions: **WARNING** (black font on orange background).

CAUTION!

The word **CAUTION** indicates a potentially dangerous situation that can result in minor injuries.

Marking in the installation instructions: **CAUTION** (black font on yellow background).

2.2.3 Material damage

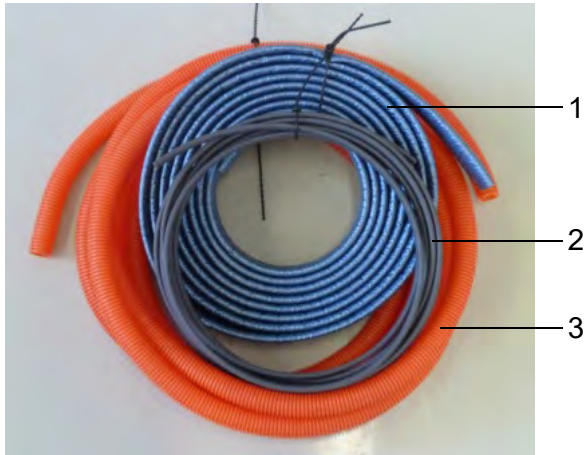
NOTICE!

The word **ATTENTION** warns you about the risk of material damage. The device or an object or animal in its vicinity, such as a calf, can be damaged.

Marking in the assembly instructions: white writing on a blue background

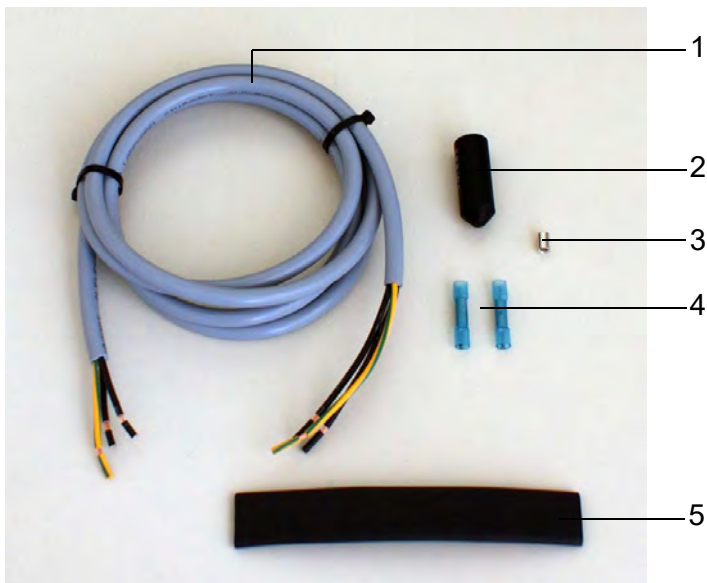
3 Scope of delivery

3.1 Heating cable set



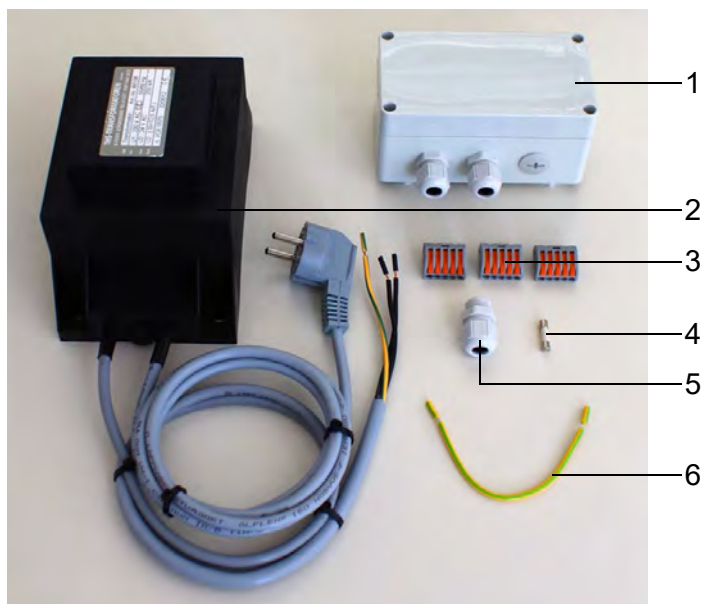
- 1 Isolating hose
- 2 Heating cable
- 3 Plastic tube (color may vary)

3.2 Connection set



- 1 Connection set cable
- 2 Shrink cap
- 3 Connector for cable shielding
- 4 Connector
- 5 Shrink hose

3.3 Transformer



- 1 Plastic casing
- 2 Transformer
- 3 Terminals (3x)
- 4 Fuse, 12,5 A T
- 5 Cable gland
- 6 Grounding cable

4 Installation

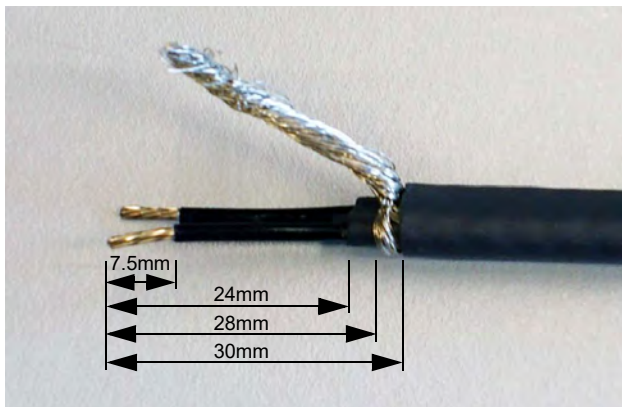
4.1 Electrical connection provided by the customer

- Install a customer-side mains connection for suction hose trace heating operation.
- Comply with local regulations and safety measures.
- Install an earth leakage circuit breaker (ELCB - 30 mA) in the customer power supply for operation of the suction hose trace heating.
- Adhere to the nominal voltage and nominal frequency. The supply voltage specified on the name plate of the device must correspond to that of the mains supply. Install excess voltage limiters as a lightning protection measure in the customer power supply.
- Protect the suction hose trace heating and all associated cables from exposure to sunlight.
- Install the suction hose trace heating so that it is sufficiently protected mechanically.

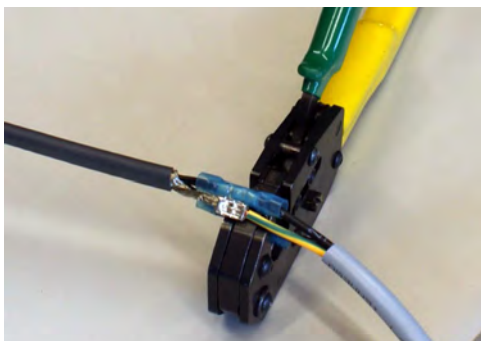
4.2 Perform installation

When installing the suction hose trace heating, proceed as follows:

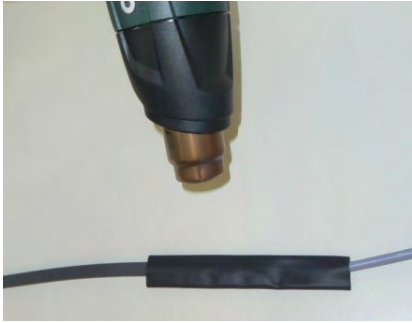
1. Prepare the heating cable as shown in the figure.



2. Connect the cable strands from the connection set and the strands of the heating cable with the aid of the connectors (see circuit diagram). Press the connection together using suitable crimping pliers.



3. Secure the connection using a hot air gun.
4. Fit the shrink hose over the connection and secure it using the hot air gun.



5. Insert the plastic tube into the isolating hose.



6. Insert the heating cable and the suction hose into the plastic tube.

Note: For the circulation cleaning you can additionally install a return line.



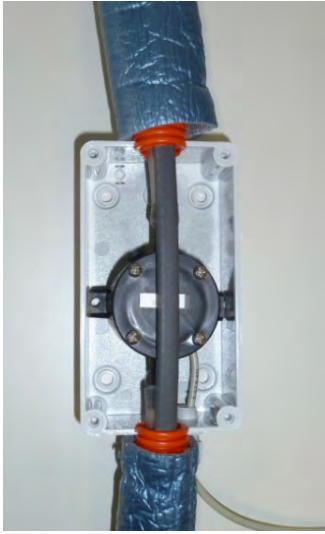
7. Adjust the length of the heating cable to that of the suction hose.
8. Place the shrink cap on the end of the heating cable and secure the connection using the hot air gun.



9. Connect the suction hose to the teat.



10. If a suction/pressure sensor is installed, install the isolation box as shown in the lower figures. Click the plastic tube into the isolation box (option) and install the heating cable above the sensor. The PG screw connection must points downwards.

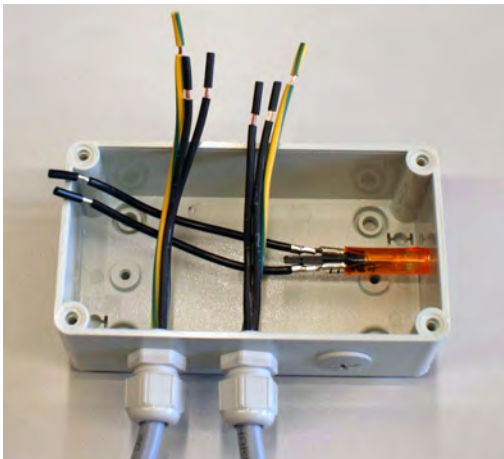


11. Connect the suction hose to the hose connection resp. the valve connection of the automatic feeder.
12. Mount the transformer and the plastic casing on a wall near the automatic feeder.

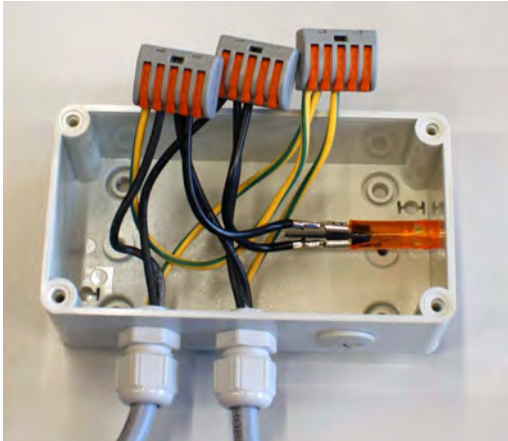
NOTICE!

Ensure the transformer connecting cable is installed outside the animal area and not on the floor, to prevent it from being damaged.

13. Open the plastic casing and connect the transformer cable and the connection set using the cable glands.



14. Connect the strands of the cable to the terminals provided and the grounding cable (see circuit diagram).



15. Screw the lid back onto the plastic casing.
16. Reconnect the transformer's mains plug to the power source.