

Mounting instruction

Retrofitting gradient control

M1.2e



1 Introduction

These installation instructions put you in the position to install the gradient control safely 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 the gradient control and put them into service.

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!

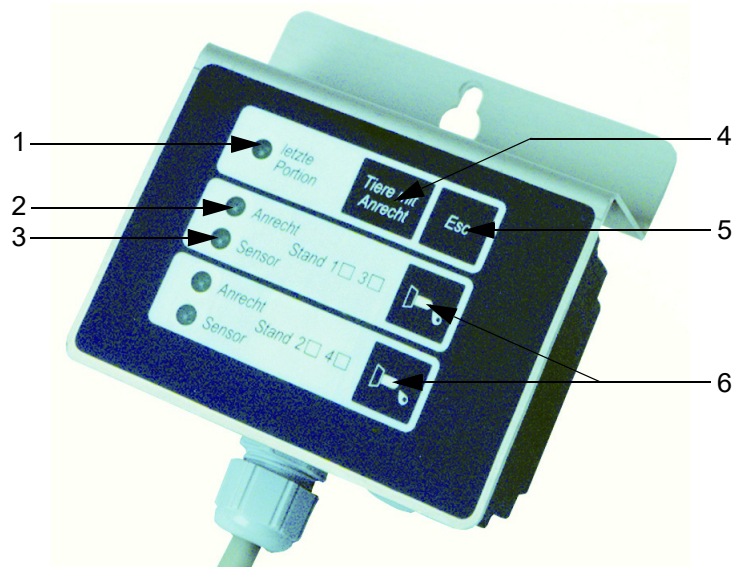
The word **ATTENTION** warns you about the risk of material damage. The device or an object or animal in its vicinity, such as a calf, can be damaged.

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

3 Functional description

If the automatic feeder is located at a higher level than the feeding station (see the illustration on the next page), a gradient control is used, thus preventing the feed from leaking out of the teat.

If an entitled animal enters the feeding station, the feed is mixed in the mixer jar. From there, the "milk" is delivered via a hose to the box valve and then to the pressure sensor. As soon as an animal starts sucking at the teat, the pressure sensor releases the milk. When an animal stops sucking, the box valve closes.



- 1 LED last portion
- 2 LED entitled animal
- 3 LED sensor
- 4 entitled animals
- 5 Esc
- 6 manual feed supply

5 Retrofitting

Note: The following instructions are also valid for the automatic feeders **VARIO** only if the gradient control is not part of the **IFS-station**.

⚠ DANGER!

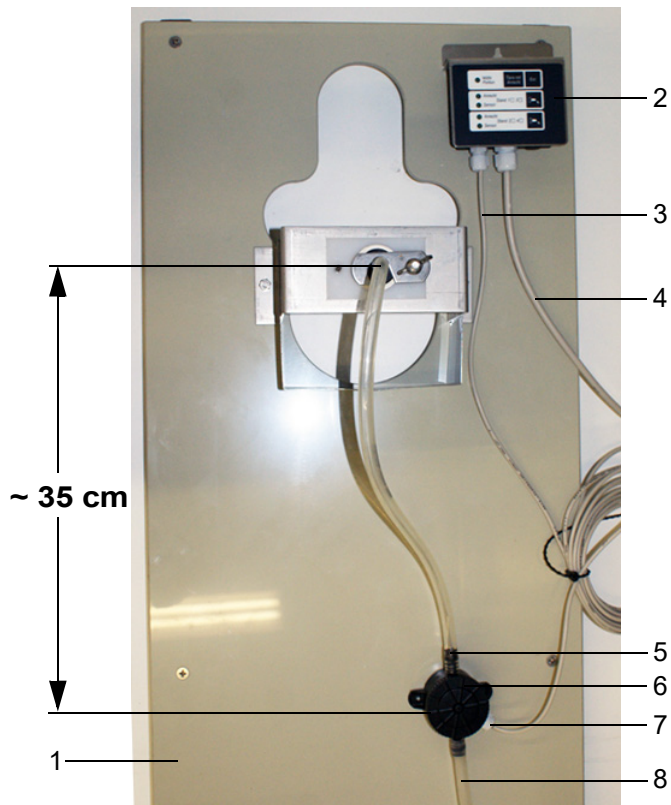
Lethal electric shock.

The electrical components of the automatic feeder are live.

► Disconnect the automatic feeder's mains plug before starting with the installation.

1. Switch off the automatic feeder and disconnect the mains plug.
2. Mount the pressure sensor at least 35 cm at the bottom right or left of the teat. The rear of the front plate would be appropriate for this purpose.

Note: Install the pressure sensor that the PG screw connection points downwards.




- 1 Rear of the front plate
- 2 Remote control with push-buttons
- 3 Cable connection: remote control > pressure sensor
- 4 Cable connection: remote control > automatic feeder
- 5 Hose nozzle at the pressure sensor
- 6 Pressure sensor
- 7 PG screw connection
- 8 Hose connection: pressure sensor > box valve

NOTICE!





- Protect the gradient control and all corresponding cables from exposure to sunlight.

3. Slip a hose on the top hose nozzle of the pressure sensor. Slip the other end of the hose on the hose nozzle of the teat.
4. Slip a hose on the hose nozzle at the bottom of the pressure sensor. Slip the other end of the hose on the hose nozzle of the box valve. The right and left hose nozzles at the top of the pressure sensor remain closed.
5. Clamp the connecting cable of the remote control to the board of the automatic feeder.

Note: For connection of the connecting cable to the automatic feeder, refer to the wiring diagram.

6. Switch off the automatic feeder.
7. Press  and keep the button pressed down while you switch on the automatic feeder again.

After a short period of time you will see the **Setup** menu in the display.

8. In the Setup menu, select **stations > feed > internal**.
9. Select the station you want by selecting  .
10. Select **gradient** in the **options** line to activate the gradient control.
11. To exit the setup, press  until the message **Exit setup?** appears in the display. Choose  to confirm.
12. Set the automatic feeder to automatic mode.