PFV-94xx(-i)

FEED WEIGHING COMPUTER

PFV-9400

PFV-9412

Table of contents

If the software version in the module does not meet the requirements of the PFV-94xx feed weighing computer control software, update the software in the module.

Remote control: *ANote-Remote-N-ENxxxxx*
Software update: *ANote-SWUpdate-N-ENxxxxx*

Copyright/Disclaimer

1 General introduction

The manual is intended for the user of this device. It contains all the information necessary for operating and cleaning this product. Please read all information and instructions carefully before using the product.

Symbols mark warnings, important notes, tips, etc. in this manual.

Stienen has compiled this manual with all due care. If you find any errors, please let us know.

1.1 Symbols and definitions


Risk of injury by dangerous electric shock. Danger to people and animals.


Warning indicating danger to product, people and animals if procedures are not strictly complied with.


Warning indicating damage to products if procedures are not strictly complied with.


Pressure cleaning is not allowed.


Collect as separate flows


Important note


Additional information


Example of a concrete application of the functionality described.


Example calculation


Manual control


Tips and advice


Screenshot


Application note

1.2 Customer service

If you have any questions, please contact your installer. Be sure to have all the necessary data handy. You should also always write down the cause of a fault and the circumstances that occurred during the fault. This will enable you to avoid any ambiguities and it will enable your installer to deal with any faults quickly and effectively.

2 Safety instructions and warnings

Read the general safety instructions in this chapter carefully before using the device. A certified installer must install the device and resolve any faults, in accordance with the applicable guidelines. If this product is installed and used in any other way, the warranty will not apply.

2.1 Sound, independent alarm system

Although we have designed and built our control equipment with the greatest care possible, technical faults can never be ruled out. Insurance requirements in many countries are becoming increasingly stringent. This requires the alarm contacts of the various control computers to be connected a central alarm unit.


We recommend also installing a sound independent alarm system, for example a min/max thermostat.


We advise you to manually test the alarm at least once a week.

2.2 During use

The people who operate the device have read the manual carefully. They are aware of potential hazards that may arise from improper use and maintenance of the product.


The device must only be opened by authorised personnel.


Do not switch off the control computer while the house is empty, but switch it to *Off* mode. This will prevent condensation caused by the equipment cooling down.


Check the device for any damage at regular intervals. A damaged device is unsafe. Always report any damage to your installer.


Electronic equipment is splash-proof and must not be cleaned using a pressure cleaner.


If any emergency has occurred, write down: the circumstances under which the emergency occurred, installation settings, software date, software version number and possible causes.

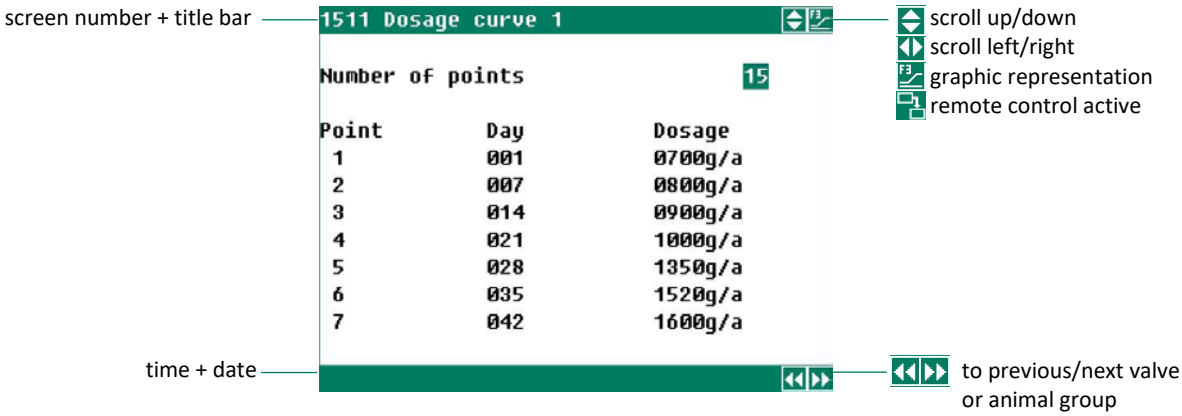
2.3 Disposal

The EU has set up systems for the separate collection of waste electrical and electronic equipment and batteries (Directive 20212/19/EU). If you do not dispose of the device properly, you risk a fine.


Electrical and electronic equipment must be collected separately at the end of its life.

3 Display and keyboard

3.1 Display



! With every key press, the screen is illuminated for several minutes. In a dark house, settings and measurements are therefore also clearly visible.

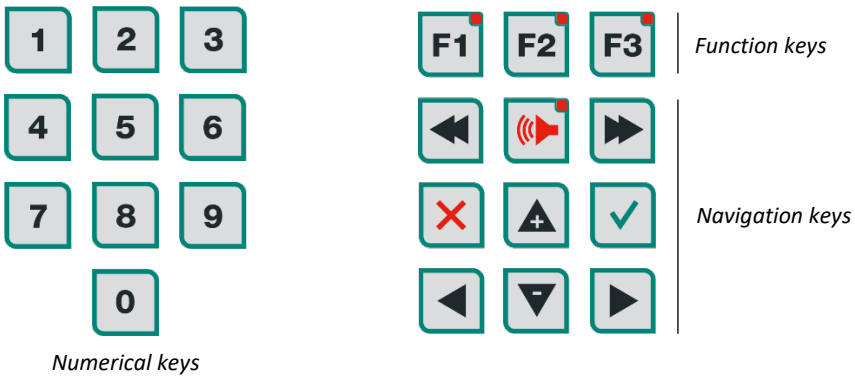
Indication that you can press ▲ ▼ to retrieve the remaining settings/measurements.

Indication that you can press ◀ ▶ to retrieve the remaining settings/measurements.

Indicates that settings can be displayed graphically by pressing the F3 function key. The dot (●) in the graph indicates the calculated value. Pressing F3 again turns off the graphical display.

Indication that you can press ◀◀ ▶▶ to select the previous/next screen.

3.2 Keyboard



⚠ Do not use sharp objects (pen or screwdriver) to operate the keys.

3.3 Function keys

F1 Press and hold F1 and use the keys ◀ ▶ to select the previous/next language.

F2 Recalling the valve status of animal group status.

F3 The graph function is active when the LED in the function key lights up. You can switch off the graph function by pressing the function key again. The LED in the key is off then.

! The values in a graph are linked to the screen from which the graph was constructed. The graph is automatically updated when you change the data on the screen.

3.4 Numerical keys (0..9)

Use the numerical keys to enter a screen number, value or text. Select menu item 10 with 0 .

Key	Character
0	_0
1	.,1'-:+
2	abcäáàâç2ABCÄÁÀÂÇ
3	defëéèê3DEFËÉÈÊ
4	ghiïíìî4GHIÏÍÌÎ
5	jkl5JKL
6	mnoöóòô6MNOÖÓÒÔ
7	pqrs7PQRS
8	tuvüúùû8TUVÜÚÙÛ
9	wxyz9WXYZ

Text input

Use 2 .. 9 to change names (max. 15 characters including spaces). The character is shown in a little box. Press the numeric key repeatedly until the character to be selected is shown. To enter a punctuation mark, press 1 repeatedly. Press 0 to insert spaces.

2 Press 1× for a, 2× for b, etc.
Use and ◀ ▶ to move the text cursor.

For example, in menu choices the text automatically starts with a capital letter.

3.5 Navigation keys

✕ Abort menu option or change.
Press and hold this key to return to the main menu.

◀ ▶ In control mode, press and hold to move cursor left/right.
In edit mode, move cursor left/right.

▲ ▼ Move cursor up/down in control mode.
In change mode, decrease/increase the value.

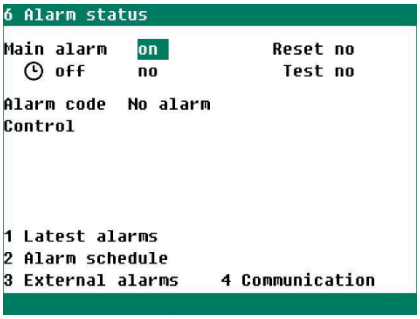
✓ Confirm the selected menu option, start edit mode and confirm the change.
In edit mode, the value to be changed appears in a green rectangle: 00,000 kg
While a change is being made, the character to be changed appears in a black frame: 06,000 kg.

3.6 Adding and removing breakpoints or periods

1. Press (✓ *Enter key*) to enter the edit mode.
2. Press and hold F1 and press ▲ to add breakpoint/period (provided that the maximum value for periods/breakpoints has not been reached).
3. Press and hold F1 and press ▼ to remove a breakpoint/period (provided that there is at least one period/breakpoint).
4. The number of breakpoints/periods is adjusted automatically.

3.7 Alarm key

Shortcut for alarm screen. The LED in the alarm key lights up if one of the controls has an alarm situation.



Here you can turn the main alarm on and off. If the main alarm is off, the LED in the alarm button flashes evenly. No more alarms are issued. Installation errors cannot be disabled.

Reset

Set *Reset* to *yes* to clear all alarms. After all alarms have been cleared, any active alarms will be turned on again.

off = temporarily disable alarm

Option for temporarily disabling the alarm (siren). This does not apply to hardware alarms. The main alarm is disabled for 30 minutes; the LED flashes unevenly. After 30 minutes, the main alarm automatically reactivates. If the alarm cause has not been remedied, the alarm relay will de-energize again, causing an alarm.

You can clear the temporary alarm deactivation time by setting *off* to *no*.

Alarm code	This code represents the alarm cause.
Control	The control to which the failure relates.
'Terminal + control'	Terminal number plus any second control to which the alarm relates.
Alarm external house	If a message received via loop communication shows that the alarm relay of a controller connected has failed, the relevant house number is shown here.

Testing the alarm

Test = yes	The alarm relay (siren) is tested for 60 seconds.
Test = no	The alarm test time is cleared.

After resolving the fault, remember to turn the alarm back *on*. Preferably use the *off* function to clear the fault.

4 Main menu

4.1 Access code

You can set an access code (four digits) to prevent unauthorised persons from changing settings. Your installer can set up to two access codes for you.

! When using an access code, we recommend writing it down and keeping it in a safe place. You cannot change settings without an access code.

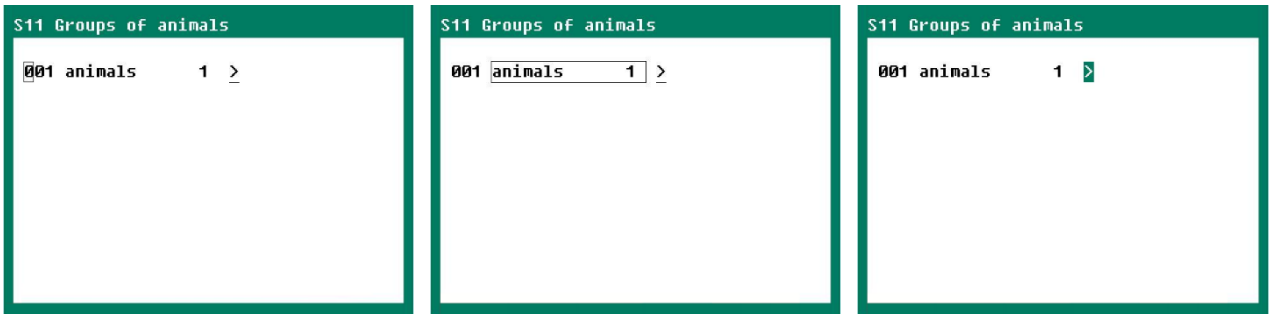
If one access code is active, you can change the setting only after entering the correct access code.

The access code remains active until the overview screen is selected. After that, you need to enter it again to change a setting.

4.2 Submenu

The letter *S* in front of the screen number indicates a submenu (see screen *71 Display,* page 40).

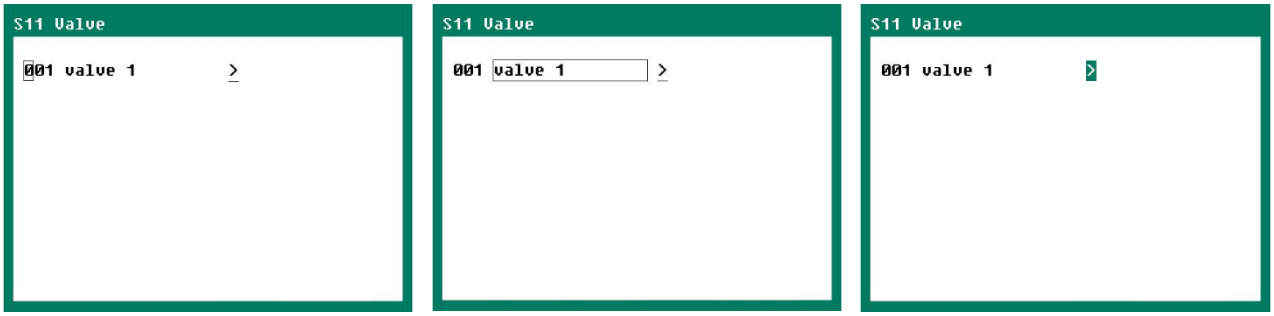
4.3 Feeding system with animal groups



Displaying animal group data

1. Press ✓ .
2. Select the required animal group number and confirm your selection with ✓ . The cursor automatically moves to the link (>).
3. Press ✓ . If you do not change the number, the cursor remains in place. OR:
4. Select the *Animal Group* column and press ✓ .
5. Use the keys ▲ ▼ to select the required animal group and confirm your selection with ✓ . The cursor automatically moves to the link (>).
6. Press ✓ . If you do not change the number, the cursor remains in place. OR:
7. Use the keys ◀ ▶ to move the cursor to the link (>) and press ✓ . The data of the selected animal group will appear on the screen.

4.4 Feeding system without animal groups

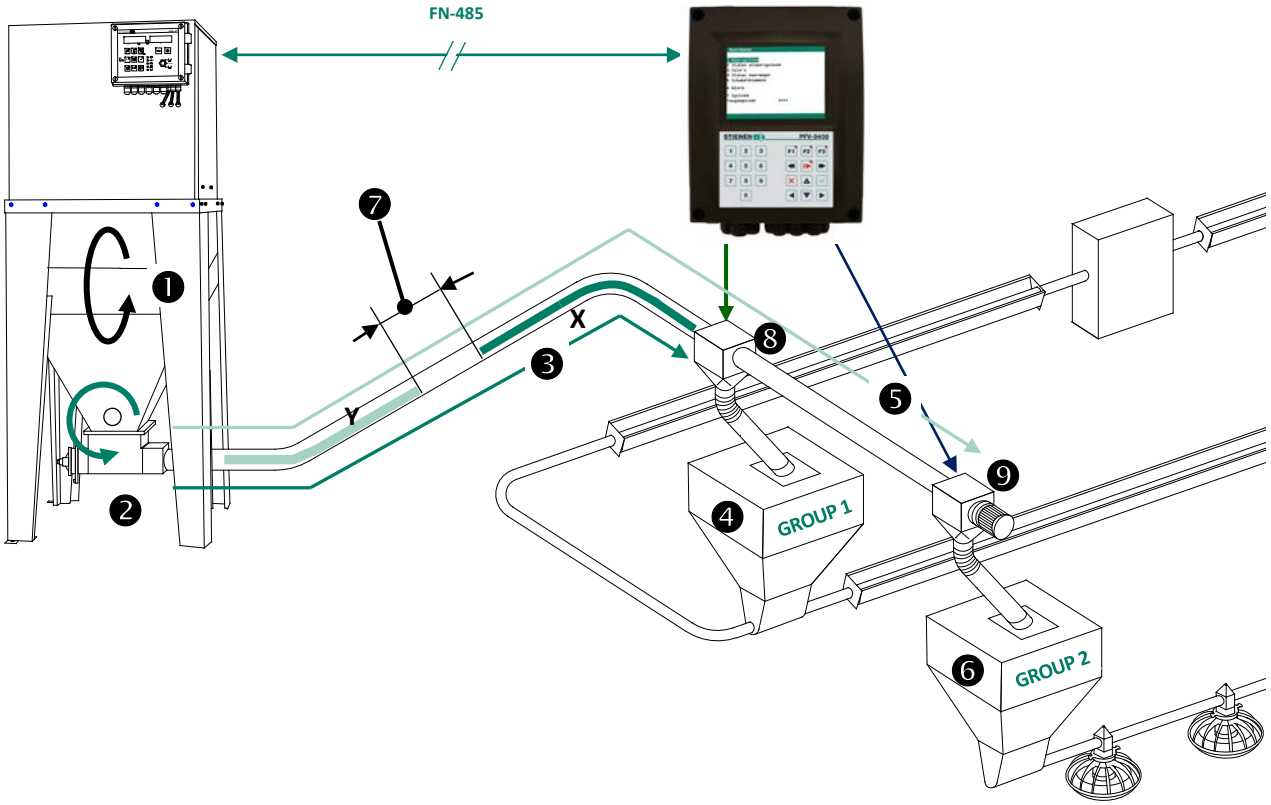


Displaying valve data

1. Press ✓ .
2. Select the required valve number and confirm your selection with ✓ . The cursor automatically moves to the link (▶).
3. Press ✓ . If you do not change the number, the cursor remains in place. OR:
4. Select the *Valve x* column and press ✓ .
5. Use the keys ▲ ▼ to select the required valve and confirm your selection with ✓ . The cursor automatically moves to the link (▶).
6. Press ✓ . If you do not change the number, the cursor remains in place. OR:
7. Use the keys ◀ ▶ to move the cursor to the link (▶) and press ✓ . The data of the selected valve will appear on the screen.

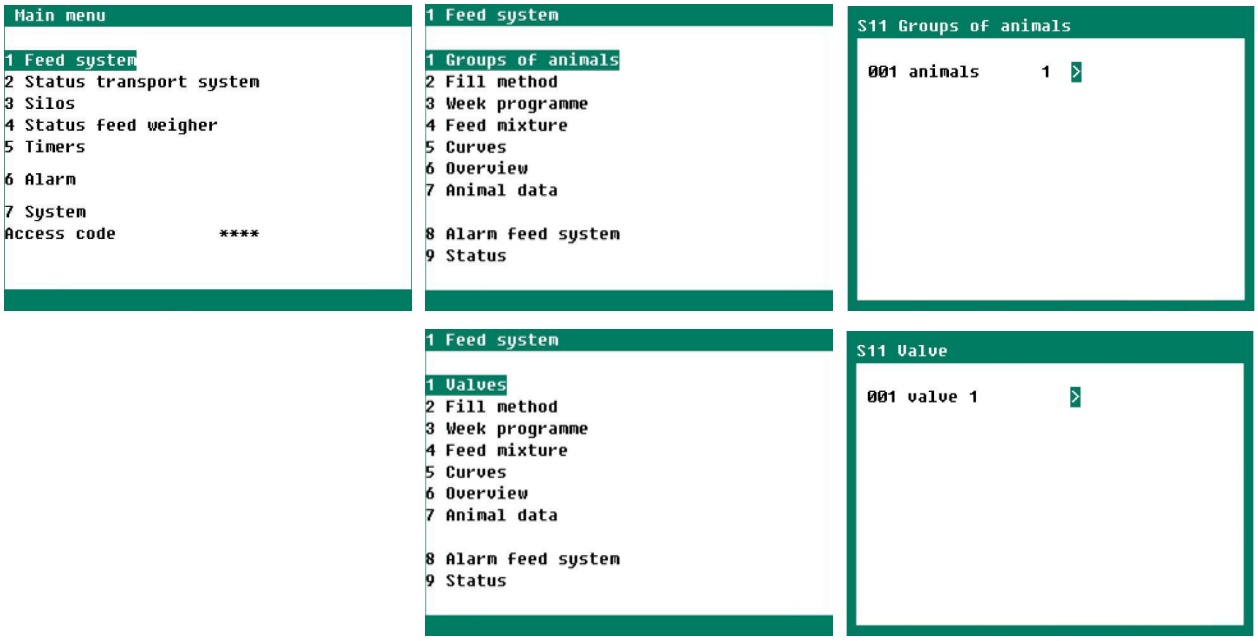
5 Feeding system

5.1 Principle diagram



❶ Feed dosage (calculated dosage)
❷ Emptying hopper under weighing hopper
❸ Distance to valve 1
❹ Hopper capacity (max. dosage valve 1)
❺ Distance to valve 2
❻ Hopper capacity (max. dosage valve 2)
❼ Distance between feed valve x and feed valve y (installer setting)
❽ Valve 1
❾ Valve 2

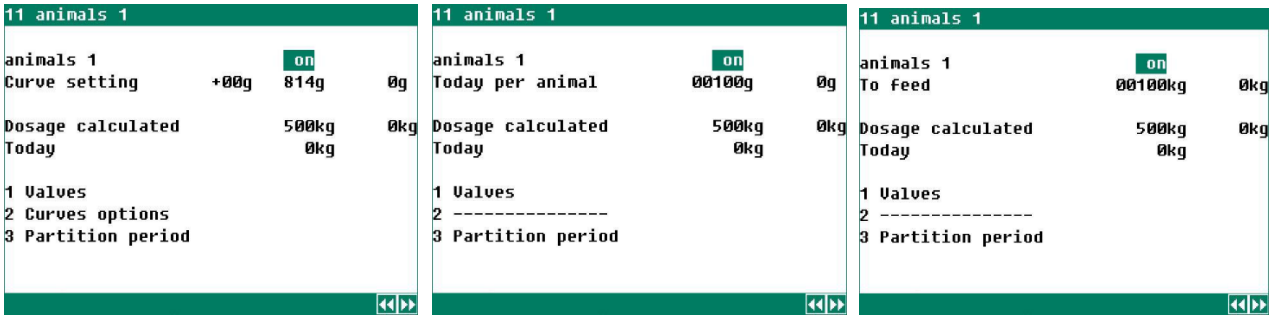
5.2 Animal groups / valves



If you do not have animal groups, the name of the valve is shown in the place of the animal group.

With animal groups, several valves are assigned to a group of animals. The valves are grouped together, as it were. The feed composition, management data, feeding times, etc. then apply to an animal group. With valves, you make these settings per valve.

Animal groups



With management and with curves

With management and without curves or curves are turned off

Without management and without curves

Animal group x — Here you can turn an animal group on and off. If an animal house (animal group) is temporarily out of operation, you can turn the animal group off. This prevents the feed cycle from starting unnecessarily.

Management = YES — *Curve setting* | You can correct the calculated curve quantity (grams per animal) by entering a positive or negative number at +00g. The entire curve is then increased or decreased by this value without changing the curve settings. This temporary curve correction is useful to temporarily adjust the feed quantity of sick animals. *(+00g = no correction*).

If dosage curves are used for this animal group and these curves are enabled (see curve options), the calculated dosage depends on:

- the curve settings;
- the day number;
- the correction;
- the number of animals belonging to this animal group.

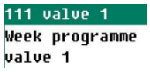
Your installer sets whether you use the menu item *Curve options* (installer setting). Behind the feed dosage calculated from the curve, you see how much of the daily amount (grams/animal) has already been fed.

Today per animal | If your installer has not enabled the curves or if the curve is disabled for this animal group, the *Today per animal* setting appears. Based on this setting and the number of animals present, the total amount of feed is calculated. This feed quantity is automatically distributed over the feeding times and over the valves assigned to this animal group.

Management = NO — *To feed* | Enter the total feed quantity for the displayed animal group here. This feed quantity is automatically distributed over the feeding times and over the valves assigned to the animal group. The *To feed* setting only appears if your installer has set the *Management* setting to *NO*.

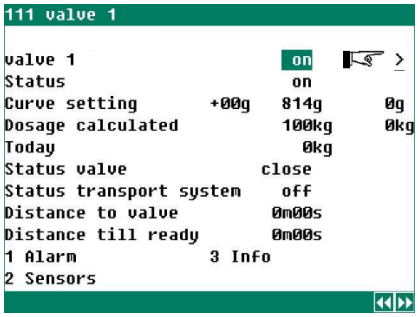
Calculated dosage — The first value is the total daily dose. The second value indicates the quantity for this feeding cycle. See *Partition period*, screen 113).

Today — The amount of feed that has been transported to the displayed animal group today up to this point.

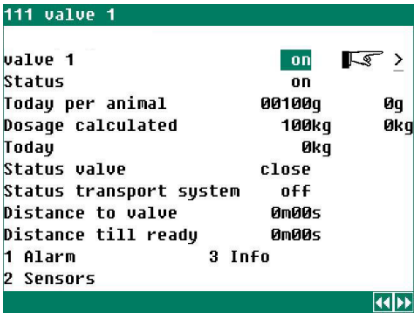
Week programme — 

If the text *Week programme* is shown in the top left corner of the screen, the feed dosage is not active on this day.

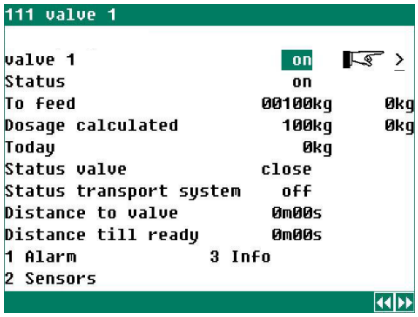
Valves



With management and with curves



With management and without curves or curves are turned off



Without management and without curves

Valve — Here you can turn the valve *on* and *off*. Your installer can change the name of the valve. It is also possible to enable and disable the valve here.

 — Manual operation appears when *Fill Method* is set to *on*.

Management = YES — If you turn off an <u>enabled</u> valve:

- the weighing cycle started will be completed (PFB-35/PFB-70);
- the dosage for the valve will be stopped and the calculated dosage will be set to 0%;
- the valve will no longer be selected in the current filling period (not even if you switch the valve 'on' again);
- a *dosage alarm* will be generated as a result of the valve being turned off.

If you turn off an <u>disabled</u> valve:

- the calculated dose will be set to 0%;
- the dosage will be recalculated if the valves are turned on and you re-activate the valve. If the valve is turned *off*, it will be skipped and no *dosage alarm* will occur.

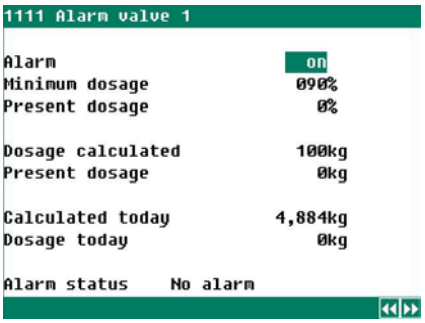
Management = NO — If an activated valve is disabled, the started weighing cycle will be completed. After that another valve is selected.

Status	The current valve status. If the valve is *off* or the fill timer is *off*, the (current) status changes from *on* to *off*.
Curve setting	*Today per animal* and *To feed* | If you have animal groups, these are copies of the settings from screen 11. If you have valves, you can change the settings as described for the animal groups in screen 11.
Dosage calculated	The quantity to be fed is automatically distributed among the feeding cycles and then among the valves assigned to the animal group. Depending on the mutual distribution between the valves and feeding cycle, the *Dosage calculated* varies per valve. The first value represents the total dosage for this feeding cycle. The second value is the amount already dosed for this feeding cycle. See *Partition period*, page 13).
Today	The current feed amount already transported to the valve activated.
Valve status	The current valve status: *open* or *closed*.
Status transport system	The transport system ensures, that the feed in the storage hopper under the feed weigher reaches the right valve. Also important are the settings *Distance to valve* and *Distance till ready*.
Distance to valve	The time required to transport the feed from the feed weigher to the valve. This is a fixed time set by your installer. It can also be measured in pulses.
Distance till ready	A variable time that depends on the calculated dosage, feed supply rate, ration size which fits in the feed weigher, feed system transport speed, etc. This 'distance' can also be expressed in pulses.

Sensors

Maximum sensor	If a maximum sensor has been installed at the valve, this line will show whether the maximum sensor detects any feed. If the maximum sensor detects feed, dosing will stop immediately and the current feeding period (for the valve displayed) will be aborted.
Demand sensor	The current demand sensor status (feed or no feed). If there is feed demand, the hopper is filled until the maximum hopper content. Every feed request of the valve is accepted until the *daily dosage* has been reached.
Minimum sensor	The minimum sensor status is always first before a dosage. If the minimum sensor detects feed, the alarm message *Valve not free* will be shown. If the fault is resolved before the valve is released, this valve will be included in the feeding cycle. Otherwise, this valve will be skipped. You will probably get a dosing alarm at the end of the day.

Alarm (dosage alarm)



You can clear the alarm status by turning the alarm *off* and back *on again*.

If the value 0% is shown behind *Present dosage*, today's feeding has not started yet.

Supply alarm

In case of *feed alarm*, the *time-to-empty* time, *distance-to-valve time* and *distance-till-ready time* are frozen. Once the alarm situation is resolved, the feed computer continues the feeding process.

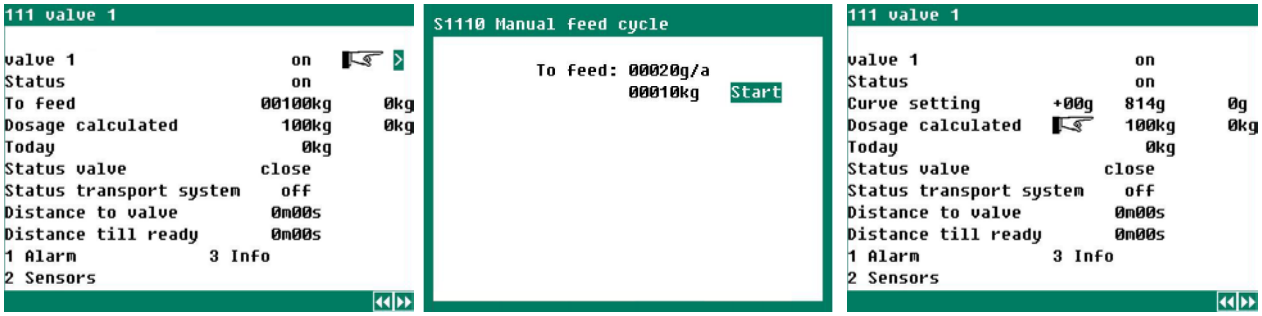
Dosage alarm

- The feed amount is determined based on the number of periods of the fill timer (see *Fill method,* pages 14 to 18) and the contents of the storage hopper under the valve.
  If you have entered 5 feeding cycles and the content of the storage hopper under valve 1 is 100kg, *a maximum of* 500kg will be dosed at valve 1 that day.
  If valve 2 has a 50 kg storage hopper, *a maximum of* 250kg will be dosed that day at valve 2 and so on.
  If it turns out at the beginning of the feeding cycle that the quantity to be fed is not achieved in the number of set periods, a *dosage alarm* is triggered at the start of the first feeding cycle.
- If it turns out at the end of the day that the total daily dose is too low, a dose alarm is generated at the end of the last feeding period.

Info

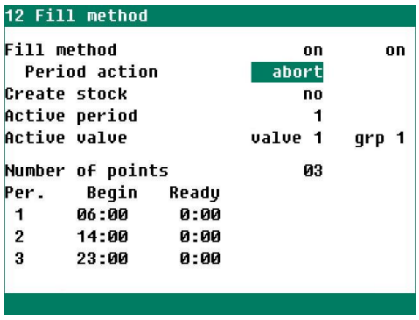
Menu item *3 Info* appears, when *Creating stock* is active, see: *Fill method,* pages 14 to 18.

5.3 Manual feeding cycle

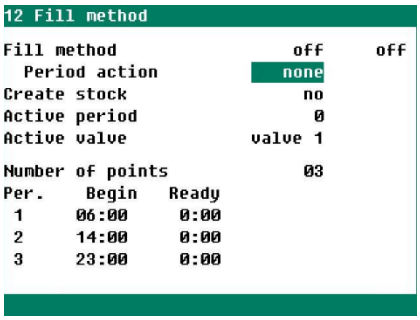


1. Place the cursor on the link behind the hand ☞ and press ☑. The *Manual Feed cycle* screen appears.
2. In this screen, enter the amount of feed (per animal or total) you want to feed manually. If you enter a feed quantity that exceeds the capacity of the storage hopper under the valve, your entry will be corrected to the maximum content of the storage hopper.
3. Select the link Start and press ☑.
4. The hand ☞ is now behind the calculated dosage to indicate that the manual feeding has started. We distinguish two situations:
   - Not all feeding cycles have elapsed: the amount to be fed manually is subtracted from the remaining daily dose.
   - All feeding cycles have taken place. You are therefore going to feed extra. The amount to be fed manually is added to the total daily dose.

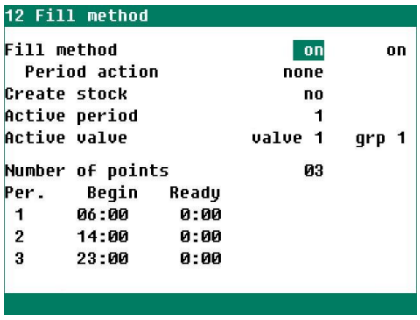
Manually aborting a feeding cycle



Aborting current feeding cycle



Fill method is automatically set to 'off'

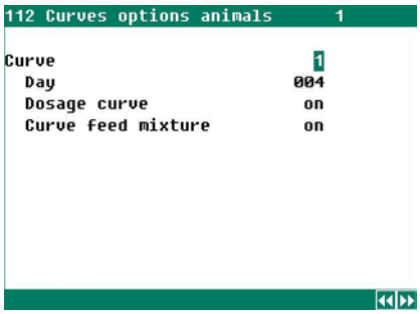


Set fill method back to 'on'

1. Go to screen 12 *Fill method* and change the *Period action* to *abort*. The period and the feeding cycle will be aborted, and therefore the manual feed turn, are aborted.
2. Turn the *Fill method* back *on*.

   ! Don't forget this, otherwise there will be no more feeding.
3. The hand is behind *Valve x* to indicate that the manually started feeding cycle has been aborted and you can manually start a new feeding cycle.

5.4 Curve options

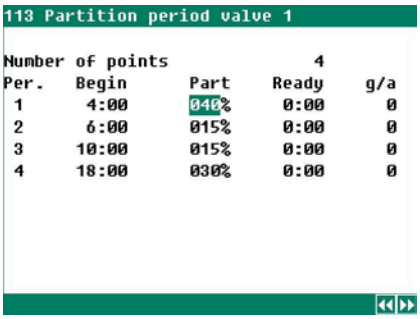


The menu option *Curves options* is only displayed if your installer has activated the option *Curve feed mixture* or *Dosage curve*.

Assign a curve to the valve indicated in the title bar in this screen. You can turn the curve *on* and *off* by setting the *Dosage curve* status to *on* or *off*.

For explanation see *Curves*, page 21.

5.5 Partition period



The storage hopper is filled no more than 1x per feeding cycle.
For an explanation of *Dosage calculated*, see *Valves* page 10.

Per.	The number of the feed cycle.
Begin	The start time of the feeding cycle, see *Fill method*, pages 14 to 18.
Part	The percentage of the calculated daily dose, see *Automatic partition*.
Ready	The time when the calculated feeding cycle dosage has been achieved.
g/a	The amount fed in grams per animal. It appears only when management is *on*.

When dividing the feed over the feed cycles, a distinction is made between *with* or *without* automatic partition, and *with* or *without* a dosage curve installed.

With automatic partition

Default The total daily amount is distributed evenly over the preset number of periods.

Setting % yourself If your installer has set the *Automatic partition* of the valve to *Perc.* (percentage), you can set the division (*partition*) among the periods yourself.

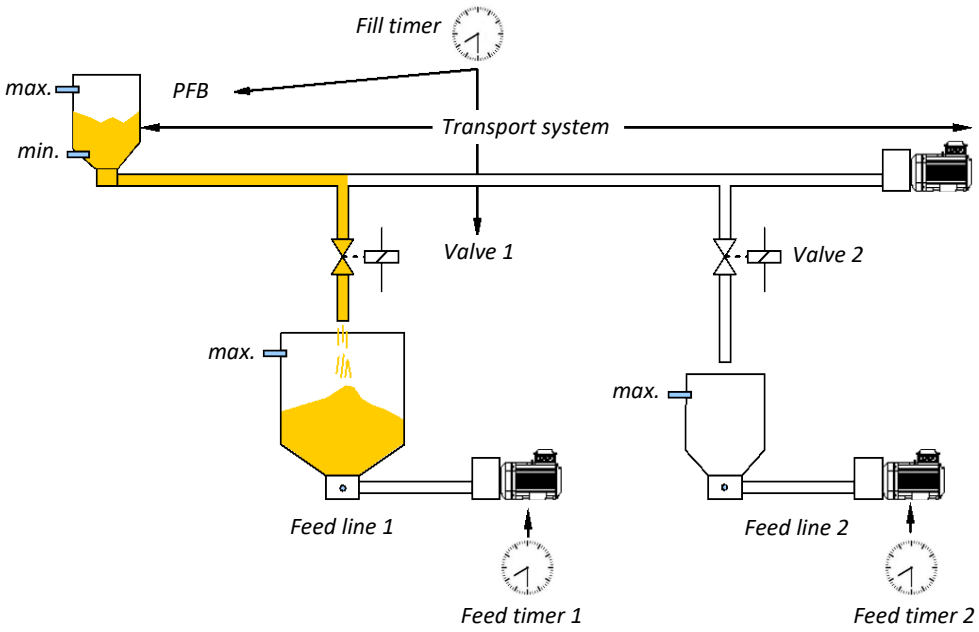
- If the last period is set to 100%, the dose is topped up to 100% in the last period. If a percentage unequal to 100% is set in the last period, this percentage is dosed as long as the daily dosage has not yet been reached.
- In the unlikely event of underfeeding in previous periods, this will be corrected in the last period based on the percentage set for the last period.
- If too much is fed in the previous periods as a result of a manual correction or curve change, dosing stops. The hopper under the relevant valve is then no longer filled.
- If feed is dispensed manually before the end of the last turn, this quantity is deducted from the daily dose. If the manual dosing takes place after the end of the last feeding cycle, this will not affect the daily dose. This has already been achieved.

Without Automatic partition

- Every period, the hopper is completely filled.
- If the daily dosage is reached before the last fill timer period is reached, the dosage stops and the hopper for the relevant valve will no longer be filled.

In the same way, you can retrieve and change the period partitioning of the other animal groups.

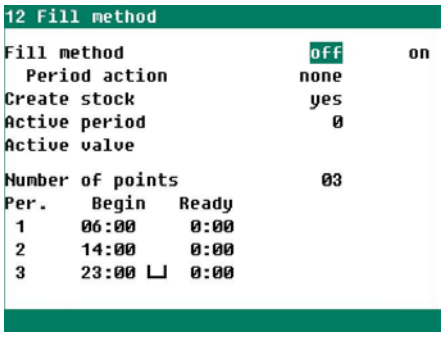
5.6 Fill method = TIMER



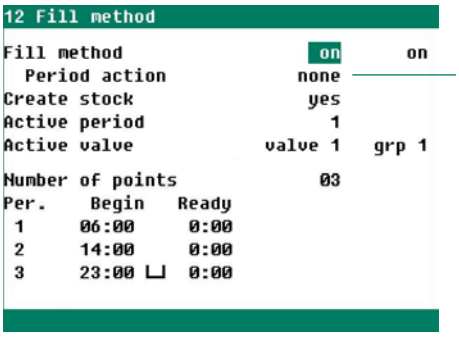
With the *feed timer*, you set the time from which feeding is allowed. The valves themselves determine what and how much may be fed. Per period, all valves are selected once.

A valve is skipped if:

- the valve is set to *off*;
- the *week programme* is active (no feeding *today*) or
- the maximum sensor detects feed.



Fill method = off



Fill method = on

! Make sure that the next fill period does not start before all valves have been addressed, otherwise dosage alarms will occur.

Fill method = off — The current state is maintained, the feeding process is 'frozen'. The *Time-to-empty*, *Distance-to-valve* and *Distance-to-ready* times are stopped. The *PFB-35/70* feed weigher completes its cycle. When you then switch the *Fill method* back to *on*, the feed computer resumes the feeding process from the point at which you had 'frozen' the process.

Period action = abort — The active period is aborted. The *Time-to-empty*, *Distance-to-valve* and *Distance-to-ready* times are cleared. The *PFB-35/70* feed weigher immediately aborts its cycle. In this situation, you have to make sure that the feed system itself is out of feed. Then set the *Fill method* to *on* again. The feed computer resumes feed dosing from the point at which you interrupted it, taking into account quantities already fed.

Period action = restart — The active period is aborted. The *PFB-35/70* feed weigher completes its cycle. The feed system is turned empty, the feed is transported to the valves. Then turn the *Fill method* back *on.* The feed computer restarts feed dosing at valve 1, taking into account total quantities already fed.

Period action = clear — The active period is aborted. All feed measurements are deleted except for the active period number. The *PFB-35/70* feed weigher immediately interrupts its cycle. In this situation, it is up to you to ensure that the feed system no longer contains any feed.
If *Create stock* is active and you have cleared the *Period action* in or after the start of the last feeding cycle (⌴), you must first perform a *restart* before setting the *Fill method* to *on*.

After you have set the *Fill Method* to *on,* the next feed dose will start at the start of a new period. After a restart, this is immediately after you have set the *Fill Method* to *on*.

! Aborting and/or restarting may result in multiple dose alarms.
Beginning new day must not be within the preset periods.

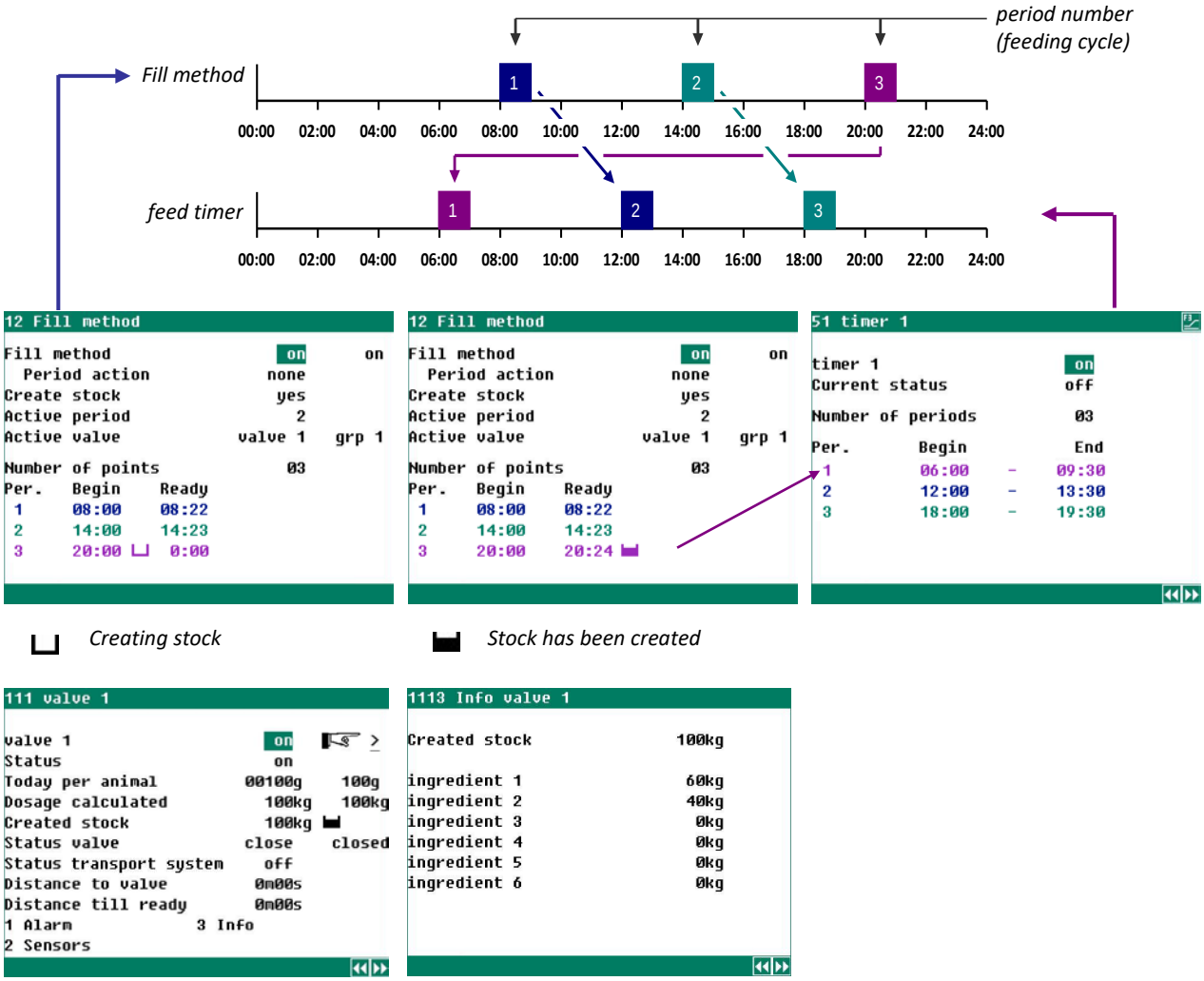
Active period — The active fill timer period.

Active valve — The active valve.
grp xx | *grp* is followed by the animal group to which this valve belongs. This number only appears with multiple animal groups.

Creating stock

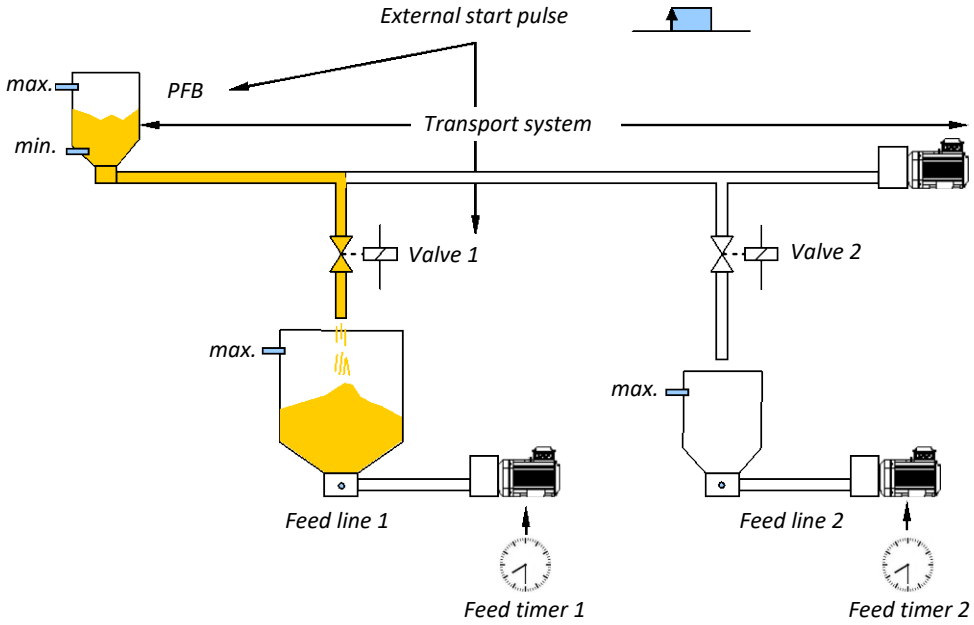
You can create a stock only if the installer has set the *Fill Method* to *timer* and you, the user, have set the *Fill Method* to *on.*

If the *Create-stock* setting is *yes*, the time of the last period is used to create the stock. The dosed amount is not added to the current day but to the next day's amount. Make sure the feed timer starts at the right time, e.g. 1st feeding cycle at 06:00.

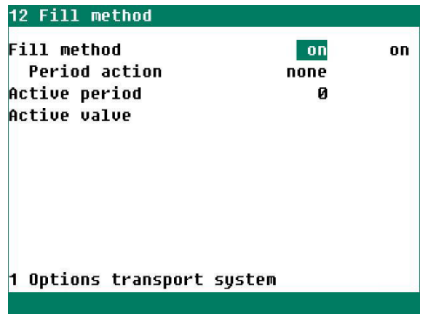


If you have activated *Create Stock*, menu item *3 Info* appears in the valve overview screen. In addition to the total stock created, the info screen also states the amount per ingredient.

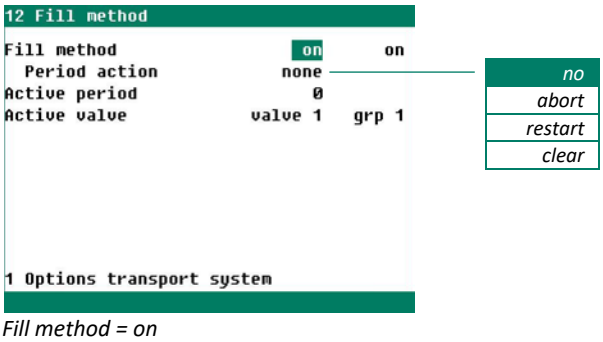
5.7 Fill method = PULSE



Feeding starts based on an external pulse. This can be an external timer or installation. As the feed cycle is started externally, no start times can be entered at the fill timer.



Fill method = off



Fill method = on

! Make sure that the next fill period does not start before all valves have been addressed, otherwise dosage alarms will occur.

Fill method = off — The current state is maintained, the feeding process is 'frozen'. The *Time-to-empty*, *Distance-to-valve* and *Distance-to-ready* times are stopped. The *PFB-35/70* feed weigher completes its cycle. When you then set the *Fill method* back to *on*, feed computer resumes the feeding process from the point at which you had 'frozen' the feeding process.

Period action = abort — The active period is aborted. The *Time-to-empty*, *Distance-to-valve* and *Distance-to-ready* times are cleared. The *PFB-35/70* feed weigher immediately aborts its cycle. In this situation, you have to make sure that the feed system itself is out of feed. Then set the *Fill method* to *on* again. The feed computer will wait for a new start pulse.

Period action = restart — The active period is aborted. The *PFB-35/70* feed weigher completes its cycle. The feed system is turned empty, the feed is transported to the valves. Then set the *Fill method* to *on* again. The feed computer will wait for a new start pulse.

Period action = clear The active period is aborted. All feed measurements are deleted except for the active feeding cycle. The *PFB-35/70* feed weigher immediately aborts its cycle. In this situation, it is up to you to ensure that the feed system no longer contains any feed.

! Aborting and/or restarting may result in multiple dose alarms.

Status The current status of the fill timer.

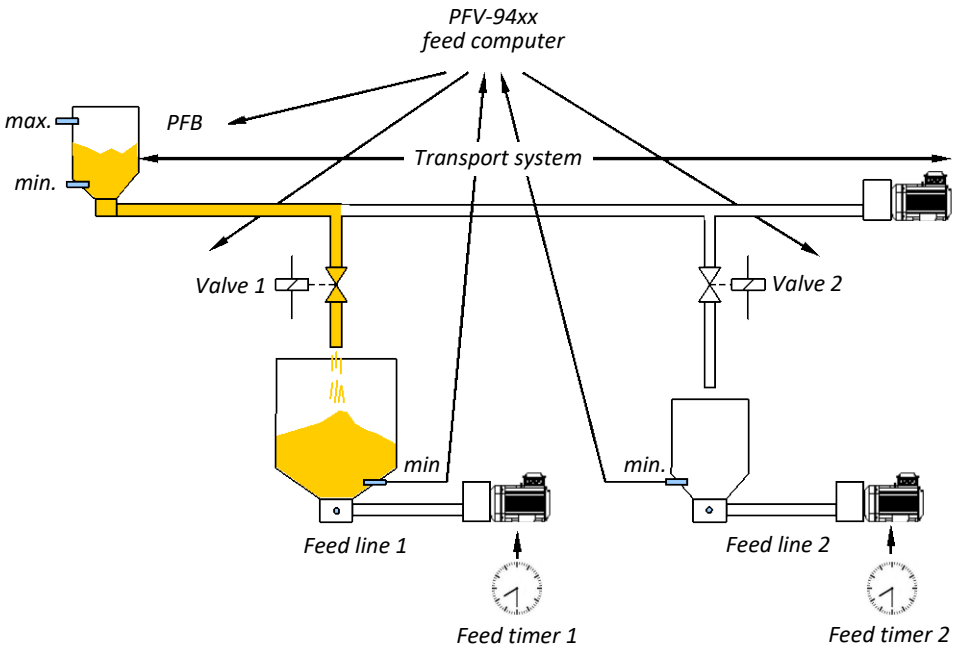
Active period Readout of the number of valid start pulses. If several start pulses fall within the feeding cycle, a maximum of one start pulse will be remembered. All other start pulses will be ignored.

Active valve Readout of the active valve.
grp xx | grp is followed by the animal group to which this valve belongs. This number only appears with multiple animal groups.

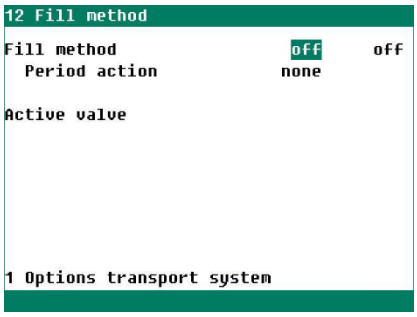
Time-limited feed demand (option)

Per discharge system, you can set a time window with the feed requests to be processed by the feed computer. Outside this time window, the feed computer does not respond to a feed demand of the discharge system concerned.

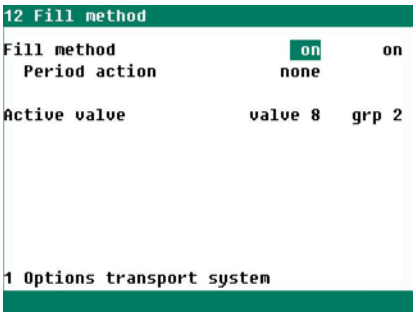
5.8 Fill method = FEED ON DEMAND



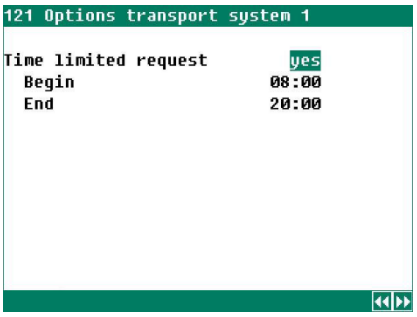
As soon as the feed sensor detects no feed, it transmits a feed demand to the PFV-94xx feed weigher computer. The feed hopper under the active valve is then filled with the maximum contents as set by your installer, after which the system continues to the next valve with demand. If several valves report demand at the same time, the sequence shown in the screen 21 *Demand valves* will be followed.



Fill method = off



Fill method = on



Fill method = off The current state is maintained, the feeding process is 'frozen'. The *Time-to-empty*, *Distance-to-valve* and *Distance-to-ready* times are stopped. The *PFB-35/70* feed weigher completes its cycle. When you then switch the *Fill method* back to *on*, the feed computer resumes the feeding process from the point at which you had 'frozen' the process.

Period action = abort The active period is aborted. The *Time-to-empty*, *Distance-to-valve* and *Distance-to-ready* times are cleared. The *PFB-35/70* feed weigher immediately abort its cycle. In this situation, you have to make sure that the feed system itself is out of feed. Then switch the *Fill method* back *on.* The feed computer resumes the feeding process from the point at which you had 'frozen' the process taking into account quantities already dosed.

Period action = restart The active period is aborted. The *PFB-35/70* feed weigher completes its cycle. The feed system is turned empty, the feed is transported to the valves. Then switch the *Fill method* back *on*. Feed dosing restarts, starting at valve 1 etc., taking into account the total quantities already fed.

Period action = clear The active period is aborted. All feed measurements are cleared, except for the active feeding cycle. The PFB-35/70 feed weigher immediately aborts its cycle. In this situation, it is up to you to ensure that the feed system no longer contains any feed.

! Aborting and/or restarting may result in multiple dose alarms.

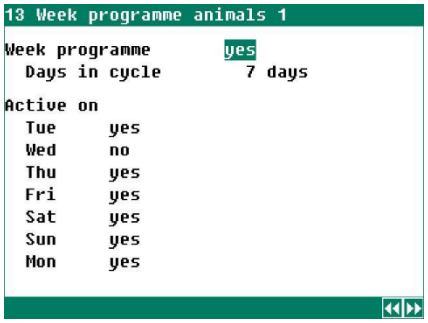
Status The current fill timer status.

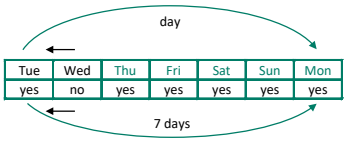
Active valve The active valve.
grp xx | *grp* is followed by the animal group to which this valve belongs. This number only appears with multiple animal groups

Time-limited feed demand (options transport system)

Per transport system, you can set a time window with the feed requests to be processed by the feed computer. Outside this time window, the feed computer does not respond to any feed request from the transport system concerned.

5.9 Week programme



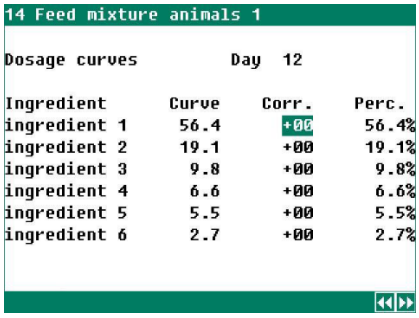


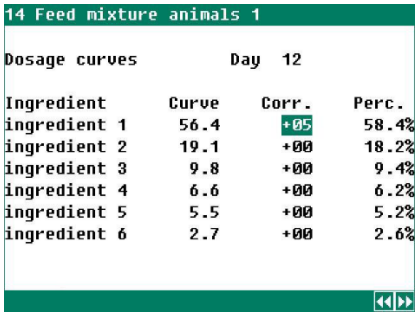
You can use *Week programme* to set feeding such that it does not take place every day, but, for example, that feeding takes place on 6 days and no feeding takes place on the seventh day. You can change or call up the week programme for the other animal groups in the same way**.**

5.10 Feed mixture

If the animal group mixture curve is active, you can query and set the mixture composition for each animal group. If the curve is active, the current mixture is calculated from the curve settings. You can change the calculated mixture afterwards by entering a correction to the units calculated in the *Corr.* column.

With feed mixture curve

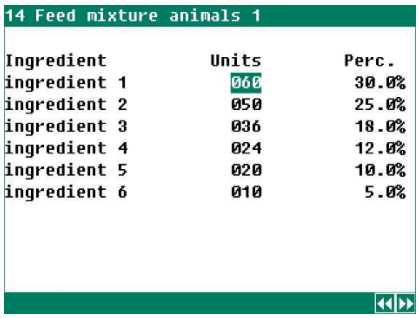




The percentages shown in the column *Perc.* Are rounded values. Therefore, the displayed percentages may differ from the actual calculated percentages by approximately 0.1%.

! The values in the *Curve, Corr*. and *Perc.* columns indicate the ratio between the various ingredients, not their percentage of the total mixture. The percentage of the mixture is calculated automatically for every ingredient on the basis of the ratios set.

Without feed mixture curve



In this screen, you can set the mutual dosing ratios between the various ingredients. The percentage is automatically calculated based on the set ratios.

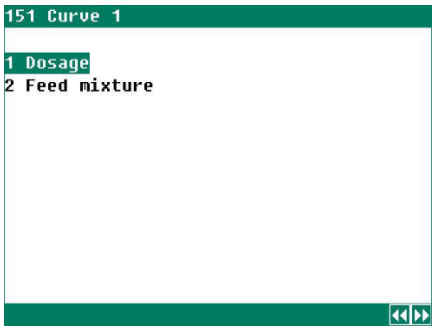
You can change or call up the feed mixtures for the other animal groups in the same way.

5.11 Curves

To avoid having to set up to 30 different dosage, feed mixture and animal weight curves, you can assign individual curves to individual valves.

You can programme up to 6 different groups of curves (each with their own individual dosage, feed mixture and animal weight curves).

! The animal weight curve is not currently is use.



For automatic and gradual adjustment of dosage, feed composition, etc., you can programme up to six different curves. A curve can consist of up to 15 breakpoints.

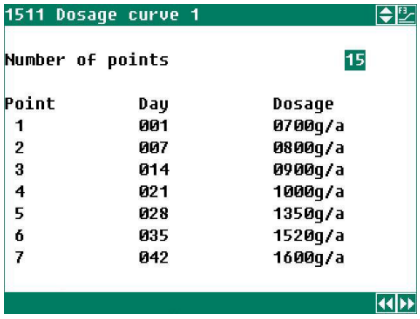
Depending on the current day number, the current setpoint is determined from the curve. Based on this calculated value, the feed weighing computer controls the amount of feed dosed (the curves must be *on*).

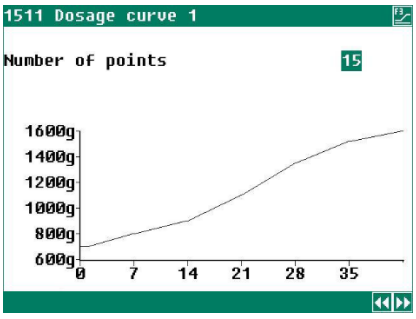
! The day numbers in the growth curve should be consecutive (see the example below).
If the day number of the first breakpoint is greater than 1, the setpoint for the first breakpoint will be maintained until the pre-set day number.

1	001	0700g/d
2	014	0800g/d
3	007	0900g/d
4	021	1000g/d

not allowed

Dosage





If your installer has activated dosage curves, you can use *programmable curves to* automatically grow the feed and/or water quantity per animal with the age of the animals. In the dosage curve, you enter the day number and the corresponding feed quantity per animal per day (g/d) for each breakpoint. You can set a separate dosage curve for each animal group (or valve).

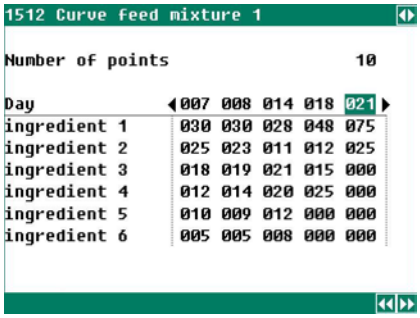
A curve consists of up to 15 breakpoints. The day number is between 1 and 999 and is automatically incremented by 1 every new day (*Beginning new day*).

The total amount to be dosed is recalculated every day based on:

- the curve settings;
- the current day number;
- the current number of animals in the house.

Press F3 for a graphical display of the curve. Pressing this key again also returns to the table display. The current day number is indicated with a ● (dot).

Feed mixture



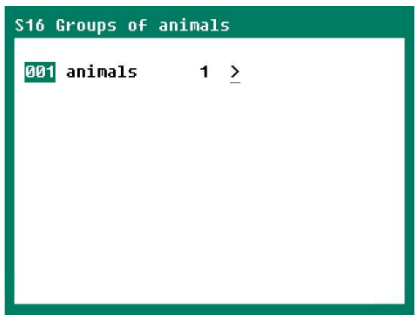
You can vary the feed mixture based on the age of the animals. Note:

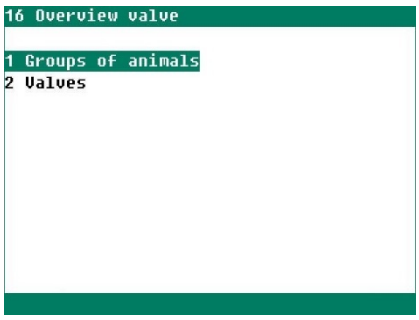
- You set a mixing ratio here instead of percentages of the total dose;
- If you change the number of ingredients in screen 32 (*Ingredient name*), the feed mixture (*Mixing ratio*) will also change.

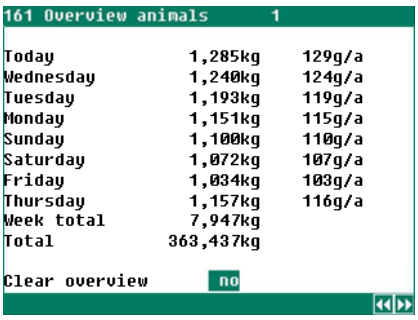
The arrow keys at the top right of the screen indicate that there are several more columns of settings.

5.12 Overview

Animal group overview

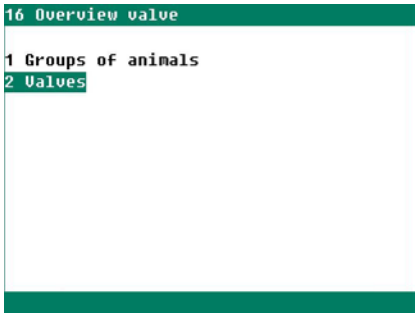


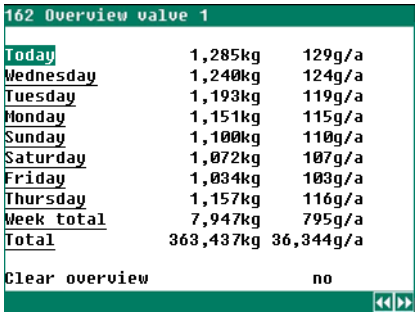


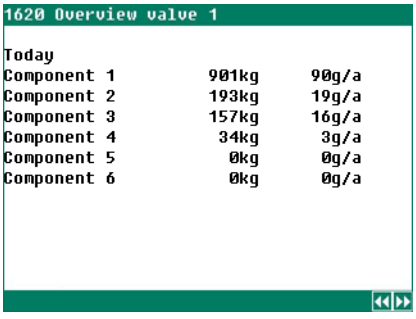


Overview of the amount fed: on the left the total amount, on the right the amount per animal (if animal data is available). Due to rounding off, the figures displayed may differ slightly from the actual value. You can call up the overviews for the other animal groups in the same way.

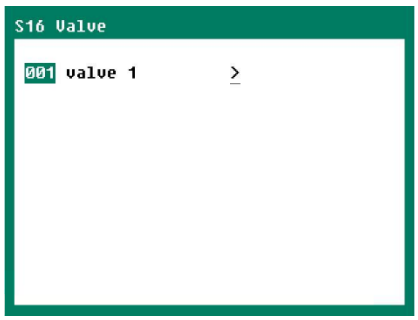
Valve overview

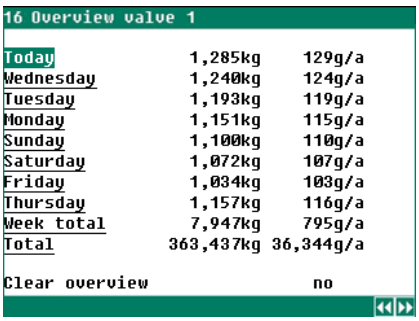


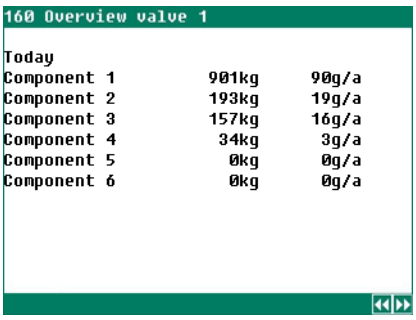




You can call up the overviews for the other valves in the same way.
The following screens will be shown on your display if you have no animal groups:

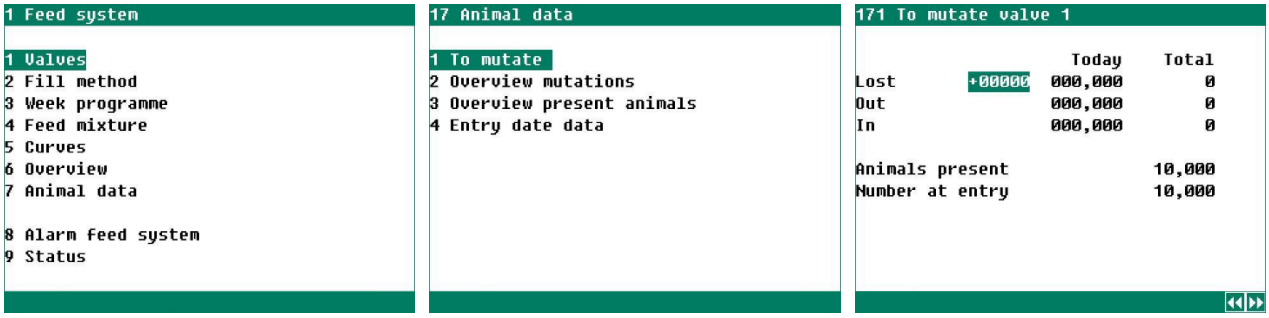






Clear overview All amounts fed for the house selected and stored in the memory (including the amount fed for today and the feeding times stored) will be deleted.
NOTE: This operation also deletes today's data.

5.13 Animal data



 The buttons also select the next/previous animal group.

Mutation

Lost	Indicate the number of animals that have died here. *Today*'s mortality (or death rate) is lowered automatically by the value entered after which the entry is erased. If you have entered an incorrect value you can correct this by entering this as a positive value.
Lost Today	Today's total mortality.
Lost Total	The total mortality calculated from today's and previous days' mortality.
Out	Here you enter the animals removed from the house in the meantime.
Out Total	The total number of unloaded animals.
In	Here you enter the animals added to the house in between.
In total	The total number of animals added.
Animals present	*Number at entry - Lost Total - Out Total + In Total*.
Number on entry	This is the number of animals initially set-up in the house.

Overview of mutations

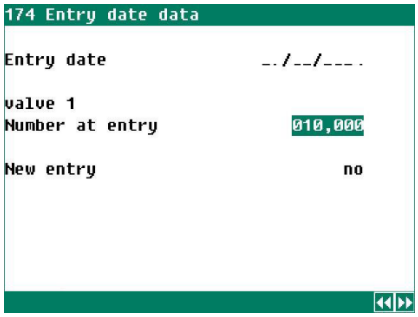
An overview of the mortality, the number of animals unloaded (out) and the number of animals added (in) per day.

Overview of animals present

Overview of the remaining number of animals in the animal group per day.

Set-up data

This data is entered at the beginning of a new round. The feed weighing computer uses this data to calculate the remaining number of animals, the feed dosage, etc.



Entry date	This date is filled in automatically once you set *New entry* to *yes*.
Number at entry	The number of animals set-up in the house on the *Entry date*.

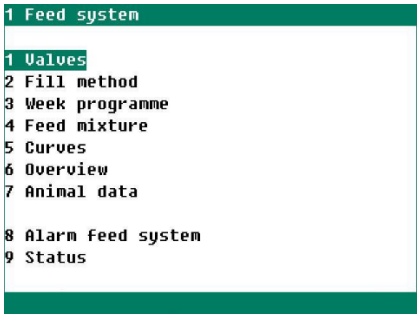
New entry When you set *New entry* on *yes*:
- the mortality (*Lost)* table is cleared;
- the set-up date (*Entry date*) is filled in;
- feed dosing is started, provided a feeding cycle is active.

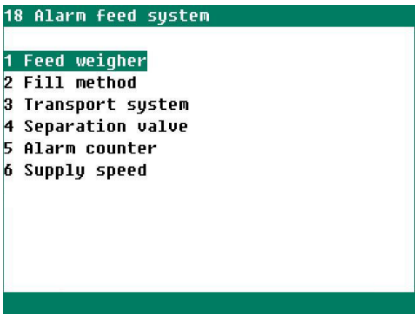
The set-up date is used to determine the age of the animals. Furthermore, this setting is used to fill the age-related mortality table. The feed computer can store the data of the past 7 days.

Animal data via communication

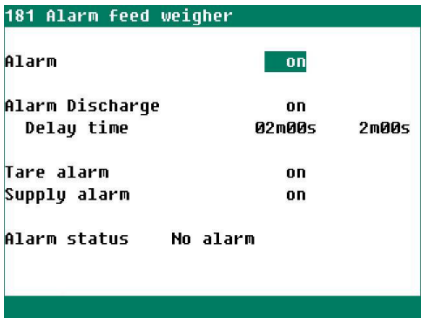
If the animal data is received via communication from a PL-9xx0, you can only request an overview of the animals present. For the other screens, the text *Communication* appears in the screen, except for screen 173 *Overview of animals present*.

5.14 Feed system alarm





Feed weigher alarm



In this screen, you can switch the feed weigher alarm *on* or *off*. If you turn this alarm off, it will no longer be passed on to the main alarm and the alarm relay will not de-energize in the event of a feed weigher malfunction. The alarm cause is shown at *Alarm status*.

⚠ For safety's sake, always switch all alarms *on*.

Alarm If you turn the alarm *off*, the PFV-94xx will no longer respond to alarms coming from the feed weigher. It also turns off the main alarm on the feed weigher. The alarm LED on the feed weigher flashes.

⚠ We strongly recommend to <u>not</u> turn off this alarm.

Alarm Discharge This alarm serves to detect whether the feed under the feed weigher is actually discharged. If the discharge auger is activated and the sensor under the feed weigher detects feed during the *Delay Time*, a *Discharge alarm* will be generated after the *Delay time* has elapsed. If the discharge transport is slow, causing a *Discharge alarm*, and you are certain that the feed is transported away from the feed weigher, you can consider turning *Alarm Discharge* to *off*. In this case, check the discharge transport regularly.

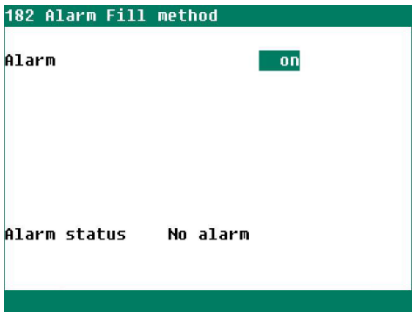
Tare alarm If you deactivate the tare alarm, the PFV-94xx will no longer respond to the tare alarm from the feed weigher. The tare alarm on the feed weigher will also be deactivated. If you switch off the tare alarm and something unexpected like bridging occurs in the weigher, the amount actually dosed will differ from the calculated amount and the animals will not be fed enough. A reason for a tare alarm might be that the feed weigher vibrates too much while filling. In that event, check the hopper under the feed weigher at regular intervals.

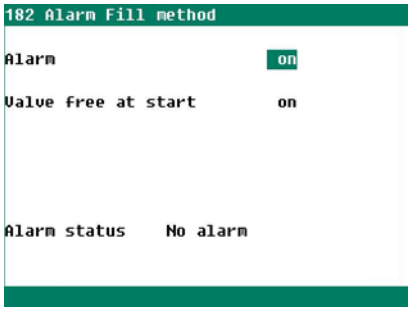
Supply alarm Turning this alarm *off* results in:
- you only get a *Dosage alarm at* the end of the feeding period. In the case of a feed demand, the dosage alarm only occurs at the beginning of the new day;
- an *alternative ingredient* is no longer automatically selected in case no more *supply alarms* occur.

Alarm status Reading out the alarm cause.

The PFV-94xx takes over control of the alarm key from the feed weigher; in other words: you will no longer be able to activate/deactivate the alarm on the feed weigher. This will only be possible on the PFV-94xx feed computer then.

Fill method



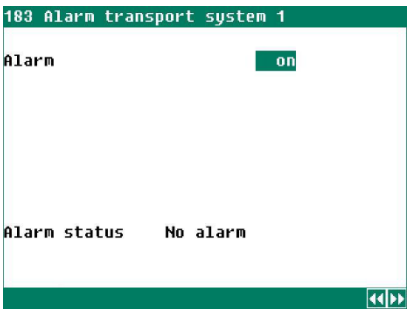


If the *Fill method* is set to *timer* and the valves operate on feed demand, you can set here that all valve statuses should be checked before a new feeding period can start. If a valve is not free, a *Valve-not-free alarm* will be generated.

⚠ For safety's sake, always switch all alarms *on*.

In this screen, you can turn the fill method alarm *on* and *off*. If you turn the alarm *off*, it will no longer be transmitted to the main alarm and the alarm relay will not de-energize if the event of a fill method malfunction. *Alarm status* shows the alarm cause.

Transport system

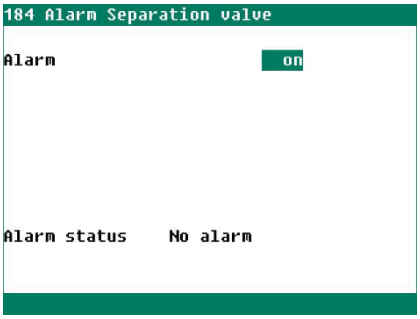


Here you can turn the alarms of the transport systems *on* or *off* one by one. If you turn the alarm *off*, it will no longer be transmitted to the main alarm and the alarm relay will not de-energize in the event of a malfunction of the transport system concerned.

Alarm status shows the alarm cause.

⚠ We strongly recommend to not turn off this alarm.

Separation valve

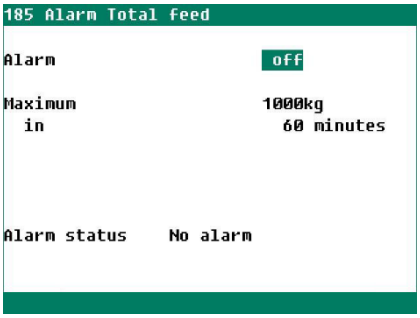


Here you can turn the separation valve alarm *on* or *off*. If you turn the alarm *off*, it will no longer be transmitted to the main alarm and the alarm relay will not de-energize in the event of a malfunction of the separation valve.

Alarm status shows the alarm cause.

We strongly recommend to not turn off this alarm.

Alarm counter

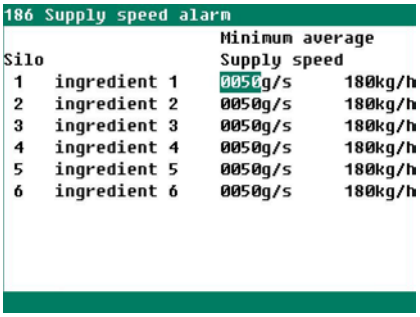


To detect any pipe breaks or leaks early, you can set the maximum amount of feed allowed to flow through the feed lines, during the pre-set time before an alarm is generated.

Alarm status shows the alarm cause.

We strongly recommend to not turn off this alarm.

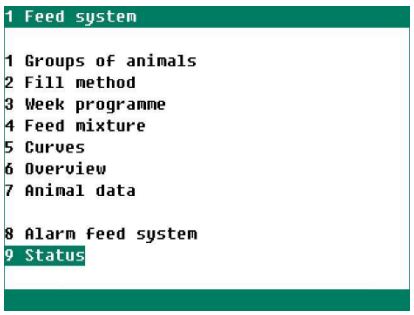
Supply feed alarm

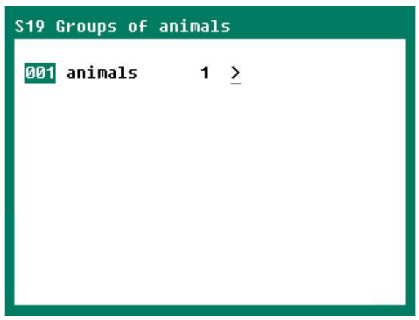


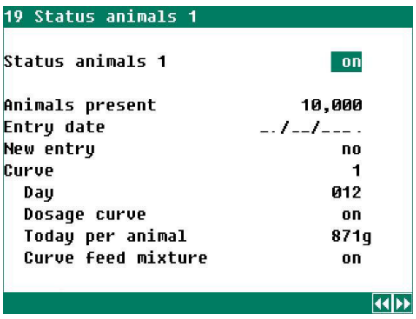
Here you set the minimum, average feed rate. If the average feed rate is lower than the set rate for 60 seconds, a feed rate alarm follows.

The settings and measurements of silos 7 to 16 are set and read in the same way.

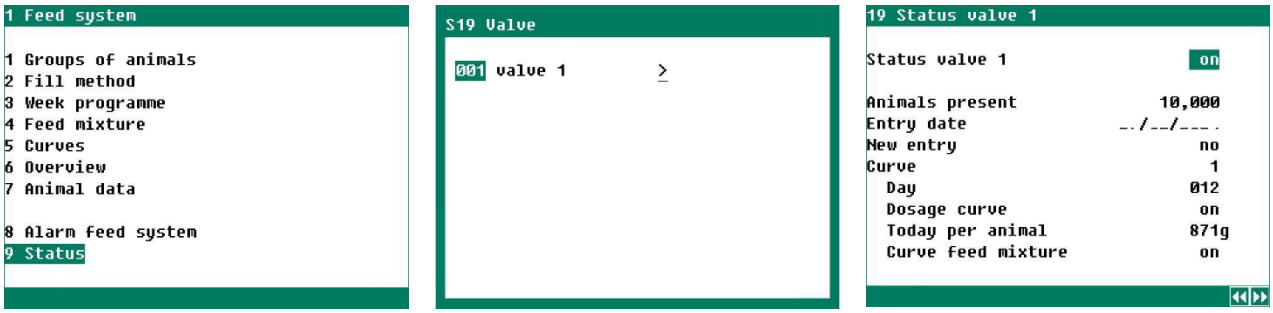
5.15 Status (F2)







Screens for animal groups

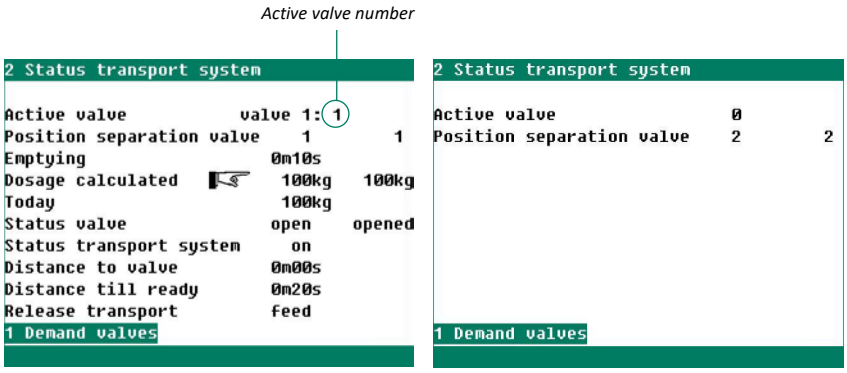


Screens for valves

You can call up the status for every individual animal group/valve. Besides the entry date and the number of animals present, you can also change the corresponding curve settings if relevant. You can change the curve number only at the animal group (screen 112).

If the animal info is received from a PL-9x00 via the communication loop, the text *Communication* will display and no entry date will be shown.

6 Transport system status



Active transport system *Inactive transport system*

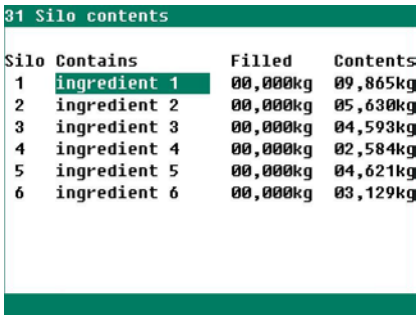
The valve name may differ from the number. Example: You have changed the name of *Valve 1* to *Laying hens*. The valve recognition number remains 1.

Active valve	The valve that is currently active. The name and number of the active valve are shown. If you work with animal groups, you will also see the animal group number of the valve concerned.
Position separation valve	The first value is the *required position* of the separation valve. The second value represents the *current position*.
Emptying	The maximum time taken by the transport system to transport the feed out of the hopper under the weigher.
Dosage calculated	The calculated amount of feed transported to the valve in this feed cycle. This amount can never exceed the capacity of the feed hopper under the valve.
Today	The amount of feed dosed today.
Valve status	Readout of the controlled valve status. If you use *valve monitoring*, the measured valve status is displayed here.
Status transport system	*off* = Feed transport is stopped *on* = feed is transported to the valve
Distance to valve	The physical distance expressed in time between feed weigher and valve. This time can be extended by any slip correction entered.
Distance till ready	The time required to transport the amount of feed (the last portion) to the valve. This time starts counting down after the *emptying time* has elapsed.
Release transport	*Feed:* The current transport system runs. *No feed:* The next transport system may run.
Demand valves	An overview shows any feed demand per valve: *yes* = feed demand *no* = on turn or been on turn; the valve is off or there is no feed demand.

If distances are measured in pulses instead of time, the number of pulses required to achieve the same goal is displayed instead of the times.

7 Silos

7.1 Silo content



For each silo, you specify which ingredient (*Contains*) and how much ingredient (*Content*: stock or shortage) it contains. Here you also enter the quantity bulked per silo. This quantity is then directly added to the content and *Filled* is automatically reset to 0.

For 9 or more silos, the symbol appears in the title bar. This symbol indicates that you can use the keys to retrieve the data of the remaining silos.

7.2 Ingredient names

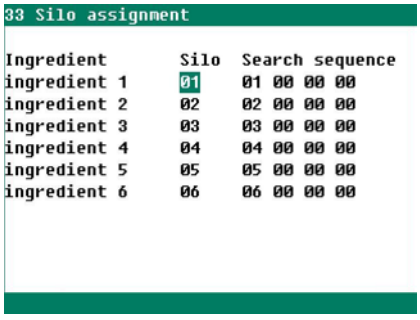
To change ingredient names, see page 4.

Do not set more ingredient types than necessary. If there are more ingredient types than silos and you change the ingredient type in a silo, you must change the mixture, curve, silo content and silo assignment. If you do not do this, the *Ingredient-not-in-silo* error message appears in the alarm overview.

You have three silos and four ingredient types. Silo 3 contains ingredient 3. You change this to ingredient 4. You then need to change: the mixture (when using curves); the silo content and the silo assignment.

7.3 Silo assignment

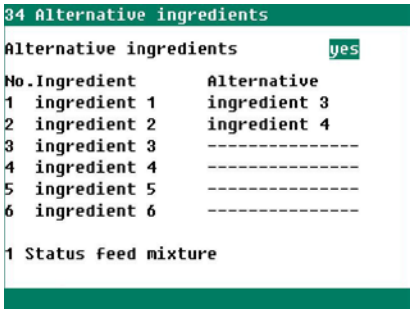
If you have several ingredients of the same type, enter the silo numbers containing the relevant ingredient type in *Search sequence*. If a silo is *blocked* (e.g. due to silo alarm or if the current silo number of the ingredient in question is 0), the programme automatically searches for the next silo with the same ingredient. If you have not set a sequence and a silo is blocked, the *invalid-silo* alarm appears.

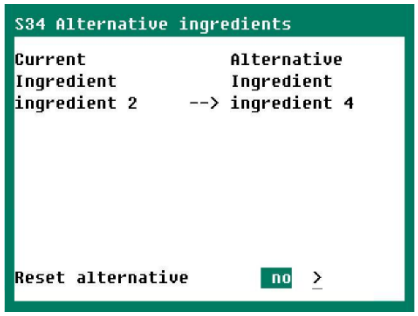


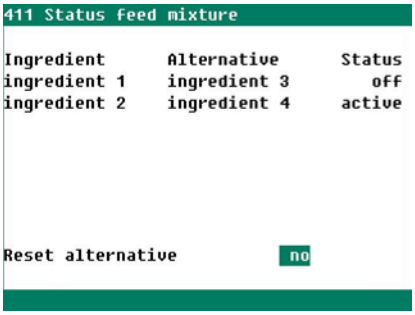
The *Silo* column shows the *active silo* from which the ingredient comes.

7.4 Alternative ingredients

If you have set an alternative ingredient for an ingredient and there is a 30-second supply alarm from that ingredient, the computer automatically switches to the alternative ingredient.







The *Status feed mixture* screen shows only those ingredients that are part of the current feed mixture.

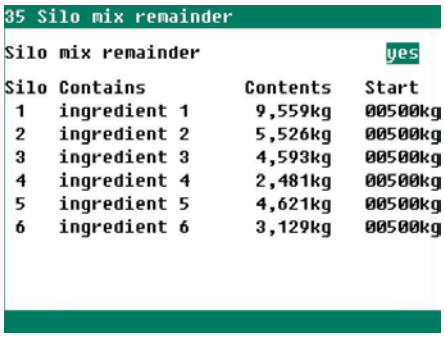
The *Reset alternative* setting clears all alternative ingredients. All statuses will be set to *off*. After a reset, it may take several minutes before feeding starts again. The new feed mixture must be re-determined.

If you have set *Alternative ingredients* to *yes*, the middle screen appears on the display to indicate that the feed weighing computer has selected an alternative ingredient. Press the link ≥ behind *Reset alternative.* The previous screen then reappears on the display.

7.5 Silo mix remainder

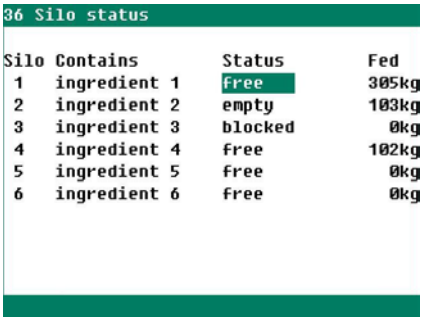
When the silo is almost empty, the residue in the silo contains salts, minerals and finely ground feed. If the silo weight falls below the set value, the feed weigher computer tries to mix the residue. The condition is that *Silo mix remainder* is active and another silo contains the same type of feed (ingredient).

- If so, the remainder is mixed on the basis of 50% remainder + 50% feed from another silo.
- If <u>not</u>, the remainder is mixed on the basis of 50% remainder + stop (search for the same feed type) + 50% remainder.



For 9 or more silos, the symbol appears in the title bar. This symbol indicates that you can use the keys to retrieve the data of the remaining silos

7.6 Silo status



In addition to the current silo status, the amount of feed fed from the silo today is also displayed. You can change the displayed status to: *free, empty* or *blocked*.
It may take several tens of seconds, before the status is transmitted to the PFB-35/70.

For more than 10 silos, the symbol appears in the title bar. This symbol indicates that you can use the keys to retrieve the data of the remaining silos.

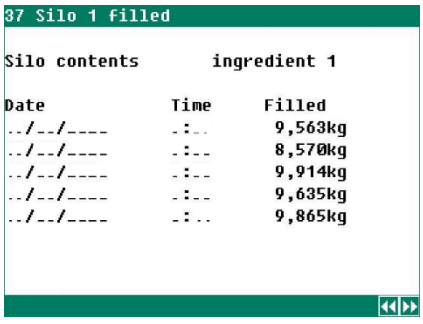
The status changes to *empty* when:
- it is changed manually;
- no feed comes out of the selected silo;
- the feed supply speed is too low.

The *empty* status is cleared when:
- it is changed manually;
- *Beginning new day* is achieved;
- the *feed weigher* is restarted (screen 31 page 29)
- the [RESET] key of the PDB-35/70 is pressed briefly;
- resetting *Alternative ingredients* (screen 341 page 30).

The status changes to *blocked* when changed manually. The silo is blocked. Feeding from this silo is then no longer possible. Only when you have an alternative ingredient feeding will continue.

The *blocked* status is released when you manually change it to *free* or *empty.*

7.7 Bulked

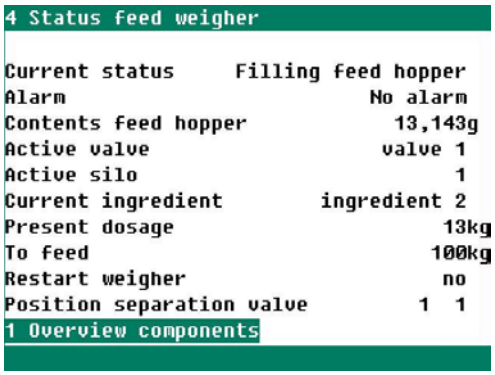


For each silo, a summary appears showing the last five times you entered the bulk data in screen 211 *Silo contents*. Besides the amount, the date and time of bulking are also displayed. It is important to enter this data immediately after filling the silo (before the next feeding period).

The settings and measurements of silos 2 thru 16 are set and read in the same way.

8 Feed weigher status

This screen displays the feed weigher status of the PFB-35/40. In this screen, you can also turn the feed weigher alarm *on* and *off*. You cannot turn off the communication alarm.



See table below
See also alarm codes page 35
Weighing hopper content in grams
Active valve
Current silo number (0 = wrong search sequence)
Ingredient name is displayed when filling the weighing hopper
Amount already dosed
Total amount of feed still to be fed today by active auger/valve
Desired and current position of the separation valve
While dosing, you can request an overview of the feed amount fed so far.

Alarm If you turn the alarm off, the PFV-94xx will no longer respond to alarms from the feed weigher. The main alarm on the feed weigher is also turned off. The alarm LED on the feed weigher flashes. We strongly recommend to not turn off this alarm.

Restart weigher During an alarm situation, set *Restart weigher* to *restart* or *abort*:

- To disable (reset) the active alarm;
- *restart*: to try to finish the active portion (when restarting);
- *abort: to abort* (reset) the active weighing and start a new weighing cycle.

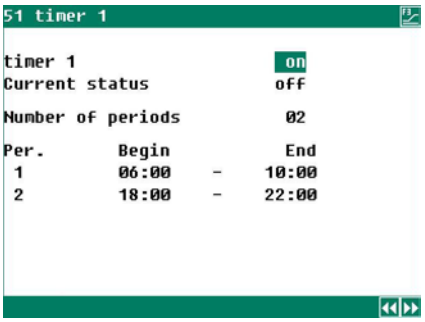
Current status	Description
Weigher standby	The weigher is waiting for a start command before starting a new weighing cycle.
Wait for release	The feed weigher cannot start a new weighing cycle because the sensor detects feed. ! This has nothing to do with whether or not you work with release contacts.
Closing discharge hatch	The weighing cycle starts again after the discharge hatch has been closed. This is repeated until the feeding cycle has been completed.
Calculating dosage	The amount to be dosed per component is determined on the basis of the feed mixture.
Taring feed hopper	The empty feed weighing hopper is tared.
Filling feed hopper	After taring the weighing hopper, the silo auger is started and the weighing hopper is filled with the components indicated.
Discharging feed hopper	The discharge hatch is opened after filling the weighing hopper with the right amount of every component.
End of weighing cycle	The feeding cycle has been completed.
Restart weighing cycle	You may have to restart the feeding cycle after a fault (alarm) (see *Alarm PDB-35/70 feed weigher*).

8.1 Ingredients overview

If the Feed amount still to be fed in the active period is unequal 0, you can call up the *Ingredients overview*. Besides the total amount still to be fed, this screen also shows the amounts still to be dosed for the individual ingredients.

9 Timers

9.1 Maximum 24 periods



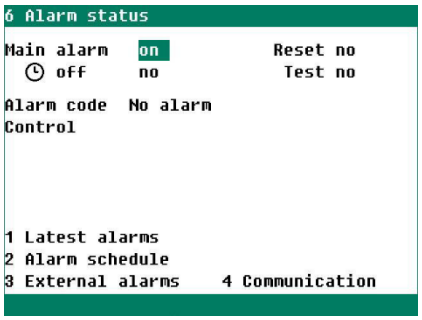
You can set up to 24 periods per timer. All times must be consecutive and the difference between two consecutive times must be at least 1 minute.

You can edit and readout the times of timers 2 thru 12 in the same way.

9.2 Timer overview

A graphical overview of the timers appears on the screen. Only the on/off times of the timers activated are displayed.

10 Alarm



10.1 Testing the alarm

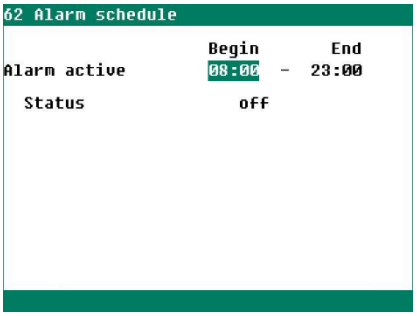
Test = yes The alarm relay (siren) is tested for 60 seconds.
Test = no The alarm test time is cleared.

off = temporarily disable alarm

Option for temporarily disabling the alarm (siren). See page 5.

After resolving the fault, remember to turn the alarm back *on*. Preferably use the *off* function to clear the fault.

10.2 Alarm schedule



Alarm active With *Begin* and *End* you enter the period, during which the time-dependant alarms should be active.

Status Only when the *Status* is active, time-dependant alarms will be transmitted to the poultry computer. Alarms that occur during the off-status will no longer be transmitted.

10.3 Latest alarms

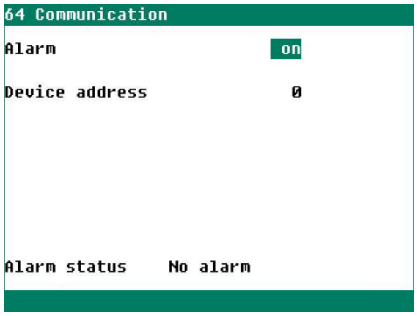
The last 5 alarm causes which caused the alarm relay to de-energize will be stored. The date and time of the alarm are displayed in addition to its cause. You can call up the data of the previous alarms by pressing the key.

Alarm 0 Displays the cause of the last occurring alarm with the date and time when the corresponding alarm is/was active.

10.4 External alarms

You installer can change the names of external alarms to any name of your choice (max. 15 characters).

10.5 Communication



A communication alarm occurs when:

- The PFV-94xx feed weighing computer is main station.
- The main station has not received data from any device (PL-9xxx, WEB-485 etc.) in the same RS485 data communication loop.
- A PFB-35/70 feed weigher is installed and the feed weighing computer has not received data from the PFB-35/70.
- A PSW-1 silo weigher is installed and the feed weighing computer has not received data from the PSW-1-D. On the PSW-1-D silo weigher, check that DIP switch SW1-6 is in its *OFF* position (slave mode).

Alarm Here you can turn the communication alarm *on* and *off*.

Alarm status Readout the alarm status: *No alarm, Communication address x* or *Communication WEB-485*

10.6 Alarm codes

Alarm codes installation

Alarm code	Description
Communication error	▪ No communication with feed weigher; ▪ Wrong communication address; ▪ Poor connection to feed weigher.
Feed weigher (xx)	xx = alarm code received from PFB-35/70 feed weigher. For more information on the alarm codes of the PFB-35/70, see page 38.
Hopper content	The maximum feed hopper content has not been entered for the valve displayed.
Input already assigned	The input has been assigned to two or more controls.
Invalid distance	*Distance to weigher* is not entered for the valve displayed.
Invalid input	The input number does not exist on the module.
Invalid feed weigher	Minimum required software version in the PFB-35/70 is 1.20 or higher. Update the software.
Invalid output	The output number does not exist on the module.
Invalid position valve	No separation valve position has been entered for the feeding system shown; *Position of diverter valve* is set to *0*.
Invalid silo output	The output number does not exist on the module.
Invalid silo weighing computer	Incompatible software version on your silo weighing computer. Please contact your installer. Update software.
Invalid valve	The valve number that you have assigned to an animal group is not "*active*" (the selected valve is "*off*").
Module xx not found	The module number set for the terminal does not exist
Module xx not installed	Module address not found, check the settings on the module
Module xx reset alarm	Module continues to reset due to a fault, check the module
No communication address	Missing device address feed computer and/or feed weigher.
No feed weigher	The *Feed weigher present* setting is set to *no*. You need to install a feed weigher.
No input assigned	No input terminal number entered
No output assigned	No output terminal number entered
No PFB-35/70	An input/output refers to the PFB-35/70 feed weigher, but it is not installed.
Output already assigned	The output has been assigned to two or more controls.

Alarm code	Description
Silo no. already used	The preset silo number has already been assigned to another silo.
Sum valves exceeds 100%	The sum of the mutual division among the valves for the displayed animal group is greater than 100%.
Unknown terminal type	This type of terminal does not exist
Valve already assigned	▪ The valve number has been assigned to the same animal group multiple times. ▪ The same valve number has been entered for several animal groups. ▪ The number of valves for the animal group is greater than the total number of valves.
Valve not assigned	The valve number has not been assigned to an animal group.
Wrong output type	Type of output does not comply with the type of output the control can drive
Wrong input type	Type of input does not comply with the type of input the control can handle.
Wrong terminal setting	Assignment error. The function you have assigned to the terminal is not supported by the module.
No info from houses	A central control installed on the PFV-94xx has not received any data from the external controller to control the central control (e.g. an incorrectly set feed weigher or an incorrect central control number, communication bus broken etc. If the PFV-94xx is linked to a PL-9xx0 poultry computer, then: ▪ The *animal group* at the PL-9xx0 has not been set to *communication*. ▪ The communication number on the PFV-94xx does not match the communication number on the PL-9xx0. ▪ The feed system on the PL-9xx0 has not been set to *PFV-94xx;* ▪ The feed counter on the PL-9xx0 has not been set to *PFV-94xx* ▪ You use valves for feeding and the timer on the PL-9xx0 has been set to *PFV-94xx* instead of to *on/off*; ▪ Software version in PFV-94xx or PL-9xx0 is not sufficiently up to date; update the software. ▪ Status PL-9xx0 house is set to *not in use*. *Rest contents via communication* has been set for a valve, but no data is received via the communication loop of the corresponding PSW-1.

Installation errors like *No house info*, *Communication error* should always be solved immediately.

Feed system alarm codes

Alarm code	Description
Alarm silo x	Silo number x is blocked. Too low feed supply. Check whether there is still feed in the silo and check the silo auger.
Alarm unknown (xxxx)	A non-documented alarm code has occurred. Note down the number that is displayed and contact your supplier.
Beginning new day in period	*Beginning new day* falls in a period, this is not allowed.
Capacity silo too low	The calculated feed dosage is higher than the weighing capacity of the mixing silo.
Discharge alarm	The contents of the mixing silo have not decreased or increased in the past 60 seconds, although a drive command has been sent to the feeding system.
Dosage too high	The calculated dosage is the sum of the contents of the hoppers of the valves belonging to the animal group. It speaks for itself that, if the total feed amount is calculated on the basis of the management data the hoppers have to be sufficiently large to enable the calculated dosage to be dosed in the number of feeding periods as set. If it is apparent beforehand that it will not be possible to achieve this, a dosage alarm will be generated beforehand.

Alarm code	Description
Dosage too low	The amount of feed dosed is less than the preset minimum amount to be dosed. See *Alarm,* page 12.
Alarm external house	Alarm in another house, only if a communication loop is present. This alarm does not trigger the alarm contact of the feed computer.
External alarm x	The contact input of external alarm x was disrupted due to which an external alarm is generated.
Invalid mixture	The mixture is on 0.0% for all ingredients, although a certain amount of feed has to be dosed.
Component not in silo	▪ Silo number is set to 0. You must always enter a valid silo number for an active ingredient; ▪ The silo contents show the silo with the selected component as *blocked*, see page 30; ▪ Ingredient is not in the silo selected, see page 29; ▪ Ingredient has not been assigned to a silo. A mixture value has been entered for the ingredient. See *Feed composition;* ▪ The ingredient assigned to the silo according to the *silo contents* displayed is not what should be in the silo according to the silo assignment.
Invalid period	▪ The times at a time switch should be incremental and the difference between *Start* and *End* should be at least 1 minute; ▪ Date and/or time on the PFV-94xx feed computer do not match the date and/or time on the PL-9xx0 poultry computer; ▪ The PL-9xx0 poultry computer is connected to a PFV-94xx feed computer that uses fill and follow-up times.
Invalid search sequence	▪ The silo number does not exist. ▪ Silo assignment changed. ▪ The silo number has been set to 0; the component must always be followed by a valid silo number ▪ A non-existent silo number has been entered for the component.
Invalid silo	There is no ingredient in the silo selected, see page 29. This error message can also occur when an ingredient is not assigned to a silo, even though a value is entered in the mixture for the ingredient.
Maximum supply alarm	The *total feed* counter exceeds the maximum setting within the time set, see: *Feed system alarm*, screen 185.
No weight loss	Discharge is active and the set weight reduction is not achieved within the set time. This message appears only if *Discharge alarm active* is *on*.
Period skipped	If a feed cycle has not run to its end and fully overlaps the next feed cycle, the *Period skipped* error message will be generated.
Propagation time expired	The *Separation valve* has been sent to a new position, but the position of the valve has not changed for the past 60 seconds (the default setting for the max. running time is 60 seconds). Check the functioning of the separation valve. The *Separation valve* has been set to manual operation; switch it to automatic operation.
Silo already assigned	The same number has been entered a number of times in the silo assignment search sequence, see page 29.
Supply speed alarm	The supply speed has been lower than the minimum supply speed setting for the last 60 seconds. The silo status is set to blocked.
Valve not free	The hopper under the valve contains a minimum level sensor that detects feed at the start of a feeding period. Remove the feed from the hopper for the valve that is indicated.

Alarm codes PFB feed weigher

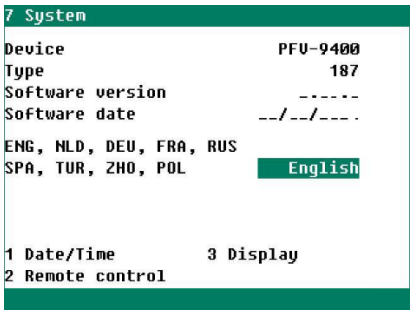
Alarm code	Description
Discharge hatch closed	Hatch still not closed after 10 seconds even though it was sent closed
Discharge hatch opened	Ingredient is not in the selected silo.
Feed detected by sensor	Hatch still not open after 10 seconds even though it was sent open.
Invalid silo	▪ Software version in PFB-35/70 is not sufficiently up-to-date. Please contact your supplier. Update the PFB-35/70 to a current software version. ▪ An input/output refers to a feed weigher while no feed weigher is installed.
Supplement empty	When the discharge hatch is opened, the feed sensor is covered with feed.
Tare: fluctuating value	The measured weight is unstable due to 'swinging' of the weighing hopper, for example. Environmental vibrations affect the measurement result.
Tare: value too high	Measured value after taring too high.
Tare: value too low	Measured value after taring too low.

For more codes and information, see the PFB-35/70 feed weigher manual.

After resolving the fault, remember to turn the alarm back *on*.
Preferably use the function *off* (temporarily disable alarm function) to clear the fault.

11 System

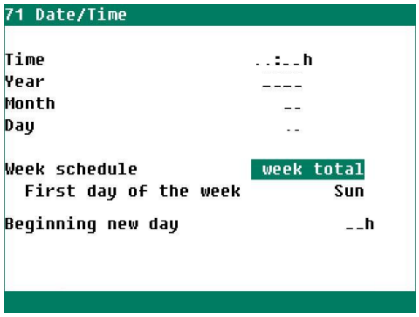
11.1 General system settings

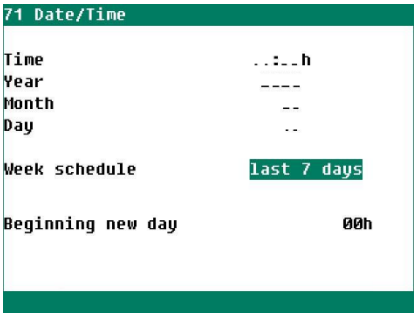


The first four lines successively show the device, type number and version and date of the software in the device.

Language You can set the language of the screen texts here. The language in this example is set to ENG. The language can also be selected using the shortcut key F1, see page 4.

11.2 Date and time





Apart from the current date and time, you can set the *Week schedule*.

For *First day of the week,* set the day on which a new week should start. At *Beginning new day,* enter the time at which the new day should start.
If you have set *Week schedule* to *week total*, you must also set the *First day of the week*. This is because the *First Day of the Week* is used to determine the weekly totals.

If you set *First day of the week* to *Sun* (*Sunday*), weekly totals are calculated on Sundays. A week total is the sum of Sunday, Saturday, Friday .... and Monday.

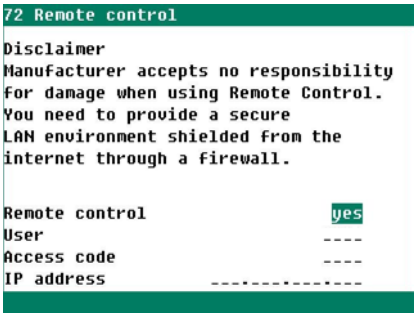
If *Beginning new day* falls in a feeding period, the error message *Beginning new day in period* appears. You should then change either the *Start new day* time or the feeding period.

Beginning new day

At the beginning of each new day,:

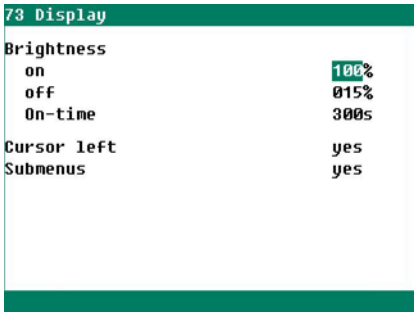
- the day-dependent data is moved 1 day further and today's data is deleted;
- if *Week schedule = week total,* the weekly total is redetermined after the end of the week or
- if *Week schedule = last 7 days,* the weekly total is redetermined at the end of each day;
- the day number is increased;
- all data from the curve is redetermined;
- the weekly programme is redetermined;
- if *Creating stock = active*, stock creation is started.

11.3 Remote control



ANote-Remote-N-ENxxxxx

11.4 Display



Brightness

on	Brightness setting of the backlight of a screen that is on.
off	Brightness setting of the backlight of a screen that is off.
Time	Number of seconds that the backlight illuminates after the last key press.

Cursor left

yes	= when entering edit mode, place cursor at leftmost position.
No	= when entering edit mode, place cursor at rightmost position.

Submenus For small installations with few valves or animal groups, this setting allows you to skip the *option screens*.