



# Operating and installation instructions Commercial Washing Machine

PW 811

PW 814

PW 818

The packaging is designed to protect against transportation damage. The packaging materials used are selected from materials which are environmentally friendly for disposal and should be recycled.

Recycling the packaging reduces the use of raw materials in the manufacturing process and also reduces the amount of waste in landfill sites.

Electrical and electronic appliances often contain valuable materials. They also contain specific materials, compounds and components, which were essential for their correct function and safety. These could be hazardous to human health and to the environment if disposed of with your domestic waste or if handled incorrectly. Please do not, therefore, dispose of your old appliance with your household waste.



Please dispose of it at your local community waste collection / recycling centre for electrical and electronic appliances, or contact your dealer or Miele for advice. You are also responsible (by law, depending on country) for deleting any personal data that may be stored on the appliance being disposed of. Please ensure that your old appliance poses no risk to children while being stored prior to disposal.

#### **Energy and water consumption**

 To get the most out of your machine, load the maximum dry load for the programme you are using.

The most efficient use of energy and water is achieved when a full load is washed.

#### **Detergent**

- Do not exceed the amounts of detergent recommended by the manufacturer on the packaging.
- Reduce the amount of detergent for smaller loads.

#### When drying with a tumble dryer

Select the highest possible spin speed for the wash programme to save energy in the subsequent tumble dryer cycle.

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This washing machine complies with all relevant current local and national safety requirements. Inappropriate use can, however, lead to personal injury and damage to property.

It is essential to read the operating instructions before using the washing machine for the first time. They contain important information on the safety, use and maintenance of the washing machine. This prevents both personal injury and damage to the washing machine.

If other persons are being shown how to operate the washing machine, they must be given or informed of these important safety instructions.

Keep these instructions in a safe place and pass them on to any future owner.

#### **Correct use**

- The washing machine is designed for commercial use.
- The washing machine is intended for installation in a commercial environment.
- If the machine is used in a commercial environment it may only be operated by instructed/trained personnel. If the machine is used in a publically accessible area, the supervisor must ensure that it can be operated safely without risk of danger.
- This washing machine is only intended for items of laundry which have not been impregnated with dangerous or inflammable substances.
- Only machine wash articles which have a care label stating that they are suitable for machine washing or for wet cleaning.
- This washing machine must be used as described in the operating instructions and must be checked on a regular basis to make sure it is functioning correctly. Maintenance must be carried out when necessary.
- The washing machine is not suitable for outdoor use.
- Do not install your washing machine in a room where temperatures below freezing may occur. Frozen hoses may burst or split. The reliability of the electronic control unit may be impaired at temperatures below freezing point.
- This washing machine must not be used in a non-stationary location (e.g. on a ship).
- ▶ This washing machine can only be used by people with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, if they are supervised whilst using it or have been shown how to use it in a safe way and understand and recognise the consequences of incorrect operation.
- ► Children under the age of eight must not be allowed near the washing machine unless they are constantly supervised.
- ▶ Older children may only use the washing machine without supervision if its operation has been clearly explained to them and they are able to use it safely. Children must be able to understand and recognise the possible dangers caused by incorrect operation.
- ► Children may not carry out cleaning or maintenance on the washing machine unsupervised.

- Always supervise any children in the vicinity of the washing machine. Never allow children to play with the washing machine.
- Disinfection programmes must not be interrupted, as this can have a limiting effect on the disinfection result. It is the operator's responsibility to ensure that the standard of disinfection in thermal as well as chemo thermal procedures is maintained (in accordance with local and national health and safety regulations) by carrying out suitable validation tests.
- Any uses other than those listed above are prohibited. The manufacturer accepts no liability in such cases.

#### **Preventing problems**

Do not use chemical cleaning agents such as those use for dry cleaning in this washing machine. There is a risk of

**fire or explosion** with most cleaning agents, e.g. benzine.

► When washing with high temperatures, remember that the porthole glass becomes hot. Do not let children touch it during a wash programme.

#### Danger of burning!

- Always close the door after use. This is to avoid the risk of children trying to climb into the washing machine or hide things it, and animals getting into the drum.
- ▶ Do not damage, remove or bypass the safety components or control elements of this washing machine.
- Machines with a damaged control panel, wires or cables must not be used until they have been repaired.
- ► Water used for washing in this machine is suds solution and not drinking water! It must be discharged into a proper drainage system.
- Always make sure that the drum is stationary before reaching in to remove laundry. Reaching into a moving drum is extremely dangerous. Danger of injury.
- ▶ Be careful not to put your hands in the gap between door and frame when closing the drum door.

**Caution!** The drum door is locked automatically as soon as the machine starts.

- If the detergent compartment drawer is open and any of the dispenser drawers are missing, there is a **danger of scalding from splashing water**.

  Do not operate the machine if any of its components are missing.
- ▶ It is particularly important to observe manufacturer's instructions when using a combination of cleaning agents and special application products. Products must only be used for applications approved by the manufacturer to avoid any material damage or the occurrence of strong chemical reactions.

#### **Technical safety**

- ▶ Before setting up the washing machine, check it for any externally visible damage. Do not install or use a damaged machine.
- The electrical safety of this washing machine can only be guaranteed when correctly earthed. It is most important that this basic safety requirement is regularly tested, and where there is any doubt the on-site wiring system should be inspected by a qualified electrician. Miele cannot be held liable for the consequences of an inadequate earthing system (e.g. electric shock).
- ▶ Unauthorised repairs could result in unforeseen dangers for the user, for which the manufacturer cannot accept liability. Repairs should only be undertaken by a Miele approved service technician, otherwise any subsequent damage will not be covered by the guarantee.
- Do not make any alterations to the machine, unless authorised to do so by Miele.
- In the event of a fault or maintenance, the washing machine must be disconnected from the power supply. The washing machine is only electrically disconnected from the power supply, if
- the plug has been disconnected from the socket, or
- the mains fuse has been disconnected, or
- the on-site screw-in fuse has been completely unscrewed.

See "Installation and connection - Electrical connection".

- This washing machine must only be connected to the on-site water supply using a new hose kit. Old hoses must not be re-used. Check the hose regularly for signs of wear. Change in good time to avoid the risk of leaks and subsequent damage.
- The cause of any leaks must be dealt with before the washing machine is restarted. Disconnect the washing machine immediately if any water leaks out.
- Steam heating malfunctions can result in high temperatures at the door, the dispenser and inside the drum (in particular at the edge of the drum). There is a risk of slight burns. This only applies to machines with steam heating.
- ► Faulty components must only be replaced by genuine Miele original spare parts. Miele can only guarantee the safety standards of the machine when Miele replacement parts are used.
- All relevant national provisions and regulations (DGUV in Germany) relating to accident insurance are applicable to this machine. It is recommended to carry out testing in accordance with the regulatory framework described in DGUV100-500 /Chapter 2.6/ Section 4. The test book required for the documentation is available from Miele.
- Please observe the instructions in "Installation and connection" and "Technical data".
- The plug for the washing machine must always be kept accessible so that the machine can be easily disconnected from the power supply.
- For hard-wired machines, an all-pole means of deactivation must be provided on site.

▶ If the machine is to be hard-wired, there must be a means of disconnecting all poles from the power supply. The mains switch must be close to the washing machine and be clearly identifiable, unhindered and easily accessible at all times.

#### Correct use

- ► The maximum dry laundry weight for the PW 811 is 12 kg, for the PW 814 it is 16 kg, and for the PW 818 it is 20 kg. The maximum recommended loads for individual programmes are given in the Programme chart.
- Before using the machine for the first time, check that the transport safety panels at the rear of the machine have been removed (see "Installation and connection Removing transport safety panels"). During spinning, a transport safety panel which is still in place may result in damage to both the machine and adjacent furniture or appliances.
- Never try to open the drum door of the washing machine using force. The door can only be opened when a corresponding message appears in the display.
- Do not push the suspended drum unit while the machine is running.
- When closing the door there is a danger of crushing and shearing between the door frame and the drum opening and also at the hinges. Exercise caution as the door locks automatically when the machine starts!
- ► Close the stopcock if the machine is to be left for any length of time (e.g. while on holiday), especially if there is no floor drain (gully) in the immediate vicinity.
- ► Take care to ensure that foreign objects (e.g. nails, pins, coins, paper clips) do not find their way into the machine with the laundry. These may damage components of the machine (e.g. suds container, drum). Damaged components can damage the laundry.
- ▶ If the correct amount of detergent is dispensed, the machine should not need to be descaled. If, however, you do wish to descale it, only use proprietary non-corrosive descaling agents and strictly observe the instructions on the packaging. Special descaling agent is available from Miele. Strictly observe the instructions for the descaling agent.
- ► Textiles which have been pre-treated in solvent based cleaning agents must be thoroughly rinsed in clean water before being washed in the machine.
- Never use solvent based cleaning agents, e.g. those containing benzine in this machine. Doing so may result in damage to component parts and create toxic fumes. **Risk of fire and explosion!**
- ▶ Benzine, petrol, paraffin, or any easily flammable liquid must not be stored or used near the machine. Do not use the machine lid as storage space.

#### Risk of fire and explosion!

- ▶ Do not store chemicals (liquid detergents, additives) on the machine lid. They may cause discolouration or lacquer damage. Accidently spilled chemicals should be removed immediately with a wet cloth from the surface.
- There is a fan outlet on the back of the machine. Under no circumstances must this be blocked. Please observe the minimum distance on the installation diagram.
- ▶ Only use dyes specified by the manufacturer as being suitable for use in a washing machine. Always observe the manufacturer's instructions carefully.
- Colour run and dye removers contain sulphur compounds which can cause damage such as corrosion. Do not use these products in this machine.

Avoid contact of stainless steel surfaces with liquid cleaning and disinfecting agents which contain chlorine or sodium hypochlorite. These agents can have a corrosive effect on stainless steel. Aggressive vapours containing chlorine bleach can also be corrosive. Do not store open containers of these agents near the machine.

Do not use a pressure washer or hose to clean the washing machine.

#### Chlorine and component damage

Frequent use of chlorine products increases the risk of damage to components.

#### Notes on using chlorine bleach and perchloroethylene (PCE)

The use of substances containing chlorine, such as sodium hypochlorite and chlorine bleach in powder form, can result in damage of the protective layer of stainless steel and corrosion on componentry, depending on the chlorine concentration, the exposure time and the temperature. For this reason, it is important to refrain from the use of such products, and use bleaches based on oxygen instead.

If, however, chlorine bleaches are used for special soiling, an anti-chlorine treatment must always be carried out. Otherwise, the washing machine and the load may suffer persistent and irreparable damage.

#### **Anti-chlorine treatment**

Anti-chlorine treatment must be carried out immediately after chlorine bleach has been used. The use of hydrogen peroxide or an oxygen based cleaning or bleaching agent is recommended and the laundry should not be drained in between.

Thiosulphates, another common chlorine removal product, can on the other hand result in gypsum-like deposits on both the laundry and on machine surfaces, particularly in combination with hard water. Treatment with hydrogen peroxide neutralises chlorine and is the preferred method of choice.

The exact quantity of additives and the treatment temperatures required must be set and tested on site in accordance with the dosage recommendations of the detergent and additive manufacturers. The laundry must also be tested to check whether it contains any active chlorine residues.

#### **Accessories**

Accessory parts may only be fitted when expressly approved by Miele. If other parts are used, guarantee, performance and product liability claims will be invalidated.

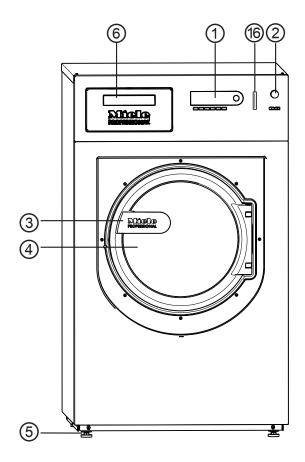
#### Disposal of your old machine

▶ Before disposing of an washing machine it is important to disable the door lock. This way you will prevent the risk of children accidentally locking themselves in and endangering their lives.

Miele cannot be held liable for damage caused by non-compliance with these Warning and Safety instructions.

# Description of the machine (with detergent dispensing compartment)

#### Models with detergent dispensing compartment (WEK)



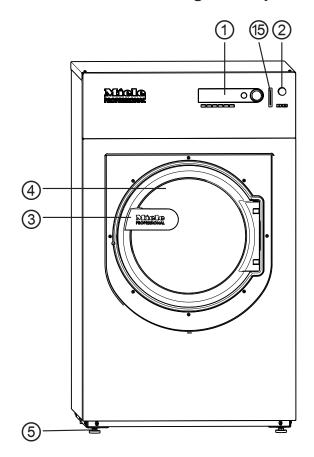
- Display see "Control panel"
- ② Emergency off switch see "Control panel"
- **3** Door handle
- **4** Drum door
- **5** Four adjustable feet
- 6 Detergent dispensing compartment
- **©** Electrical connection
- **® Cold water connection**
- 9 Hot water connection

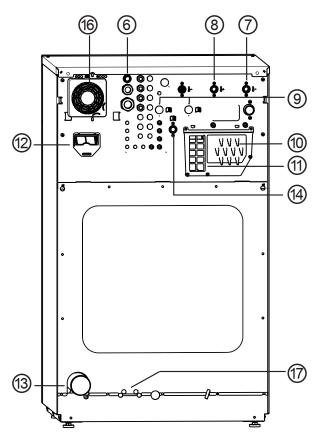
- (Optional)
- (1) Connections for external dispenser pumps
- <sup>(2)</sup> Vapour extraction / free outlet Type AB
- <sup>(3)</sup> Communication module slot
  The XKM RS232 communication module is available as an optional accessory.
- 14 Dump valve
- (5) Cold water connection for liquid dispensing (Optional)
- © Card reader see "Control panel"
- Tan casing

See "Installation and connection"

# Description of the machine (without detergent dispensing compartment)

### Models without detergent dispensing compartment (WEK)





- ① **Display** see "Control panel"
- ② Emergency off switch see "Control panel"
- **3** Door handle
- 4 Drum door
- **5** Four adjustable feet
- <sup>6</sup> Electrical connection
- **Old water connection**
- **® Hot water connection**

- 2 x hard water connection (optional)
- <sup>10</sup> Connections for dispenser pumps
- (1) Vapour extraction / free outlet Type AB
- <sup>12</sup> Communication module slot The XKM RS232 communication module is available as an optional accessory.
- 13 Dump valve
- (4) Cold water connection for liquid dispensing
- (5) Card reader see "Control panel"
- <sup>16</sup> Fan casing

see "Control panel"

#### **Control panel**



#### 1 Display

When the machine is switched on the welcome screen will appear briefly, followed by the programme list. The last started programme is highlighted.

#### **2** Function buttons

These buttons can be allocated specific functions depending on the status of the machine.

These appear in the display above the buttons and are highlighted when selected.

By reprogramming "Direct button allocation" the first 6 programmes in the programme list can be selected using buttons 1 - 6.

#### 3 Start button

The selected programme starts when the start button is pressed. After a programme has been started, the display content can be shown again by pressing this button.

#### 4 Optical interface PC

Using PC software, data can be transmitted to and from the controls to a PC.

The optical interface on the control panel provides the connection point.

#### Multifunction selector

This is used to select menu options (by turning it) and to confirm your selection (by pressing it).

#### 6 Card reader

When a card is inserted, the wash programmes on the card can be used. Insert the card in the direction of the arrow.

#### 1 Power On button

For switching the machine on

#### **® 0 Power Off button**

For switching the machine off

### Operating the washing machine

#### 9 Emergency off switch

The emergency off switch puts the machine into a safe state in the event of danger or in order to prevent danger. The emergency off switch must be placed in such a way that the user can activate it immediately in an emergency. **Caution**, the machine is not disconnected from the power supply.

When the hazard has been removed, the switch is released by turning it clockwise.

When the "START" button is pressed again, the interrupted programme continues.

#### **Function buttons**

#### **⊘** Stop/Finish

The right-hand function button is used as a finish button after a programme has been started.

After pressing the button the selected programme is stopped, if pressed again the programme is cancelled.

#### +U Block plus

The corresponding programme block (e.g. Pre-wash) is added to the programme.

#### **Starch stop**

Press this button if the laundry is to be starched.

#### Spin

#### **Without spin**

Press this button if a final spin is not required after the final rinse.

#### 

#### Start time

When this button is pressed before starting the programme, information about selecting a start time will appear on the display.

#### i Information

After the programme has started, current programme information can be displayed here.

#### Manual control

 $\rightarrow \rightarrow$  Skip

♣ Back Return to previous display page.

#### **▼**/▲ Information on next / previous line

#### ☐ Save

See "Access to supervisor level"

1-999 programmes

#### **⋈** Delete (backwards)

a→A change from lower case to upper case

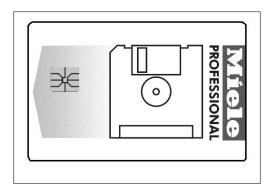
# Operating the washing machine

- **A**→**a** change from upper case to lower case
- → Water intake
- **△** Dosage
- i Dispensing switched off
- □ □ □ Drainage with agitation
- □ Card
- √ Marked
- **⊕** Programme locked

If a programme is locked, after 1 minute it can no longer be stopped and cancelled with the finish button.

- **☐** Programme unlocked

#### **Supervisor card**



For data transfer from the controls to the card and vice versa, see the programming instructions.

A card can hold max. 30 programmes consisting of 6 blocks each. The back of the card can be labelled.

### Preparing for use

#### **Commissioning**

The machine should be commissioned by a Miele service technician or an authorised Miele Service dealer only.

- Open the supply valves for water and steam, depending on heating type.
- Switch the machine on at the on-site mains switch.
- Switch on the machine with the I "Power on" button.



The welcome screen will appear in the display.



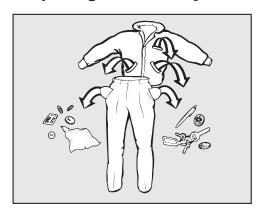
The display varies depending on the selected programme.

Then the programme list will appear.

The last started programme is highlighted.

**Tip:** Turn the multifunction selector to select a programme and press the "START" button to start it immediately.

#### **Preparing the laundry**



Empty all pockets.

The Foreign objects (e.g. nails, coins, paper clips, etc.) can cause damage to fabrics and to components in the machine.

#### Max. load

(dry laundry)

PW 811	PW 814	PW 818
max. 12 kg	max. 16 kg	max. 20 kg

Maximum load weights are given in the programme chart.

#### Loading the washing machine

- Switch on the washing machine with the I button.
- Pull the door handle to open the drum door.
- Unfold the laundry and load loosely into the drum. Mixing both large and small items gives better wash results and also helps distribute the load evenly during spinning.

The most efficient use of energy and water is achieved when a full load is washed. However, do not overload as this reduces cleaning efficiency and causes creases.

# Closing the drum door

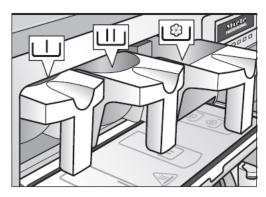
■ Close the door by pressing it until the pre-latch engages.

⚠ Make sure that no items are caught between the drum door and the seal.

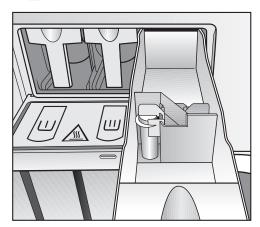
The drum door engages, but does not lock yet. The drum door locks automatically as soon as the machine starts.

# Washing with dispenser compartment

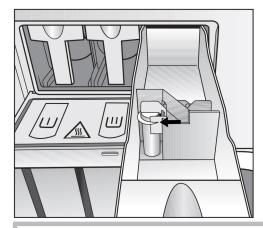
# Adding detergent using the detergent dispenser compartment



■ For standard wash programmes add the detergent for the main wash to the ☐ drawer and if desired, add detergent for a pre-wash to the ☐ drawer. Add fabric conditioner to the front of the drawer.



■ Add any other liquid agents to the back of the <sup>®</sup> drawer (if this has been programmed).



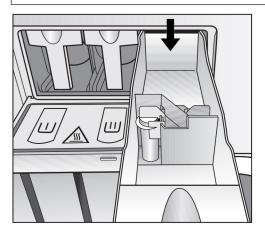
Do not fill the \Bullet drawers above the level marker with liquid agents.

Otherwise they will run straight through the siphon into the suds container.

### Washing with dispenser compartment

#### **Bleaching agent**

Only use bleach on fabrics with the  $\Delta$  symbol on the wash care label.



Liquid bleaching agents must only be dispensed through the designated dispenser drawer compartment. The agent will then be dispensed automatically during the 2nd rinse. Liquid bleaching agents should only be used on coloured textiles which have a wash care label stating that they are colour fast and suitable for bleaching.

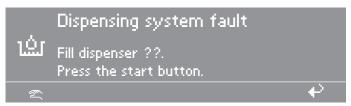
Trequent use of chlorine products increases the risk of damage to components.

# Dyes, dye removers and descaling agents

Proprietary dyes, dye removers and descaling agents may only be used in this machine if the manufacturer expressly states that they are suitable for use in a washing machine. Instructions on the packaging must be observed.

# Continuing the programme after a "Dispensing system fault" message

When the dispenser is empty, the pump and the machine switch themselves off and the washing machine indicates a lack of liquid agent.



- Fill the dispenser container.
- Press the "Start" button to continue the programme.

#### Amount to be dispensed

Please follow the detergent manufacturer's instructions.

It is particularly important to observe manufacturer's instructions when using a combination of cleaning agents and special application products. Products must only be used for applications approved by the manufacturer to avoid any material damage or the occurrence of strong chemical reactions. Confirmation must be sought from the detergent manufacturer that using the agent in the washing machine will not cause damage.

Correct dosage also depends on the viscosity of the liquid agent. It should therefore be allowed to settle to room temperature before being used.

### Commissioning the dispensing pumps

Before the liquid dispensing pumps can be used the liquid agent must be drawn into the system and the amount to be dispensed set.

### **Dispenser calibration**

Dispensing calibration is used to measure the throughput of individual dispensing pumps.

To go directly to "dispenser calibration" when the machine is switched off: ■ Press and hold multifunction button 2 and switch the machine on with Power on I.



#### Options:

- Dispenser pump 1 to 13
- Select a dispenser pump.

### Washing without dispenser compartment

When a dispenser pump is selected, the following will appear in the display:



**Tip:** The dispensing amount can be set from 0 to 9999 ml in 1 ml increments.

■ Press multifunction button 0/1.

The dispensing hose will fill up.

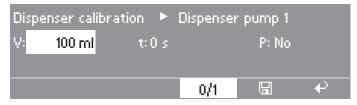
- Stop the process by pressing button 0/1.
- Run the hose of the dispenser pump that is being checked upwards into a measuring vessel.

⚠ Irritant agents.Skin and eye irritation.Avoid contact with skin and eyes, wear protective clothing.

■ Return to the main menu by pressing + "Back".



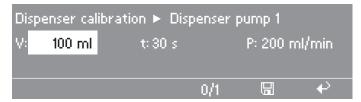
■ Select a dispenser pump.



■ Press multifunction button 0/1.

Stop the pump by pressing button 0/1, or the pump will stop automatically after 60 seconds.

■ Measure the required amount in the measuring vessel.



■ Enter the amount measured in field "V:".

The throughput P is calculated in ml/min. by the controls.

■ Press the "Save" 🖫 button.

# Washing without dispenser compartment

The measured value is assigned to the pump.

■ Reattach the hose.

#### **Detergent dispensing**

# Amount of detergent

Please dispense according to water hardness levels and follow the detergent manufacturer's instructions.

# Water hardness levels

Hardness range	Hardness in mmol/l	German scale °dH
I (soft)	0 - 1.5	0 - 8.4
II (medium)	1.5 - 2.5	8.4 - 14
III (hard)	above 2.5	above 14

Check with your local water supplier if you do not know the water hardness in your area.

#### Selecting a programme

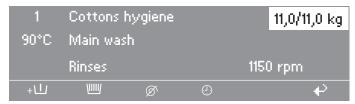
Select a programme (e.g. Programme 1 Cottons) by turning the multifunction selector.

The following (e.g.) will appear in the display:



Selecting Prewash, Starch stop and Without spin additional functions ■ Press the multifunction selector to confirm the selected programme.

The following (e.g.) will appear in the display:



■ If required, add the Pre-wash programme block by pressing the +U "Block plus" function button.

When the +U "Block plus" function button is pressed, the following appears on the display:



The "+U" field is highlighted in the display.

**Tip:** The function can be de-selected by pressing the button again.

**Tip:** Press the "Starch stop" button to starch the laundry.

**Tip:** If you do not want a spin after the final rinse, press the  $\emptyset$  Without spin button.

If you do not want to make any further changes to the programme:

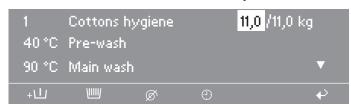
■ Press the "START" button.

The wash programme will start.

Changes before starting the programme
Load

Changes can be made before the start of the programme, e.g. load, temperature or spin speed:

The load can be entered manually before the start of the programme.



- Select the "Load capacity" field by turning the multifunction selector. Press the multifunction selector to confirm your selection.
- Change the load capacity by turning the multifunction selector. Press the multifunction selector to confirm the value.

**Temperature** 

Before the programme starts, the temperature can be set in 1 °increments from cold 15 °C to the max. 95 °C.

■ Select the "Temperature" (40 °C for pre-wash) field by turning the multifunction selector. Press the multifunction selector to confirm your selection.

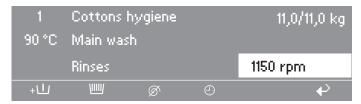


■ Change the temperature by turning the multifunction selector. Press the multifunction selector to confirm the value.

Spin speed

The spin speed can be changed in 25 rpm increments from 300 to the maximum spin speed. No setting is possible between 0 and 300 rpm.

■ Select the "Spin speed" (1100 rpm for final spin) field by turning the multifunction selector. Press the multifunction selector to confirm your selection.



■ Change the spin speed by turning the multifunction selector. Press the multifunction selector to confirm the setting.

Maximum spin speeds

PW 811	PW 814	PW 818
1150 rpm	1075 rpm	1075 rpm

The maximum spin speeds depend on the programmes selected.

#### Starting a programme

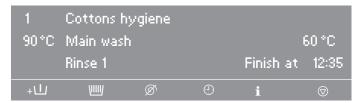
■ Press the "START" button.

The wash programme will start.

After the programme has started, the programme sequence is shown in the display.

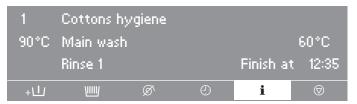


In the 2nd line of the display, in this case pre-wash, the current suds temperature is shown.



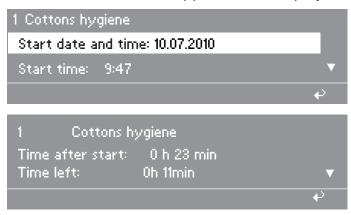
If the pre-wash programme block is finished, the main wash programme block will appear in the second line of the display with the current suds temperature. The next programme block, in this case rinse 1, is shown below.

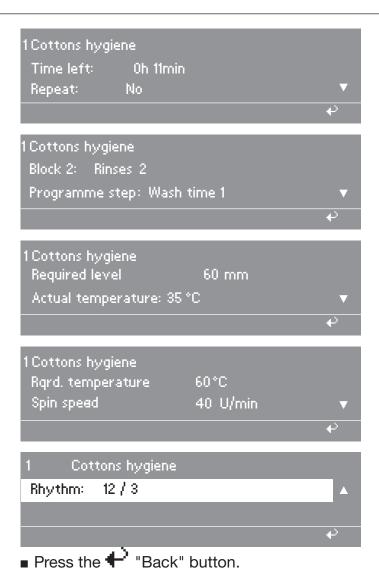
**Tip:** The "programme finished" display on the right shows the time that the programme will finish.



■ Press the i "Information" button.

Further information will appear in the display. For example:





The display will automatically revert to the programme sequence.

# Opening the drum door after the programme has finished

At the end of the programme, when the drum has stopped rotating and no water is left in the machine, the following (for example) appears on the display:



At the same time, a buzzer sounds for 5 seconds at the end of the programme.

The door is unlocked automatically.

■ Pull the door handle to open the drum door.

The door catch must be disengaged.

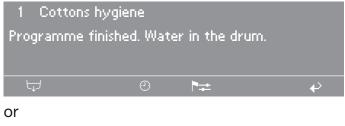
Never use force to open the door!

If the door cannot be opened, follow the instructions in "Opening the door in an emergency".

■ Remove the laundry.

# Procedure in the event of a programme interruption during operation:

If the programme is interrupted when there is water remaining in the machine or during a spin, the following (e.g.) will appear in the display:





The door is locked.

Do not attempt to open it using force.

- Press the "Drainage" button or select the "Separate drain" programme and press "START".
- Open the door at the end of the programme.

If no further wash programmes are planned:

- Switch off the machine with the 0 "Power Off" button.
- Switch off at the on-site mains electricity switch.
- Close the on-site supply valves for water and steam.

#### **Detergent dispensing**

Avoid dispensing more than the required amount as this can cause excessive foaming.

- Only use low foaming detergents.
- Dispense according to the detergent manufacturer's recommendations.

The amount to dispense will depend on:

- the amount of laundry
- the water hardness level in your area
- the type and amount of soiling level in the laundry

#### Amount of detergent

Please dispense according to water hardness levels and follow the detergent manufacturer's instructions.

# Water hardness levels

Hardness range	Hardness in mmol/l	German scale °dH
I (soft)	0 - 1.5	0 - 8.4
II (medium)	1.5 - 2.5	8.4 - 14
III (hard)	above 2.5	above 14

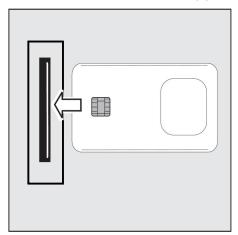
Check with your local water supplier if you do not know the water hardness in your area.

## **Card operation**

Cards with **at least one** programme are intended for a particular type of machine. Blank cards can be used in any machine.

■ Switch on the machine with the I "Power On" button.

The welcome screen will appear in the display.



Insert the card.

The programmes on the card will appear in the display.



- Select a programme by turning the multifunction selector. Press the multifunction selector to highlight the programme.
- Select the highlighted programme by pressing the multifunction selector.
- Press the "START" button.

The programme will start running.

**Tip:** After the "START" button has been pressed, the card can be removed from the card reader. The programme will be deleted at the end of the programme.

Do not insert any objects other than the card into the card slot.

If the card is inserted into the slot the wrong way, the following message will appear in the display:



Insert the card into the card reader correctly.

## Washing by card operation

If the card is not suitable for this model of machine, the following message will appear in the display:



■ Insert a suitable card for the model of machine.

## **Laundry load operation**

A card with only one special programme on it is assigned to a laundry load that requires a special process.

■ This function is activated in the supervisor level via the "Laundry loads" menu option.

The machine controls will then only accept cards for laundry loads on which there is **only one** programme.

■ The programmes in the controls can no longer be accessed.

## Language selection

The language can be changed temporarily via the flag symbol before starting the programme.

The language selected is reset 5 minutes after the end of the programme when the door is opened.



■ Press the ¬⇒ button.

The following will appear in the display:



■ Press the multifunction selector to confirm the selection of "Language".



■ Select the required language by turning the multifunction selector. Press the multifunction selector to confirm the selection.

#### Start time

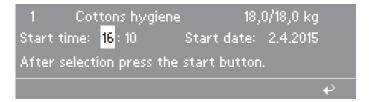
Setting a start time Select the programme.

When a programme has been selected, the display shows (e.g.):



■ Press the ② Start time button.

The following (e.g.) will appear in the display:



The current time and date always appear. The entry field for hours is highlighted.

- Press the multifunction selector to select the hour.
- Set the hour by turning the multifunction selector. Press the multifunction selector to confirm the value.
- Press the multifunction selector to select the "Minutes" field.
- Set the minutes by turning the multifunction selector. Press the multifunction selector to confirm the value.
- Press the multifunction selector to select the "Start day" field.
- Set the day by turning the multifunction selector. Press the multifunction selector to confirm the value.
- Set the month and year in the same way.
- Press the "START" button to start the programme at the time set.

The display shows the current time and date and the start time.



**Tip:** The start time will be deleted when the drum door is opened. If the drum door is opened again, the "START" button must be pressed again.

## Cancelling the start time

■ Press the ④ "Start time" or ♣ "Back" button.

The changes will not be saved.

#### With Pre-wash

In programmes with a pre-wash option, a pre-wash can be added for heavily soiled laundry before the programme has started.

■ Press the ++∪ "Block plus" button.

The following will appear in the display:



The "+U" field is highlighted in the display.

**Tip:** The function can be deselected by pressing the +U "Block plus" button again.

#### Starch

# Adding via the detergent compartment

Starching can be selected before the programme starts by pressing the "Starch stop" button.

The wash time will automatically be increased by 4 minutes.

■ Press the "Starch stop" button.

The "" field will be highlighted in the display.

**Tip:** The function can be de-selected by pressing the button again.



When the programme stage "Starch stop" is reached, "Programme stop through Starch stop" will flash in the display.

- Press the "START" button to continue the programme.
- Prepare the starch according to manufacturer's instructions and add to the front of compartment drawer \8.

**Tip:** Dilute the starch with water if necessary.

■ Press the "START" button to continue the programme.

## Adding directly into the drum

The "Starch stop" stage has been reached.

- Open the drum door and add the starch prepared according to the manufacturer's instructions.
- Close the drum door.

The following message appears in the display:



■ Press the "START" button to continue the programme.

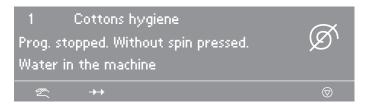
## Without spin

Without spin can be selected before the programme starts  $\emptyset$ .

■ Press the "Without spin" button.

The "Ø" field will be highlighted in the display.

**Tip:** The function can be de-selected by pressing the button again.



When programme stage "Without spin" is reached, "Programme stop through Without spin" will flash in the display.

■ End the programme without a spin and with water still in the machine by pressing the 

"Stop/Finish" button.

**Tip:** The programme can be continued with a spin by pressing the "START" button.

## **Programme stop**

Stops the programme.

■ Press the ♥ "Stop/Finish" button to stop the programme.

The programme is stopped.



**Tip:** Press the "START" button to continue the programme.

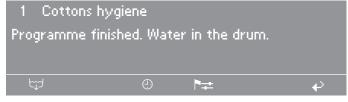
## **Programme cancellation**

The programme can be cancelled as follows.

■ Press the ♥ "Stop/Finish" button twice in succession.

The programme will be cancelled.

If the programme is interrupted when there is water remaining in the machine or during a spin, the following (e.g.) will appear in the display:



or

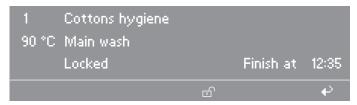
#### Additional functions



**Tip:** To open the door, press the 💬 "Drain" button or select the Separate spin programme and press the "START" button.

## Cancelling a locked programme

It is not possible to stop or cancel a locked programme.



The display will show the locked state if an attempt is made to cancel the programme by pressing the  $\bigcirc$  "Stop/Finish" button.

**Tip:** The programme can be unlocked by pressing the ☐ "Unlock" button and entering the password.

■ Press the 
☐ "Unlock" button and enter the password.

When the password is entered, the following appears in the display:



■ Press the 🖫 "Save" button.

The normal display content will appear and the programme can now be cancelled.

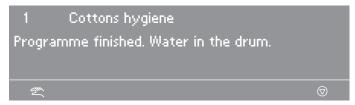


## Skipping a programme

The current programme can be shortened (skipped) or programme blocks can be repeated.

■ Press the ♥ "Stop/Finish" button.

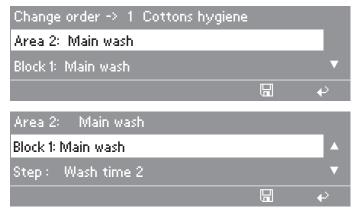
The programme is stopped.



■ Press the  $\rightarrow$  "Skip" button.

The current area, block or stage appears in the display.

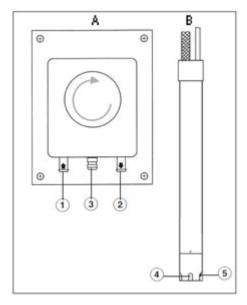
**Tip:** See "Programme structure" for more information.



- Turn the multifunction selector to highlight Area and confirm by pressing the multifunction selector.
- Select and confirm areas: 1 Pre-wash, 2 Main wash or 3 Rinse.
- Turn the multifunction selector to highlight Block and confirm by pressing the multifunction selector.
- Select and confirm blocks: 1-10 Pre-wash, 1-10 Main wash or 1-10 Rinse.
- Turn the multifunction selector to highlight Stage and confirm by pressing the multifunction selector.
- Select and confirm the required programme stage.
- Press the 🖫 "Save" button and then "START" to skip the stage.

**Tip:** If the  $\begin{center} \begin{center} \begin$ 

# Liquid dispensing (optional for machines with dispenser compartment)



- A Dispenser pump
- B Siphon
- 1 Hose connection (suction side)
- 2 Hose connection (pressure side)
- 3 Leakage outlet
- Suction inlet opening
- <sup>⑤</sup> Empty indicator. When the dispenser is empty the pump and the machine switch themselves off.

# Continuing the programme after a "Dispensing system fault" message

When the dispenser is empty, the pump and the machine switch themselves off and the washing machine indicates a lack of liquid agent.



- Fill the dispenser container.
- Press the "Start" button to continue the programme.

## **Deselecting dispensing**

Liquid dispensing can be switched off before the programme starts.



- Switch liquid dispensing off manually using the "Dispensing off" function button.
- After the programme has started, no detergent will be dispensed via the dispenser pumps and the following message (for example) will be displayed:



## Amount to be dispensed

Please follow the detergent manufacturer's instructions.

A Risk of injury!

Strong chemical reactions and material damage.

It is particularly important to observe manufacturer's instructions when using a combination of cleaning agents and special application products. Products must only be used for applications approved by the manufacturer to avoid any material damage or the occurrence of strong chemical reactions. Confirmation must be sought from the detergent manufacturer that using the agent in the washing machine will not cause damage.

**Tip:** Correct dosage also depends on the viscosity of the liquid agent. It should therefore be allowed to settle to room temperature before being used.

## **Connecting the dispensing pumps**

Connection terminals for 4 time-controlled dispenser pumps, which can be operated without a multifunction module, are located behind the cover adjacent to the electrical connection. See enclosed wiring diagram.

Once the machine has been successfully installed and connected, replace all the housing parts that were removed.

## Commissioning the dispensing pumps

Before the liquid dispensing pumps can be used the liquid agent must be drawn into the system and the amount to be dispensed set.

## Dispenser calibration

Dispensing calibration is used to measure the throughput of individual dispensing pumps.

To go directly to "dispenser calibration" when the machine is switched off: ■ Press and hold multifunction button 2 and switch the machine on with "Power On".



#### Options:

- Dispenser pump 1 to 13
- Select a dispenser pump.

When a dispenser pump is selected, the following will appear in the display:

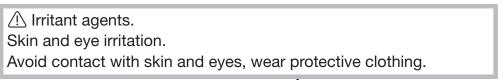


**Tip:** The dispensing amount can be set from 0 to 9999 ml in 1 ml increments.

■ Press multifunction button 0/1.

The dispensing hose will fill up.

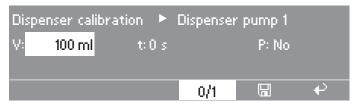
- Stop the process by pressing button 0/1.
- Run the hose of the dispenser pump that is being checked upwards into a measuring vessel.



■ Return to the main menu by pressing + "Back".



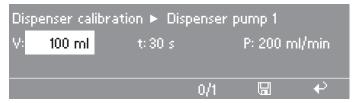
Select a dispenser pump.



■ Press multifunction button 0/1.

Stop the pump by pressing button 0/1, or the pump will stop automatically after 60 seconds.

■ Measure the required amount in the measuring vessel.



■ Enter the amount measured in field "V:".

The throughput P is calculated in ml/min. by the controls.

■ Press the "Save" 🖫 button.

The measured value is assigned to the pump.

Reattach the hose.

## Cleaning and maintenance of the dispensing system

Rinse the dispensing system through with hot water every 2 weeks, or before shutting the dispenser pumps down for any length of time, to avoid the system getting clogged up and corroded.

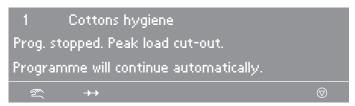
- Also rinse out the siphons with water.
- Put the siphons in a container of warm water (40-50 °C).
- Use dispenser calibration to activate each pump until the dispensing system is rinsed through.
- Check the connection points, hoses, dispensing sockets and washers for leaks.

## **Peak-load negotiation**

When a peak-load signal is received, the heating is deactivated and the programme stopped.

Activate the peak-load function.

The following message appears in the display:



The programme is resumed automatically when the peak-load function finishes.

#### **Communication module**

The machine can be connected to a PC (personal computer) using the communication module.

The slot for the module is located on the back of the machine.

An Editor programme is available for this from Miele.

## **Operating data**

With the Operating data module, operating data can be read or deleted via the 
"Operating data" button either before programme start or after the end of the programme.



■ Press the 

"Operating data" button.

When the ≡ button is pressed, the following appears in the display:



You have the following options:

Total data

Data from all programmes is collected and added together in Total data.

- Programme data

Programme data is data which is recorded during the course of a programme.

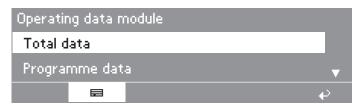
- Deleting data
- Module (delete total data and programme data)
- Total data (only delete total data)
- Programme data (only delete programme data)

**Tip:** The function can be deselected by pressing the **■** "Operating data" button again.

If the data storage capacity in the operating data module is full, a message appears when the "START" button is pressed to inform you that operating data will be overwritten.

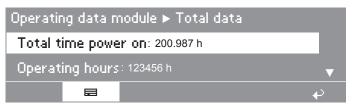
**Tip:** If the "Back" button is pressed or if the "START" button is not pressed within 30 seconds, the programme will not start and the display appears as before programme start.

#### **Total data**



Select the Total data menu option.

After selecting Total data, the following appears in the display (for example):



#### Further options:

- Total switch-on time: 200,987 h

- Operating hours: 123,456 h

- Heating activation time: 73,456 h

- Drive motor running time: 93,456 h

- Programme starts: 23,456

- Programme stops: 567

Programme cancellations: 67

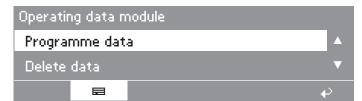
Water quantity: 1,234,567 I

- Amount of laundry: 1,234,567 kg

- Dispensed detergent: 2,345 I

- Energy: 12,345,678 kWh

## Programme data



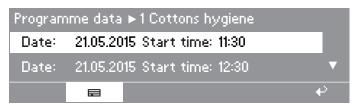
Select the Programme data menu option.

After selecting Programme data, the following appears in the display (for example):



■ Select the relevant programme from the programme list and confirm your selection by pressing the multifunction selector.

Then a list of all programme starts of "Programme 1 Cottons" will appear with date and start time.



■ Select the programme start you want from the list of all "Programme 1 Cottons" programme starts and confirm your selection by pressing the multifunction selector.



#### Further options:

- Location: Lehrte

- Serial number: 12345678

- Model: PW 811

- Amount of laundry: 11 kg

- + button: Pressed

Starch stop button: Pressed

- Spin stop button: Not activated

- Programme start: 11:30

- Programme finished: 12:05

Total operating time: 0 h 35 min

- Electrical energy: 12.5 kWh

- Gas energy: 0 kWh

- Steam energy: 0 kWh

- Total volume of water: 140 l

- Max. water temperature: 95 °C

Max. drain temperature: 45 °C

- Programme change: 2 (after selecting and pressing the multifunction selector only the last 3 stops and 3 starts are displayed.)
- Programme fault: none (only the last 3 faults are saved.)
- Area 1: Pre-wash (after selecting and pressing the multifunction selector, the area or the block can each be changed.)
- Block 1: Pre-wash

- Duration: 6 min

- Water volume: 20 l

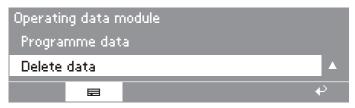
 Dispensing phase 1: Amount ml (after selecting and pressing the multifunction selector, the 6 dosages are displayed.)

- Max. temperature: 12 °C

Holding time: 6 min

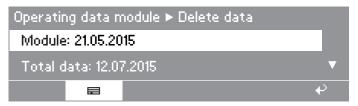
- Dispensing phase 2: No

## **Deleting data**



■ Select the "Delete data" menu option.

After selecting Delete data, the following appears in the display:



**Tip:** With the menu option Module, Total data and Programme data are deleted from the Operating data.

With the menu option Total data, only the total data will be deleted from the Operating data.

With the menu option Programme data, only the programme data will be deleted from the Operating data.

■ Select a menu option by turning the multifunction selector. Press the multi-function selector to confirm the selection.

A prompt to enter a password then appears.



■ Enter the password or insert the card for Supervisor level.

The menu option is accessed and an additional security question appears.



■ Press the 🖫 "Save" button.

The data is deleted.

## Weighing system / Weighing base

If the machine is equipped with a weighing base, the laundry load weight is displayed in 0.2 kg increments during loading. The max. loading weight for the programme is displayed beside it.

# Resetting the load display to zero

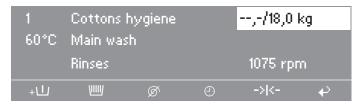
Do not place items on the machine. Do not lean against the machine.

This can influence the result of the measurement.

If the load display does not show "0.0" with an empty drum, this can be rectified by pressing the +++ "0 -reset" button.



■ If after resetting to 0 (taring), you discover an overlooked item in the drum, the following will appear in the display:



■ Reset the display to 0 using the +++ button.

**Tip:** If the machine is overloaded, for example when laundry is wet, it will operate in accordance with the nominal load after the programme starts. This value is also saved in the operating data module.

At the end of the programme when the drum has stopped rotating, the residual moisture in the laundry is shown in the display.

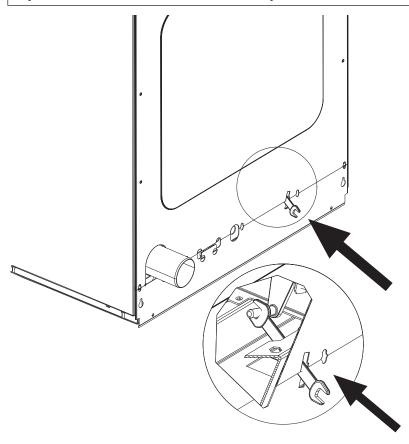


## Opening the door and drain valve in an emergency

## Power failure during the washing process

- **Power failure dur-** Switch the machine off.
  - Switch off at the on-site mains electricity switch.
  - Close the supply valves for water or steam.

To remove the laundry, first the drain valve must be opened manually and then the drum door manually unlocked.



- Insert a spanner (max. wrench size SW 10/11) through the slot on the back of the machine.
- Open the drain valve by pressing the lever behind the back panel of the machine.
- Keep pressing on the lever until the suds have drained away completely.

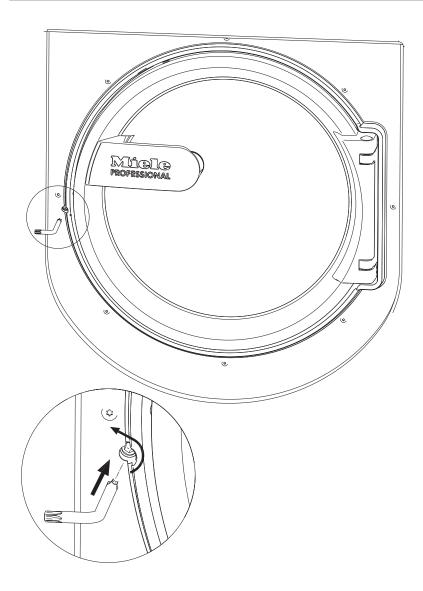
The suds will drain away.

The emergency drain closes automatically when the spanner is removed from the slot.

Opening the door in an emergency in case of a power cut

The drum door cannot be opened.

① Caution! Danger from rotating drum and danger of scalding. Before inserting the Torx wrench, make sure that the machine is disconnected from the power supply, the drum has stopped and there is no water in the machine.



■ Turn the release element with the inner hexagon with a Torx wrench T 40 two whole revolutions anti-clockwise (left).

**Tip:** Pushing on the door at the same time makes it easier to turn the emergency unlock mechanism.

The release element is located opposite the door catch at the same height as the handle (see illustration).

The emergency release must not be turned to the right. Danger of damage to the door lock.

The turn resistance will noticeably reduce. When the emergency release element moves freely, the door is unlocked.

## **Troubleshooting**

**Tip:** It is not necessary to screw the emergency release back up. The door can now be opened.

## Service interval and BGR display

If the following message appears after "Power On" in the machine display, either a service or the annual BGR check must be carried out.





The display will go out after 5 seconds.

## Fault messages

Repairs to electrical, gas and steam heated machines should only be undertaken by a suitably qualified service technician to ensure safety. Unauthorised or incorrect repairs and other work by unqualified persons could be dangerous.

Malfunctions occurring before or after the start of a programme will be shown in the display.

The display remains dark. There is no power to the machine.



■ Check the plug connectors, mains switch and (on-site) fuses.



■ When the power has been restored press "START".

**Tip:** This error message can mean: The motor thermo-switch of the drive motor has been triggered.

Allow the motor to cool down.



■ Check the stopcock and press the "START" button.



If the door lock fault occurs again after a restart, proceed as described in "Opening the door in an emergency". Call the Service Department if restart does not work.



Press the "START" button to continue the programme without heating.

**Tip:** Disinfection programmes will be cancelled if this fault message appears.

■ Call the Service Department.



■ Allow the motor to cool down.

Too large an imbalance. The imbalance switch has been triggered.



■ Switch the machine off and back on again and press "START".



■ Check on-site drain system and press "START".

A defective drain valve must only be repaired by Miele Service.

## **Troubleshooting**



■ Change the dispenser container.



Insert the card into the card reader correctly.

#### **Miele Service**

In the event of a any faults please call Miele Service.

When contacting your dealer or the Service Department, please quote the model and serial number of your machine. These can be found on the data plate:

Model	
SN:	/ 0000000
AntNr.	Mat -Nr.
IBN	

visible above the porthole glass when the drum door is open, or on the back of the machine at the top.

Please also pass on the error message appearing in the machine display to the Service Department.

Use only genuine Miele original spare parts. The Service department will also require model, serial number (SN) and material number (M-nr.) when ordering.

## Problem solving guide

With the help of the following notes, minor faults in the performance of the machine, some of which may result from incorrect operation, can be put right without contacting the Service Department. This will save time and money.

The following guide may help you to find the reason for a fault, and to correct it. You should, however, note the following:

Repair work to electrical appliances should only be carried out by a suitably qualified person in strict accordance with current local and national safety regulations. Unauthorised or incorrect repairs and other work by unqualified persons could be dangerous.

#### The programme does not start

Problem	Cause and remedy
The display remains dark	<ul> <li>There is no power to the machine.</li> <li>Check whether the washing machine is switched on.</li> <li>Check whether the washing machine is connected to the power supply.</li> <li>Check whether the main fuse or circuit breaker has tripped.</li> </ul>
A fault message appears in the display	<ul> <li>A programme cannot be started while there is a fault message in the display.</li> <li>Note the information in the display.</li> <li>Press the multifunction selector to confirm the message. The fault message is deleted.</li> </ul>
The display is dark and the Start button indicator light is flashing slowly.	The display has switched off automatically to save energy (Standby mode).  Press a button. Standby comes to an end.

## **Problem solving guide**

## An unsatisfactory wash result

Problem	Cause and remedy
Liquid detergent does not give the required result.	<ul> <li>Liquid detergents usually contain no bleaching agents.</li> <li>They do not remove fruit, coffee and tea stains.</li> <li>■ Use a general purpose powder detergent containing a bleaching agent.</li> <li>■ Pour stain removers into drawer Ш in the dispenser compartment and liquid detergent into a dispenser ball.</li> <li>■ Never put stain removers and liquid detergent together in the dispenser drawer.</li> </ul>
Grey, greasy particles cling to washed laundry.	<ul> <li>Insufficient amounts of detergent were used. to break down the particles of grease in heavily soiled laundry.</li> <li>Use more detergent.</li> <li>Before washing the next load run a 60 °C programme with powder detergent but without a load.</li> </ul>
White residues which look like powder detergent are seen on dark textiles after washing.	<ul> <li>The detergent contained compounds (zeolites) to aid water softening which are not soluble in water. These have ended up on the laundry.</li> <li>Try and brush off the residues with a soft brush once the laundry is dry.</li> <li>Wash dark textiles using a detergent which contains no zeolites. Liquid detergents usually contain no zeolites.</li> </ul>
Textiles with particularly greasy soiling are not getting clean.	<ul> <li>Select a programme with pre-wash. Use liquid detergent for the pre-wash.</li> <li>Continue to use universal powder detergent for the main wash.</li> <li>The use of heavy-duty detergent is recommended in the main wash for very heavily soiled work clothing. Please seek advice from the detergent manufacturer.</li> </ul>

#### General problems with the washing machine

Problem	Cause and remedy	
The machine vibrates during the spin cycle.	The machine feet are not level.  Level the machine and adjust the feet.	
Fabric softener is not completely dispensed or too much water remains in the & compartment.	The siphon tube is not correctly positioned or is clogged.  Clean the siphon, see "Cleaning and care - Cleaning the detergent dispenser compartment".	
The display is in a different language.	A different language has been selected in "Settings ▶" "Language ▶".  ■ Set the language you want. The flag symbol serves as a guide.	
The door will not open.	<ul> <li>There is no power to the machine.</li> <li>Check whether the machine is switched on.</li> <li>Check whether the machine is connected to the power supply.</li> <li>Check whether the main fuse or circuit breaker has tripped.</li> </ul>	
	Power failure ■ Open the drum door as described in the next section.  There is still water in the drum and the machine is unable to drain. ■ Check whether the drainage system is blocked. Clean the drainage system as described in the next section.  For safety reasons the drum door cannot be opened if the suds temperature is higher than 50 °C.	

## To continue a programme after an interruption to the power supply

If a running programme is interrupted, e.g. by a power cut, the programme can be continued when power is restored.

- Switch on the washing machine with the I button.
- Then press *Start*.

The programme will then continue with the next programme stage.

## **Problem solving guide**

## Possible reasons for increased levels of foaming

Problem	Cause and remedy
Excessive foaming	<ul> <li>Detergent type</li> <li>Only use detergent formulated for use in commercial washing machines. Domestic laundry detergent is not suitable.</li> </ul>
	Overdosing of detergent  Dispense detergent following the instructions on the packaging and in accordance with local water hardness levels.
	<ul><li>Detergent creates too much foam</li><li>■ Use a lower foaming detergent or contact your detergent application specialist.</li></ul>
	Very soft water ■ In areas with hardness level 1 dispense less detergent in accordance with the detergent manufacturer's instructions.
	Soiling level of the laundry  For lightly soiled laundry dispense less detergent in accordance with the detergent manufacturer's instructions.
	Residues, e.g. detergent left on laundry  Run an additional pre-wash without detergent and without selecting a temperature. Laundry which has been pre-treated before washing must be thoroughly rinsed before running a wash programme.
	Small loads  Reduce the amount of detergent accordingly.
	Drum speed too high during the wash  Reduce the drum speed and wash rhythm.

## **Problem solving guide**

## Large items stretched

Problem	Cause and remedy
Stretching of large items during spinning	■ Please contact Miele Service.
	Large items can get stretched during spinning.

## Cleaning and care

Carry out cleaning and maintenance of the machine after use if possible.

Do not use a pressure washer or hose to clean the machine.

■ Clean the machine casing, control panel and plastic parts with a mild non-abrasive cleaning agent or with a damp cloth only. Wipe dry with a soft cloth.

Scouring agents will scratch the surface.

- Clean stainless steel casing with a proprietary stainless steel cleaner.
- Remove any deposits from the door seal with a damp cloth.

Penetration of cleaning agents into electrical components.

- When disinfecting the surfaces, use a damp cloth only to clean the front and around the door lock. Do not spray any liquids.
- Clean stainless steel casing with a proprietary stainless steel cleaner.
- Remove any deposits from the door seal with a damp cloth.

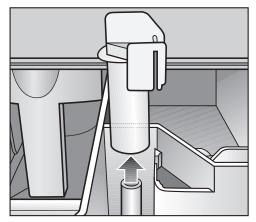
**Tip:** Heavy deposits of dust around the fan housing should be removed with a vacuum cleaner. The fan housing is located on the back of the machine.

## **Build-up of rust**

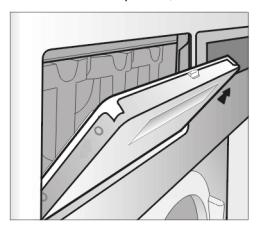
The drum is manufactured from rust-free stainless steel. Water or foreign objects containing ferrous substances (e.g. paper clips, metal buttons or metal swarf) which are placed in the machine with the laundry can cause a build-up of rust in the drum. Clean the drum regularly in this case and if rust occurs, remove it immediately with a proprietary stainless steel conditioner. Check the door seals for metal objects and clean thoroughly as described above. This must be carried out regularly.

# Cleaning the detergent compartment, detergent drawers and siphons

- After use the detergent compartment and the detergent drawers should be cleaned with warm water to remove any detergent residues.
- If the machine is not going to be used for a longer time, leave the flap of the detergent compartment open.
- Also clean the siphons in the detergent drawers.



■ Remove the siphons, clean with hot water and replace.

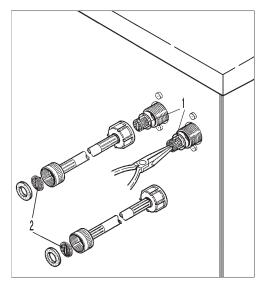


Cleaning the drip channel and siphon

■ Pull the flap of the detergent compartment on the right hand side down to 45°.

If the drip channel and its drain connector are blocked, then these should be cleaned.

■ Check the ventilation grille on the rear of the machine for soiling from time to time and clean when necessary.



■ The filters in the water inlet valves (1) and the inlet hoses (2) must be checked for soiling from time to time and cleaned as necessary.

## Installing the washing machine

The washing machine must be installed by Miele Service or by an authorised dealer. Please observe the information on the installation diagram.

This washing machine is only intended for items of laundry which have not been impregnated with dangerous or inflammable substances.

- To avoid the risk of frost damage, the machine must not be located in rooms which may be subject to very low temperatures.
- Transport the machine on a trolley inside the room.

Machines with feet must not be pushed to move them. This could damage them.

- Remove the packaging carefully with a suitable tool.
- Lift the machine off the pallet using a lifting device.

## **General operating conditions**

This washing machine is intended only for use in a commercial environment and must only be operated indoors.

Ambient temperature in installation room: 0 °C to 40 °C

Relative humidity: non-condensing

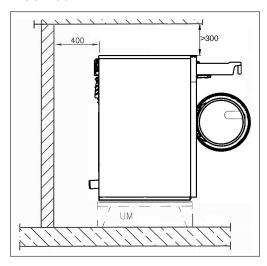
Depending on the nature of the installation site, sound emissions and vibration may occur.

**Tip:** Have the installation site inspected and seek the advice of a professional in instances where increased noise may cause a nuisance.

## For easy maintenance

For ease of future maintenance and servicing, the minimum dimensions and distance to the wall must be observed to enable access.

■ The minimum dimensions and distance to the wall must be observed.



Minimum distance to the wall approx. 400 mm to allow for maintenance.

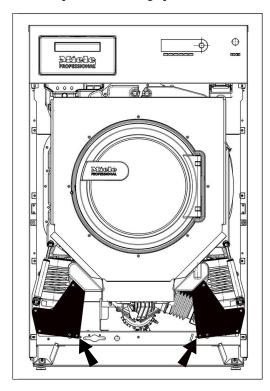
Adjust the washing machine screw feet until the machine is level.

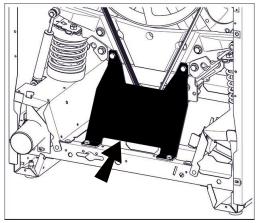
The machine must be completely level to ensure smooth operation.

## Installation on a raised plinth

When installed on a raised plinth, the machine must be secured to the plinth. When installed on a concrete base the machine must be secured to the base. The plinth must be secured to the floor.

## **Transport safety panels**





## Removing the transport safety panels

The 2 transport safety panels at the front are each secured with 3 hexagon screws. The transport safety panels at the back are each secured with 4 hexagon screws. The transport safety panels must only be removed when the machine is in place, before it is commissioned.

- Remove the front and back panel:
- Unscrew the screws at the bottom of the front panel and remove the panel.
- Unscrew the screws at the bottom of the back panel and remove the panel.
- Loosen the hexagon screws to remove the transport safety panels.

Retain the transport safety panels. They need to be refitted should the machine ever need to be moved again.

## **Plumbing**

Water pressure (flow pressure) of a minimum 1 bar (100 kPa) / maximum 10 bar (1000 kPa) is required to guarantee problem free programme operation.

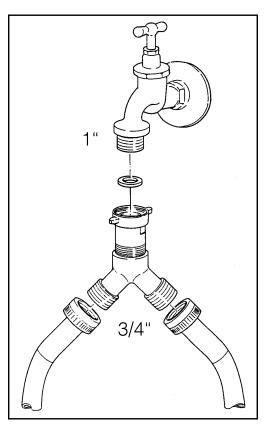
The machine must be connected to the water supply using the inlet hoses provided.

Hoses must be replaced with hoses tested for a burst pressure of at least 70 bar (7000 kPa) and for water temperatures of a minimum of 90 °C.

This also applies for associated connection fittings. Miele original replacement parts fulfil these requirements.

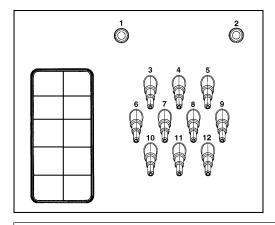
**Tip:** The hot water supply must not exceed a maximum temperature of 60 °C.

## Connection to the cold water supply

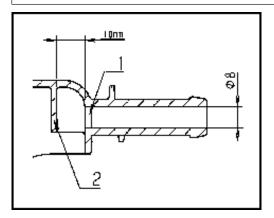


The Y-piece is supplied with the machine.

# Dispensing agent connection to the liquid dispensing mixing compartment



Connections 1 and 2 are provided for viscous agents. These connections are sealed and need to be drilled open using an 8 mm drill bit.



Care must be taken to drill through the first wall (1) only, as there is a deflecting wall (2)10 mm behind it.

If the drilled out connections are no longer required, they must be resealed.

Connections **3** to **12** are provided for liquid dispensing. These connections are sealed and must be cut to suit the diameter of the hose with a suitable hacksaw. If opened connections are no longer required, they must be resealed.

### Installation and connection

## Water drainage

**AV** machines: DN 70 on the machine, DN 70 sleeve on-site. Throughflow rate 200 l/min.

If the slope for drainage is extremely steep, the piping must be vented to prevent formation of a vacuum in the machine's drain system.

Foam and vapour venting kit **BWS** 

If excessive suds form, foam may escape from the vapour vent. To remove the foam, an optional vapour venting kit (BWS) can be used.

## **Programme chart - Basic programmes**

#### **Cottons**

Cottons	90 °C	Fill ratio/Load size
Fabric	Cotton, linen and mixed fibre fabrics, for example bed linen and towelling	1:10 - 1:9 PW 811
Programme sequence	+ LI Pre-wash 40 °C, optional Main wash 90 °C, Cool down can be activated 2 rinses Last rinse hot* Final spin	11 - 12 kg PW 814 14 - 16 kg PW 818 18 - 20 kg

<sup>\*</sup> The standard programmes Cottons 90 °C and Cottons 60 °C are programmed for hot water rinse. If hot water is available, we recommend using hot water for the final rinse:

<sup>-</sup> There is less residual moisture in the laundry after spinning.

<sup>-</sup> The laundry is already warmed.

<sup>-</sup> This saves time and energy if the laundry is immediately either dried in a tumble dryer or ironed with a rotary ironer.

### **Cottons programmes**

Cottons	60 °C	Fill ratio/Load size
Fabric	Normally soiled cotton, linen and mixed fibre fabrics, for example bed linen and towelling	
Programme sequence	+U Pre-wash 30 °C, optional Main wash 60 °C 2 rinses Last rinse hot Final spin	
<b>Cottons intensive</b>	60 °C	
Fabric	Heavily soiled cotton, linen or mixed fibre, e.g. bed linen and towelling	1:10 - 1:9 PW 811 11 - 12 kg PW 814 14 - 16 kg PW 818 18 - 20 kg
Programme sequence	+U Pre-wash 30 °C, optional Main wash 60 °C 2 rinses Last rinse hot Final spin	
Cottons	30 °C	
Fabric	Normally soiled cotton, linen and mixed fibre fabrics, for example bed linen and towelling	
Programme sequence	+ L Pre-wash 30 °C, optional Main wash 30 °C 2 rinses Final spin	

<sup>\*</sup> The standard programmes Cottons 90 °C and Cottons 60 °C are programmed for hot water rinses. If hot water is available, we recommend using hot water for the final rinse:

<sup>-</sup> There is less residual moisture in the laundry after spinning.

<sup>-</sup> The laundry is already warmed.

<sup>-</sup> This saves time and energy if the laundry is immediately either dried in a tumble dryer or ironed with a rotary ironer.

Cottons intensive	30 °C	Fill ratio/Load size
Fabric	Heavily soiled cotton, linen or mixed fibre, e.g. bed linen and towelling	1:10 - 1:9 PW 811 11 - 12 kg
Programme sequence	+ LL Pre-wash 30 °C, optional Main wash 30 °C 2 rinses Final spin	
Cottons Eco short		PW 814
Fabric	Lightly soiled cotton, linen and mixed fibre fabrics, for example bed linen and towelling	14 - 16 kg PW 818
Programme sequence	+ L Pre-wash 30 °C, optional Main wash 50 °C 2 rinses Final spin	18 - 20 kg

### Minimum iron programmes

Minimum iron	60 °C	Fill ratio/Load size
Fabric	Normally soiled synthetic and mixed fibre fabrics	
Programme sequence	+U Pre-wash 30 °C, optional Main wash 60 °C 2 rinses Final spin	
Minimum iron inte	ensive 60 °C	
Fabric	Heavily soiled synthetic and mixed fibre fabrics	
Programme sequence	+ Pre-wash 30 °C, optional Main wash 60 °C 2 rinses Final spin	1:20
Minimum iron	30 °C	PW 811 - 5.6 kg
Fabric	Normally soiled synthetic and mixed fibre fabrics	PW 814 - 7 kg PW 818 - 9 kg
Programme sequence	+ L Pre-wash 30 °C, optional Main wash 30 °C 2 rinses Final spin	
Minimum iron inte	ensive 30 °C	
Fabric	Heavily soiled synthetic and mixed fibre fabrics	
Programme sequence	+U Pre-wash 30 °C, optional Main wash 30 °C 2 rinses Final spin	

## **Delicates and Woollens programmes**

Delicates	30 °C	Fill ratio/Load size
Fabric	Synthetic and artificial fibre fabrics	
Programme sequence	Main wash 30 °C Wash rhythm "gentle" 2 rinses Final spin	
Woollens	30 °C	
Fabric	Machine washable woollens and wool mixtures with a woollens care label	1:25
Programme sequence	Main wash 30 °C Wash rhythm "very gentle" 2 rinses Final spin	PW 811 - 4.4 kg PW 814 - 5.6 kg PW 818 - 7.2 kg
Woollens handwa	sh 30 °C	
Fabric	Washable woollens and wool mixtures with a wool mark	
Programme sequence	Main wash 30 °C Wash rhythm "extra gentle" 2 rinses Final spin	

### Separate rinse programme

Separate rinse		
Fabric	Fabrics that only need to be rinsed and spun	
Programme sequence	1 rinse Final spin	

### Separate spin programme

Separate spin		
Fabric	Items which have been washed and only need to be spun in the machine	
Programme sequence	Final spin	

### Separate drain programme

Separate drain		
Fabric		
Programme sequence	Water drainage	

### Starch programme

Starch		
Fabric	For starching freshly laundered items such as table cloths, serviettes and workwear	
Programme sequence	1 rinse Final spin	

<sup>\*</sup> Starch concentrates can be added to the front right or back right dispenser drawer compartment 🕙 before the programme starts. Large quantities of starch solution can be added manually with the water using the dispenser compartments 🗓 or 🗓.

### **Programme chart - Hotel/Restaurant/Catering**

A multitude of textiles with widely varying degrees of soiling fall into this area. These programmes are suitable for washing lightly soiled bedding and towels, through heavily soiled table linen to very heavily soiled kitchen linen.

### Programmes for bedding and towelling

Bedding and towe	elling 90 °C	Fill ratio/Load size
Fabric	White cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling	1:10* - PW 811- 11 kg
Programme sequence	+ L Pre-wash 40 °C, optional Main wash 90 °C, Cool down can be activated 2 rinses Final spin	
Bedding and towe	elling 60 °C	PW 814 - 14 kg
Fabric	Linen and mixed fibre coloured and white bed linen and towelling	PW 818 - 18 kg
Programme sequence	+LL Pre-wash 40 °C, optional Main wash 60 °C 2 rinses, final spin	

<sup>\*</sup> Wash with maximum load.

#### Mattress covers programme

Mattress covers	60 °C	Fill ratio/Load size
Fabric	Synthetic waterproof mattress protectors	1:13
Programme sequence	+LL Pre-wash 30 °C, optional Main wash 60 °C 2 rinses Final spin	PW 811 - 8.6 kg PW 814 - 10.8 kg PW 818 - 13.8 kg

### Spa towelling programmes

Spa towelling	50 °C	Fill ratio/Load size
Fabric	Coloured and white cotton, linen and mixed fibre fabrics, e.g. bed linen and towelling, with heavy oil and grease stains.	1:13*
Programme sequence	Main wash 50 °C + ☐ Extra main wash 75 °C, optional** 2 rinses Final spin	PW 811 - 8.6 kg PW 814 - 10.8 kg PW 818 - 13.8 kg

<sup>\*</sup> Wash with maximum load.

### Bathrobes 60 °C programme

Bathrobes	60 °C	Fill ratio/Load size
Fabric	Cotton and mixed fibre bathrobes (select + U Pre-wash 40 °C for heavily soiled items)	1:13*
Programme sequence	+ L Pre-wash 40 °C, optional Main wash 60 °C 2 rinses Final spin	PW 811 - 8.6 kg PW 814 - 10.8 kg PW 818 - 13.8 kg

<sup>\*</sup> Wash with maximum load.

#### Kitchen linen programme

Kitchen linen	90 °C	Fill ratio/Load size
Fabric	Cotton, linen and mixed fibre kitchen linen	
Programme sequence	Pre-rinse Pre-wash 40 °C Main wash 90 °C, Cool down can be activated 3 rinses Final spin	1:13 PW 811 - 8.6 kg PW 814 - 10.8 kg PW 818 - 13.8 kg

<sup>\*\*</sup> For heavy soiling, for example by creams and massage oils, an additional clear wash with elevated temperature can be selected. In the case of coloured stains, additional bleach can be dispensed.

### **Table linen programmes**

Table linen	90 °C	Fill ratio/Load size
Fabric	White cotton, linen and mixed fibre table linen	
Programme sequence	Pre-wash 40 °C Main wash 90 °C, Cool down can be activated 2 rinses Final spin	1:10 PW 811 - 11 kg
Table linen	60 °C	9
Fabric	Coloured cotton, linen and mixed fibre table linen	PW 814 - 14 kg
Programme sequence	Pre-wash 40 °C Main wash 60 °C 2 rinses Final spin	PW 818 - 18 kg

### **Curtains programme package**

Curtains	40 °C	Fill ratio/Load size
Fabric	Synthetic and artificial fibre fabrics	1:25 - 1:20
Programme sequence	+ L Pre-wash 30 °C, optional Main wash 40 °C 3 rinses Final spin	PW 811 - 5.0 kg PW 814 - 6.2 kg PW 818 - 8.0 kg

## Programme sequence without spin:

- Press the Ø "Without spin" button.
- End the programme in "Without spin" mode with water still in the machine by pressing the ⑦ "Stop/Finish" button.
- Press the 💢 "Drain" button.

## **Programme chart - Duvets**

These programmes are suitable for washing down, natural fibre and synthetic quilts, unquilted and quilted duvets.

These wash programmes are only suitable for washing fabrics with a care label stating that they are suitable for machine washing.

Down duvets	60 °C	Fill ratio/Load size
Fabric	Heavily soiled down and feather filled duvets and pillows.	
Programme sequence	Deflation +  Pre-wash 30 °C, optional Main wash 60 °C 2 rinses Final spin	
Down duvets	40 °C	
Fabric	Normally soiled down and feather filled duvets and pillows	see "Bedding load
Programme sequence	Deflation +  Pre-wash 30 °C, optional Main wash 40 °C 2 rinses Final spin	sizes"
Synthetic duvets	60 °C	
Fabric	Heavily soiled synthetic duvets and pillows.	
Programme sequence	+ LI Pre-wash 30 °C, optional Main wash 60 °C 2 rinses Final spin	

Synthetic duvets	40 °C	Fill ratio/Load size
Fabric	Normally soiled synthetic duvets and pillows	
Programme sequence	+ L Pre-wash 30 °C, optional Main wash 40 °C 2 rinses Final spin	
Natural fibre duve	ts 25 °C	see "Bedding load
Fabric	Machine washable natural fibre quilts and blankets.	sizes"
Programme sequence	Main wash 25 °C, Wash rhythm "extra gentle" 2 rinses Finishing agent Final spin	

### **Detergent**

**Tip:** Liquid detergent is recommended. For heavy soiling, powder detergent can be added for a better wash result.

### **Bedding load sizes**

The maximum loads are set out in the chart below. The loads given are approximate only and vary depending on the size and thickness of the bedding.

Model	Quantity*
PW 811	2 pillows or 1 single duvet
PW 814	3 pillows or 1 pillow + 1 single duvet
PW 818	4 pillows or 2 pillows + 1 single duvet or 2 single duvets

<sup>\*</sup> A single duvet is equal to approx. 2 pillows.

**Tip:** Unquilted duvets must be tied a few times to keep imbalance to a minimum and ensure good wash results.

### **Programme chart - Disinfection**

All programmes are **locked**. All programmes are locked. After 1 minute into a programme, the programme can therefore no longer be cancelled, stopped or parts skipped.

To avoid recontamination, the water for the rinse cycles in the disinfection programmes is not supplied via the detergent dispensing compartment.

Thermal disinfecti	on 90 °C	Fill ratio/Load size
Fabric	Cotton, linen e.g. bed linen, towelling	
Programme sequence	+ Pre-wash 40 °C, optional Disinfection 90 °C, 10 min., Cool down can be activted 2 rinses Final spin	
Thermal disinfecti	on RKI* 90 °C	
Fabric	Cotton, linen e.g. bed linen, towelling	
Programme sequence	Disinfection 90 °C, 10 min., Cool down can be activated 2 rinses Final rinse	1:10
Chemo-therm. Disinfection	60 °C	PW 811- 11 kg PW 814 - 14 kg PW 818 - 18 kg
Fabric	Cotton, linen e.g. bed linen, towelling	- FVV 010 - 10 kg
Programme sequence	+ L Pre-wash 40 °C, optional Disinfection 60 °C**, 20 min. 2 rinses Final rinse	
Chemo-thermal di	isinf. 60 °C	
Fabric	Cotton, linen e.g. bed linen, towelling	
Programme sequence	Disinfection 40 °C**, 20 min. 2 rinses Final spin	

<sup>\*</sup> RKI = (Robert Koch Institute)

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time, and dosages) must be set on site to suit cleaning agents and disinfectants.

Chemo-therm. Disinfection	40 °C	Fill ratio/Load size
Fabric	Cotton, mixed fibre up to 40 °C	
Programme sequence	+LL Pre-wash 30 °C, optional Disinfection 40 °C**, 20 min. Wash rhythm "gentle" 2 rinses Final spin	1:10
Chemo-thermal d RKI*	isinf. 40 °C	PW 811- 11 kg PW 814 - 14 kg PW 818 - 18 kg
Fabric	Cotton, mixed fibre up to 40 °C	1 W 010 - 10 Kg
Programme sequence	Disinfection 40 °C**, 20 min. Wash rhythm "gentle" 2 rinses Final spin	
Incontinence +	90 °C	
Fabric	Washable incontinence nappy systems	
Programme sequence	Pre-rinse +  Pre-rinse, optional Pre-wash 40 °C Disinfection 90 °C, 10 min., Cool down can be activated 3 rinses Final spin	1:13 PW 811 - 8.6 kg
Incontinence laun	dry 90 °C	PW 814 - 10.8 kg PW 818 - 13.8 kg
Fabric	Heavily soiled personal clothing, cotton	
Programme sequence	2 Pre-rinses Pre-wash 40 °C Disinfection 90 °C, 10 min. 3 rinses Final spin	

<sup>\*</sup> RKI = (Robert Koch Institute)

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time, and dosages) must be set on site to suit cleaning agents and disinfectants.

### **Disinfection - general information**

#### What is disinfection?

Deactivation and reduction in number of pathogens transmitting diseases to such an extent that the transmission of diseases and infection is no longer to be anticipated.

#### Thermal disinfection

Thermal disinfection is carried out by the action of a defined temperature over a holding time. In the list, according to § 18 IFSG, this is 90 °C over 10 min. or 85 °C over 15 min. With a suds ratio of 1 - 4 to 1 - 5 with the activity range AB.

The thermal disinfection is independent of the detergent used, which does not have to be classified.

#### Chemo-thermal disinfection

Chemo-thermal disinfection differs from thermal disinfection by a lower suds temperature during the disinfection phase. A compensation for the low temperature is ensured by the correspondingly listed washing and disinfecting components.

Important is that these products are used exactly according to listing. The suds temperature, the suds ratio and the time of dosing must be strictly adhered to.

For disinfection wash programmes there are two lists in which the necessary process parameters with regard to washing and disinfecting agents are listed.

#### **RKI list (Robert Koch Institute)**

Describes procedures for disinfection according to § 18 Infection Protection Act. These processes are only required when a health authority prescribes the use of disinfection in the event of the outbreak of an epidemic relating to a notifiable, transferable disease where there is a risk of items being contaminated. The RKI lists thermal disinfection processes as well as chemo-thermal methods.

#### Disinfection process according to areas of impact

Disinfection procedure is divided into areas of impact A, B and C.

- Area of impact A:
   Suitable for the destruction of vegetative bacteria, including mycobacteria, fungus and fungal spores.
- Area of impact B: Suitable for deactivating viruses.
- Area of impact C:
   Suitable for killing anthrax spores.

In the event of officially directed disinfection, the first drainage of wash liquid may not be discharged until after disinfection has been carried out.

#### **VAH** list

VAH = Association for Applied Hygiene (previously DGHM = German Society for Hygiene and Microbiology)

The VAH/DGHM list describes the procedures required for routine prophylactic disinfection, and in particular for the prevention of infection in hospitals, doctors' offices, public areas and other areas where there may be the risk of infection spreading.

With respect to an officially directed disinfection, § 18 of the Infection Protection Act is invoked.

Special validated procedures and machines are to be used for surgical textiles as medical devices. The procedures and machines listed here are **not** medical devices.

#### Avoidance of contamination or recontamination

- Disinfect your hands before using the machine.
- Use clean / disinfected transport containers.
- Dispense washing and disinfecting agents in accordance with instructions.
- Observe regulations regarding the wearing of protective clothing.
- Ensure that water is bacteria-free when using water from water treatment units.
- Clean detergent dispensing drawers, detergent compartments and siphons before use.

#### Cleaning dispensing drawers and siphons

The detergent dispensing drawer is subject to constant moisture. It needs to be cleaned regularly to prevent the build-up of water-borne bacteria.

■ Clean the detergent dispensing drawer, detergent compartments and siphon thoroughly with hot water as required to remove detergent residues and encrustation.

It is the operator's responsibility to ensure that the standard of disinfection in thermal as well as chemo thermal procedures is maintained (in accordance with local and national health and safety regulations) by carrying out suitable validation tests. The procedures should be checked periodically, thermoelectrically by means of loggers or bacteriologically using bio-indicators. The operator must pay particular attention to observing the process parameters temperature and, in the case of chemo-thermal programmes, the concentration. Disinfection programmes must not be interrupted, as this can have a limiting effect on the disinfection result.

## 'Clean machine' programme

For cleaning the detergent dispenser drawer, the drum, the suds container and the drainage system.

■ Carry out the "Clean machine" programme regularly if you frequently use disinfection programmes or low temperature programmes, or to get rid of coarse soiling.

Clean machine*		
Material	Without load	
Programme sequence	+ U Cleaning 70 °C, optional 2 rinses	

<sup>\*</sup> The **Cleaning** block which takes water in through all inlets and has the temperature increased to 70 °C. can be selected with this programme by pressing the Block Plus button. If the Cleaning block is included in the Maintenance programme, detergent needs to be dispensed.

### **Programme chart - Facility Management**

These programmes are suitable for washing, disinfection and conditioning (at different humidity levels) cotton mops, blended or microfibre fabric, floor mats, polishing pads and cleaning cloths used in facility management.

To avoid recontamination, the water for the rinse cycles in the disinfection programmes is not supplied via the detergent dispensing compartment.

#### Mop programmes

Avoid coarse soiling in the machine.

■ Shake out the mops before putting them in the machine.

Mops standard*	60 °C / 90 °C	Fill ratio/Load size
Fabric	Cotton, viscose, polyester and microfibre mops	
Programme sequence	Pre-spin Pre-rinse +	
Mops standard + finish	60 °C / 90 °C	1:10
Fabric	Cotton, viscose, polyester and microfibre mops	PW 811- 11 kg
Programme sequence	Programme sequence as for Mops standard, then: Finishing agent, damp or activate block: Damp, wet, dripping wet	PW 814 - 14 kg PW 818 - 18 kg For number, see "Mops per load"
Mops thermal disi	infec- 90 °C	chart
Fabric	Cotton, viscose, polyester and microfibre mops	
Programme sequence	Pre-spin Pre-rinse +	

Mops thermal disi tion + finish	nfec- 90 °C	Fill ratio/Load size
Fabric	Cotton, viscose, polyester and microfibre mops	
Programme sequence	Programme sequence as for Mops thermal disinfection, then: Finishing agent, damp or activate block: Damp, wet, dripping wet	
Mop chemo-thern disinfection	nal 60 °C	
Fabric	Cotton, viscose, polyester and microfibre mops	
Programme sequence	Pre-spin Pre-rinse +	1:10 PW 811- 11 kg PW 814 - 14 kg PW 818 - 18 kg
Mops Ch. Th. Disin. 60 °C + finish		For number, see
Fabric	Cotton, viscose, polyester and microfibre mops	"Mops per load" chart
Programme sequence	Programme sequence as for Mops chemothermal disinfection*, then: Finishing agent, damp or activate block: Damp, wet, dripping wet	
Finish mops		
Fabric	Cotton, viscose, polyester and microfibre mops	
Programme sequence	1 rinse Finishing agent, damp or activate block: Damp, wet, dripping wet	

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time, and dosages) must be set on site to suit cleaning agents and disinfectants.

Mops intensive	90 °C	Fill ratio/Load size	
Fabric	Cotton, viscose, polyester and microfibre mops		
Programme sequence	Pre-spin Pre-rinse + 🗓 2nd pre-rinse, optional Pre-wash 30°C Main wash 90 °C, Cool down can be selected 3 rinses Final spin	1:10 PW 811- 11 kg PW 814 - 14 kg PW 818 - 18 kg	
New mops	60 °C / 90 °C	For number, see	
Fabric	For washing new mops	"Mops per load"	
Programme sequence	Main wash 60 °C / 90 °C, Cool down can be activated 2 rinses Final spin	chart	

With the **Mops...+ finish** programme the mops are ready to use and already impregnated with cleaning agent and disinfectant. To achieve this, following washing or disinfection there is a finishing stage and then a final spin. The desired moisture of the mops can be varied by programming different spin blocks at the end.

Dosage amounts must be set on site and the standard of disinfection must be checked.

The **Finish mops** programme is suitable for the subsequent finishing of clean and dry mops. A disinfecting agent is applied during finishing.

Dosage amounts must be set on site and the standard of disinfection must be checked.

#### Mop load size (cotton)

Mop size/ weight	40 cm 190 g/ mop	50 cm 220 g/ mop	60 cm 280 g/ mop	80 cm 360 g/ mop	110 cm 510 g/ mop	130 cm 610 g/ mop	160 cm 720 g/ mop
PW 811	Qty. 58	Qty. 50	Qty. 39	Qty. 31	Qty. 22	Qty. 18	Qty. 15
PW 814	Qty. 74	Qty. 64	Qty. 50	Qty. 39	Qty. 27	Qty. 23	Qty. 19
PW 818	Qty. 95	Qty. 82	Qty. 64	Qty. 50	Qty. 35	Qty. 30	Qty. 25

**Tip:** When using microfibre mops, the load size is higher due to the lower mop weight.

#### Mop load size (microfibre)

Mop size/weight	40 cm 120 g/mop	50 cm 170 g/mop
PW 811	Qty. 92	Qty. 65
PW 814	Qty. 117	Qty. 82
PW 818	Qty. 150	Qty. 106

### Mats / pads programmes

Mats	40 °C	Fill ratio/Load size	
Fabric	Door mats		
Programme sequence	Pre-rinse Main wash 40 °C 3 rinses Final spin	1:15 PW 811 - max.	
Heavily soiled mat	ts 60 °C	7.4 kg PW 814 - max.	
Fabric	Heavily soiled floor mats	9.4 kg	
Programme sequence	Pre-rinse +  Pre-wash 40 °C, optional  Main wash 60 °C (selectable from cold to 60 °C)  3 rinses  Final spin	PW 818 - max. 12.0 kg	
Pads	40 °C / 60 °C		
Fabric	Polishing pads		
Programme sequence	Pre-rinse + 1 2nd pre-rinse, optional Main wash 40 °C / 60 °C 3 rinses Final spin	1:50 PW 811 - 2.2 kg PW 814 - 2.8 kg PW 818 - 3.6 kg	

**Tip:** The number of mats per load may vary depending on the size, stiffness and thickness of the mats.

### **Cleaning cloth programmes**

These programmes are suitable for washing, disinfection and conditioning (at different humidity levels) of cleaning cloths made of cotton, blended or microfibre fabric used in facility management.

Cloths standard	60 °C	Fill ratio/Load size
Fabric	Cotton, viscose, polyester and microfibre cloths	
Programme sequence	Pre-rinse +  Pre-wash 30 °C, optional Main wash 60 °C 3 rinses Final spin	
Cloths standard +finish	60 °C	
Fabric	Cotton, viscose, polyester and microfibre cloths	
Programme sequence	Programme sequence as for Cloths standard, then: Finishing agent, damp or activate block: Damp, wet, dripping wet	1:20 PW 811 - 5.6 kg approx. 350 cloths
Th. Dis. cloths	90 °C	PW 814 - 7 kg
Fabric	Cotton, viscose, polyester and microfibre cloths	approx. 440 cloths
Programme sequence	Pre-rinse + L Pre-wash 30 °C, optional Disinfection 90 °C, 10 min., Cool down can be activated 3 rinses Final spin	PW 818 - 9 kg approx. 565 cloths
Cloths th. disin. + Finish	90 °C	
Fabric	Cotton, viscose, polyester and microfibre cloths	
Programme sequence	Programme sequence as for Cloths thermal dis- infection, then: Finishing agent, damp or activate block: Damp, wet, dripping wet	

Ch. Th. Dis. cloths	Fill ratio/Load size	
Fabric	Cotton, viscose, polyester and microfibre cloths	
Programme sequence	Pre-rinse +  Pre-wash, optional Disinfection 70 °C, 10 min. 3 rinses Final spin	1:20
Ch. Th. Dis. cloths	s + fin- 70 °C	PW 811 - 5.6 kg approx. 350
Fabric	Cotton, viscose, polyester and microfibre cloths	cloths PW 814 - 7 kg approx. 440 cloths PW 818 - 9 kg
Programme sequence	Programme sequence as for Cloths chemothermal disinfection. Disinfection, then: Finishing agent, damp or activate block: Damp, wet, dripping wet	
Finish cloths		approx. 565 cloths
Fabric	Cotton, viscose, polyester and microfibre cloths	
Programme sequence	1 rinse Finishing agent, damp or activate block: Damp, wet, dripping wet	

The programme **Standard cloths** is also suitable for cleaning cloths that are not to be used immediately after washing, but are to be stored after drying.

With the **Cloths...+ finish** programme the cloths are ready to use and already impregnated with detergent and disinfectant. To achieve this, following washing or disinfection there is a finishing stage and then a final spin. The desired moisture of the cleaning cloths can be varied by programming different spin blocks at the end. Dosage amounts must be set on site and the standard of disinfection must be checked.

The **Finish cloths** programme is suitable for the subsequent finishing of clean and dry cloths. A disinfecting agent is applied during finishing. Dosage amounts must be set on site and the standard of disinfection must be checked.

### **Programme chart - Fire service**

These programmes are suitable for washing and reproofing fire suits, jackets and trousers, breathing masks and chemical protective suits.

## **Protective clothing programmes**

Wash protective of	lothing 60 °C	Fill ratio/Load size
Fabric	Nomex fire suits, jackets, trousers	
Programme sequence	Pre-wash 40 °C Main wash 60 °C 3 rinses, Final spin	
Wash/Reproof pro	otective 60 °C	
Fabric	Nomex fire suits, jackets, trousers	
Programme sequence	Pre-wash 40 °C Main wash 60 °C 2 Rinses Reproofing 40 °C Final spin	1:20 - 1:15 See "Load size" chart.
Reproof protect.	clothing 40 °C	
Fabric	Nomex fire suits, jackets, trousers	
Programme sequence	1 Rinse Reproofing 40 °C Final spin	

### Load size

Model	Quantity*
PW 811	Approx. 1 - 2 suits (or 3 jackets)
PW 814	Approx. 2 suits (or 3 jackets)
PW 818	Approx. 3 suits (or 5 jackets)

#### Preparing protective clothing for washing

- Do not stick any labels on.
- Remove carabiner hooks if possible, or enclose in a side pocket.
- Close Velcro fastenings or cover with Velcro tape.
- Wash sheepskin linings separately.
- Do not wash garments inside out.
- Observe max. load weights.

**Protective clothing** is a programme used for washing fire suits. It is not suitable for washing garments containing wool as lining material.

**Tip: Detergent:** We recommend using a liquid detergent with reduced pH that is particularly effective for dissolving grease and pigmentation stains.

**Tip: Proofing agent:** Proofing agent must be suited to the special requirements of this area of use.

#### Mask programmes

**Masks** are programmes for washing and disinfecting breathing masks with head straps.

- Put the head bands over the masks to protect the visors before loading the machine.
- Put each mask into its own protective bag and fasten it.
- Remove the masks from the bags after processing.
- Spin damp, empty bags using the **Spin wash bags** programme.

Masks	60 °C	Fill ratio/Load size
Load	Face masks with head straps	
Programme sequence	Disinfection* 60 °C, 20 min. 4 rinses	PW 811 - 10 masks
Masks with pre-w	ash 60 °C	PW 814 -
Load	For heavily soiled masks with head straps	13 masks PW 818 - 15 masks
Programme sequence	Pre-cleaning 30 °C Disinfection* 60 °C, 20 min. 4 rinses	
Spin wash bags		
Load	Face mask bags	
Programme sequence	Spin	1:20

<sup>\*</sup> The disinfection parameters for chemo-thermal disinfection (temperature, temperature holding time, and dosages) must be set on site to suit cleaning agents and disinfectants.

To avoid recontamination, the water for the rinse cycles in the disinfection programmes is not supplied via the detergent dispensing compartment.

Do not wash masks with connections for helmet-mask combinations. The clasps are likely to scratch visors.

Use a suitable detergent. Observe the manufacturer's instructions.

#### Chemical protective suits programmes

**Protective suits** is a programme for washing chemical protective clothing of fire brigades.

A chemo-thermal disinfection (60 °C / 20 min.) is carried out, for which suitable detergents are to be used.

Protective suits	60 °C	Fill ratio/Load size	
Fabric	Chemical protective suits made of multi-layer laminate		
Programme sequence	Disinfection 60 °C, 20 min. 3 rinses	PW 811 - 1 suit	
Protective suits sp	PW 814 - 1 suit		
Fabric	Chemical protective suits made of multi-layer laminate	PW 818 - 2 suits	
Programme sequence	Pre-wash 40 °C		

- Observe the recommendation of the protective suit manufacturer regarding maximum wash temperature.
- In the case of unidentified soiling, check decontamination, as this is not guaranteed and must be checked.
- To remove external contamination, close the suits before using the "Protective suits special" programme. For internal and external disinfection with the "Protective suits" programme, open the suits. To protect the visor, fold the hood inwards and place the leg part over it.
- Observe the minimum load of the washing machine so that the suits do not spread apart and damage the visors. Or prevent the unfolding of the suits by washing in a suitably large washing net.
- Heavily contaminated suits should be pre-washed using the "Protective suits special" programme.

## **Programme chart - Professional cleaners**

WetCare "wet cleaning" is a very gentle cleaning process using water and special care products for clothing that could previously only be cleaned chemically.

WetCare sensitive 25 °C		Fill ratio/Load size
Fabric	For non washable garments	1:20 - 1:15
Programme sequence	+U Pre-wash 25 °C, optional Main wash 25 °C Waterproof finish 25 °C Final spin	PW 811 5.6 - 7.4 kg PW 814 7 - 9.4 kg PW 818 9 - 12 kg
WetCare Silks	30 °C	
Fabric	For non washable garments which crease easily	1:25 - 1:20
Programme sequence	Main wash 30 °C, optional Waterproof finish 25 °C Final spin	PW 811 4.4 - 5.6 kg PW 814 5.6 - 7 kg PW 818 7.2 - 9 kg
WetCare intensive	40 °C	
Fabric	Washable garments	1:20 - 1:15
Programme sequence	+ LI Pre-wash, 30 °C, optional Main wash 40 °C Rinse Waterproof finish 25 °C Final spin	PW 811 5.6 - 7.4 kg PW 814 7 - 9.4 kg PW 818 9 - 12 kg

In the Professional cleaners programmes no hot water valves are activated. The incoming water must not exceed a temperature of 30  $^{\circ}$ C.

## **Programme chart - Immersion proofing**

Wash/reproof	40 °C	Fill ratio/Load size
Fabric	For all washable garments requiring reproofing (e.g. outdoor clothing)	
Programme sequence	+ L Pre-wash 30 °C, optional Main wash 40 °C 2 Rinses Reproofing 40 °C Final spin	1:20 - 1:15 PW 811 6.6 kg PW 814
Rinse/reproof	40 °C	8.2 kg
Fabric	For all washable garments requiring reproofing (e.g. outdoor clothing)	PW 818 10.6 kg
Programme sequence	1 Rinse Reproofing 40 °C Final spin	

## **Programme chart - Equestrian**

This programme is suitable for washing and reproofing horse blankets, saddle cloths, gaiters, hoof boots, bandages, textile halters.

Horse blankets	60 °C	Fill ratio/Load size
Fabric	Horse blankets, saddle-cloths, gaiters, hoof boots, bandages, textile halters	
Programme sequence	Pre-rinse +	
Horse blankets	30 °C	
Fabric	Horse blankets, saddle-cloths, gaiters, hoof boots, bandages, textile halters	
Programme sequence	Pre-rinse +	
Woollen horse bla	1:13 See "Load size"	
Fabric	Horse blankets containing wool	chart.
Programme sequence	Pre-rinse Pre-wash 30 °C Main wash 30 °C Wash rhythm "gentle" 2 rinses Final rinse	
Wash/proof horse blankets	30 °C	
Fabric	Horse blankets, saddle-cloths, gaiters, hoof boots, bandages, textile halters	
Programme sequence	Pre-rinse +	

#### Pre-treatment

Remove coarse soiling from very heavily soiled blankets with a strong jet of water or a vacuum cleaner.

#### Detergent

For washing, a detergent without bleach and optical brightener should be used.

For woollen blankets, products with slightly reduced pH should be used. It is also possible to add enzyme-containing products.

It needs to be ensured that no proteases are used as these enzymes attack and damage the wool.

#### Load size

Model	Load, maximum 3/4 of the total recommended load			
	Saddle cloths	Summer blankets	Winter blankets	
PW 811	8	2	1	
PW 814	10	2-3	1-2	
PW 818	12	3	2	

#### **Buckles**

Metal buckles, hooks and eye fasteners must be covered to protect the drum. Special bags for this purpose are available to order from Miele.

## **Programme chart - Sport**

Sports shirts	40 °C	Fill ratio/Load size
Fabric	Polyester or polyamide with and without spandex	
Programme sequence	+ L Pre-wash 30 °C, optional Main wash 40 °C 3 rinses Final spin	
Track suits	40 °C	
Fabric	Polyester, polyamide	
Programme sequence	Main wash 40 °C 2 rinses Final spin	1:20
Track suits intens	PW 811 - 5.6 kg PW 814 - 7 kg	
Fabric	Polyester, polyamide	
Programme sequence	+ L Pre-wash 30 °C, optional Main wash 40 °C 2 rinses Final spin	
Leg protectors		
Fabric	Polyester, polyamide, polyethylene, polypropylene and ethylene vinyl	
Programme sequence	Main wash 40 °C 2 rinses	

Outerwear	40 °C	Fill ratio/Load size
Fabric	Polyamide and membrane items	
Programme sequence	+ Pre-wash 30 °C, optional Main wash 40 °C 2 rinses Reproofing 40 °C Final spin	1:15 PW 811 - 7.4 kg
Reproof sportswe	PW 814 - 9.4 kg PW 818 - 12 kg	
Fabric	Polyamide and membrane items	1 W 010 - 12 kg
Programme sequence	Rinse Reproofing 40 °C Final spin	
Functional underw	vear 40°C	
Fabric	Polyester/man-made elastomer mix polyamide/ man-made elastomer mix or polypropylene	1:20
Programme sequence	+ Pre-wash 30 °C, optional Main wash 40 °C 2 rinses Final spin	PW 811 - 5.6 kg PW 814 - 7 kg PW 818 - 9 kg

## Programme chart - Sluice

The sluice programmes are for extremely heavily soiled personal clothing, as well as heavily soiled towels and bed linen.

Disinfection according to provisions of British National Health Service (GB). There are two different disinfection options: 65 °C for 10 min or 71°C for 3 min.

Sluice sensitive	65°C	Fill ratio/Load size
Fabric	Heavily soiled personal clothing, towelling and bed linen	
Programme sequence	2 pre-rinses Pre-wash 60 °C, 5 min. Disinfection 65 °C, 10 min. 3 rinses Final spin	1:10 PW 811- 11 kg PW 814 - 14 kg
Sluice	71°C	
Fabric	Heavily soiled personal clothing, towelling and bed linen	PW 818 - 18 kg
Programme sequence	2 pre-rinses Pre-wash 60 °C, 5 min. Disinfection 71 °C, 3 min. 3 rinses Final spin	

### Sluice programme sequence

Sluice Sensitive 65 °C					
Programme stage	Liquid ratio *	Thermostop	Temperat- ure	Temperature holding time (wash time 2)	Programmed wash time approx.
Pre-wash 1	1:7	No	Cold	-	5 min
Pre-wash 2	1:7	No	Cold	-	4 min
Pre-wash	1:7	Yes	60°C	5 min	-
1 min. spin at	500 rpm				
Disinfection	1:5	Yes	65°C	10 min	- **
2-minute spir	at 800 rpm				
Rinse 1	1:5	No	Cold	-	5 min
1 min. spin at	800 rpm				5 min
Rinse 2	1:5	No	Cold	-	5 min
1 min spin at	1 min spin at max. speed				
Rinse 3	1:4	No	Cold	-	5 min
5 min spin at	max. speed				
		Sluid	ce 71 °C		
Pre-wash 1	1:7	No	Cold	-	5 min
Pre-wash 2	1:7	No	Cold	_	4 min
Pre-wash	1:7	Yes	60°C	5 min	-
1 min. spin at	1 min. spin at 500 rpm				
Disinfection	1:5	Yes	71°C	3 min	_ **
2 min. spin at 800 rpm					
Rinse 1	1:5	No	Cold	_	5 min
1 min. spin at 800 rpm					
Rinse 2	1:5	No	Cold	_	5 min
1 min spin at max. speed					
Rinse 3	1:4	No	Cold	-	5 min
5 min spin at	5 min spin at max. speed				

Depending on load and fabric type

<sup>\*\*</sup> Depending on heating type and, with hot water connection, the hot water temperature

## Programme chart - Water recovery (WRG)

Water recovery cl	Fill ratio/Load size	
Fabric		
Programme sequence	Drain Rinse Drain Wash Drain Rinse Drain	
Water recovery drainage		
Programme sequence	Drainage	

### **Control panel**



#### 1 Display

When the machine is switched on the welcome screen will appear briefly, followed by the programme list. The last started programme is highlighted.

#### **2** Function buttons

These buttons can be allocated specific functions depending on the status of the machine.

These appear in the display above the buttons and are highlighted when selected.

By reprogramming "Direct button allocation" the first 6 programmes in the programme list can be selected using buttons 1 - 6.

#### 3 Start button

The selected programme starts when the start button is pressed. After a programme has been started, the display content can be shown again by pressing this button.

#### 4 Optical interface PC

Using PC software, data can be transmitted to and from the controls to a PC.

The optical interface on the control panel provides the connection point.

#### Multifunction selector

This is used to select menu options (by turning it) and to confirm your selection (by pressing it).

#### **©** Card reader

When a card is inserted, the wash programmes on the card can be used. Insert the card in the direction of the arrow.

#### 1 Power On button

For switching the machine on

#### **® 0 Power Off button**

For switching the machine off

#### 9 Emergency off switch

The emergency off switch puts the machine into a safe state in the event of danger or in order to prevent danger. The emergency off switch must be placed in such a way that the user can activate it immediately in an emergency. **Caution**, the machine is not disconnected from the power supply.

When the hazard has been removed, the switch is released by turning it clockwise.

When the "START" button is pressed again, the interrupted programme continues.

#### **Function buttons**

### **⊘** Stop/Finish

The right-hand function button is used as a finish button after a programme has been started.

After pressing the button the selected programme is stopped, if pressed again the programme is cancelled.

#### +U Block plus

The corresponding programme block (e.g. Pre-wash) is added to the programme.

#### **Starch stop**

Press this button if the laundry is to be starched.

#### Spin

### **Without spin**

Press this button if a final spin is not required after the final rinse.

#### 

#### Start time

When this button is pressed before starting the programme, information about selecting a start time will appear on the display.

#### i Information

After the programme has started, current programme information can be displayed here.

#### Manual control

 $\rightarrow \rightarrow$  Skip

**♣ Back** Return to previous display page.

#### **▼**/▲ Information on next / previous line

#### ☐ Save

See "Access to supervisor level"

1-999 programmes

#### **⋈** Delete (backwards)

a→A change from lower case to upper case

A→a change from upper case to lower case
- Water intake
<b>≌</b> Dosage
🕍 Dispensing switched off
<b>₩</b> Washing and heating
<b>◯</b> ♥ Drainage with agitation
□ Card
√ Marked
Programme locked  If a programme is locked, after 1 minute it can no longer be stopped and cancelled with the finish button.

## **Overview of function levels**

Operator Access with Power On	Supervisor Access to Supervisor level using ▶ "Settings" function button and password or with card entry.		
Programme start for all programmes	Menu options in main menu		
Programme start for special programmes (Approved function)	Language Choice of user language for the duration of a pro- gramme	Time/Date Set date and time	
Programme start with card only (laundry load operation)	Programming Create new programme, copy, delete, change		
Programme start only after insertion of coins or with pre-paid card	Settings (basic)		
	Memory function Buzzer Seconds unit Hours unit Mass unit Pressure unit  Max. temperature Max. spin speed Display - Display standby - contrast setting Button allocation - Time of day - Date display Dispensing calibration Delivery rate dispensing (D1 to 13) Correction factor dispensing (D1 to D13) Dispenser empty (D1 to 13) Password use Medium water pressure - Heater power Customer data: Location - Surname - First name Street - House number - Town - Postcode - Telephone System address - Set-up date Currency		
	Change password	Laundry loads Machine operation only possible with card access	
	Cards Key card, supervisor card  Manual control		

## Access to Supervisor level / changing the password

#### **Password**

The supervisor level is accessed by entering a four-digit password from the character set provided. It can only be selected at the start or end of a programme.

■ Press the ¬⇒ button.

The following will appear in the display:



When "Supervisor level" is selected and the multifunction selector is pressed, the password entry screen will appear.

The first time you access the supervisor level, enter the password "M1LE".



Select letter or number.

When the multifunctionselector is operated, the character selected will appear in the corresponding position.

If no function is carried out within 30 seconds, if the button is pressed, or if an incorrect password is entered, the same display content will be shown as after a power cut.

Retrieving data for the last password entry and last incorrect password entry.

■ Press the i "Info" button.

The date of the last password entry and the last incorrect password entry will appear.



With this function it is possible to check whether other people know the password and have used it.

■ Press the ♣ "Back" button.

If no other button is pressed, the screen will automatically revert to the previous one after 30 seconds.

## Access to Supervisor level / changing the password

The display is reset.

■ Press the 🖫 "Save" button once you have entered all four characters

The supervisor level will open once you have entered the password.



### Change password

The password can be changed via this menu option.

■ Select supervisor level / main menu.



■ Select "Change password" and confirm by pressing the multifunction selector.

After selecting and pressing the multifunction selector, the following appears in the display:



■ Select letter or number.

When the multifunctionselector is operated, the character selected will appear in the corresponding position.

■ Enter the new password and press the 🖫 "Save" button.

Once you have entered the password and pressed 🖫 "Save", the confirmation prompt will appear.



■ Press the 🖫 "Save" button.

### Main menu options

- Language
- Time/Date
- Dispensing
- Access mode
- Programming
- Settings
- Change password
- Laundry loads

### Language option

### Selecting the local language

■ Select the language menu option.



When the country language is set the display immediately changes to this language to ensure that the display is instantly legible for all users. It then returns to the main menu.

#### Options:

- deutsch english (GB) english (USA) español français italiano
- nederlands norsk português ελληνικά русский

If after 30 seconds in Supervisor level "Language" the start button has not been pressed or the multifunction selector operated, the display will return to the main menu.

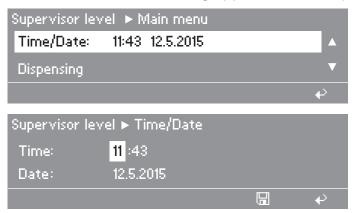
### Time of day, Date option

This menu option is used to set the current date and time.

In the event of a power cut these are retained for approx. 6 weeks. After this time they will need to be reset.

■ Select the Time, Date menu option:

After selection, the following appears in the display:



■ Press the 🖫 "Save" button

The setting is adopted once the  $\square$  "Save" button has been pressed and the display has returned to the main menu.

If after 30 seconds in Supervisor level "Time / Date" the  $\square$  "Save" button has not been pressed, or the multifunction selector operated, the display will revert to the main menu.

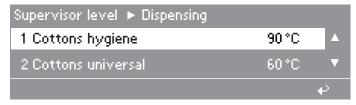
### **Dispensing option**

This menu option allows you to change individual dispensing settings. Miele programmes are saved under the same M.-Nr. after changing the dispensing data. In this case the basic programme lock is not active.



■ Select "Dispensing".

After selection, the following appears in the display:



■ Select the relevant programme.

When the corresponding programme is selected, only the dispensing data parameters will appear.



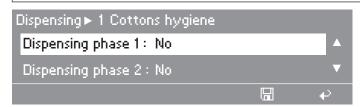
■ Select the required range and block.



The options will appear:

- No
- Qty. in ml
- Concentration ml/l
- Concentration ml/kg

In "Dispensing method: No" setting, dispensing phases 1 and 2 are locked.



## **Dispensing option**

In the "Amount and concentration" setting, in dispensing phases 1 and 2 either "No" or "User defined" can be selected.



#### Options:

Dispensing 1 to 6

Dispenser pump:

- No
- D1 to D13



Dispensing amount: 0 to 9999 depending on dispensing method:

- ml
- ml/l
- ml/kg

Dispensing delay:

- No
- 0 to 999 s
- Press the ☐ "Save" button to save dispensing data, or press the button to return to the programme list without saving.

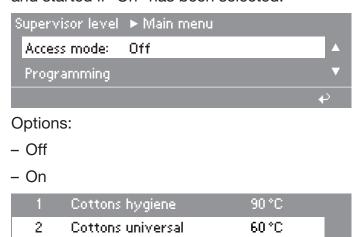
Return to programme list with or without saving your changes to the dispensing settings.

**Tip:** If the correction factor is changed, it must be corrected as necessary.

## Access mode optionAccess mode option

## Access mode optionAccess mode option

In this operating state only approved programmes can be selected and started if "On" has been selected.



☐ Programme locked

If programmes are not approved in the programme header the message 🗗 "Programme locked" appears beside the programme number.

### **Programme structure**

#### Programme header

Programme number, Programme name, Material number, Area 1-2-3, Name - area 1-2-3, Weigh, Nominal load, Min. water level, Fill type, Access mode, Lock, Peak load, Hot water control, Price

#### Area 1 Pre-wash

Pre-wash 1 to Pre-wash 10 (max. 10 blocks)

#### Area 2 Main wash

Main wash 1 to Main wash 10 (max. 10 blocks)

#### Area 3 Rinse

Rinse 1 to Rinse 10 (max. 10 blocks)

A programme consists of a **Programme header**, a **Pre-wash** area, a **Main wash** area and a **Rinse** area. These areas can form the programme individually or combined, but areas cannot occur twice. The areas consist of individual blocks.

General programme structures, which apply to the whole programme are configured in the programme header. See menu option "Create".

The blocks are identical for each individual area and all have the same basic parameter settings.

The easiest way to create a new programme is to copy blocks or areas of an existing programme or a whole programme, and then to change it.

Programme block			
	Block name		
1.	Block activation		
2.	Programme stop 1		
3.	Programme stop signal 1		
4.	Heating		
5.	Free temperature selection		
6.	Temperature		
7.	Hysteresis		
8.	Warm up		
9.	Level 1		
10.	Water inlet 1		
11.	Dispensing method		
12.	Dispensing phase 1		
13.	Dispensing stop 1		
14.	Agitation from level		
15.	Level stop 1		
16.	Wash time 1		
17.	Thermostop		
18.	Level 2		
19.	Water inlet 2		
20.	Dispensing phase 2		
21.	Dispensing stop 2		
22.	Level stop 2		
23.	Wash time 2		
24.	Cool Down		
25.	Wash time 3		
26.	Programme stop 2		
27.	Programme stop signal 2		
28.	Drain path 1		
29.	Drain level		
30.	Wash time 4		
31.	Drain path 2		
32.	Free spin speed selection		
33.	Spin		
34.	Repeat		
35.	Block end signal		

### Copy menu option

Available programme packets, programmes, areas and blocks can be copied using this menu option.

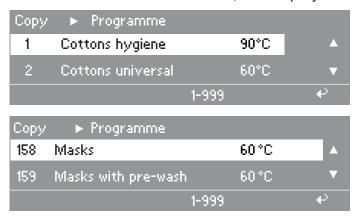


When the multifunction selector is operated, the following appears in the display:



#### Copy programme

All programmes, a programme packet (e.g. programme 1 to 10) or an individual programme can be copied with this menu option. However, existing programmes will only be overwritten following additional confirmation. When this is selected, the display will show the following:



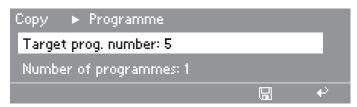
After selecting the programme and pressing the multifunction selector, this is marked with a  $\sqrt{\ }$ .

The tick is deleted following a further confirmation with the multifunction selector.

■ Press the 🖫 "Save" button to complete the marking process.

If all programmes are to be copied, press the 1-999 button. The programmes are then marked.

**Tip:** Depending on the number of programmes to be copied, the lowest target programme number is selected, from which the following programmes can be saved.



■ Enter the target programme number and copy it using the 🖫 "Save" button.

If you wish to copy to a target programme place that is already occupied by another programme, the security question will appear.



If the storage space available is insufficient to accept the selected programme, the following message will appear in the display:



"Insufficient controller memory" will flash in the display.

■ Press the 🖫 "Save" button to overwrite.

The overwriting process is carried out and the screen returns to the "Copy" sub-menu.

**Tip:** When  $\begin{cases} \begin{cases} \be$ 

#### Copy area

With this menu option a section from an existing programme can be copied to another programme. In the target programme, a non-existent section is added or the existing section is overwritten.

Select the area to be copied.

When this is selected, the display will show the following:



- Press the multifunction selector, select the source programme number and confirm your selection.
- Go to the source area and confirm.
- Select the source area Pre-wash, Main wash or Rinse and confirm.



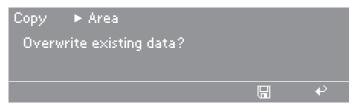
- Go to target programme and confirm.
- Select the target programme number and confirm.
- Go to target area and confirm.
- Select the target area Pre-wash, Main wash or Rinse and confirm.

If the target area is not available (no name defined yet), the area number and the standard area name appear (target area: Pre-wash, Main wash, Rinse).

Enter and activate by pressing the 🖫 "Save" button.

Copying will be carried out.

**Tip:** If copying to a target programme place that is already occupied by an area, the security question will appear.



■ Press the 🖫 "Save" button to overwrite.

The overwriting process is carried out and the screen returns to the "Copy" sub-menu.

**Tip:** When  $\clubsuit$  is pressed, or if after 30 seconds no button has been pressed, copying is not carried out and the display returns to the "Copy" sub-menu.

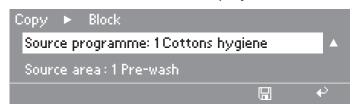
#### Copy block

With this menu option a block can be copied out of one existing programme into another programme or within a programme. A new block is added into the target programme.

If there are already 10 blocks in the target area, the 10th Block is omitted. If a block is not copied into an existing target area, the new target area is automatically allocated the relevant name.

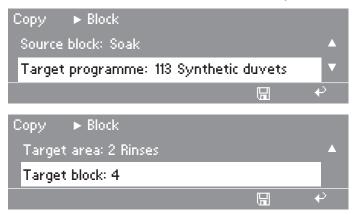
■ Select the block to be copied.

When this is selected, the display will show the following:



Press the multifunction selector, select the source programme number and confirm your selection.

- Go to Source area and confirm your choice.
- Select the source area Pre-wash, Main wash or Rinse and confirm your selection.
- Go to Source block and confirm your selection.
- Select the source block and confirm your selection.



Either the first unlocked programme or the last selected programme appears as target programme number.

- Go to Target programme and confirm your choice.
- Select the target programme number and confirm your selection.
- Go to Target area and confirm your selection.
- Select the target area Pre-wash, Main wash or Rinse and confirm your selection.

The first free block will appear as the target block.

- Go to Target block and confirm your selection.
- Select the target block and confirm your selection.
- Press the 🖫 "Save" button.

Copying will be carried out.

If the 10th block is to be overwritten by copying, the security question will appear.

■ Press the 🖫 "Save" button.

The overwriting process is carried out and the screen returns to the "Copying" sub-menu.

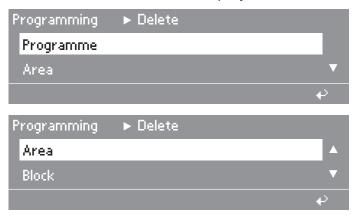
**Tip:** When  $\begin{cases} \begin{cases} \be$ 

### **Deleting a menu option**

In this menu option a program packet, a programme, an area or a block can be deleted. In the input field for the programme number, only the programme numbers of existing programmes appear with the use of the multifunction selector.

■ Select "Programming Delete".

When this is selected, the display will show the following:



## Deleting a programme

All programmes, a programme packet or an individual programme can be deleted with this menu option.

■ Select "Programme Delete".

After selection, the following appears in the display:



⊕ "Locked" indicates a basic programme lock. The programme cannot be deleted.



- Select the desired programme.
- Press the multifunction selector to mark the programme.

Press again to remove the tick.

**Tip:** Press the "1-999" function button if all deletable programmes are to be deleted. Programmes to which a basic programme lock is assigned, cannot be deleted.



When 🖫 "Save" is pressed, the security question appears.



■ Press the 🖫 "Save" button.

The overwriting process is carried out and the screen returns to the sub-menu.

**Tip:** When the **+** button is pressed, or if after 30 seconds no button has been pressed, deletion is not carried out and the display returns to the sub-menu.

If there are no programmes that can be deleted, the following message appears in the display:

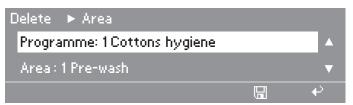


#### **Deleting an area**

With this option an area of a programme can be deleted.

■ Select "Delete Area".

When this is selected, the display will show the following:



■ Press the multifunction selector.

When the multifunction selector is pressed, the following appears in the display:



■ Select the programme number and confirm your selection.



Go to Area and confirm your selection.



- Select the area Pre-wash, Main wash or Rinse and confirm your selection.
- Press the 🖫 "Save" button.

The security question will appear.

■ Press the 🖫 "Save" button.

Deletion will be carried out and the screen will return to the submenu.

**Tip:** When the  $\clubsuit$  button is pressed, or if after 30 seconds no button has been pressed, deletion is not carried out and the display returns to the sub-menu.

#### **Deleting a block**

With this menu option a block in an area of a programme can be deleted.

■ Select "Delete Block".

When this is selected, the display will show the following:



■ Press the multifunction selector.



- Select the programme number and confirm your selection.
- Go to Area and confirm your selection.



- Select the area Pre-wash, Main wash or Rinse and confirm your selection.
- Go to Block and confirm your selection



- Select the block and confirm your selection.
- Press the 🖫 "Save" button.

The security question will appear.

■ Press the 🖫 "Save" button.

Deletion will be carried out and the screen will return to the submenu.

**Tip:** When the button is pressed, or if after 30 seconds no button has been pressed, deletion is not carried out and the display returns to the sub-menu.

### Change menu option

With this menu option an already existing programme can be changed and stored under the same programme number. If the programme is a Miele programme, the existing material number in the programme header is deleted if it is changed and then saved.

■ Select Programming Change

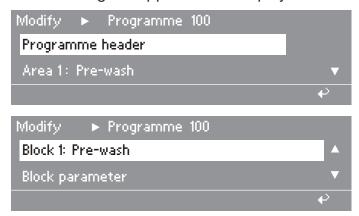
When this is selected, the display will show the following:



**Tip:** ⊕ "Locked" indicates a lock. The programme cannot be changed.

■ Select the programme you want to change and confirm.

The following will appear in the display:



**Tip:** Options for changes in the programme header are given in **Menu option "Create, Programme header"**.

■ Press the 🖫 "Save" button.

The parameters that are already set will be saved.

**Tip:** When the + button is pressed, or if after 30 seconds no button has been pressed, the changes are not carried out and the display returns to the sub-menu.



Select the area here.



- Select the block here.
- Select block parameters.

Individual programme stages can be accessed by selecting block parameters.



Options for changes to individual programme stages are given in **Menu option "Create"**, **Block programming**.

## "Create" menu option

A new programme is created with this menu option. Individual areas, blocks and programme stages are configured.

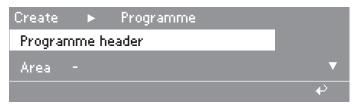
■ Press the 🖫 "Save" button to save the programme header parameters that are already configured.

The screen will jump to the selection for the area, block or block programming:



### Programme header

When this is selected, the display will show the following:



## Programme number

When this is selected, the display will show the following:



■ Use the multifunction selector to select a free programme number.

When creating a new programme, the lowest programme number will appear automatically in the "Programme number" input field.

Any free programme number can be selected, from the lowest number not yet assigned up to number 999.

**Programme name** ■ Select the Programme name menu option.

When this is selected, the display will show the following:



- Jump to the "Programme name" input field.
- Select a character and press the multifunction selector.

The selected character will appear in the "Name" field.



Use the a->A function button to toggle between upper and lower case.

Use the ⟨XI function button to delete a character and move one field to the left.

#### **Material number**

Select the Material number input field.

■ Turn the multifunction selector to the right.

The material number can only be read and not changed. In the case of newly created programmes by the operator, xxxxxxxx appears here.

#### Area 1 - 2 - 3

Select input field Area 1

■ Turn the multifunction selector to the right.



You have the following options:

- No
- 1 block to 10 blocks

If a quantity of blocks is defined, an area name must also be assigned. This can be assigned under" "Name area 1". As a first proposal, the area 1 "Pre-wash", area 2 "Main wash" and area 3 "Rinse" will appear here. See also "Programme structure".



**Tip:** The selection and input of name area 1 is performed similarly to the programme name.

Input for area 2 and 3 are similar to the input from area 1.

### Weighing

Configuration of the way in which the laundry load weight should be established.

■ Use the multifunction selector to select "Weigh" and press to confirm the selection.



You have the following options:

- No

The controls assume that the nominal load is always reached. It is not possible to enter a weight before the start of the programme.

Manual

Laundry weight can be entered by hand before the programme start.

- Automatic

Laundry weight is measured automatically in the machine.

#### **Nominal load**

A laundry weight can be allocated to a programme with this option.

■ Turn the multifunction selector to "Nominal load" and press to confirm the selection.

Maximum nominal load value is dependent on the model and is as follows:

for PW 811 - 12 kg

for PW 814 - 16 kg

for PW 818 - 20 kg

You have the following options:

- From 0.0 kg, in 0.2 kg increments to maximum nominal load.
- Set a laundry weight.

#### Min. water level

When Minimum water level is selected, all blocks without heating are allocated the minimum water level.

This value configures the lowest selectable level value. The maximum value is 300 mm.



■ Select the menu option "Minimum water level".

You have the following options:

- From 0 in 2 mm increments up to a maximum of 300 mm.
- Enter the minimum water level.

#### Fill type

With the Fill type option the type and method of water intake can be specified for the programme.

If the Fill type is changed in the programme header when the programme is created, the basic settings for the levels are saved again in the blocks.



You have the following options:

- Automatic load adjustment mm

In programmes which are started with Automatic load adjustment, the laundry load influences water levels, dispensing and the number of rinse cycles.

Water level mm.

When Water level mm or Automatic load adjustment are selected, the option "Concentration m/l" is locked in the Dispensing menu option and the Block programming.

- Water quantity I
- Laundry to suds ratio kg/l

**Tip:** The suds ratio to be programmed depends on load ratio, load composition and absorption of the laundry. The following table provides guidance:

Programmes with recommended load ratio (kg:l drum volume)	Absorption of laundry (Example)	Max. Laundry to suds ratio (kg:l liquid)
1:20	Low (PES/BW mixed fibres)	1:8 to 1:10
1:10*	Medium (Cotton flat woven)	1:5 to 1:6
1:10*	High (Cotton towelling)	1:5 to 1:7

<sup>\*</sup> e.g. Chemo-thermal disinfection programme

#### **Access control**

When the "Access control" option is selected, the programme is allocated programme approval.

A programme which is not approved cannot be started in Access control status.



■ Select the "Access control" menu option.

You have the following options:

- No
- Yes

#### Lock

When the "Lock" option is selected, a programme is allocated programme locking.

If a programme is started, after one minute it can no longer be stopped or cancelled with the finish button.

The door can only be opened at the end of the programme.



■ Select the "Lock" menu option.

You have the following options:

- No
- Yes

#### **Peak load**

When "Peak load" is selected, the programme is allocated a peak load function.

If the input peak load signal is present and the programme is in a heating phase, the heating is switched off and the programme is stopped. "Programme stopped by peak load function" appears in the display.

If the programme is in Thermostop, the safety interval of the Thermostop is maintained.



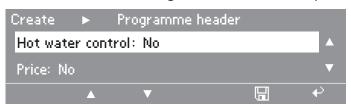
■ Select the "Peak load" programme function.

You have the following options:

- Yes
- No

#### Hot water control

When "Hot water control" is selected, you have the choice between automatic water valve guide and control of pre-selected water valves.



You have the following options:

- No
- Yes

If "Yes" is selected for Hot water control, the water intake valves are "automatically" activated in such a way that the required temperature for the wash cycle is already reached from the first intake of water by alternately activating cold or hot water valves.

If automatic valve control is not selected, the pre-selected water valves are activated in conjunction with Hot water control "Yes" without regard to the required temperature.

**Price** 

If the "Price" option is selected, a price can be allocated to a programme.

The price set must be paid before the programme can be started.



■ Select the "Price" programme option.

You have the following options:

- No

If "No" is set, a price message will not appear.

- 0.10 to 9999.90 in 0.10 increments
- Press the 🖫 "Save" button.

This concludes the programming of the programme header and you now enter block programming.

### **Block programming**

## Entering Block programming

After completing the programming of the programme header, press the 🖫 "Save" button to enter Block programming.



- Select the area of block programming:
- Area 1: Pre-wash
- Area 2: Main wash
- Area 3: Rinse



- Select Block 1 to 10 from the selected area.
- Select block parameters.

When Block parameter is selected, you enter the individual programme stages of the selected block.

# Basic parameter settings

In the block programming the individual steps in the blocks are defined. Because the blocks are identical for each individual area, all have the same basic parameter settings.

Programme block			
	Stage	Basic setting	
	Block name	20 blank spaces	
1.	Block activation	No	
2.	Programme stop 1	No	
3.	Programme stop signal 1	No	
4.	Heating	No	
5.	Free temperature selection	No	
6.	Temperature	Cold	
7.	Hysteresis	Normal	
8.	Warm up	<b>⊕</b> *	
9.	Level 1	0 mm / 0 l / 1:0 kg/l	
10.	Water inlet 1	Automatic	
11.	Dispensing method	No	
12.	Dispensing phase 1	⊕ *	
13.	Dispensing stop 1	⊕ *	
14.	Agitation from level	Automatic	
15.	Level stop 1	No	
16.	Wash time 1	No	
17.	Thermostop	⊕ *	
18.	Level 2	0 mm	
19.	Water inlet 2	Automatic	
20.	Dispensing phase 2	<u>+</u> *	
21.	Dispensing stop 2	<u>+</u> *	
22.	Level stop 2	No	
23.	Wash time 2	No	
24.	Cool Down	No	
25.	Wash time 3	No	
26.	Programme stop 2	No	
27.	Programme stop signal 2	No	
28.	Drain path 1	No	
29.	Drain level	0 mm	
30.	Wash time 4	No	
31.	Drain path 2	Drain	
32.	Free spin speed selection	No	
33.	Spin	No	
34.	Repeat	No	
35.	Block end signal	No	

 $<sup>^* \ \</sup>begin{picture}(20,20) \put(0,0){\line(1,0){10}} \put(0,0){\line(1,0){10}}$ 

#### **Block name**

#### Entering block name



■ Enter the block name.

## 1. Block activation

Block activation can be determined at the start of all block programming.

- Select from the following options in the display under Block activation:
- No

Programme block is not carried out

- Permanent

The programme block is a permanent component of the programme structure and is always carried out.

Block+

The programme block is only carried out when the  $\coprod$  "Block+" button has been pressed.

## 2. Programme stop 1.

Used to stop a current programme.

- Choose from the following options:
- No

No programme stop occurs.

Permanent

A programme stop always occurs at the point programmed.

- Starch stop
- Spin stop

When "Starch stop" or "Spin stop" are selected, a programme stop only occurs at the point programmed if the relevant button is pressed at that time.

Spin and Starch stop

When "Starch stop" or "Spin stop" are selected, a programme stop only occurs at the point programmed if both the "Starch stop" and the "Spin stop" buttons are pressed at that time.

## 3. Programme stop signal 1

Used to set a "Programme stop" output (for signal transmitter) for a programme stop.

- Choose from the following options:
- No

The output "Programme stop" is not activated for a programme stop.

- Yes

The output "Programme stop" is activated for a programme stop.

#### 4. Heating

Used to allow suppression of the heating.

**Tip:** This function can be used e.g. for warm rinses.

- Choose from the following options:
- Yes

The heating is activated normally in the heating regulation circuit to reach the required temperature.

- No

The heating is not activated. The selected temperature is to be achieved exclusively via the water valve control. With the setting Thermostop only "No" is possible. The field in the display for the required temperature remains empty before and after programme start.

## 5. Free temperature selection

Used to make changes to temperature before programme start.

- Choose from the following options:
- No

Always heated to the temperature set in the block programming.

- Yes

The temperature of the 1st main wash set before programme start is carried over to all programed blocks, but only if "Yes" is programmed in those blocks in the "Free temperature selection" programme stage and if the temperature programmed in the block is not lower.

#### 6. Temperature

Used to programme a temperature.

- Choose from the following options:
- Cold

The heating is not activated.

15 to 95 °C

With increments of 1 °C temperature values are freely programmable.

#### 7. Hysteresis

Temperature difference between heating switch-on-and switch-off points.

- Choose from the following options:
- Normal (Off 0 °C, On -6 °C)
- Low (Off +3 °C, On 0 °C)
- User defined
   +3 °C to -10 °C in 1 °C increments

#### 8 .Warm up

Heating-up speed, how rapidly the water should heat up.

⊕ Warm up is locked if "No" is programmed in programme stage 4. Heating.

- Choose from the following options:
- No
- 1 °C/min to 10 °C/min

Heating is permanently activated as required.

#### 9. Level 1

In the programme header, the fill type can be selected between automatic load adjustment, water level, the water quantity and the suds ratio. With automatic load adjustment or water level, level 1 can be adjusted accordingly.

- Choose from the following options:
- Water quantity

Setting in 0.5 I increments from 0 I to 999 I.

- Water level

Setting in 2 mm increments from 0 mm to 350 mm.

Laundry to suds ratio

Setting in 0.5 kg increments from 1:0.0 kg/l to 1:20 kg/l.

#### 10. Water inlet 1

Control of water intake valves.

- Choose from the following options:
- Automatic

With the "automatic" setting the water intake valves are activated such that the required temperature for the wash cycle is already reached from the first intake of water by alternately activating cold or hot water valves.

The assignment of valves to detergent dispensers is as follows:

	Valves
Pre-wash compartment	K1, W1
Main wash compartment	K2, W2
Fabric softener compartment	К3
Special application compartment	K4
Direct water intake	KD, WD
WRG inlet valve	K6

The following valves are activated depending on programme blocks:

Programme structure	Temperature range		
	Actual temperature >Required	Actual temperature =Required	Actual temperature <required< td=""></required<>
Pre-wash 1	KD, K1	WD, W1, KD, K1	WD, W1, KD, K1
Pre-wash 2-10	KD, K1	WD, KD, K1	WD, W1
Main wash 1	KD, K2	WD, W2, KD, K2	WD, W2, KD, K2
Main wash 1-10 (with prewash)	KD, K2	KD, WD, W2, K2	WD, W2
Rinse 1	KD, K3	WD, KD, K3	WD, K3
Rinse 1	KD, K4	KD,WD,K4	WD, K4
Rinse 2	KD, K3	WD, KD, K3	WD, K3
Rinse 1	KD	KD, WD	WD
Rinse 2	KD, K4	KD,WD,K4	WD, K4
Rinse 3	KD, K3	WD, KD, K3	WD, K3
Rinse 1	KD	KD, WD	WD
Rinse 2	KD, K4	KD,WD,K4	WD, K4
Rinse 3-9	KD	KD, WD	WD
Rinse 10	KD, K3	KD,WD, K3	WD, K3

- User-defined
- No
- 4 of 10 different water valves

## 11. Dispensing method

Determines how the detergent is dispensed into the machine.

- Choose from the following options:
- No

No dispensing

- Amount ml (millilitre)
- Concentration m/l (ml per litre)

Does not appear if Fill type is programmed to "Water level" or "Auto load adjustment" in programme header.

Concentration ml/kg (ml per wash load in kg)

## 12. Dispensing phase 1

Determines the dispensing concentration for max. 6 dispenser pumps.

- Choose from the following options:
- No

Detergent is not dispensed.

- User-defined
  - Dispenser pump
     1 dispenser pump per dispensation
     selectable from D1 to D13
  - Dispensing amount (depending on dispensing method)
    - 0 to 9999 ml or
    - 0 to 999 ml/l or
    - 0 to 999 ml/kg
  - Dispensing delay0 to 999 sec.
- ⊕ with dispensing method "No"

## 13. Dispensing stop 1

Dispensing process control

- Choose from the following options:
- No

The dispensing runs simultaneously to the subsequent programme steps. As a result, the dispensing is discontinued at the end of the subsequent Wash time 1.

■ Yes

Long dispensing phases are not cancelled. The following Wash time 1 begins after the end of the dispensing.

– ⊕ with dispensing method "No"

## 14. Agitation from level

Drum agitation for the first water intake in the programme block.

- Choose from the following options:
- Automatic
- User-defined
- Automatic
- User-defined

Duration: 0.15 to 59 sec.

0 to 99 min.

Rhythm:

No

Normal 12/3 sec. Wash / Pause Gentle 5/10 sec. Wash / Pause

Gentle+ 3/27 sec. Wash / Pause

User-defined

On: 2 to 99 sec.
Off: 2 to 99 sec.

Spin speed:

No

Normal

Scooping

User defined 20 to 70 rpm

Start drum rotation:

Automatic load control

0 mm to Level 1

Water level

0 mm to Level 1

Water quantity

0 I to Level 1

Laundry to suds ratio

1:0 to 1:20 kg/l

#### **15. Level stop 1** Regulation of water inlet

- Choose from the following options:
- No

Water flows in simultaneously with subsequent programme stages Dispensing phase 1 and 2, Agitation from level and Wash time 1 and 2. These programme stages are overlaid with the water intake.

- Yes

First the water intake up to the defined level takes place, followed by the subsequent programme stages. The programme progress stops during the water intake. The drum rotation is assumed according to the function "Agitation from level".

#### 16. Wash time 1

Drum rotation with the defined rhythm and speed occurs within the time specified.

- Choose from the following options:
- No
- User-defined

Duration: 0.15 to 59 sec.

0 to 99 min.

Rhythm:

No

Normal

Gentle

Gentle+

User-defined

On: 2 to 99 sec.
Off: 2 to 99 sec.

Spin speed:

No

Normal

Scooping

User defined 20 to 70 rpm

#### 17. Thermostop

⊕ Thermostop is locked when "No" is programmed in programme stage 4. Heating.

- Choose from the following options:
- No

With Thermostop "No" the heating phase starts as soon as the minimum heat level is reached. The wash times 1 and 2 are chronologically processed, without the required temperature necessarily being reached.

- Yes

When Thermostop "Yes" is programmed, the heating phase also begins when the minimum heating level is reached and then allows Wash time 2 to run only when the required temperature is reached. Wash time 2 always starts at the required temperature.

- Disinfection

When Thermostop "Disinfection" is programmed, the procedure is the same as for "Yes". Additionally, after a drop in temperature of 3 °C below the lowest permissible hysteresis value (e.g. in case of peak load, refuelling, power cut), Thermostop is activated and Wash time 2 and Dispensing phase 2 have to run again.

**18. Level 2** Settings as for Level 1

**19. Water inlet 2** Settings as for Water inlet 1

**20. Dispensing** Settings as for Dispensing phase 1 phase 2

21. Dispensing stop 2

Settings as for Dispensing stop 1

22. Level stop 2

Settings as for Level stop 1

23. Wash time 2

Settings as for Wash time 1

24. Cool Down

Cooling the water to a defined temperature before drainage.

- Choose from the following options:
- No

Water cooling does not take place.

Automatic

A gradual water intake takes place via the valves which have been set in the programme step "Water inlet 2" with a cooling rate of 3 °C/min. until the max. level of the machine is reached. Subsequent to this water will be drained until the wash level is reached. Then a gradual water intake etc. starts again until the water temperature reaches 45 °C. If the programmed target level is similar to the maximum level of the machine, it will be reduced by 30%.

User defined
 Cooling temperature from 20 to 95 °C
 Cooling speed from 1 to 20 °C/min.

25. Wash time 3

Settings as for Wash time 1

26. Programme stop 2

Settings as for Programme stop 1

27. Programme stop signal 2 28. Drain path 1

Settings as for Programme stop signal 1

The point at which the water should leave the machine, and where it should drain to is set.

- Choose from the following options:
- No

No drainage takes place. During the spin cycle, the drain valve is opened at speeds > 70 rpm.

- Drain

The drain valve is activated.

- Reservoir

The drained water is transferred to the water recycling system.

Empty reservoir

The WRG tank is emptied.

- Main wash

The water is circulated.

#### 29. Drain level

A water level can be selected. A residual amount of water can remain in the suds container until the high-speed spin starts. For certain types of laundry this results in an optimal distribution of laundry during spinning to minimise unbalances. No drum rotation takes place.

- Choose from the following options:
- Water level0 mm to Level 1 or 2
- 30. Wash time 4

Settings as for Wash time 1.

In Wash time 4 the drain is permanently open.

31. Drain path 2

Settings as for Drain path 1.

32. Free spin speed selection

Programming spin speed

- Choose from the following options:
- No

The machine always spins at the spin speed programmed in the block. Changing the spin speed before the programme is started is not possible.

- Yes

The spin speed setting, selected for the last programme block before the start of a programme, is assumed for the appropriate programme blocks. Regardless of whether "Yes" or "No" is programmed in the last block for the programme step "Free spin speed selection". Changing the spin speed before the programme is started is possible.

#### 33. Spin

Creating a user defined spin profile.

- Choose from the following options:
- No

No spin carried out

Automatic

Spin profile

Phase	1	2	3	4	5	6
Duration	1 min.	1 min.	1 min.	3 min.	3 min.	2 min.
Rhythm	No	12/3	No	No	No	12/3
Spin speed [rpm]	500	30	500	850	Max.	30

#### - User-defined

To create a spin profile, 6 different spin phases can be programmed for each spin stage.

Duration: 0, 1 to 59 sec.

0 to 99 min.

Rhythm:

No

Normal

Gentle

Gentle+

User defined 3/12 to 99/99 sec.\*

Spin speed:

No

Normal

Scooping

User defined 20 to 70 rpm

300 - max. rpm\*\*

Maximum spin speed depends on washing machine:

Model	Max. spin speed
PW811	1150 rpm
PW814	1075 rpm
PW818	1075 rpm

#### 34. Repeat

A block or programme repetition can be set.

- Choose from the following options:
- No

No repetition

- Block

Repetition of programme blocks

1 x block to 9 x block

- Programme

Repetition of programmes

1 x programme to 9 x programme

# nal

**35. Block end sig-** A signal can be activated when a programme block is finished.

- Choose from the following options:
- No

No block end signal.

- Yes

<sup>\*</sup>Total always ≥ 15

<sup>\*\*</sup>The ranges 1 to 19 and 71 to 299 rpm cannot be selected

The "Block end" output relay was activated at the end of the block. The block end signal activated in the last block remains active until the Finish or Start button or the multifunction selector are pressed.

#### **Settings option**

Access the Settings option.



■ Call up the following display content by operating the multifunction selector:



#### Sub-menu options:

- Memory function
- Basic programme lock
- Buzzer
- Unit temperature
- Unit seconds
- Unit minutes
- Unit hours
- Unit length
- Unit mass
- Unit volume
- Unit pressure
- Unit drum rotation
- Max. temperature selection
- Max. spin speed selection
- Display
- Display standby
- Contrast setting
- Button allocation
- Clock display
- Date display
- Dispenser calibration

- Dispensing throughput (D1 to D13)
- Dispensing correction factor (D1 to D 13)
- Dispenser level reminder (D 1 to D 13)
- Password required
- Medium water pressure
- Heater rating
- Customer data
- Currency

Save the specified parameters.

- Specify the parameters.
- Press the ☐ "Save" button to save the specified parameters.

The parameters are saved and the display switches back to the submenu.

**Tip:** When  $\begin{center} \begin{center} \begin{c$ pressed, the settings are not saved and the display returns to the main menu.

#### **Memory function**

The Temperature and Spin speed programme parameters for those programmes which can be changed before the programme start, are saved after the start of the programme. In addition, the button functions are not reset at the end of the programme. These appear again with each new programme selection.

#### Options:

- No
- Yes

# lock

**Basic programme** The programmes in this defined programme area cannot be changed, deleted or overwritten.

#### Options:

- No
- User defined from: 1 to 999

#### Buzzer

If "Yes" is programmed, the buzzer is activated along with the programme stop signal 1 and 2, the block end signal and the fault stop signal. The buzzer frequency is increased with the fault stop signal. The buzzer is automatically switched off after 5 minutes or by pressing a multifunction button.

If "No" is programmed, the buzzer is switched off.

#### Options:

- No
- Yes

Unit Temperature, Second, Minute, Hour, Length, Mass, Volume, Pressure, Revolutions

According to the set language when "auto" is set, the appropriate unit for temperature, second, minute, hour, length, mass, volume, pressure or revolutions is used.

#### **Temperature - unit**

Options:

- auto
- °C
- °F

#### Seconds - unit

Options:

- auto
- s
- sec
- sg
- sek

#### Minutes - unit

Options:

- auto
- min
- mn

#### Hours - unit

Options:

- auto
- h
- timer
- tim
- uur
- time
- hr

#### Length - unit

Options:

- auto
- mm
- inches

#### Mass - unit

Options:

- auto
- kg

**–** I

#### Volume unit

Options:

- auto
- I
- USA gal
- CDN gal

#### Pressure - unit

Options:

- auto
- bar
- psi

#### Speed - drum rotation

Options:

- auto
- U/min
- T/min
- rpm
- t/mn
- giri/min
- kierr/min
- r/min
- omdr/min
- v/min
- o/min

# Maximum tem-

This value can be set from cold to 95 °C in 1 °C increments and limits perature selection all temperature settings in the programmes to the selected value. This means that when 60 °C is selected, for example, the water will not be heated to more than 60 °C in any programme even if a higher temperature is programmed for the selected programme.

#### Options:

- 15 to 95 °C
- Cold

#### Maximum spin speed selection

This value can be changed from 0 rpm up to the maximum for the machine in the following increments:

Area	Stage	Notes
		1 to 19 rpm cannot be selected.
20 rpm to 70 rpm	1 rpm	Replication of spin speeds
		71 to 299 rpm cannot be selected.
300 rpm to max* rpm	25 rpm	Spin speed range for actual spin- ning

When a speed of 500 rpm, for example, is selected, all programmes will spin at no higher than 500 rpm although a higher spin speed might be set in the selected programme.

\* Maximum spin speed depending on machine:

Maximum spin speed depends on washing machine:

Model	Max. spin speed
PW811	1150 rpm
PW814	1075 rpm
PW818	1075 rpm

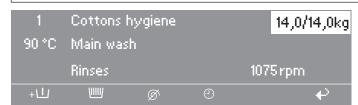
#### Options:

- 300 to 1150 rpm
- 20 to 70 rpm
- 0 rpm

#### **Display**

The display can be switched between "Normal" and "Detail".

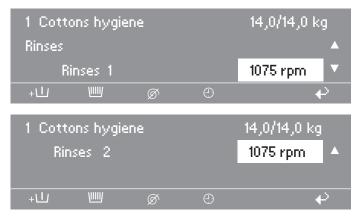
In the Normal display only the temperature of the pre-wash and the main wash, the final spin speed of the last block and the area names are shown before the start of the programme.



■ Switch the display to "Detail".

When "Detail" is selected, all area and block names are displayed.





#### Options:

- Normal
- Detail

#### **Display standby**

If the "Display Standby: yes" setting is selected, the display is switched on by pressing any button. If no further buttons are pressed after 10 minutes, the machine returns to "Standby". The start button light ring flashes to inform you of this. When a button is pressed the display is switched on again and the last active screen appears.

When "Display standby: No" is set, the display is permanently on.

- Choose from the following options:
- Yes
- No

#### **Contrast setting**

The display contrast can be altered from 1 to 10. This allows the display to be optimised for specific working conditions. When it is altered, the contrast is changed immediately.

#### Options:

- 1 to 10

#### **Button allocation**

When "Direct" is set the first 6 programmes on the programme list are allocated to the function buttons 1 to 6.

- Confirm with the multifunction selector.
- Choose from the following options:
- Normal
- Direct

#### **Clock display**

You can select either the 24-hour or 12-hour clock for the display.

#### Options:

- 24 h
- 12 h

#### Date display

Various different display formats are used in accordance with the language set.

Select the date format from the chart below.

Country	Format
Deutschland, England, Niederlande, Frankreich, Italien, Finnland, Portugal, Span- ien, Dänemark, Norwegen, Griechenland	Day/Month/Year
Sweden	Year / Month / Day
USA	Month/Day/Year

**Tip:** The date format can be changed in accordance with the country. Options:

- auto
- Day/Month/Year
- Year / Month / Day
- Month/Day/Year

# tion

**Dispenser calibra-** Dispensing calibration is used to measure the throughput of individual dispensing pumps.

To go directly to "dispenser calibration" when the machine is switched off:

■ Press and hold multifunction button 2 and switch the machine on with "Power On".



#### Options:

- Dispenser pump 1 to 13
- Select a dispenser pump.

When a dispenser pump is selected, the following will appear in the display:



Tip: The dispensing amount can be set from 0 to 9999 ml in 1 ml increments.

■ Press multifunction button 0/1.

The dispensing hose will fill up.

■ Stop the process by pressing button 0/1.

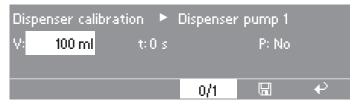
■ Run the hose of the dispenser pump that is being checked upwards into a measuring vessel.

⚠ Irritant agents.
Skin and eye irritation.
Avoid contact with skin and eyes, wear protective clothing.

■ Return to the main menu by pressing 🕂 "Back".



Select a dispenser pump.



■ Press multifunction button 0/1.

Stop the pump by pressing button 0/1, or the pump will stop automatically after 60 seconds.

■ Measure the required amount in the measuring vessel.



■ Enter the amount measured in field "V:".

The throughput P is calculated in ml/min. by the controls.

■ Press the "Save" 🖫 button.

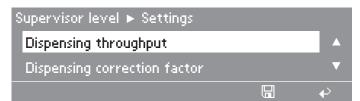
The measured value is assigned to the pump.

Reattach the hose.

# Dispensing throughput (D1 to D13)

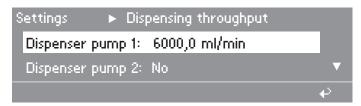
The throughput of the connected dispensing pumps can be set from 0 ml/min to 9999 ml/min in 1 ml/min steps.

Access the following content:



Select "Dispensing throughput".

The following will appear on the display:



#### Options:

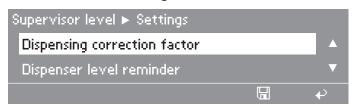
- No
- 1 to 9999.0 ml/min

# Dispensing correction factor (D1 to D 13)

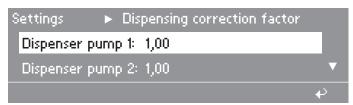
The correction factor can be used if an adjustment is made to the liquid dispensing. If, e.g. the dispensing agent for Dispensing pump D 1 were altered (to a higher concentration), a rapid modification can be made with the correction factor.

■ Calculate the correction factor using the following formula:

Access the following content:



■ Select "Dispensing correction factor".



You have the following options:

- 2
- 1.99 to 0.01

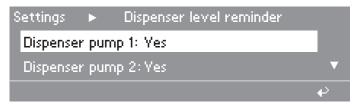
Once you exit the supervisor level, the new dispensing amounts are used in the programmes but the programming is not changed.

# Dispenser level reminder (D 1 to D 13)

The machine must be programmed if a container level reminder is required.



■ Select "Dispenser level reminder".



#### Options:

- Yes
- No

# Password required

The use of a password can be selected here.

- Set whether or not you want to use a password. Options:
- Yes
- No

However, if a password has already been assigned and the operator then selects "No", they will be prompted to enter the current password when they press +.

# Medium water pressure

Medium water pressure must be set in order to calculate consumption data. This is used, among other things, for calculating water quantities in individual blocks or for a whole programme.

#### Options:

- 0.1 to 50 bar
- 1 to 800 psi

#### **Heater rating**

#### Options:

- 0 to 999.9 kW

#### **Customer data**

Customer details can be entered here.

#### Options:

- Sector- Name- First name- Telephone

StreetHouse numberInstallation date

#### Location

A sector can be selected here.

#### Options:

- Care home
- Medical practice

- Nursing home
- Fire brigades/rescue services
- Restaurant / Café
- Commercial laundry
- Small businesses
- Hotel/guesthouse
- Industry
- Youth hostel
- Hospital
- Riding stables
- Schools
- Dry cleaners
- Housing associations
- Other:

Surname, First name

Street, House number

Town, Postcode

Telephone,

System address (a 10-digit system address for the machine can be entered here)

Installation date

#### Currency

#### Options:

- auto	(in line with selected	ianguage)

- EUR Euro

- GBP pounds sterling

- CHF Swiss francs

- USD American dollars

- RUB Russian roubles

- CAD Canadian dollars

- CZK Czech krone

- DKK Danish krone

- PLN Polish zloty

- SEK Swedish krone

- TRL Turkish lira

- SKK Slovakian krone

### **Laundry load menu option**

A card with only one programme on it is assigned to a laundry load that requires a special process.

■ Call up the "Card access" menu option.



#### Options:

- No
- Yes

With the selection "Yes" the card programme can be started. The programmes in the controls can no longer be accessed.

■ Select "Yes" to start the card programme.

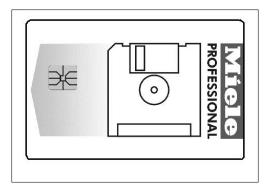


#### **Cards**

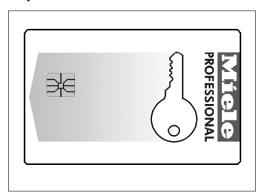
#### Cards

Cards are divided into different applications. There are two different types of card:

Supervisor card



Key card



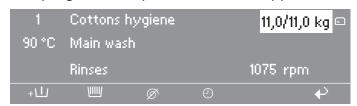
#### Supervisor card

If a card with saved programmes is placed in the card reader before the programme is started, the controls no longer access the internal programme memory. The content of the card is read and displayed in the display as a programme list with the indication "Card operation":



- Calling up programme details and transferring programme to controls.
- Press the multifunction selector.

The programme representation will appear.



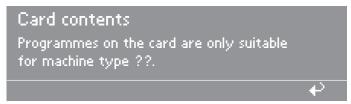
■ Press the "START" button.

The programme is transferred to the memory in the controls.

Remove the card from the card reader.

**Tip:** The programme is only deleted from the memory when the programme is finished and the card has been removed from the card reader.

If the programmes on the card are not suitable for the model of machine, the following message will appear:



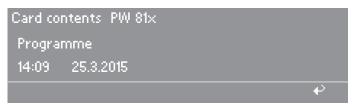
A card can hold max. 30 programmes consisting of 6 blocks each. If there is only one programme on it, the Card access operation option is carried out.

# Information on calling up card content

Before the start or after the end of a programme information can be called up about card content.

■ Insert a card with data into the card reader and press the far-right function button at the same time.

Information about card content will appear immediately.



Content of a card with a programme as shown in the display.

**Tip:** When the card is removed or the + button is pressed the display returns to normal.

#### **Locking cards**

There is the option of locking and unlocking the card using the PC software.

**Tip:** Data on the card cannot be changed when it is locked.

Insert the card into the card reader.

If there is a locked card in the reader, the following message will appear for 5 seconds when either menu option "Data to card" or "Delete card" are selected and confirmed with the multifunction selector:



#### Key card

This card allows access to the main menu in the operator level without entering a password. The card does not need to remain in the card reader to access additional functions. After inserting the card, the following will appear on the display:



#### Options:

- Language
- Time/Date
- Dispensing
- Access control
- Programming
- Settings
- Change password
- Laundry loads

# Saving changed data

Saving data changed in the previous stage onto the Supervisor card

- Remove the key card from the card reader if necessary.
- Insert the Supervisor card into the card reader.

Saving dispensing data, language, programmes, (programme packets or back up), programme settings (card access operation).

#### Laundry load operation

This function can be activated via the "Laundry loads" option in the Supervisor level.

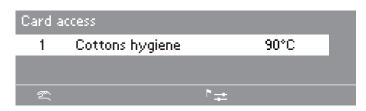
A card with only one programme on it is assigned to a laundry load that requires a special process.

- Call up Supervisor Level
- Select the "Card access" menu option.

If there is no card in the card reader or if there are other programmes on the card (Card access operation not recognised), the following will appear in the display:



When a card is inserted with one programme, e.g.:



#### Data to card

With this menu option language, dispensing, programme and settings data can be written **from the controls onto a card**.

Data from different machines cannot be combined onto one card.

■ In the Main menu call up the "Data to card" display.



You have the following options:

- Data to card
- Data to control unit
- Deleting a card
- Select "Data to card".

After selection, the following appears in the display:



You have the following options:

- Programme
- Dispensing
- Settings
- Language

#### Programme data

With this menu option up to max. 30 programmes can be copied onto a card.

The programmes are copied row by row onto the card and the programme numbers assigned in the machine are copied along with them.

**Tip:** Laundry load operation is possible if there is only one program on the card.

■ Call up "Programme" in the "Data to card" menu:



■ Select "Programme".

After selection, the following appears in the display:



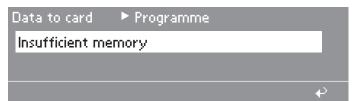
■ Press the multifunction selector to mark the programme you want.



Press the "1-999" button if all programmes are to be copied.

■ Press the 🖫 "Save" button to copy.

If there is not enough free space to save all the marked programmes on the card, the following message will flash in the display:



#### Dispensing data

All dispensing data for available programmes in the controls can be copied onto a card using this option.

However, existing dispensing data will only be overwritten following additional confirmation. For each programme, dispensing method, dispensing phase 1, 2 (dispenser pump, dispensing amount and level) and dispensing stop 1, 2 (yes or no) are listed. When the dispensed agent is changed, a fast and simple dispensing adjustment is therefore possible.

Only dispenser pumps that are active are listed.

■ Call up the "Dispensing" display in the "Data to card" menu option.



■ Use the multifunction selector to select "Dispensing" and press to confirm your selection.

The following will then appear in the display during data transfer:



If there was already dispensing data on the card, the security question will appear.



Press the 🖫 "Save" button to overwrite the existing data.

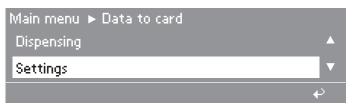
**Tip:** When the  $\begin{center} \begin{center} \beg$ 

#### Setting data

With this menu option all settings from the Supervisor level (see "Settings" menu option) can be copied from the controls onto a card.

However, existing settings will only be overwritten following additional confirmation.

■ Call up the "Settings" display in the "Data to card" menu option.

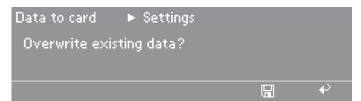


■ Select "settings" and press the "START" button.

Then the display will change to the following:



If there was already settings data on the card, the security question will appear.



Press the 🖫 "Save" button to overwrite the existing data.

**Tip:** When the button is pressed, or if after 30 seconds no button has been pressed, overwriting is not carried out and the display returns to the previous menu.

#### Language data

Profitronic M provides 11 languages as standard. These can be accessed in the supervisor level via the menu option "Language".

If an existing language is to be written to a card, select the menu option "Language". However, existing language data on the card will only be overwritten following additional confirmation.

■ Call up the "Language" display in the "Data to card" menu option.



#### Option:

- All available languages in the controls
- Select one of the languages available in the controls using the multifunction selector.

The following will then appear in the display during data transfer:



If there was already language data on the card, the security question will appear.



■ Press the SS "Save" button to overwrite the existing data.

**Tip:** When the button is pressed, or if after 30 seconds no button has been pressed, overwriting is not carried out and the display returns to the previous menu.

# Data to control unit

With this menu option available control data (language, dispensing data, programmes or settings) can be copied **from the card to the controls**.

■ Call up the "Data to control unit" option in the Main menu.



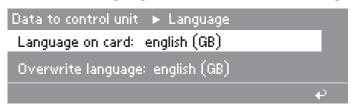
You have the following options:

- Data to card
- Data to control unit
- Deleting a card
- Select "Data to control unit".

When "START" is pressed the following appears in the display, depending on the data content of the card:

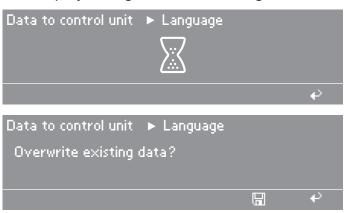
#### Language

If there is a language on the card, the following appears:



Select "Language on card" and confirm your selection by pressing the multifunction selector.

The display changes to the following:



If a language was already in the selected position in the controls, the security question will appear.

■ Press the 🖫 "Save" button to overwrite the existing data.

**Tip:** When the button is pressed, or if after 30 seconds no button has been pressed, overwriting is not carried out and the display returns to the previous menu.

#### **Dispensing**

All dispensing data for available programmes in the controls can be copied onto a card using this option.

However, existing dispensing data will only be overwritten following additional confirmation. For each programme, dispensing method, dispensing phase 1, 2 (dispenser pump, dispensing amount and level) and dispensing stop 1, 2 (yes or no) are listed. When the dispensed agent is changed, a fast and simple dispensing adjustment is therefore possible.

Only dispenser pumps that are active are listed.

■ Select the "Dispensing" menu option.



When the multifunction selector is pressed, the security question will appear.



■ Press the 🖫 "Save" button to confirm.

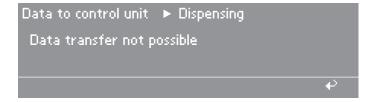
During data transfer the following appears in the display:



**Tip:** If not all dispensing data was able to be copied from the card to the controls, the following message will appear:



**Tip:** If copying is not possible as described above, the following appears in the display for 5 minutes:



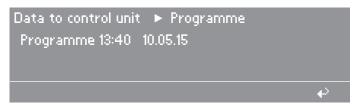
#### **Programme**

With this menu option one or more programmes can be copied from the card to the controls.

**Tip:** Existing programmes in the controls will be overwritten.

■ Select the "Programme" menu option.

After selection, the following appears in the display:



■ Press the multifunction selector to confirm your selection.

The following will appear in the display:



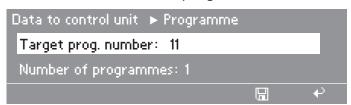
#### Option:

- All programmes are available on the card
- Select or deselect programmes by pressing the multifunction selector.

**Tip:** Press the 1-999 button if all available programmes are to be copied onto the card.

■ Press the 🖫 "Save" button to call up the display to select the target programme place.

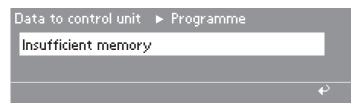
The first free programme place in the controls appears that can accommodate all selected programmes on the card.



■ Select the programme place and press the 🖫 "Save" button.

Data transfer is activated.

**Tip:** If the available space in the controls is insufficient to accommodate all selected programmes from the card, the following message will appear in the display:



**Tip:** When the button is pressed, or if after 30 seconds no button has been pressed, overwriting is not carried out and the display returns to the previous menu.

If there is enough storage space in the controls, the following appears in the display during data transfer:



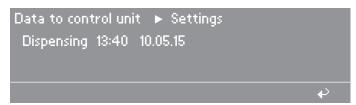
If a target programme place was chosen which is already occupied by another programme, the security question will appear.

#### Settings

With this menu option settings from the Supervisor level can be copied from the card to the controls.

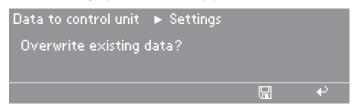
Existing programmes in the controls will be overwritten.

■ Select the "Settings" menu option.



■ Press the multifunction selector.

The security question will appear.



■ Press the 🖫 "Save" button to confirm.

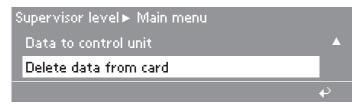
During data transfer the following appears in the display:



#### Deleting a card

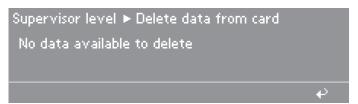
All data on the card can be deleted with this menu option.

■ Select the "Delete data from card" menu option.



■ Press the multifunction selector to confirm your selection.

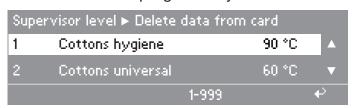
The following will appear in the display:



All data has been deleted.

**Tip:** If there are wash programmes on the card, for example, these can be deleted individually.

Select the wash programme you want to delete.



- Press the multifunction selector to mark the programme you want to delete.
- Press the 🖫 "Save" button and confirm your selection.

The security question will appear.



**Tip:** When the button is pressed, or if after 30 seconds no button has been pressed, deletion is not carried out and the display returns to the previous menu.

■ Press the 

"Save" button.

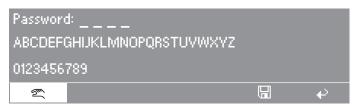
The data content of the card or the marked programmes are deleted and the display returns to menu selection.

#### Manual control

# Switch to manual control.

Manual control is possible before programme start or in a programme stop.

■ Press the <sup>2™</sup> "Manual control" button to access the password entry screen.



■ Enter the password.

The Manual control menu is displayed:



The current level, spin speed and temperature statuses of the machine are displayed.

The function buttons are assigned with specific manual control functions:

- Water inlet ऊ
- Dispensing 业
- Washing and heating
- Drain with drum rotation (
- Spin 🕥
- Press the button again to end a selected function.

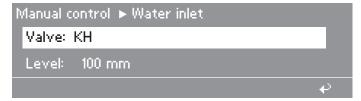
# Ending Manual control

- Press the ♥ "Stop / Finish" button to end a selected function.
- Press the ♥ "Stop / Finish" button again to end Manual control.

#### Water intake <sup>→</sup>

Water inlet valves and the water level can be set.

■ Press the <sup>△</sup> "Water intake" button.



Press the multifunction selector to confirm the selection of "Valve".



■ Turn the multifunction selector to select the relevant valve and press to confirm your selection.



- Turn the multifunction selector to select "Level" and press to confirm your selection.
- Turn the multifunction selector to set the level and press to confirm your entry.
- When the valve and level have been selected, start water intake by pressing the "START" button.

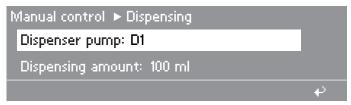
**Tip:** Water intake stops when the set level is reached or if the  $\stackrel{\times}{\neg}$  button is pressed again.

#### Dispensing 🗳

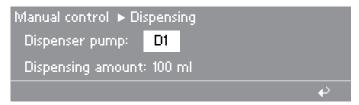
Dispensing valve and amount can be set.

This function can only be selected if "Yes" is programmed in the Service level dispensing display.

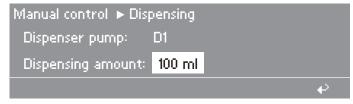
■ Press the □ "Dispensing" function button.



■ Press the multifunction selector to confirm the selection of "Dispenser pump".



■ Turn the multifunction selector to select the relevant dispenser pump and press to confirm your choice.



- Turn the multifunction selector to select the dispensing amount and press to confirm your choice.
- Turn the multifunction selector to set the relevant dispenser pump and press to confirm your entry.
- Press the "START" button to start dispensing.

If dispensing has taken place, the programme will be ended.

**Tip:** The programme will also be ended if the button is pressed.

# Washing and heating **⊕**#

Temperature, spin speed and wash rhythm can be set.

■ Press the "Washing and heating" function button.



- Set temperature, spin speed and wash rhythm successively.
- After setting, press the "START" button to start the "Washing and heating" programme.

If washing and heating have taken place, the programme will be ended.

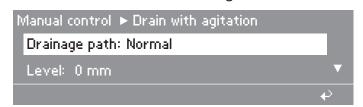
Tip: The programme will also be ended if the \*# button is pressed.

# Drainage with agitation 🖫 🖫

rip. The programme will also be ended if the war button is press

Drain path, level, spin speed and wash rhythm can be set.

■ Press the ❤️❤ "Drain with agitation" button.



- Set drain path, level, spin speed and rhythm successively.
- After setting, press the "START" button to start the "Drain with agitation" programme.

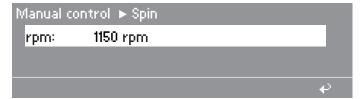
If drain with drum rotation has taken place, the programme will be ended.

**Tip:** The programme will also be ended if the ❤️❤️ button is pressed.

Spin(S)

The spin speed can be set.

■ Press the ⑤ "Spin" button.



- Set the spin speed.
- After setting, press the "START" button to start the "Spin" programme.

If spinning has taken place, the programme will be ended.

**Tip:** The programme will also be ended if the ① button is pressed.



■ Press the ⑦ "Stop / Finish" button to end selected functions.

**Tip:** Manual control is ended by pressing the  $\bigcirc$  "Stop / Finish" button again.

# Function combinations

Water inlet, dispensing, washing and heating can be selected simultaneously in any combination\*.

즉	<u></u>	(Q)t	( <b>)</b>	0
Water intake	Dispensing	Washing and heating	Drainage with agitation	Spin

<sup>\*</sup> all possible function combinations are highlighted in grey

# PW 811 machine data

#### **Electrical connection**

Voltage	see data plate
Frequency	see data plate
Total connected load	see data plate
Current draw	see data plate
Fuse rating	see data plate
Heater rating	see data plate

#### Installation dimensions

Casing width (without add-on components)	795 mm
Casing height (without add-on components)	1350 mm
Casing depth (without add-on components)	827 mm
Overall machine width	799 mm
Overall machine height	1352 mm
Overall machine depth	940 mm
Minimum width of transport opening	805 mm
Minimum distance between wall and machine front	1280 mm
Minimum distance between wall and rear of appliance	400 mm

### Weight and floor load

Net weight	see installation plan
Max. floor load in operation	see installation plan

#### **Emissions data**

Sound pressure level emission in workplace in accordance with EN ISO 11204/11203	<70 dB(A) re 20 μPa
Sound power level EN ISO 9614-2	<80 dB(A)

### **Product safety**

Product safety standard	oofsty standard	IEC 60335-1, IEC 60335-2-7
Flou	Salety Stalidard	EN 60335-1, EN 50571

# **Technical data**

### PW 814 machine data

### **Electrical connection**

Voltage	see data plate
Frequency	see data plate
Total connected load	see data plate
Current draw	see data plate
Fuse rating	see data plate
Heater rating	see data plate

#### Installation dimensions

Casing width (without add-on components)	920 mm
Casing height (without add-on components)	1450 mm
Casing depth (without add-on components)	757 mm
Overall machine width	924 mm
Overall machine height	1452 mm
Overall machine depth	849.5 mm
Minimum width of transport opening	930 mm
Minimum distance between wall and machine front	1160 mm
Minimum distance between wall and rear of appliance	400 mm

### Weight and floor load

Net weight	see installation plan
Max. floor load in operation	see installation plan

#### **Emissions data**

Sound pressure level emission in workplace in accordance with EN ISO 11204/11203	<70 dB(A) re 20 μPa
Sound power level EN ISO 9614-2	<80 dB(A)

### **Product safety**

Product safety standard	IEC 60335-1, IEC 60335-2-7	
Froduct salet	alidatu	EN 60335-1, EN 50571

# PW 818 machine data

#### **Electrical connection**

Voltage	see data plate
Frequency	see data plate
Total connected load	see data plate
Current draw	see data plate
Fuse rating	see data plate
Heater rating	see data plate

### **Installation dimensions**

Casing width (without add-on components)	920 mm
Casing height (without add-on components)	1450 mm
Casing depth (without add-on components)	857 mm
Overall machine width	924 mm
Overall machine height	1452 mm
Overall machine depth	950 mm
Minimum width of transport opening	930 mm
Minimum distance between wall and machine front	1260 mm
Minimum distance between wall and rear of appliance	400 mm mm

# Weight and floor load

Net weight	see installation plan
Max. floor load in operation	see installation plan

#### **Emissions data**

Sound pressure level emission in workplace in accordance with EN ISO 11204/11203	<70 dB(A) re 20 μPa
Sound power level EN ISO 9614-2	<80 dB(A)

### **Product safety**

Product safety standard	IEC 60335-1, IEC 60335-2-7	
Froduc	y standard	EN 60335-1, EN 50571



Miele Co. Ltd. Fairacres, Marcham Road, Abingdon, Oxon, OX14 1TW Professional Sales, Tel: 0845 365 6608

E-mail: professional@miele.co.uk

Internet: www.miele-professional.co.uk