Miele

Operating instructions
Washing machine



To avoid the risk of accidents or damage to the appliance, it is **essential** to read these instructions before it is installed and used for the first time.

en-AU, NZ

M.-Nr. 12 702 644

Contents

Warning and Safety instructions .. **4**

Sustainability and environmental protection **10**
Optimum use of energy and water . 11
Drying in the tumble dryer 11
Sound reduction 11
Using detergents 11

Familiarising yourself with the appliance..... **12**
Your washing machine 12
Control panel..... 12
Main menu in the display 12
Symbols 13
Operating principles..... 13
Networking 14
SmartStart (only available in selected countries)..... 15
Proximity sensor/MotionReact 15
ComfortOpen..... 15
AmbientLight..... 16
CapDosing..... 16
TwinDos 16
PowerWash 17
FlexLoad..... 17
Optional accessories 17

Installation..... **18**
Rear view 18
Requirements for the installation surface for the washing machine 19
Transporting the washing machine to the installation surface..... 19
Removing or reinstalling the transit bars..... 20
The Miele water protection system 22
Water inlet..... 24
Connecting the water inlet hoses 24
Drainage..... 25
Electrical connection 28
Aligning the washing machine..... 29
Additional installation requirements..... 30
Technical data 32

Commissioning **33**
Requirements for networking 33
Commissioning procedure 33

Operation..... **34**
Operating sequence 34
On the washing machine..... 34
Via the App 34
Preparing the laundry 35
Switching on the washing machine. 35
Loading the laundry..... 35
Selecting a programme 36
Setting programme parameters..... 36
Adding detergent..... 36
Starting a programme..... 37
At the end of the programme 37
Special points for operation via App 38
Time selection/SmartStart)) 38
SmartStart)) 39
Add laundry (AddLoad)..... 39
Programme modifications after starting the programme 39
Cancelling a programme..... 39
Interrupting a programme 39
Favourites..... 39
Using TwinDos 40
Detergent dispensing quantity entered for TwinDos..... 41
Replacing the TwinDos cartridge..... 41
Using the dispenser drawer..... 42
CapDosing..... 43

Programmes..... **45**
Programme chart 45
Programme sequence 57
Extras 58
Detergent recommendations 59
Consumption data 60

Good to know **61**
Preparing the laundry for washing... 61
Care label 62
Detergent 63

Spinning 65

Adjusting settings **66**
General 68
Software update 68
Security 68
Proximity sensor 68
Factory default settings 68
Networking 68
Wi-Fi 68
Connection 68
Remote control 69
Appliance functions 69
TwinDos 69
Water inlet 69
Memory 69
SmartStart (only available in selected countries) 70
ComfortOpen 70
Allergy 70
Soak 70
Rinse plus 70
Temperature reduction 70
Suds cooling 70
Low water pressure 70
Anti-crease 71
Water hardness 71
Lighting 71
Information 71
Software 71
Legal information 71
Consumption 71
Operating hours 71
Service 71

Cleaning and care **72**
Cleaning the casing, drum and control panel 72
Descaling the washing machine 72
Carrying out descaling 72
Cleaning the dispenser drawer 73
Cleaning the water intake filter 75
Cleaning the TwinDos system 76
Cleaning the drum/Hygiene in the washing machine 76

Problem solving guide **77**
The display does not switch on automatically – it is not possible to select a programme 77
Door does not open or close 77
Water intake or drainage 78
Fault messages and information in the display 78
Fault messages and problems with TwinDos 80
Hygiene in the washing machine 80
Problems with the dispenser drawer 81
Poor wash results 82
Noises and various other problems. 83
Draining the suds in the event of a fault 84
Remove the plinth flap 84
Draining the suds 85
Cleaning the pumps and drain filters 87
Fitting the plinth flap 88
Cleaning the nozzle at the top of the sealing ring 88
Operating the emergency release ... 89

Service **90**
Contact in case of fault 90
Warranty 90

Warning and Safety instructions

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

Read the operating instructions carefully before using the washing machine. They contain important information on safety, installation, use and maintenance. This prevents both personal injury and damage to the washing machine.

In accordance with standard IEC 60335-1, Miele expressly and strongly advises that you read and follow the instructions for installing the washing machine as well as the warning and safety instructions.

Miele cannot be held liable for injury or damage caused by non-compliance with these operating instructions.

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

Correct application

▶ This washing machine is designed for domestic use and for use in similar environments by guests in hotel or motel rooms, bed & breakfasts and other typical living quarters. This does not include common/shared facilities or commercial facilities within hotels, motels or bed & breakfasts.

▶ The washing machine is not suitable for outdoor use.

▶ It must only be used to wash garments which have been declared suitable for washing by the manufacturer indicated on the garment care label. Any other use is not permitted. Miele cannot be held liable for damage resulting from incorrect or improper use or operation.

▶ This washing machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning its use by a person responsible for their safety.

▶ The washing machine is intended for use at altitudes of up to 4000 m above sea level.

Safety with children

▶ Young children must not be allowed to use this appliance.

▶ Cleaning work may only be carried out by older children under the supervision of an adult.

▶ Older children may only use the appliance when its operation has been clearly explained to them and they are able to use it safely, recognising the dangers of misuse.

▶ Please supervise children in the vicinity of the washing machine and do not let them play with it.

Technical safety

▶ Follow the instructions in “Installation”.

▶ Before setting up the washing machine, check it for any externally visible damage. Do not install or use a damaged machine.

▶ Before connecting the washing machine, ensure that the connection data on the data plate (fuse rating, voltage and frequency) matches the mains electricity supply. If in any doubt, consult a qualified electrician.

▶ The electrical safety of this washing machine can only be guaranteed when continuity is complete between it and an effective earthing system which complies with current local and national safety regulations. It is most important that this basic safety requirement is present and regularly tested and, where there is any doubt, the household 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).

▶ Do not connect the washing machine to the mains electricity supply by a multi-socket adapter, extension lead or similar. These do not guarantee the required safety of the machine (fire hazard due to the risk of overheating).

▶ If defective safety-relevant components are replaced, Miele can only guarantee full compliance with safety requirements if genuine Miele replacement parts are used.

▶ The electrical socket must be easily accessible after installation so that the machine can be disconnected from the electricity supply if necessary.

▶ If the power supply cord is damaged, it must only be replaced with a specific power supply cord of the same type (available in the Miele online shop or from Miele Customer Service). For safety reasons, replacement may only be carried out by a suitably qualified specialist or Miele Customer Service.

▶ The manufacturer's warranty will be invalidated if the washing machine is not repaired by a qualified specialist or Miele Customer Service.

▶ Maintenance or repairs by unqualified persons could be extremely dangerous. The manufacturer cannot accept liability for unauthorised work. Maintenance or repairs must only be carried out by a qualified specialist or Miele Customer Service.

▶ This washing machine must not be installed and operated in mobile installations (e.g. on a ship).

▶ Do not make any alterations to the machine, unless authorised to do so by Miele.

▶ In the event of a fault or for cleaning purposes, the washing machine is only completely isolated from the electricity supply when:

- it is switched off at the wall socket and the plug is withdrawn, or
- it is switched off at the mains circuit breaker.

▶ The Miele Waterproof system protects from water damage provided the following conditions have been met:

- The machine is correctly plumbed in and connected to the electricity supply.
- If a fault or damage has been identified, the machine must be examined by a competent person before further use, and repaired if necessary.

▶ The water flow pressure must be at least 100 kPa and must not exceed 1000 kPa.

▶ Temporary or permanent operation with a self-sufficient or non-mains synchronous energy supply system (e.g. isolated networks, back-up systems) is possible. A requirement for the operation is that the energy supply system complies with all current local and national requirements that apply to stand-alone, solar and/or battery systems. The protective measures provided in the installation and in this Miele product must also be assured in their function and operation in isolated operation or in non-mains synchronous operation, or replaced with equivalent measures in the installation.

▶ This washing machine is supplied with a special lamp to cope with particular conditions (e.g. temperature, moisture, chemical resistance, abrasion resistance and vibration). This special lamp must only be used for the purpose for which it is intended. The special lamp is not suitable for room lighting. Replacement lamps may only be installed by a qualified specialist or Miele Customer Service. This washing machine contains *1* light source corresponding to energy efficiency class E.

▶ In areas which may be subject to infestation by cockroaches or other vermin, pay particular attention to keeping the machine and its surroundings in a clean condition at all times. Any damage which may be caused by cockroaches or other vermin will not be covered by the machine warranty.

Correct use

▶ Do not install the washing machine in a room where there is a risk of frost. Frozen hoses may burst or split. The reliability of the electronic control unit may be impaired at temperatures below freezing point.

▶ Before commissioning the washing machine, check that the transit bars on the back of the machine have been removed (see “Installation” ⇨ “Removing or reinstalling the transit bars”). If the transit bars are not removed, damage to both the washing machine and adjacent furniture or appliances may occur during spinning.

▶ Turn off the tap if the machine is to be left for any length of time (e.g. holiday), especially if there is no floor drain (gully) in the immediate vicinity.

▶ Flooding danger.
If hooking the drain hose into a laundry washtub, check that the water can drain off quickly enough to prevent the laundry tub from overflowing. Make sure the drain hose is secure, so that the force of the water flowing out of the hose does not dislodge it.

▶ 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), which in turn can result in damage to the laundry.

▶ Take care when opening the drum door after using the steam function. There is a danger of burning due to escaping steam and the high temperature of the surface of the drum as well as the porthole glass. Stand back away from the machine and wait until the steam has dissipated.

▶ The maximum dry laundry load size is 10.0 kg. See the "Programme overview" for the maximum recommended load sizes for individual programmes.

▶ Do not use solvent based cleaning agents, e.g. those containing benzine, in this machine, as this may result in damage to component parts and create toxic fumes. Such agents also pose a fire and explosion hazard.

▶ Textiles which have been pre-treated in solvent based cleaning agents must be thoroughly rinsed in clean water before being washed in the machine.

▶ 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 a proprietary natural citric acid based descaling agent. Miele recommends using Miele descaler for washing machines which is available to order online at shop.miele.com (depending on country) or from Miele. Strictly observe the instructions on the packaging.

▶ Do not use solvent based cleaning agents, e.g. those containing benzine, to clean the external surfaces of the machine. They can cause damage to plastic surfaces.

▶ Only use dyes specified by the manufacturer as being suitable for use in a domestic 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.

▶ If detergent comes into contact with the eyes, rinse them thoroughly with lukewarm water immediately. If swallowed, seek medical assistance immediately and retain the packaging or label for reference. Those with skin problems or sensitive skin should avoid their skin coming into contact with detergent.

Accessories and spare parts

▶ Miele assumes no liability for the use of accessories that are not genuine Miele accessories. Miele is not liable for warranty, guarantee and/or product liability claims if damage or defects are due to the use or installation of accessories that do not originate from Miele or have not been approved by Miele.

▶ A Miele tumble dryer can be stacked on top of a Miele washing machine using the appropriate stacking kit (available as an optional accessory). Please make sure you order the correct one for the Miele washing machine and Miele tumble dryer.

▶ Miele original spare parts are kept in stock for at least 10 years and up to 15 years after discontinuation of your washing machine.

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

Sustainability and environmental protection

Disposal of the packing material

The packaging material is used for handling and protects the appliance from transport damage.

Recycling the packaging reduces the use of raw materials in the manufacturing process and also reduces the amount of waste in landfill sites. Ensure that any plastic wrappings, bags etc. are disposed of safely and kept out of the reach of babies and young children. Danger of suffocation.

Only for Australia: Note for installer: Expanded polystyrene (EPS) packaging included. Please retain and dispose of EPS packaging responsibly. For further information, please contact Miele.

Disposing of your old appliance

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. You are also responsible for deleting any personal data that may be stored on the appliance prior to disposal. Please ensure that your old appliance poses no risk to children while being stored prior to disposal.

Optimum use of energy and water

Wash with the maximum load size for the programme in question. This achieves the most efficient use of energy and electricity.

Programmes that are more efficient with regard to energy and water consumption generally have a longer programme running time. By extending the programme running time, the wash temperature can be reduced while still providing the same wash results.
If, for example, the *ECO 40-60* and *Cottons* 40 °C or 60 °C programmes are compared with each other, the *ECO 40-60* programme is more efficient in terms of energy and water consumption. However, the programme running time of the *ECO 40-60* programme is longer than that of the *Cottons* 40 °C or 60 °C programme.

Modern detergents make it possible to wash at lower temperatures (e.g. 20 °C). Using lower temperature settings will save energy.

Use the *Express 20* programme for small, lightly soiled loads.

Drying in the tumble dryer

The spin speed selected affects the residual moisture in the laundry. The higher the spin speed, the lower the residual moisture in the laundry.

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

Sound reduction

The spin speed selected affects the sound emissions of the washing machine. The higher the spin speed, the greater the sound emissions of the washing machine.

Move the final spin of the washing machine outside of quiet periods and/or use the *Extra quiet* Extra.

Using detergents

Use the TwinDos system for exact dispensing.

Adjust any manual dosage to the degree of soiling of the laundry.

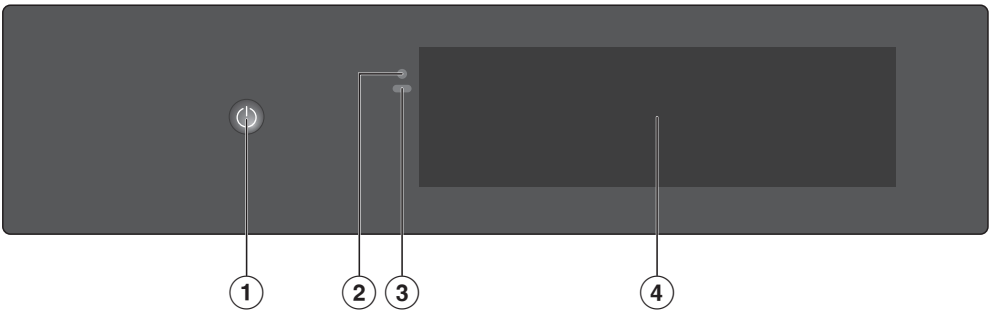
Do not exceed the amounts of detergent recommended by the manufacturer on the packaging.

Familiarising yourself with the appliance

Your washing machine

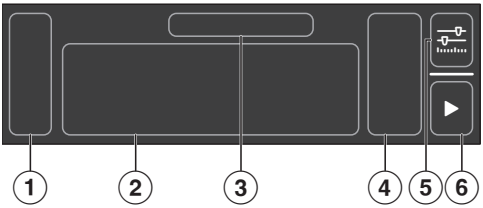
① Waterproof system inlet hoses for cold mains water and hot water
② Electrical connection
③ Control panel
④ Detergent dispenser drawer
⑤ Door
⑥ Drain hose
⑦ Plinth flap
⑧ Opening tab
⑨ Sealing ring
⑩ Drain filters
⑪ TwinDos

Control panel



① On/Off ⏻ sensor
② Optical interface (for Customer Service)
③ Proximity sensor (MotionReact)
④ Display

Main menu in the display



① Sidebar
② Programmes
③ Name of the highlighted programme
④ Parameters for the programme
⑤ Further parameters
⑥ Start

Symbols

≡	Menu
	Programmes
♡	Favourites
	Remote control/MobileStart Networking
	Further parameters
▶	Start
■	Stop
❚❚	Pause
	Settings
	OK
	Sounds
	System lock
	Maintenance
	Wipe protection
①	TwinDos compartment 1
②	TwinDos compartment 2
	Capsule with detergent
	Capsule with care product
	Capsule with additive

Operating principles

Switching the washing machine on or off

The ⏻ *On/Off* sensor is recessed.

- Press ⏻ *On/Off* until the washing machine switches on or off.

Useful tip: With MotionReact, the washing machine is automatically switched on when you approach it.

Navigating the display

The display can be scratched by pointed or sharp objects, e.g. pens. Only touch the display with your fingertips.

- Swipe your finger in the required direction in the display.
- To select a menu option, press the required menu option or symbol.

The menu option is highlighted.

Exiting a menu level

You are in a menu.

- Depending on the menu, select × *Close window* or ⮌ *Back*.

The higher-level menu is displayed.

Selecting a programme

You are in the main menu.

- Swipe your finger across the display until the required programme is highlighted.
- If you want to start the programme with the parameters displayed, select ▶ *Start*.

Useful tip: If you want to change the parameters, select the icon of the programme or *Further parameters*.

Automatic safety lock

The washing machine has an automatic safety lock. The washing machine can only be started within 60 seconds of the last operational step on the control panel.
If the 60 seconds are exceeded, the ▶ *Start* sensor goes dark. The following question appears in the display: *Release safety lock?*. Confirm the question with *OK*.
You then have another 60 seconds in which to start the wash programme.

Adjusting parameters

You can switch parameters on or off (e.g. Extras) or adjust them on a scale (e.g. the temperature).

Switching parameters on or off

Activated parameters are highlighted in colour.

- Select the parameter you want to switch on or off.
- Confirm with ✓ *OK*.

The parameter is saved.

Changing parameters on a scale

- Select the parameter you want to change.
- Move the scale to the left or right until the required value is highlighted.
- Confirm with ✓ *OK*.

The value is saved.

Displaying the pull-down menu

The pull-down menu provides quick access to certain functions. You can also open notifications via the pull-down menu.



- Open the pull-down menu by pulling it down from the top centre of the display.
- Touch × *Close window* to close the pull-down menu.

Displaying the context menu

When you are in certain menus, a context menu can be displayed. This allows you to rename or move Favourites, for example.

- To open the context menu, press and hold a Favourite.
- Make the required change.
- To close the context menu, select × *Close window*.

Networking

Your washing machine is equipped with an integrated Wi-Fi module. The Wi-Fi module makes it possible to connect to your home network and to use the Miele App on a mobile device.

Once your washing machine has been connected via Wi-Fi, the connection is automatically re-established every time it is switched on.

Make sure that your Wi-Fi network signal is strong enough in the place where you intend to install your washing machine.

Connecting your washing machine to your Wi-Fi network will increase energy consumption, even when the washing machine is switched off.

Smart Extras via the Miele App*

Networking via the Miele App gives you access to numerous Smart Extras, including:

- Accessing status information.
- Using additional helpful functions.
- Keeping your washing machine up to date with the latest Miele developments via software updates.

You can find more detailed information about Smart Extras on the Miele website, in the Apple App Store® or in the Google Play Store™.

*This is a separate digital offer from Miele & Cie. KG. The range of functions can vary depending on the model and the country. Acceptance of the General Terms and Conditions and Privacy Policy for Miele digital products and services in the Miele App is required. Miele reserves the right to change or discontinue the digital offers at any time.

SmartStart (only available in selected countries)

You can have your washing machine started automatically from outside with a suitable energy management system.

The washing machine must be networked with the Miele App.

Proximity sensor/MotionReact

The washing machine has a proximity sensor. The proximity sensor reacts to movement and detects when you approach the washing machine.

Depending on the operating status of the washing machine, you can trigger various actions using the proximity sensor, including switching on the washing machine.

You can adjust the settings for the proximity sensor to suit your personal requirements under ≡ *Menu* ▸ ⚙ *Settings* ▸ General ▸ *Proximity sensor*.

ComfortOpen

A motorised mechanism opens the door when a hand approaches the door handle sensor.

The door opens a little automatically at the end of the programme.

Drum lighting

The drum lighting illuminates the drum and the area in front of the washing machine. The drum lighting comes on automatically when the door is opened. The drum lighting will go out again automatically after a few minutes.

Defective drum lighting can only be replaced by Miele Customer Service.

AmbientLight

The washing machine has lighting for the door and for the TwinDos cartridges.

Door lighting

The door lighting indicates when and whether the door can be opened.

TwinDos lighting

The TwinDos unit lighting indicates when a TwinDos cartridge needs to be replaced. It also shows which TwinDos cartridge needs to be replaced.

CapDosing

CapDosing is a system for dispensing special-purpose detergents, fabric softeners and boosters using capsules.

The capsules are available with 3 different labels:

- = Fabric care product (e.g. fabric softener, proofing agent)
- = Additive (e.g. detergent enhancer)
- = Special-purpose detergent (for the main wash only)

Each capsule contains the correct amount for one wash cycle.

The capsules are available from the Miele online shop or from your Miele specialist dealer.

⚠ Capsules pose a health risk.
The ingredients of capsules can be hazardous to health if they are swallowed or come into contact with skin.
Keep capsules out of the reach of children.

TwinDos

TwinDos is a system for the automatic dispensing of detergents.

TwinDos can be operated with Miele UltraPhase 1 and UltraPhase 2 or with commercially available liquid detergents and fabric softeners.

Refill containers are required for the use of commercially available products. The refill containers are available from the Miele online shop or from your Miele specialist dealer.

UltraPhase 1 and UltraPhase 2

UltraPhase 1 and 2 are a liquid detergent system and together they make a complete detergent for white and coloured laundry.

UltraPhase 1 is a liquid detergent which dissolves dirt and removes the most common stains. UltraPhase 2 is a bleaching agent and removes stubborn stains. For the best washing result, these two agents are dispensed at separate times during the wash process.

UltraPhase 1 and 2 are available from the Miele online shop or from your Miele specialist dealer.

TwinDos cartridge detection

The TwinDos cartridges have a barcode. The washing machine uses this barcode to identify the detergent contained in the cartridge and automatically sets the corresponding parameters.

PowerWash

The PowerWash technique uses less water than conventional washing techniques. Energy consumption is reduced because less water needs to be heated. This results in some special features in the programme sequence.

- At the start of the wash programme, the washing machine spins a few times.
- If necessary, the washing machine will pump water away and take in a little more fresh water.
- Noise when heating the water on the heater elements (bubbling noises).

FlexLoad

The washing machine measures the amount of laundry in the drum after the programme has started. Once the measurement is complete, the load determined is displayed at ⓘ *Information*. The time left, energy consumption and water consumption of the wash programme are adjusted to the determined load size.

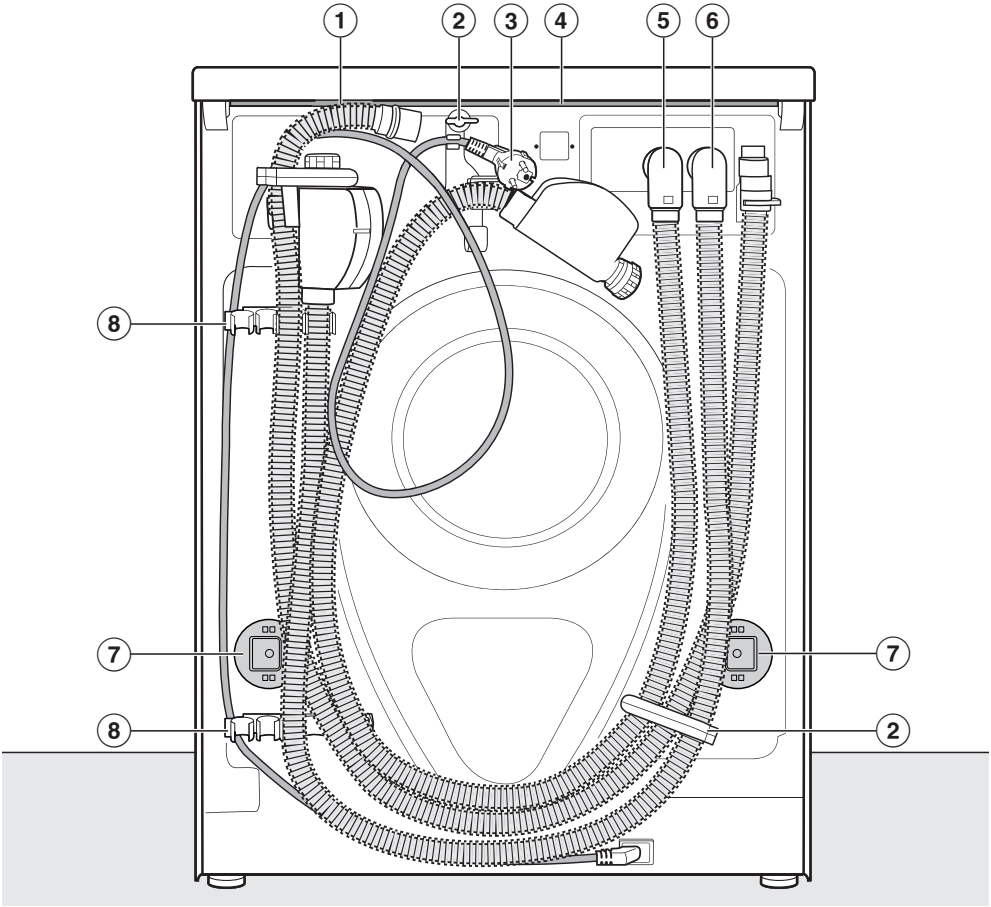
The time left that is initially displayed can be significantly reduced.

Optional accessories

Products specially tailored to your washing machine – such as detergent, fabric care products, additives, appliance care products and accessories – are available from the Miele online shop and Miele Customer Service.

You can access the Miele online shop via the following QR code:

Rear view



① Drain hose

② Transport clips for inlet and drain hoses and power supply cord

③ Power supply cord

④ Protruding lid for holding when moving the appliance

⑤ Waterproof system water inlet hose for cold water (drinking water)

⑥ Waterproof system water inlet hose for warm water

⑦ Safety caps for transit bars

⑧ Transport clips for inlet and drain hoses and for storing transit bars when not in use

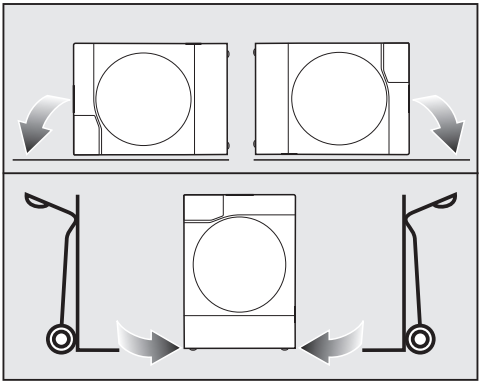
Requirements for the installation surface for the washing machine

- Connections for electricity, water intake and drainage should be installed in such a way that they remain accessible when the washing machine is in its final position.
- The best base is a concrete floor.
- When installing on wooden beam flooring, the base should be reinforced with a plywood base (minimum size: 59 x 60 x 3 cm). The base should span several joists and be bolted to the joists and not only to the floorboards. Check for the presence of pipes and cables first.
- Do not place on soft flooring (e.g. carpet).

Transporting the washing machine to the installation surface

⚠ Danger of injury to people and damage to property caused by moving the appliance incorrectly
If the washing machine tips up, there is a danger of injury to people and damage to property.
Make sure the washing machine is stable during transportation.

Transporting with a hand trolley



■ If transporting the washing machine, make sure its left or right side panel is:

- lying horizontally (e.g. in a car) or
- upright on a hand trolley

Carrying the washing machine to its installation surface

The transport packaging material must be removed before carrying the washing machine.

⚠ Danger of injury due to unsecured lid.
Make sure the fixings at the back of the lid are secure. They may become brittle due to external circumstances. There is a danger of the lid being pulled off when carrying the appliance.
Before carrying the appliance, check that the lid is secure where it protrudes at the back.

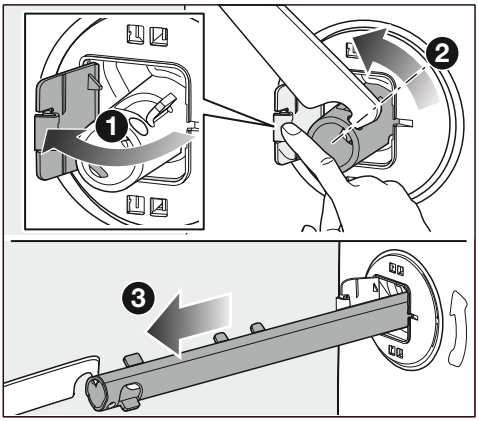
■ Carry the washing machine by the front adjustable feet and by the lid where it protrudes at the back of the machine.

Removing or reinstalling the transit bars

The transit bars must only be removed after the washing machine has reached its destination.

Removing the transit bars

Remove the left-hand transit bar first, followed by the right-hand transit bar.



❶ Push the cover out.

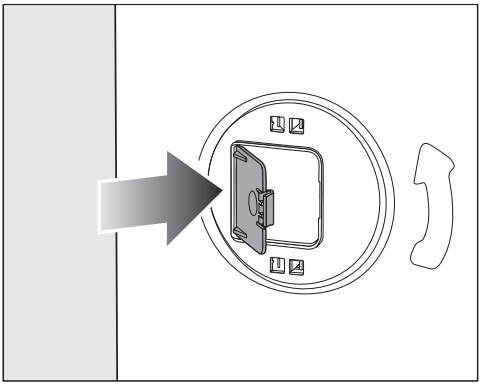
❷ Using the spanner supplied, turn the transit bar 90°.

❸ Then pull the transit bar out.

■ Remove the right-hand transit bar in the same way.

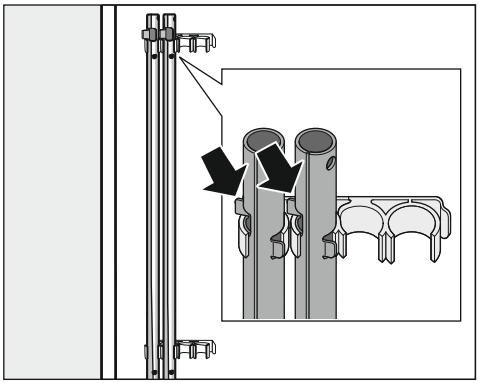
Covering the holes

⚠ Risk of injury from sharp edges.
There is a risk of injury from reaching into holes that are not covered.
After removing the transport safety device, cover the exposed holes.



■ Press the covers firmly shut until they click into place.

Securing the transit bars

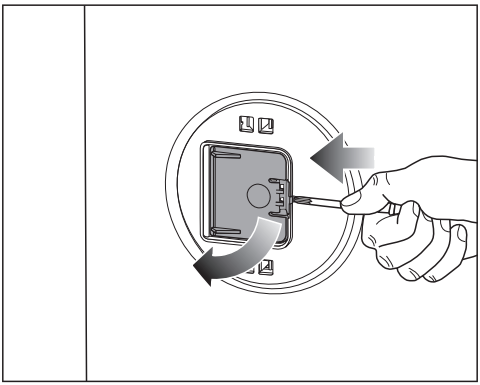


■ Secure the transit bars to the rear panel of the washing machine. Make sure that the top retainer is located above the holder.

Refitting the transit bars

The transit bars must be installed before transport, e.g. when moving house.

⚠ Risk of damage from incorrect transport.
The washing machine may become damaged if moved without the transit bars in place.
Keep the transit bars in a safe place. Fit them again if the machine is to be moved (e.g. when moving house).



- Press against the retainer with a sharp object (a narrow screwdriver, for example).

The cover will open.

- Lift the drum slightly from the inside and hold the drum in this position.
- Push the transit bars back into the openings.
- Turn the transit bars inwards by 90° using the spanner supplied.

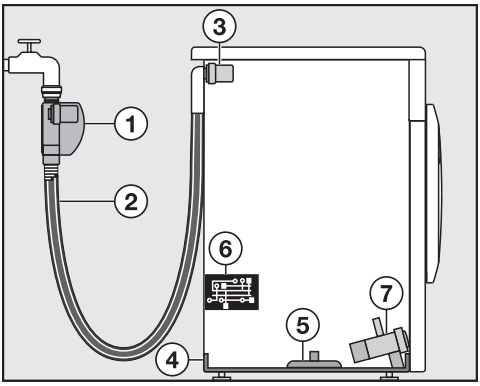
The Miele water protection system

The Miele water protection system protects all parts of the washing machine from water damage.

The system consists of the following main components:

- the water inlet hose
- the electronic module, and the drainage and overflow protection
- the drain hose

The Miele Waterproof system (WPS)



① Solenoid valve inside the casing of the water inlet hose

② Sheathed water inlet hose with pressure-resistant inner hose

③ Solenoid valve for water intake control

④ Floor tray

⑤ Float switch

⑥ Electronic module

⑦ Drain pump

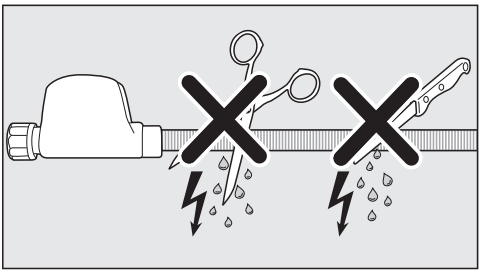
Water inlet hoses

- A solenoid valve ① that shuts off the water inlet directly at the tap is located in the casing of the water inlet hoses. If the solenoid valve is faulty, the pressure-resistant inner hose ② and the solenoid valve for water intake control ③ will provide additional protection.
- The inner hose and the solenoid valves have a burst pressure of at least 6000 kPa (60 bar).
- The sheathed water inlet hose ② consists of a pressure-resistant inner hose and an outer sleeve. If water leaks from the inner hose, it is guided through the outer sleeve and into the floor tray ④. The float switch ⑤ closes the solenoid valves ① and ③. This shuts off the water inlet and prevents any more water from flowing into the appliance. Water in the suds container is pumped away.

Special features of the water inlet hose

⚠ Risk of electric shock from mains voltage.
There are live electrical components in the water inlet hose.
The water inlet hose must never be connected in an area subject to spray water, e.g. from a bath or shower.





Electronic module and casing

- Drainage protection:
  Any leaking water from the washing machine is collected in the floor tray ④ in the base of the machine. The float switch ⑤ signals the water in the floor tray to the electronic module ⑥. The electronic module closes the solenoid valves ① and ③. This shuts off the water inlet and prevents any more water from flowing into the appliance. In addition, the electronic module ⑥ activates the drain pump ⑦ and the water in the suds container is pumped away.
- Overflow protection:
  The electronic module constantly monitors the water level in the washing machine. If the water level exceeds a certain level, the drain pump ⑦ switches on and pumps the excess water away. Should the water level rise repeatedly in an uncontrolled way, the drain pump ⑦ will switch on continuously and the washing machine indicates a fault, which is accompanied by a buzzer.

Drain hose

The drain hose is protected by a ventilation system which prevents the machine from being emptied completely.

Water inlet

⚠ Health risk and risk of damage due to contaminated mains water.
The quality of the water used must correspond to the drinking water specification of the country in which the washing machine is being operated.
Always connect the washing machine to potable water.

The water connection pressure needs to be between 100 kPa (1 bar) and 1000 kPa (10 bar). If the water connection pressure exceeds 1000 kPa (10 bar), a pressure reducing valve must be installed.

Connection to the water supply should incorporate a tap with a ¾" threaded union. If a tap is not available, only a qualified installer may connect the washing machine to the mains water supply.

This washing machine can be operated with cold mains water and/or hot water.

The factory default setting is cold water.

⚠ Damage caused by incorrect water connection.
Connection to hot water only is not permitted. The washing machine requires a cold water connection when operating with hot water in order to control the temperature of the wash water.
Always connect the washing machine to cold mains water.

Hot water

The preferred temperature is 55°C. The temperature must not exceed 60°C. Consult a qualified plumber if the temperature exceeds 60°C.

Connecting the water inlet hoses

To use warm water, the washing machine must be set to *Hot water main wash* or *Hot water mw + rinse* in ☰ ▸ ⚙ *Settings* ▸ *Appliance functions* ▸ *Water inlet*.

- Screw the water inlet hoses with the nut onto the thread of the taps.
  - Water inlet hose with **blue** marking to cold water
  - Water inlet hose with **red** marking to warm water

To prevent damage to the inner hose, hold the valve casing firmly and turn the nut.

- Slowly turn on the taps and check the connections for leaks.
- Correct the position of the seal and screw thread if necessary.

Useful tip: If the washing machine is only operated with cold water, the water inlet hose with the red marking can be secured to the back of the washing machine.

Maintenance

Only use a **Miele Waterproof system** hose should you need a replacement.

⚠ Damage caused by dirty water.
This washing machine has a filter in the hose connection to the casing to protect the solenoid valves.
This filter must not be removed.

Drainage

The suds are drained through a drain pump with a 1 m high delivery head. For the water to drain freely, the hose must be free of kinks.

If required, the hose can be extended to a length of up to 5 m. The necessary parts can be ordered from Miele Customer Service.

For a delivery head of more than 1 m (up to a max. of 1.8 m), a replacement drain pump will need to be fitted. Please contact Miele for advice. For a delivery head of 1.8 m, the hose can be extended to a length of up to 2.5 m. The necessary parts can be ordered from Miele Customer Service.

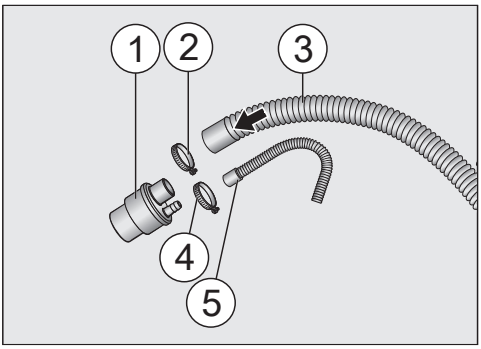
Drain hose connection options

1. Connect the drain hose to a plastic drain pipe
2. Connect the drain hose to a sink
3. Route the drain hose to a floor drain (gully)
4. Hang the drain hose in a sink or basin

Drain adapter (only available in selected countries)

Miele offers a drain adapter for connection to a plastic drain pipe or sink as an optional accessory (please note the drain adapter may not be available in all countries). The drain adapter offers the option of connecting only the washing machine or the washing machine together with the tumble dryer.

Connecting the hoses to the drain adapter



① Drain adapter

② Hose clip

③ Washing machine drain hose

④ Hose clip

⑤ Tumble dryer drain hose

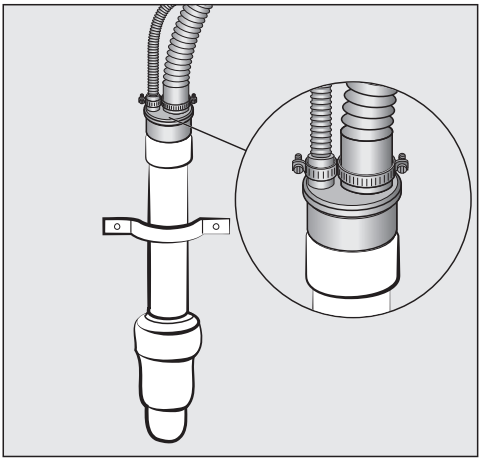
- Connect the hoses to the drain adapter as shown in the image.
- Secure the hoses with hose clips.

Connecting to the plastic drain pipe

The drain adapter fits onto a standpipe with a diameter of DN 40 or DN 50.

The maximum delivery head of the washing machine is 1 m. The length of the drain hose must not exceed 2.5 m.

Useful tip: The sealing ring supplied with the drain adapter must not be used.

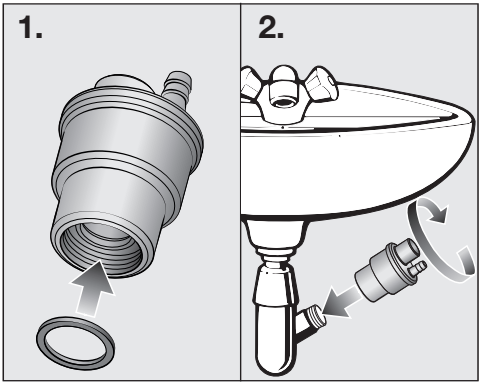


- Insert the drain adapter in the plastic drain pipe.

Connecting to the sink

It is possible to connect to a sink drain outlet using a $1^1/_2$" thread.

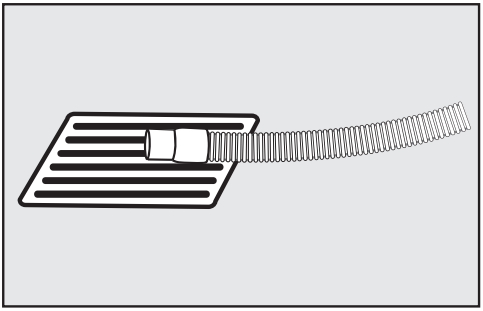
Useful tip: Ensure that the seal is inserted in the adapter.



- Insert the seal in the drain adapter.
- Screw the adapter onto the sink drain outlet.

Routing the drain hose to a floor drain (gully)

Useful tip: The maximum drain length is 5 m.

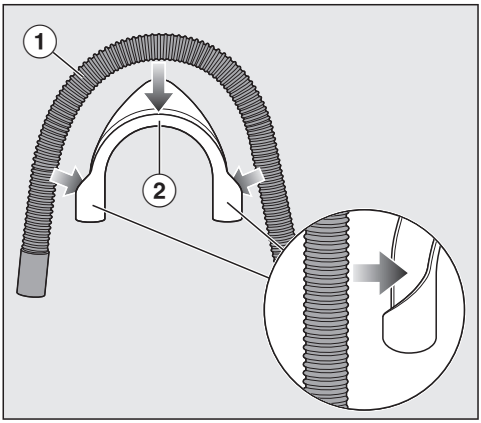


- Place the drain hose on the floor drain.
- If necessary, secure the hose to prevent it from slipping.

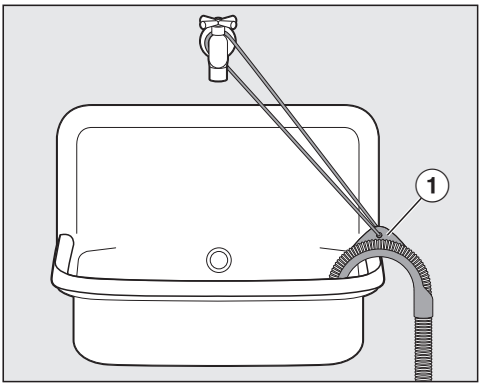
Hanging the drain hose in a sink or basin

If drainage is via the sink, rapid drainage must be guaranteed. Otherwise there is a risk of flooding or backsiphonage into the washing machine.

Useful tip: To prevent the drain hose from slipping, use the enclosed elbow.



- Place the drain hose ① in the elbow ②.



- Hang the drain hose over the sink.
- Secure the elbow from slipping using a strap and the eyelet ①.

Electrical connection

The washing machine is supplied with a mains cable with moulded plug ready for connection to a switched socket.

The socket should be easily accessible after the machine has been installed. If the switch is not accessible after installation, an additional means of disconnection must be provided for all poles.

⚠ Risk of fire from overheating!
Connecting the washing machine to a multi-socket plug adapter or to an extension lead can overload the cable.
Do not use an extension lead or multi-socket plug adapter.

All electrical work must be carried out by a suitably qualified and competent person, in strict accordance with national and local safety regulations.

For extra safety, it is advisable to install a suitable residual current device (RCD) with a trip current of 30 mA. Ensure power is not supplied to the appliance until after the installation has been completed.

If the mains connection cable is damaged, it must only be replaced with a specific mains connection cable of the same type (available from Miele). For safety reasons, such replacement may only be carried out by a suitably qualified and competent technician or by a Miele authorised service technician, in order to avoid a hazard.

The data plate indicates the nominal power consumption and the appropriate fuse rating. Compare this information with the data of the on-site electrical connection.
If in any doubt, consult a qualified electrician.

Temporary or permanent operation with a self-sufficient or non-mains synchronous energy supply system (e.g. isolated networks, back-up systems) is possible. A requirement for the operation is that the energy supply system complies with all current local and national requirements that apply to stand-alone, solar and/or battery systems.
The protective measures provided in the domestic installation and in this Miele product must also be assured in their function and operation in isolated operation or in non-mains synchronous operation, or replaced with equivalent measures in the installation.

Aligning the washing machine

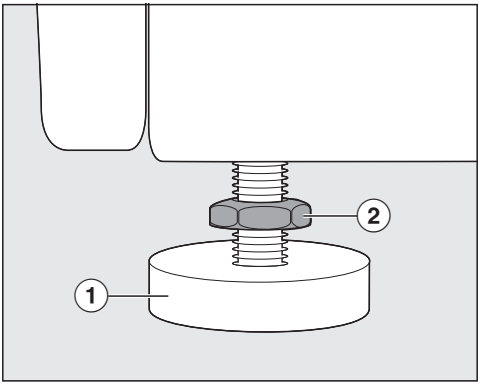
⚠ Risk of damage due to incorrectly aligned washing machine.
There is a danger of the washing machine moving about if the feet are not secured.
Turn all four counter nuts for the feet until they sit firmly up against the housing. Please also check this for the feet which did not need adjustment.

The washing machine must stand perfectly level on all 4 feet. This is the only way to ensure safe and proper operation.

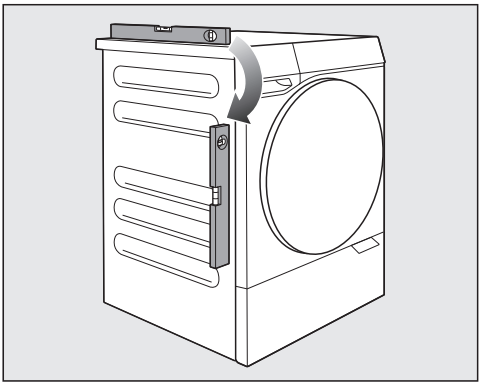
Incorrect installation may increase water and energy consumption. The washing machine can also move around during spinning.

Unscrewing the feet and positioning the washing machine vertically

The appliance is supplied with all feet screwed in.



- Using the spanner supplied, turn the counter nut ② in a clockwise direction.
- Then turn the counter nut ② together with the foot ① to unscrew.



- Use a spirit level to check the washing machine is standing level.

If the washing machine is vertical, the feet still need to be secured.

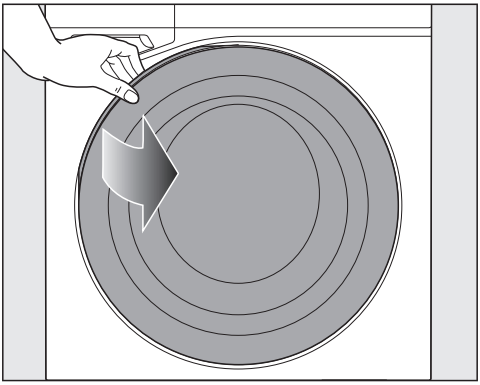
Securing the feet

- Hold the foot ① securely with water pump pliers.
- Use the spanner to screw the counter nut ② tight against the casing.

Removing accessories from the drum

There are accessories in the drum.

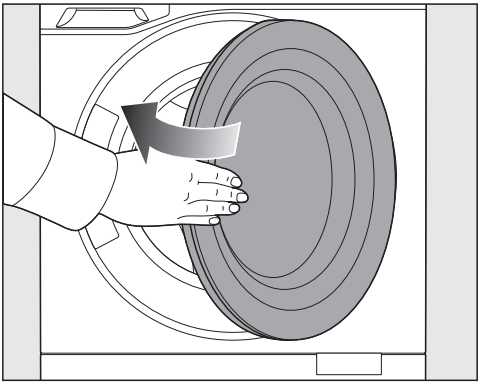
- Switch on the washing machine. Approach the washing machine or press ⏻ *On/Off*.



- Touch the door.

The ComfortOpen function opens the door a little.

- Remove the accessories.



- Shut the door with a gentle swing.

Additional installation requirements

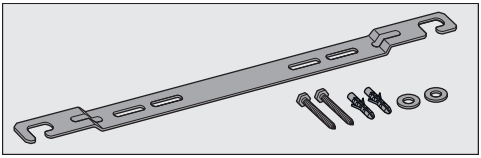
Installation on a plinth

⚠ Injury can occur if the washing machine has not been adequately secured.

If installing on a plinth, the washing machine must be secured to the plinth in order to ensure it cannot fall or slip.

Secure the washing machine with the MTS floor anchoring (see figure).

The washing machine can be installed on a plinth provided on site. Secure the washing machine to the plinth with the MTS floor anchoring.



The washing machine can also be mounted on a plinth with drawer (WTS 610).

All parts are available from the Miele online shop or Miele Customer Service.

Installing under a continuous worktop

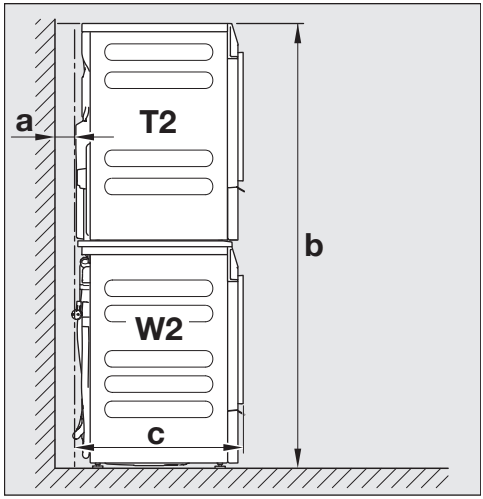
⚠ Risk of electric shock due to exposed cables.
There is a risk of coming into contact with live parts while the lid is removed.
Do not remove the washing machine lid.

This washing machine (with lid intact) can be pushed under a worktop (min. 850 mm) if there is space to do so.

Washer-dryer stack

The washing machine can be installed as a washer-dryer stack together with a Miele tumble dryer. A WTV stacking kit is required for this.

You can obtain a stacking kit from Miele.



a = at least 2 cm

b = WTV 601: 172 cm
WTV 611: 184.5 cm

c = 70 cm

Installation

Technical data

Height	850 mm
Width	596 mm
Depth	699 mm
Depth with door open	1170 mm
Height for building under	850 mm
Width for building under	600 mm
Depth for building under	600 mm
Weight	Approx. 95 kg
Capacity	10.0 kg dry laundry
Supply voltage	See data plate
Rated load	See data plate
Fuse rating	See data plate
Consumption data	See “Programmes”
Minimum water connection pressure	100 kPa (1 bar)
Maximum water connection pressure	1000 kPa (10 bar)
Water inlet hose length	1.60 m
Drain hose length	1.50 m
Length of power supply cord	2.00 m
Maximum delivery head	1.00 m
Maximum drainage length	5.00 m
LEDs	Class 1
Test certifications awarded	See data plate
Power rating in off mode	0.50 W
Networked standby	2.00 W
Frequency range	2.4000–2.4835 GHz
Maximum transmission power	< 100 mW

⚠ Damage resulting from incorrect installation and connection.
Installing and connecting the washing machine incorrectly will cause serious damage.
Please follow the installation instructions.

This washing machine has undergone a complete functional test at the factory. Some residual water will therefore remain in the drum from this process.

Requirements for networking

Note the following requirements for networking:

1. A home Wi-Fi network is available at the installation site.
   Have the Wi-Fi password ready.
2. The Miele App is available on a mobile device.
3. You have a user account in the Miele App.

You can also carry out networking at a later date. Skip the “Networking” menu option during commissioning.

Commissioning procedure

- Approach the washing machine or press ⏻ *On/Off*.

The display shows the first step for commissioning.

- Follow the steps in the display.

Commissioning is not complete until the commissioning programme has been completed. If the process is cancelled beforehand, the entire commissioning process must be repeated.

Operating sequence

We recommend the operating sequence listed below. This is customised to match your washing machine controls. This will allow you to make the best possible use of all special features.

You will find useful information and tips on the individual operational steps in “Operation”.

On the washing machine

1. Prepare the laundry
2. Switch on the washing machine
3. Load the laundry
4. Close the door
5. If detergent is to be added via the dispenser drawer, add the detergent
6. Select a programme
7. Set the programme parameters
8. Start with ▶ *Start*

   The washing machine door is locked
9. End of the programme

Further operating options:

- Delay start
- AddLoad (add laundry)

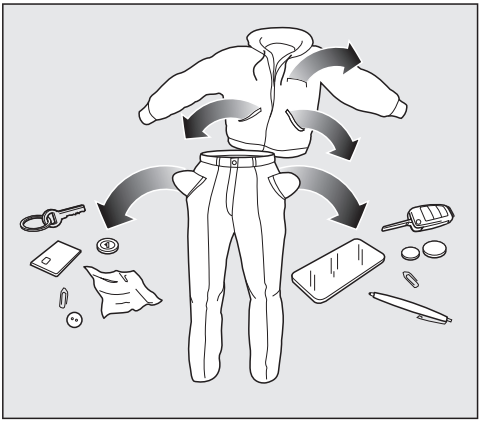
Via the App

1. Preparing the laundry
2. Switching on the washing machine
3. Loading the laundry
4. Closing the door
5. Select *MobileStart* on the washing machine
6. Start the washing machine with ▶ *Start*

   The washing machine door is locked.
7. If detergent is to be added via the dispenser drawer, fill with detergent
8. Select a programme via the App
9. Start the programme via the App
10. End of the programme

Preparing the laundry

⚠ Damage due to foreign objects.
Nails, coins, paper clips, and so on can cause damage to garments and components in the machine.
Check the laundry before washing and remove any foreign objects.



■ Empty all pockets.

Switching on the washing machine

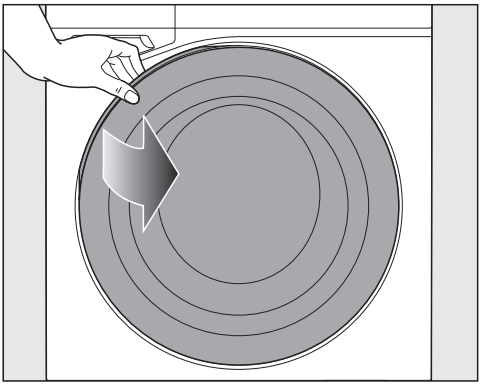
When the proximity sensor is activated, the washing machine switches on automatically.

■ Press ⏻ *On/Off*.

Loading the laundry

Check the drum for pets or foreign objects before loading it with laundry.

The door handle sensor registers when a hand touches the door and opens the door a little.

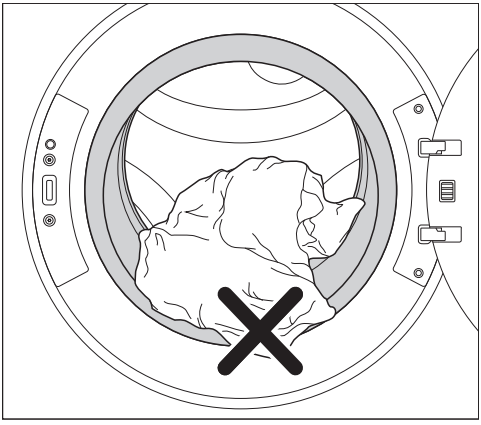


■ Open the door fully.

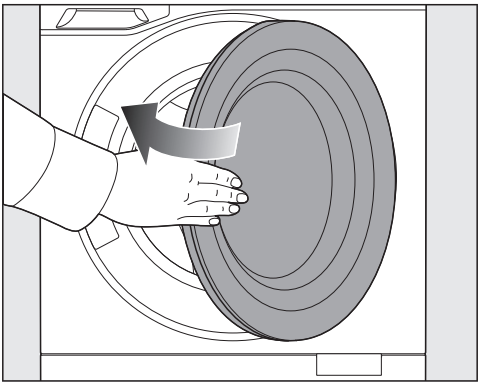
■ Unfold the laundry and load loosely in the drum.

Tips

- Mixing both large and small items gives better wash results and helps distribute the load evenly during spinning.
- Always ensure that the maximum load size is not exceeded for the different programmes. The relevant load size is always shown in the display.



■ Make sure that no items are caught between the door and the sealing ring.



- Shut the door with a gentle swing.

Selecting a programme

Useful tip: To view programme information, select ⓘ *Information*.

- Swipe your finger across the display until the required programme is highlighted.

Setting programme parameters

Selecting the temperature

You can alter the pre-set temperature of most programmes.

- Select *Temperature* using the slide control within the specified range.

Selecting TwinDos/capsules

TwinDos must be set up.

Useful tip: TwinDos is automatically activated in all programmes in which dispensing is possible and recommended.

- Select *TwinDos/Cap*.

Selecting a spin speed

You can alter the pre-set maximum spin speed for the programmes.

- Select *Spin speed* using the slide control within the specified range.

Selecting Extras

- Select *Further parameters*.

All parameters are displayed.

- Select *Extras*.
- Switch on the required Extra.

The list only shows the Extras that can be activated for the selected programme.

Certain combinations of Extras are not possible, e.g. *Short* and *Energy saving*. After selecting the first Extra, options that cannot be combined are no longer available for selection.

Adding detergent

Selecting TwinDos/capsules

TwinDos must be set up.

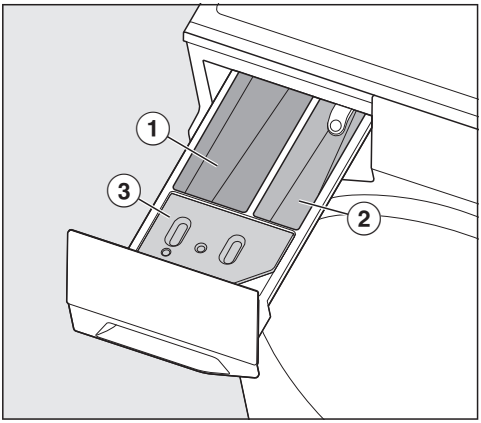
Useful tip: TwinDos is automatically activated in all programmes in which dispensing is possible and recommended.

- Select *TwinDos/Cap*.

Using the dispenser drawer

Ensure that TwinDos dispensing is deactivated.

- Pull out the dispenser drawer.



① compartment
Detergent for the main wash and soaking

② compartment
Detergent for the pre-wash

③ /compartment
Fabric softener, form conditioner or capsules

■ Add the detergent to the appropriate compartment.

Starting a programme

The washing machine has an automatic safety lock. The washing machine can only be started within 60 seconds of the last operational step on the control panel.

If the 60 seconds are exceeded, the ▶ *Start* sensor goes dark. The following question appears in the display: *Release safety lock?*. Confirm the question with *OK*.

You then have another 60 seconds in which to start the wash programme.

■ Select ▶ *Start*.

The door is locked and the programme starts running.

At the end of the programme

Unlocking the door during the Anti-crease phase

The door is locked in the Anti-crease phase. The door can be unlocked at any time.

■ Select ✓ *Confirm*.

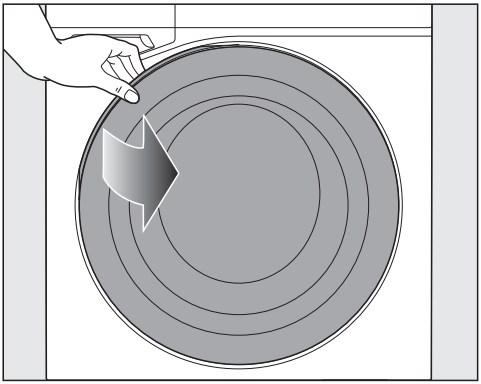
The door unlocks and can be opened.

Tips

- After the Anti-crease phase, the door will unlock automatically.
- When ComfortOpen is activated, the door opens a little automatically after the Anti-crease phase.

Opening the door

The door handle sensor registers when a hand touches the door and opens the door a little.



■ Open the door fully.

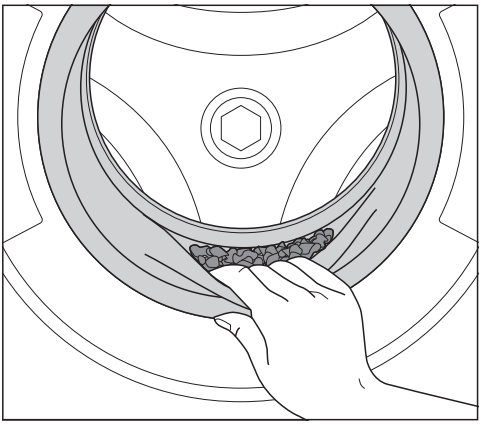
Removing the laundry

■ Remove the damp laundry from the drum.

■ To remove all items of laundry, turn the drum by hand.

Items left in the drum could discolour other items in the next wash or become discoloured themselves.
Check that all items have been removed from the drum.

What to do after removing laundry



- Check the door sealing ring for any foreign objects.
- If you used a capsule, remove it from the dispenser drawer.

Tips

- Leave the dispenser drawer slightly open to allow it to dry.
- For safety reasons, close the door when the machine is not in use. Otherwise there is a danger of objects being placed inadvertently in the drum. If these remain unnoticed and were washed in the next load, they could damage the laundry. An open door is also a danger to pets and children.

Special points for operation via App

Loading the laundry

- Open the door.
- Load the laundry.
- Close the door.

Activating operation via App

- Select *MobileStart*.

Locking the washing machine door

- Select ▶ *Start*.

The washing machine door is locked.

Selecting and starting a programme via the App

- Select the required programme.
- Select the programme parameters you want.
- Start the programme.

Time selection/SmartStart

Setting Delay start/SmartStart (only available in selected countries)

The Delay start function gives you several options for starting a programme at a later time. You can set the start time or the finish time of a programme. If a suitable energy management system is available, you can use the *SmartStart* function to start your washing machine automatically based on an external signal. The Delay start function is possible within a 24-hour period.

The *SmartStart* setting is only visible if the washing machine is networked with the Miele App and the SmartStart function has been activated in the settings.

- Select the ⇄ *Further parameters* symbol.
- Select *Start*.
- Set the time you want (*Start* or *Finish*).
- To start the wash programme with Delay start, select ▶ *Start*.
- To return to the programme selection, select ✓ *Confirm*.

SmartStart

You need a suitable energy management system. The energy management system connects to the Miele Cloud. The Miele Cloud controls the washing machine via the Miele App.

If you have activated SmartStart, a time period is now set. The washing machine will then be started by a suitable energy management system within the time period specified by you. If the energy management system does not send a signal by the latest possible start time, the washing machine will start automatically.

Add laundry (AddLoad)

Laundry can be added or removed if the display shows “Add laundry”.

- Touch the display.
- Select *Add laundry*.

The wash programme is interrupted and the door will open a little.

- Open the door fully.
- Add or remove laundry.
- Close the door.
- Follow the process for starting a programme again.

The programme will continue.

Programme modifications after starting the programme

Once the programme has started, neither the programme nor the parameters can be changed. To make a change, you must cancel the programme.

Cancelling a programme

- Select ■ *Stop*.

The display will ask whether you want to cancel the programme.

- Select *Yes*.

The programme is cancelled and the door is opened.

Interrupting a programme

- Switch off the washing machine.
- Switch the washing machine on again to continue the programme.

Favourites

You can save up to 12 programmes as Favourites. You can change the programme name and certain parameters for your Favourite programmes. The saved Favourites are called up using the programme selector Favourites.

Saving Favourites

You are in the main menu.

- Select a programme.
- Select the parameters you want.
- Select ♡ *Favourites*.

A keyboard is displayed.

- Enter the name for the Favourite.
- Select ✓ *Confirm*.

The programme has been saved as a ♥ Favourite. The programme can be started immediately via ▶ *Start*.

Useful tip: To save a programme directly as a Favourite, you can also select ♡ *Favourites* at the end of the programme.

Moving Favourites

You are in the ♡ *Favourites* menu. You have saved a programme as a Favourite and want to sort the list.

- Touch and hold the Favourite you want to move.

A context menu is displayed.

- Select ≡ *Move*.
- Move the *Favourite* to the required position.
- Confirm with ⓥ *OK*.

The change has been saved.

Editing Favourites

You are in the ♡ *Favourites* menu. You have saved a programme as a Favourite and want to edit the parameters.

- Move your finger in the display until the required Favourite lights up.
- Touch the ⇄ *Further parameters* symbol.

The parameters are displayed.

- Change the parameters you want.

The changes are saved.

Removing Favourites

You are in the ♡ *Favourites* menu. You have saved a programme as a Favourite and want to remove it from the list.

- Select the Favourite you want to remove.
- Select ♥ *Favourites*.
- You can delete it now.

The Favourite has been removed from the list.

Using TwinDos

TwinDos must be set up.

TwinDos is automatically activated for all programmes in which dispensing is possible.

Useful tip: The detergent dispensing quantities are preset. If too much foam builds up, the dispensing quantity can be reduced via *Settings* ⚙ ▸ *TwinDos* ▸ *Dosage amount*.

Detergent dispensing quantity entered for TwinDos

The UltraPhase 1 and 2 TwinDos cartridges have a barcode that is read by the washing machine. Therefore, you do not need to enter any dispensing quantities when using UltraPhase 1 and 2.

You must specify the dispensing quantities in the following cases:

- The barcode is defective.
- You are using a detergent from another manufacturer.

■ Select ☰ ▸ ⚙ *Settings* ▸ *Appliance functions* ▸ *TwinDos*.

■ Select the TwinDos cartridge compartment for which you want to enter or change the dispensing quantity.

■ Select *Dosage amount*.

■ Enter the dispensing quantity specified on the detergent packaging for **water hardness level 2 (medium), moderately soiled laundry and a load size of 4.5 kg.**

Useful tip: This information can be found in a printed table on detergent packaging.

The washing machine automatically calculates the amount of detergent required.

Using stain removers for TwinDos

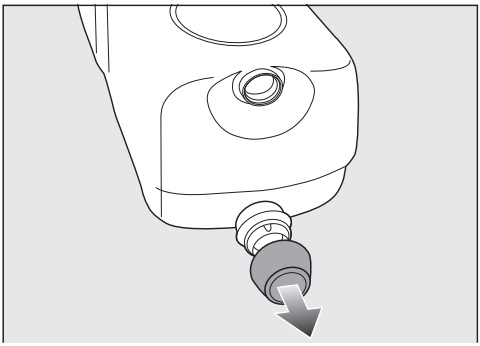
The following options are available when using stain removers:

- using Caps Booster and activating CapDosing
- adding stain removers via the dispenser drawer compartment II

Replacing the TwinDos cartridge

A message will appear in your washing machine display if a TwinDos cartridge is empty.

Preparing the TwinDos cartridge

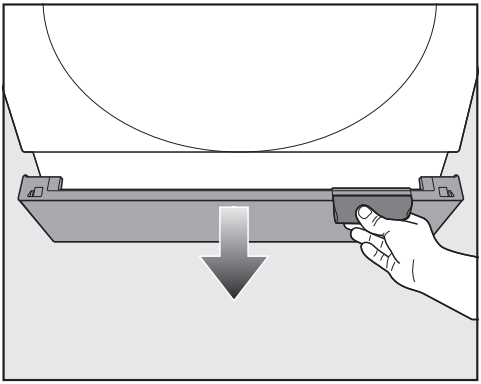


■ Remove the cover cap from the TwinDos cartridge.

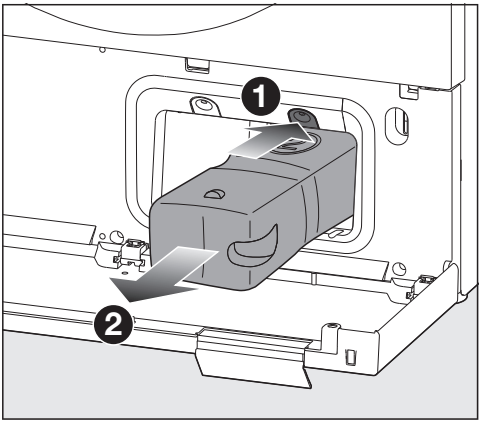
Replacing the TwinDos cartridge

■ Switch on the washing machine.

The plinth flap can break off.
Do not place anything on the plinth flap when it is open.



■ Open the plinth flap.

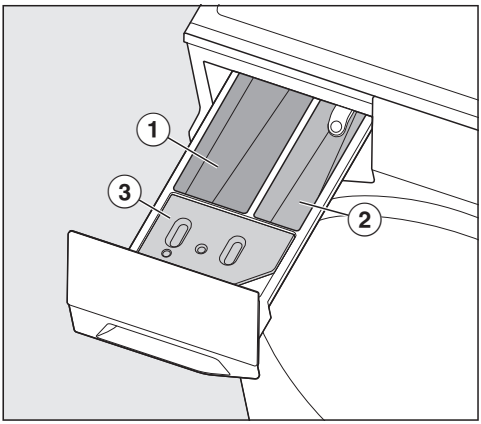


- Press the lock ❶ to release it.
- Pull out the empty TwinDos cartridge ❷.
- Insert a new TwinDos cartridge.

Using the dispenser drawer

Ensure that TwinDos dispensing is deactivated.

- Pull out the dispenser drawer.



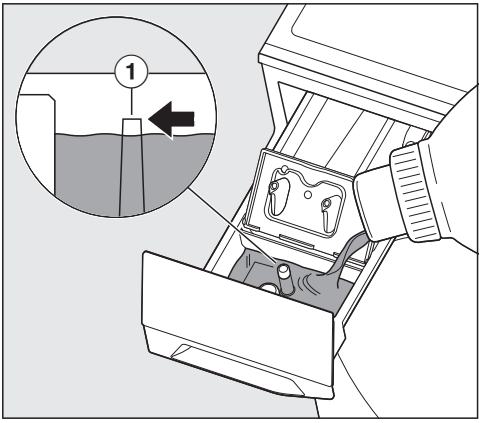
① compartment
Detergent for the main wash and soaking

② compartment
Detergent for the pre-wash

③ ❀/ compartment
Fabric softener, form conditioner or capsules

- Add the detergent to the appropriate compartment.

Adding fabric softener



- Add fabric softener, form conditioner or liquid starch to the ❀ compartment. **Do not exceed the maximum level mark** ①.

The agent will be automatically dispensed in the final rinse cycle. At the end of the programme, a small amount of water remains in the ❀ compartment.

Liquid starch results in clogging. If clogged, the siphon in the ❀/ ▭ compartment will not work and the compartment can overflow.
Clean the siphon particularly thoroughly after using liquid starch a few times.

Using detergent tablets or pods

- Always put detergent tablets or pods directly in the drum with the laundry.

They cannot be added via the dispenser drawer.

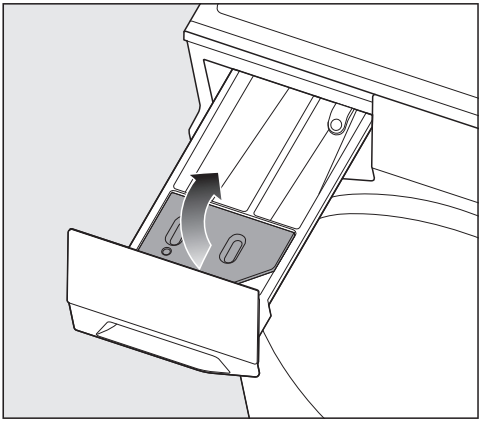
CapDosing

⚠ Capsules pose a health risk.
The ingredients of capsules can be hazardous to health if they are swallowed or come into contact with skin.
Keep capsules out of the reach of children.

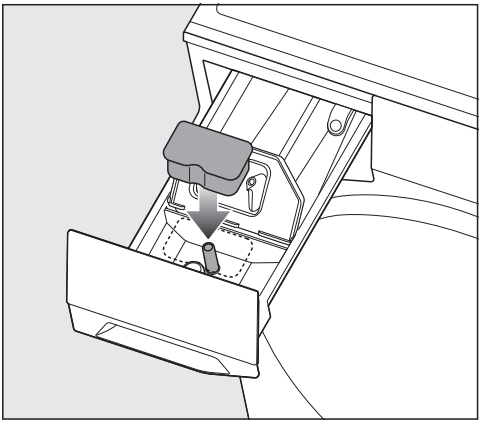
Inserting a capsule

The capsule is opened by the act of inserting it in the detergent dispenser drawer. The contents can run out of the capsule if you then remove it from the drawer before it is used.
In this case, dispose of the capsule and do not re-use it.

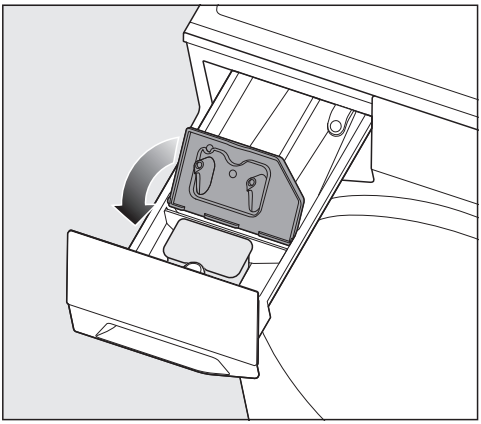
- Pull out the dispenser drawer.



- Open the lid of the ❀/ ▭ compartment.



■ Press the capsule in firmly.



■ Close the lid and press it firmly shut.

■ Close the dispenser drawer.

The programme will dispense the contents of the capsule at the correct time.

Water intake to the ❀ compartment is solely via the capsule.

No additional fabric softener may be added to the ❀ compartment when using a capsule.

Programme chart

Cottons	
Temperature	Cold to 90 °C
Load	10.0 kg
Spin	1600 rpm
Items	Cotton, linen or mixed fibre fabric, e.g. T-shirts, underwear, table linen.
Tip	Where particularly high levels of hygiene are required, please select a temperature of 60 °C or higher.

ECO 40-60	
Temperature	Cannot be selected, temperature is automatically controlled by the programme.
Load	10.0 kg
Spin	1600 rpm
Items	For normally soiled cotton garments
Tip	- A laundry load consisting of mixed cottons that are intended for washing at 40 °C or 60 °C can be washed in the same wash cycle. - This programme is the most efficient in terms of energy and water consumption for washing cottons.

Note for test institutes:

Energy labelling programme according to AS/NZS 2040.1 and AS/NZS 2040.2 (consumption data is available at www.energyrating.gov.au).

The detergent must be added via the detergent dispenser drawer.

TwinDos dispensing must be switched off during the tests.

Programmes

Minimum iron	
Temperature	Cold to 60 °C
Load	4.0 kg
Spin	1200 rpm
Items	Synthetic and mixed fibre textiles as well as easy care cotton, e.g. jumpers, dresses, trousers and socks/tights
Tip	Reduce the final spin speed for fabric that creases easily.

QuickPowerWash	
Temperature	40 °C and 60 °C
Load	4.0 kg
Spin	1600 rpm
Items	Lightly or moderately soiled cottons, linen or mixed fibres that are also suitable for the Cottons programme
Tip	- Fast and thorough cleaning of laundry with increased energy and water consumption. - Observe the maximum load size.

SmartMatic	
Temperature	Cannot be selected, temperature is automatically controlled by the programme.
Load	6.0 kg
Spin	1400 rpm
Items	Cottons and synthetic fibre or mixed fibre textiles which can be washed at a temperature of 30 °C and higher
Tip	- Whether it is used for washing 6 x 1 kg or 1 x 6 kg, the programme offers consistently high wash results with the same water and energy consumption per kg. - You can optimise detergent consumption by using TwinDos.

Woollens	
Temperature	Cold to 40 °C
Load	3.0 kg
Spin	1000 rpm
Items	Machine-washable or hand-washable wool or wool blend fabric, e.g. jumpers, cardigans, socks/tights. If the care label does not specify a temperature, wash using the cold setting.
Tip	Reduce the final spin speed for fabric that creases easily.

Shirts/Blouses	
Temperature	Cold to 60 °C
Load	1.0 kg
Spin	1000 rpm
Items	Shirts and blouses made of cotton and mixed fibre
Tip	- Pre-treat collars and cuffs if necessary. - The *Pre-ironing* Extra is activated automatically. - Wash silk shirts and blouses in the *Silks* programme.

Delicates	
Temperature	Cold to 40 °C
Load	3.0 kg
Spin	1000 rpm
Items	Delicate garments made from synthetic fibre, mixed fibre and viscose, e.g. lingerie and appliquéd garments
Tip	For items which crease easily, select the *Pre-ironing* Extra.

Programmes

PowerFresh	
Temperature	Steam
Load	1.0 kg
Spin	No final spin
Items	Dry and clean cotton, linen or mixed fibre textiles which are slightly creased The textiles must be suitable for drying in a tumble dryer and suitable for ironing.
Tip	- Smaller loads achieve a better result. - Selecting TwinDos ensures a fresh fragrance. - Remove garments as soon as the programme has finished and hang them up on a coat hanger. - The programme is **not** suitable for garments made of wool or wool blend fabric.

Dark garments/Denim	
Temperature	Cold to 60 °C
Load	4.0 kg
Spin	1200 rpm
Items	Black and dark cotton or mixed fibre textiles and denim, e.g. jackets, trousers, shirts, skirts
Tip	- Wash inside out. - Denim often contains excess dye and may run during the first few washes. Therefore, wash light and coloured denim items separately.

Outerwear	
Temperature	Cold to 40 °C
Load	3.0 kg
Spin	800 rpm
Items	Functional textiles, e.g. jackets and trousers made from membrane fabrics such as Gore-Tex®, SYMPATEX® and WINDSTOPPER®
Tip	- Close any zips and velcro fasteners before washing. - Do not use fabric softener. - If required, outdoor clothing can be re-proofed in the *Proofing* programme. Reproofing after each wash cycle is not recommended.

Sportswear	
Temperature	Cold to 60 °C
Load	3.0 kg
Spin	1200 rpm
Items	Sportswear such as singlets and leggings as well as microfibre and fleece garments
Tip	- Do not use fabric softener. - Observe the instructions on the care label.

Trainers	
Items	Trainers without leather
Temperature	Cold to 40 °C
Load	2 pairs of shoes
Spin	No final spin
Tip	- Coarse soiling should be brushed off first before washing. - A small additional load of towelling or cleaning cloths increases the cleaning performance and reduces noise. - Close velcro fasteners. - Do not use fabric softener. - Observe the instructions on the care label. - Use the drying basket for tumble drying.

Express 20	
Temperature	Cold to 40 °C
Load	3.0 kg
Spin	1200 rpm
Items	Cotton garments that have hardly been worn or are only very lightly soiled
Tip	The *Short* Extra is activated automatically.

Down filled items/Duvets	
Temperature	Cold to 60 °C
Load	2.0 kg
Spin	1200 rpm
Items	- Items with down filling, e.g. jackets, vests and sleeping bags - Pillows and duvets with down, feather or synthetic filling
Tip	- Remove air from the textiles before washing to prevent an excessive build-up of foam. - Observe the instructions on the care label.

Bed linen	
Temperature	Cold to 90 °C
Load	8.0 kg
Spin	1600 rpm
Items	Bed linen, pillowcases
Tip	Fasten zips and buttons.

Curtains/Drapes	
Temperature	Cold to 40 °C
Load	3.0 kg
Spin	600 rpm
Items	Curtains and drapes specified as machine-washable by the manufacturer
Tip	- To remove dust, select the *Pre-wash* Extra. - For curtains which crease easily, deselect the final spin function. - Remove curtain rollers.

Silks	
Temperature	Cold to 30 °C
Load	1.0 kg
Spin	600 rpm
Items	Silks and other hand-washable fabrics with no wool content, e.g. satin, lace and silk
Tip	When using a laundry bag (e.g. for bras or tights), always include other loose textiles in the load.

Programmes

First wash	
Temperature	Cold to 40 °C
Load	2.0 kg
Spin	1200 rpm
Items	New clothes made of cotton, synthetic fibres and towelling
Tip	Use this programme to wash any manufacturing residues out of new items.

Proofing	
Temperature	40 °C
Load	2.0 kg
Spin	1000 rpm
Items	Items made of microfibre and mainly synthetic fibres, e.g. outerwear, skiwear and rainwear, table linen
Tip	- Requires the use of a special-purpose detergent. - Proofing creates a water and dirt-repellent effect on the textiles. - The items must be freshly laundered and spun or dried before proofing. - The thermal fixation of the Proofing programme takes place automatically at the end of the process.

Pre-ironing only	
Temperature	Steam
Load	2.0 kg (spun laundry)
Spin	No final spin
Items	Damp, freshly washed and spun textiles that are suitable for drying in a tumble dryer and suitable for ironing
Tip	- Reduces creasing after washing and minimises the ironing effort. - 5–6 shirts make up a load of approx. 2.0 kg. - Smaller loads achieve a better result. - Remove garments as soon as the programme has finished and then put them in the tumble dryer or hang them up on a coat hanger to smooth them out. - Not suitable for garments made of wool or wool blend fabric

Separate rinse	
Temperature	No heating
Load	8.0 kg
Spin	1600 rpm
Items	Textiles that are to be rinsed or for separate fabric softeners
Tip	Reduce the final spin speed for fabrics that crease easily.

Spin only	
Temperature	No heating
Load	10.0 kg
Spin	1600 rpm
Items	Items which only need to be spun
Tip	- Drain: set the spin speed to 0 rpm - Reduce the final spin speed for fabrics that crease easily.

Clean TwinDos	
Temperature	No heating
Load	0.0 kg
Spin	No final spin
Items	Do not load any laundry The drum must be empty for the cleaning process
Tip	- Clean the washing machine before switching off for longer periods of time (more than 2 months). - Use the Miele TwinDos Care cleaning cartridge for cleaning.

Clean machine	
Temperature	Cannot be selected, temperature is automatically controlled by the programme.
Load	0.0 kg
Spin	No final spin
Items	Do not load any laundry The drum must be empty for the cleaning process
Tip	- Optimum results can be achieved by using Miele's IntenseClean machine cleaner. Alternatively, a universal powder detergent can be used. - Dispense the machine cleaner or universal detergent directly into the drum. - The *Short* Extra is activated automatically.

Clean drum	
Temperature	No heating
Load	0.0 kg
Spin	No final spin
Items	Do not load any laundry The drum must be empty for the cleaning process
Tip	Soiling such as sand or fluff is rinsed out of the drum.

AddProgrammes

Cotton Repair	
Temperature	Cold to 40 °C
Load	2.0 kg
Spin	1200 rpm
Items	For cotton fabrics
Tip	- Special programme for the Miele Cap CottonsRepair - Visibly renews fabrics - Removes pilling - Use a maximum of 1–2 times per year depending on the fabric

Refresh trainers	
Temperature	Steam
Load	1 pairs of shoes
Spin	No final spin
Items	Trainers without leather
Tip	- Trainers are scented and freshened up, but not cleaned. - TwinDos is selected. - Use the Trainers programme for cleaning.

Hygiene rinse	
Temperature	No heating
Load	5.0 kg
Spin	1600 rpm
Tip	- Freshens up fabrics after long periods in the washing machine (e.g. overnight). - Using fabric softener improves the hygienic effect.

Programmes

Soft toys	
Temperature	Cold to 40 °C
Load	1.0 kg
Spin	1200 rpm
Tip	- Do not wash stuffed toys with straw fillings. - Do not wash stuffed toys containing metal or electronic parts.

Toy building blocks	
Temperature	Cold to 40 °C
Load	6.0 kg
Spin	No final spin
Items	Plastic toys (e.g. Lego® and Duplo® blocks, Schleich® animals, Poly-M® building bricks)
Tip	- Place the items to be washed inside a mesh wash bag. - A small additional load of towelling or cleaning cloths increases the cleaning performance and reduces noise. - Do not wash toys containing metal parts (risk of rust).

SneakerWash	
Temperature	Cold to 30 °C
Load	1–3 shoe laundry bags
Items	Runners without leather
Tip	- Observe the instructions on the care label. - Coarse soiling should be brushed off first before washing. - Close velcro fasteners. - Wash runners in the shoe laundry bag. - Place the SneakerTabs in the pocket provided in the shoe laundry bag. - Adding a small load, e.g. 5 old towels or cleaning rags, has a positive effect on the washing machine's imbalance behaviour.

Programme sequence

	Wash rhythm	Rinse cycles	Water level during rinsing
Cottons	Intensive	3	Medium
ECO 40-60	Intensive	2	Medium
Minimum iron	Normal	3	High
QuickPowerWash	Intensive	2	High
SmartMatic	Normal	3	Medium
Woollens	Hand wash	3	High
Shirts/Blouses	Sensitive	3	High
Delicates	Sensitive	3	Very high
PowerFresh	Rocking	–	–
Dark garments/Denim	Normal	3	Medium
Outerwear	Sensitive	3	High
Sportswear	Sensitive	2	High
Trainers	Rocking	2	Medium
Express 20	Intensive	1	Low
Down filled items/ Duvets	Normal	2	High
Bed linen	Intensive	2	High
Curtains/Drapes	Sensitive	4	Medium
Silks	Hand wash	2	High
First wash	Normal	2	Medium
Proofing	Normal	1	Medium

- The information in the table always refers to the maximum load size of the programme.
- The washing machine determines the amount of water and energy required depending on the amount of laundry and its absorbency.
- During the main wash, the suds are sprayed continuously into the laundry. This means that the water level cannot be detected.

Number of rinse cycles

The number of rinse cycles depends on a number of factors:

- selected final spin speed
- foam build-up during the main wash cycle
- selected Extras

Extras

Short

For light soiling with no visible staining.

The programme sequence is reduced. Mechanical action and energy usage are increased.

Pre-ironing

The laundry undergoes a smoothing process with steam at the end of the programme. For optimal smoothing, reduce the maximum load by 50 %. Small loads achieve a better result.

The garments must be suitable for drying in a tumble dryer and suitable for ironing.

SingleWash

For efficiently washing a very small load (< 1 kg) in a normal wash programme. The wash duration is reduced.

Please note the following advice:

- Use liquid detergent.
- For manual dosing: Reduce the dosage to a maximum of **50 %** of the amount quoted for a **½ load**.

Stains

For cleaning stained laundry. The programme sequence is altered with this wash Extra.

Energy saving

The wash temperature is reduced and the wash duration is increased.

Rinse plus

Activate 1 to 3 extra rinses for excellent cleaning results.

The number of rinse cycles can be set under ≡ *Menu* ▸ ⚙ *Settings* ▸ *Appliance functions* ▸ *Rinse plus*.

Extra quiet

This option reduces noise levels during the wash programme. Use this if you want to wash laundry during quiet periods (for instance when children are sleeping). The *Rinse hold* Extra is switched on automatically, deactivating the final spin. The programme running time is extended.

Hygiene plus

The hygiene requirements for laundry are increased. The temperature holding time is extended in the main wash to improve the rinsing efficiency. This will increase the water and energy consumption for the programme. The laundry must be suitable for drying in a tumble dryer and suitable for ironing.

Pre-wash

For laundry with large amounts of dirt, e.g. dust and sand.

Soak

For heavily soiled fabrics with protein stains.

The soak duration can be set to between 30 minutes and 6 hours under ≡ *Menu* ▸ ⚙ *Settings* ▸ Appliance functions ▸ *Soak*.

Rinse hold

The laundry is not spun after the final rinse and remains in the rinse water. This helps prevent creasing if the laundry is not going to be removed from the washing machine immediately after the end of the programme.

Detergent recommendations

The recommendations apply across the entire temperature range of the wash programmes.

	Miele UltraPhase 1 and 2	Miele capsules	Miele capsules	Miele capsules	Universal detergent	Colour detergent	Detergent for delicates and woollens	Special-purpose detergent
Cottons	✓	✓		✓	✓	✓	✓	
ECO 40-60	✓		✓	✓	✓	✓		
Minimum iron	✓		✓	✓		✓		
QuickPowerWash	✓		✓	✓	✓	✓		
SmartMatic	✓		✓	✓	✓	✓		
Woollens		✓					✓	✓
Shirts/Blouses	✓		✓	✓	✓	✓		
Delicates	✓	✓	✓	✓			✓	
PowerFresh	✓							
Dark garments/Denim	✓		✓	✓	✓	✓		
Outerwear	✓	✓					✓	✓
Sportswear	✓	✓				✓		✓
Trainers	✓	✓				✓		✓
Express 20	✓		✓			✓[1]		
Down filled items/Duvets	✓	✓					✓	✓
Bed linen	✓	✓		✓	✓	✓	✓	
Curtains/Drapes	✓		✓	✓	✓	✓		
Silks		✓					✓	✓
First wash	✓		✓	✓		✓		
Proofing			✓					
Clean machine					✓[2]			✓

✓ recommended

[1] Liquid detergent

[2] Powder detergent

Specialist detergents (e.g. WoolCare)

Fabric care (e.g. fabric softener)

Additive (e.g. booster)

Consumption data

Programmes		Load	Energy	Water	Running time	Temperature[1]	Residual moisture	Spin speed
		kg	kWh	Litres	h:min	°C	%	rpm
Cottons	60	10.0	1.950	110.0	3:19	60	50.00	1400
	20	10.0	0.300	85.0	2:55	20	50.00	1400
Minimum iron	30	4.0	0.400	45.0	1:59	30	30.00	1200
Express 20[2]	40	3.0	0.200	20.0	0:20	30	60.00	1200
Woollens	30	3.0	0.250	25.0	0:40	30	40.00	800
QuickPowerWash	40	4.0	0.700	40.0	0:49	40	60.00	1400

[1] Maximum laundry temperature reached in main wash.

[2] *Short* Extra activated

TwinDos dispensing must be switched off during the tests.

Information for customers

Consumption data can vary from the nominal values listed depending on water pressure, water hardness, water intake temperature, room temperature, type and volume of load, fluctuations in the mains voltage and any Extras selected.

Preparing the laundry for washing

Sorting the laundry

- Sort the laundry according to colour and fabric.
- Empty all pockets.

⚠ Damage due to foreign objects.
Nails, coins, paper clips, and so on can cause damage to garments and components in the machine.
Check the laundry before washing and remove any foreign objects.

- Dark textiles often contain excess dye which is released in the first few washes. Therefore, wash light and coloured items separately.
- Information on the fabric and wash programme can be found on the care label. Most garments have a care label in the collar or side seam.
- **Do not** wash garments with the **not washable** symbol on the care label in the washing machine.

- For curtains, remove the rollers and/or lead weights or tie both in a bag.
- Make sure that bra underwires are sewn in. Remove any loose underwires before washing.
- Close any zips, velcro fasteners or hook and eye fasteners before washing.
- Close the buttons of duvet covers and pillowcases. This prevents other laundry from getting trapped inside the covers.

Pre-treating stains

Pre-treat stains quickly, preferably while the stains are fresh. Dried stains or stains that have penetrated the fabric are difficult to remove.

- Dab the stains off using a soft, colourfast cloth. Do not rub.

Useful tip: Stains (e.g. blood, egg, coffee, tea) can be pre-treated using some handy tricks. You can find these tricks in the Miele App or in Customer information - Helpful Advice and Information - Tips on stain removal on the Miele website.

⚠ Damage due to solvent-based cleaning agents.
Cleaning agents containing benzine, stain remover, etc., can damage plastic parts.
When pre-treating garments, make sure that any plastic parts (e.g. buttons) do not come into contact with cleaning agent.

⚠ Risk of explosion due to solvent-based cleaning agents.
If solvent-based cleaning agents are used, an explosive mixture can form.
Never use solvent-based cleaning agents in the washing machine.

Care label

The care label contains symbols for the perfect cleaning and care of garments.

The symbols can be divided into the following categories:

Washing	
The figure quoted in the bucket is the maximum temperature at which the garment can be washed.	
	Normal agitation, e.g. the *ECO 40-60*, *Cottons* programmes
	Reduced agitation, e.g. the *Minimum iron* programme
	Much reduced agitation, e.g. the *Delicates* programme
	Hand wash, e.g. the *Woollens* programme
	Do not wash

Drying	
	Normal or higher temperature
	Low temperature
	Do not tumble dry

Ironing	
	Approx. 200 °C
	Approx. 150 °C
	Approx. 110 °C Ironing with steam can cause irreversible damage.
	Do not iron

Professional cleaning	
	Dry clean only. The letters indicate the type of cleaning agent required.
	Wet cleaning
	Do not dry clean

Bleaching	
	Any oxidation bleach can be used
	Use oxygen bleach only
	Do not bleach

Detergent

Any detergent suitable for domestic washing machines can be used with this appliance. Please observe the instructions for use and dosage on the detergent packaging.

Using dispensing aids

Use dispensing aids (e.g. dispenser balls) if these are supplied with the detergent, particularly when using liquid detergent.

Using refill packs

When purchasing detergent, buy refill packs wherever possible. This helps reduce the amount of waste packaging.

Correct dispensing of detergent

The dispensing quantity of detergent depends on various factors:

- Degree of soiling of the laundry
- Amount of laundry
- Water hardness. Check with your local water supplier if you do not know the water hardness level in your area.

Effects of dispensing more or less than required

Dispensing too much detergent does not improve the wash results, but has the following effects:

- Poorer wash results due to too much foam in the drum and reduced mechanical action
- Cleaning results are impaired
- Higher water consumption due to an extra rinse (switched on automatically if too much foam is sensed in the drum)
- Higher costs due to increased water and detergent consumption
- Pollution of the environment

Dispensing too little detergent has the following effects:

- The laundry does not get clean and turns grey over time (greying of the laundry)
- Increased limescale on the heater elements (energy consumption increases, heater element service life is reduced)
- Unpleasant odours in the washing machine (due to the formation of a biofilm)
- Unpleasant odours in the laundry (due to residual sebum)

Water hardness levels

When dispensing detergent, it is important to observe the water hardness levels.

The local water supplier can supply details of the on-site water hardness level.

Water hardness level	Hardness level 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

Water softener

Using water softener is recommended from water hardness levels II and III. Using water softener can save detergent. Dispense according to the amount specified on the water softener packaging. Observe the following sequence when adding water softener and powder detergent into the dispenser drawer.

1. Add powder detergent.
2. Add water softener.

Any other order will cause the detergent to stick to the dispenser drawer.

Useful tip: For liquid detergents: pour the detergent into the dispenser drawer and the water softener directly into the drum using a dispensing aid.

Then dispense the recommended amount of detergent for water hardness level I.

Colour run and dye removers/dyes

- Dyes suitable for use in domestic washing machines can be used. However, please note that the salt used in the dyeing process can cause corrosion to stainless steel components in the machine if you use dye frequently. Always observe the manufacturer's instructions carefully.

After dyeing, run the *Clean drum* programme. This rinses out any salt and colour residues.

- It is prohibited to use dye removers in the washing machine.

⚠ Damage due to colour run/dye removers.
Colour run and dye removers can cause corrosion in the washing machine.
Do not use colour run or dye removers in this washing machine.

Spinning

The laundry is spun to remove water. There is a spin cycle after the main wash, after the rinse cycles and in the final spin phase.

The ideal final spin speed is pre-set for each programme and is limited to a maximum value depending on the programme. The maximum final spin speed for the programme can be found in the programme chart.

Rinse-spin

There is a rinse-spin cycle after the main wash and the rinse cycles.

It is important to drain the water out of the laundry to improve the cleaning results. The maximum set spin speed is not reached.

If the final spin speed is reduced, the rinse-spin speed is adjusted.

If the final spin speed is less than 700 rpm, an extra rinse is activated in the *Cottons* programme to ensure efficient cleaning results.

Deselecting the final spin or rinse-spin

Deselecting the final spin

- Switch on the *Rinse hold* Extra.

The laundry is not spun after the final rinse and remains in the rinse water. This helps prevent creasing if the laundry is not going to be removed from the washing machine immediately after the end of the programme.

Deselecting the rinse-spin and the final spin

- Set the final spin speed to 0 rpm.

Useful tip: It is only possible to deselect the rinse-spin when deselecting the final spin.

Settings: Overview

* Follow the instructions in the display.

General ` ▸

Software update ▸
- Update

Language ▸

Date & Time ▸
- Clock format ▸
  - 24 hours
  - 12 hours
- Time ▸
- Date ▸

Brightness ▸

Sounds ▸
- Keypad tones ▸
- Buzzer tones ▸
- End of prog. tone ▸

Security ▸
- System lock ▸
  - Set up
  - Edit
  - Delete
    - PIN code ▸

Proximity sensor ▸
- Off
- Near
- Far

Factory default settings ▸
- Reset

Networking ▸

Wi-Fi

Connection ▸
- Signal strength ▸
- Home network ▸
- IP address ▸
- Reset

Remote control

Appliance functions ▸

TwinDos ▸
- Compartment 1 ▸
  - Detergent ▸
    - UltraPhase 1
    - UltraPhase 2
    - Colour detergent
    - Universal detergent
    - Delicates detergent
    - Woollens detergent
    - Fabric softener
    - No detergent
  - Dosage amount ▸
  - Adjust fill level ▸
- Compartment 2 ▸
  - Detergent ▸
    - ...
  - Dosage amount ▸
  - Adjust fill level ▸

Water inlet ▸
- Cold water
- Hot water main wash
- Hot water mw + rinse

Memory

SmartStart

ComfortOpen

Allergy

Soak ▸
- 0:30 → 6:00 h

Rinse plus ▸
- 1 rinse cycle
- 2 rinse cycles
- 3 rinse cycles

Temperature reduction

Suds cooling

Low water pressure

Anti-crease ▸
- Anti-crease
- Duration ▸
  - 0:30 → 2:00 h

Water hardness ▸

Lighting ▸
- Door handle

Information ▸

Software ▸

Legal information ▸

Consumption ▸
- Previous programme ▸
- Total consumption ▸

Operating hours

Service ▸

Service Access Point

General

You can find this under ≡ *Menu* ▸ ⚙ *Settings* ▸ *General* .

Software update

To receive updates, you must successfully connect to your home Wi-Fi network.

You can switch on this function to keep the software up to date with the latest Miele developments. A message will appear in the display as soon as a new update is available.

Security

System lock

The system lock prevents the appliance from being used without authorisation.

- *Set up*
  You are prompted to select an input method for the system lock. You must unlock the display every time after switching on.
- *Edit*
  This menu option is only displayed if you have already set up the system lock. You can change the selected PIN code.
- *Delete*
  This menu option is only displayed if you have already set up the system lock. You can delete the system lock. There is no longer any protection against the appliance being used without authorisation.

Useful tip: Make a note of the *PIN code*. If you have forgotten the PIN code, Miele Customer Service will have to reset the PIN code.

Proximity sensor

The proximity sensor detects movements within a certain range. You can deactivate the proximity sensor or adjust its range (*Near* or *Far*).

Factory default settings

You can reset the appliance to the default settings.

Networking

You can find this under ≡ *Menu* ▸ ⚙ *Settings* ▸ *Networking* .

Networking allows you to operate your appliance using the Miele App or external voice assistants, as well as to update the software.

Wi-Fi

You can only connect to your home Wi-Fi network if the *Wi-Fi* setting is activated.

Connection

You can view information about your home Wi-Fi network.

- *IP address*
  The strength of the Wi-Fi signal is displayed.
- *Home network*
  You can view the quality of the connection to your home Wi-Fi network.
- *IP address*
  The IP address is displayed.
- *Reset*
  If you reset the network data, you will no longer be able to operate your appliance via the Miele App or external voice assistants or update the software. You will need to reconnect to your home Wi-Fi network.

Remote control

You are only able to operate your appliance via the Miele App or external voice assistants if the *Remote control* setting is switched on.

Appliance functions

You can find this under ≡ *Menu* ▸ ⚙ *Settings* ▸ *Appliance functions* .

Here you can make various settings for the wash process.

TwinDos

You can select detergents, set the dispensing quantities and check and correct the fill level of the detergent cartridges.

This setting is only necessary if the detergent cartridges are not automatically detected by the washing machine.

If you wish to use your own detergent with the TwinDos function instead of UltraPhase 1 and 2, you will need the refill containers (optional accessories).

UltraPhase 1 and 2 can only be dispensed as a package. If a different detergent is selected for one compartment, the setting for the other compartment is automatically deselected.

Useful tip: If you select *No detergent*, the respective TwinDos compartment will be deactivated.

Water inlet

You can programme 3 options for the water intake.

- *Cold water*

  Water enters via the cold water inlet hose only.

- *Hot water main wash*

  When using cold and hot mains water, the water enters via both water inlet hoses. Hot mains water is only used in the main wash if a temperature of over 30 °C is selected.

- *Hot water mw + rinse*

  When using cold and hot mains water, the water enters via both water inlet hoses. Hot mains water is used in the main wash and for rinsing. Water consumption is reduced by approx. 10%.

Memory

The washing machine will save the last parameters (temperature, spin speed and some of the Extras) selected for a wash programme after the programme has started.

When the wash programme is chosen again, the saved parameters will appear in the washing machine's display.

SmartStart (only available in selected countries)

The *SmartStart* setting is only visible if the washing machine is networked with the Miele App.

If you have activated SmartStart, the Delay start has a different function. The washing machine will then be started by a suitable energy management system within the time period specified by you.

ComfortOpen

The washing machine door opens automatically at the end of the Anti-crease phase or after a programme is cancelled.

Allergy

Increased demand on the rinsing efficiency of the washing machine. An extra rinse is always carried out.

Soak

You can set a soak duration of between 30 minutes and 6 hours.

Rinse plus

You can select how many extra rinses are to be carried out. This setting is important for allergy sufferers. The washing machine's water consumption increases.

Temperature reduction

At an installation altitude above 1000 m, water has a lower boiling point. Miele recommends activating the reduced temperature setting at installation altitudes of 2000 m or above to prevent water from boiling. The maximum temperature is reduced to 80 °C even if a higher temperature is selected.

Suds cooling

Additional water flows into the drum at the end of the main wash to cool the suds down. Hot suds can damage plastic drainage pipes.

Suds cooling takes place when the *Cottons* programme with a temperature of 70 °C or higher is selected.

Switch on the suds cooling in the following cases:

- to prevent the danger of scalding if the drain hose is hooked over the edge of a sink or basin
- where the drainage pipes are rated less than 70 °C

Low water pressure

If the water pressure is below 100 kPa (1 bar), the programme will be cancelled and the fault message *Fault F10 • Water inlet* will appear.

If the on-site water pressure cannot be increased, activating this function will prevent the programme from being cancelled.

Anti-crease

The Anti-crease function reduces creasing after the end of the programme.

At the end of the programme, the drum continues to turn at intervals for up to 2 hours. The washing machine door can be opened at any time.

Water hardness

Set the exact water hardness for the water in your home. The water hardness is required to correctly dispense TwinDos.

Lighting

The door handle lighting can be switched off or on.

Information

You can find this under ≡ *Menu* ▸ ⚙ *Settings* ▸ *Information* .

Software

You can find information about the installed software here.

Legal information

You can query which integrated open source components are used in the software.

Consumption

You can display the energy and water consumption of the washing machine.

Operating hours

You can query the number of operating hours.

Service

You can set whether Miele Customer Service can gain access to the software for servicing purposes.

Remote Access
Miele Customer Service can access the software remotely.

Cleaning the casing, drum and control panel

⚠ Risk of electric shock from mains voltage.
Mains voltage is present when the washing machine is switched off.
Disconnect the mains plug before cleaning or maintenance.

⚠ Damage due to ingress of water.
The pressure of a water jet can cause water to get into the washing machine, resulting in damage to components.
Do not spray the washing machine with a water jet.

⚠ Damage due to cleaning agents.
Solvent-based cleaning agents, abrasive cleaners, glass cleaners or all-purpose cleaners can cause damage to plastic surfaces and other parts.
Do not use these cleaning agents.

Cleaning recommendation:
As required

Tools required:
Soft cloth

- Clean the casing and control panel with a mild cleaning agent or soapy water and dry both with a soft cloth.
- The drum can be cleaned using a suitable stainless steel cleaner following the manufacturer's instructions on the packaging.

Descaling the washing machine

Descale the washing machine regularly depending on the water hardness. Check with your local water supplier if you do not know the water hardness level in your area. We recommend using the Miele descaler to descale the washing machine. The descaler is available from the Miele online shop or from Miele Experience Centres.

Cleaning recommendation:

Water hardness	Descaling programmes per year
Soft (I) (0–8.4 °dH)	0–1
Medium (II) (8.4–14 °dH)	1–2
Hard (III) (over 14 °dH)	2–3

Tool required:
Descaler, e.g. descaler from Miele

Carrying out descaling

The drum must be **empty** and **dry**.

- Open the door.
- Add the descaler directly into the drum. Follow the manufacturer's dispensing recommendation.
- Close the door.
- Select the *Cottons* 90 °C programme.
- Start the programme.

At the end of the programme, the process is complete.

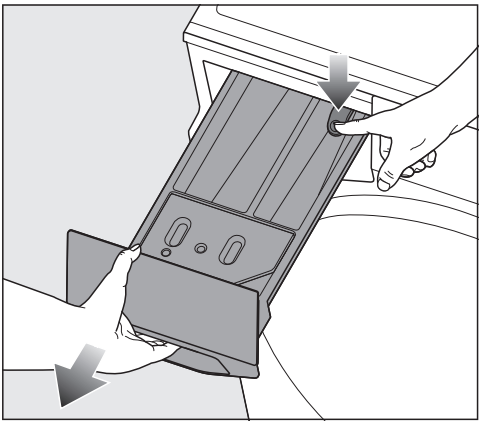
Cleaning the dispenser drawer

Washing at low temperatures and the use of liquid detergent can lead to a build-up of mould and bacteria in the dispenser drawer.

Cleaning recommendation:
Every 4 weeks at the beginning, even if you only use TwinDos. If there is no heavy soiling, you can extend the intervals.

Tools required:
Bottle brush

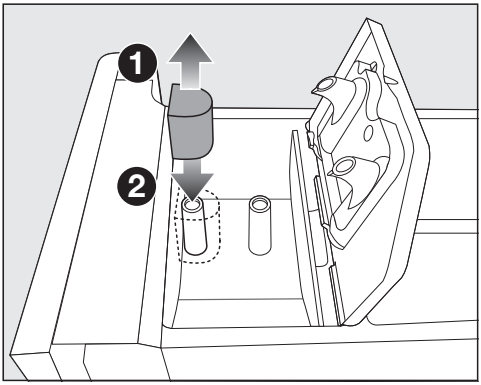
Removing and cleaning the dispenser drawer



- Pull out the dispenser drawer until you feel resistance. Press down the release button and at the same time pull the drawer right out of the machine.
- Clean the dispenser drawer with warm water.

Cleaning the siphon and the ❀/ ▭ compartment channel

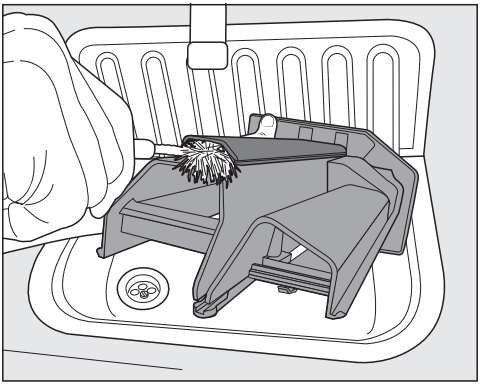
Liquid starch results in clogging. If clogged, the siphon in the ❀/ ▭ compartment will not work and the compartment can overflow.
Clean the siphon particularly thoroughly after using liquid starch a few times.



❶ Pull the siphon out of the ❀ compartment.

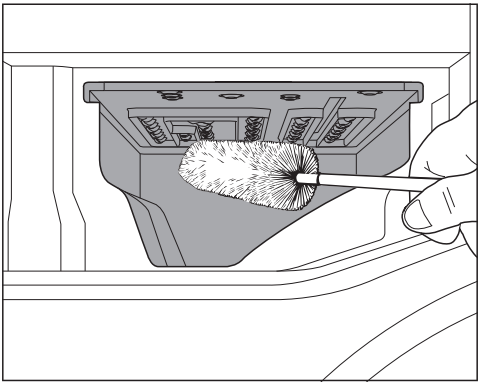
- Clean the siphon under warm running water.
- Clean the siphon tube in the same way.

❷ Refit the siphon.



- Clean the fabric softener channel using a bottle brush and warm water.

Cleaning the dispenser drawer housing



- Use a bottle brush to remove detergent residues and limescale from the jets inside the dispenser drawer.
- Replace the dispenser drawer.

Useful tip: To assist drying, leave the dispenser drawer slightly open.

Cleaning the water intake filter

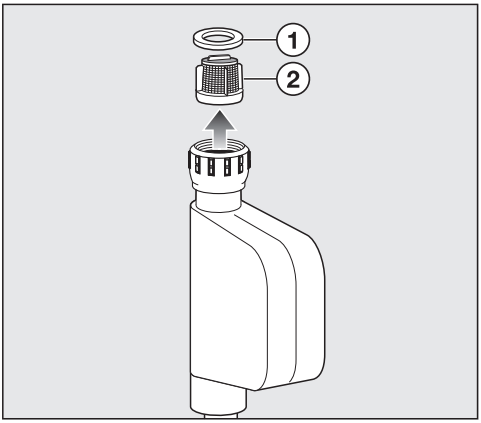
The filter must be put back in place after cleaning.

The washing machine has a filter to protect the water intake valve. You can check the filter for soiling and clean it yourself in just a few simple steps.

Cleaning recommendation:
Every 6 months. Perform this check more often if there are frequent interruptions to the external water supply.

Tools required:
Screwdriver, long nose pliers

- Turn off the tap.
- Unscrew the water inlet hose from the tap.



- Use a screwdriver to remove the black rubber seal ① from the screw thread.
- Using long nose pliers, take hold of the plastic filter bar ② and remove the plastic filter.
- Clean the filter.
- First insert the filter and then the rubber seal back in the screw thread.
- Screw the screw thread securely back onto the tap by hand.
- Slowly turn on the tap.

Make sure there is no water leaking from the connections.

Cleaning the TwinDos system

⚠ Damage resulting from dried laundry detergent.
If the system has not been used for a long time (more than 2 months), detergent in the hoses can become viscous or dry out. The hoses can become blocked and would then need to be cleaned by a Customer Service technician.
Clean the TwinDos system.

The washing machine has the *Clean TwinDos* cleaning programme for the TwinDos system. Running the cleaning programme will rinse and clean the hoses inside the washing machine.

To run the cleaning programme, you will need the TwinDos Care cleaning cartridge or a refill container, available from the Miele online shop or from your Miele specialist dealer.

Cleaning the compartment

Detergent residues can cause clogging.

Cleaning recommendation:
Each time the cartridges are changed.

Tools required:
Damp cloth

■ Use a damp cloth to clean the compartment interior.

Starting the cleaning programme

Cleaning interval:
Longer downtime of more than 2 months or when changing the type of detergent

Tools required:
TwinDos Care cleaning cartridge or refill container

■ Follow the instructions in the display.

Cleaning the drum/Hygiene in the washing machine

The washing machine has 2 machine cleaning programmes:

- *Clean drum*
- *Clean machine*

Cleaning the drum

Soiling such as sand and fluff is rinsed out of the drum.

Cleaning recommendation:
As required

■ Start the *Clean drum* programme.

Cleaning the machine

Washing at low temperatures and/or using liquid detergents can cause germs and odours to build up in the washing machine.

Cleaning recommendation:
Message in the display

Tools required:
Miele IntenseClean machine cleaner or a universal powder detergent

■ Start the *Clean machine* programme.

Many malfunctions and faults can be easily remedied. You can save time and money in many cases, as you do not need to contact Customer Service.

More information to help you remedy faults yourself can be found at www.miele.com.au/support/customer-assistance or www.miele.co.nz/support/customer-assistance.

The display does not switch on automatically – it is not possible to select a programme

Problem	Possible cause and remedy
Washing machine does not switch on. The display remains dark.	There is no power to the washing machine. ■ Check whether the mains plug is plugged in and switched on. ■ Check whether the circuit breaker has tripped.
	The proximity sensor is switched off. The proximity sensor does not respond. ■ Press ⏻ *On/Off* and switch on the washing machine. ■ Check the *Proximity sensor* setting in Settings. ■ Check the proximity sensor by approaching the washing machine from the front.

Door does not open or close

Problem	Possible cause and remedy
Fault F34	The door is not closed properly. The door lock could not engage. ■ Close the door again. ■ Start the programme again. ■ If the same fault message appears again, contact Miele Customer Service.
Fault F35	The door lock has jammed. ■ Switch the washing machine off and on again. ■ If the same fault message appears again, contact Miele Customer Service.
The door cannot be opened during the wash process.	During the wash process, the door is locked and the door sensor is switched off. ■ You can interrupt the wash process and cancel the door lock via “Add laundry”.

Problem solving guide

Water intake or drainage

Problem	Possible cause and remedy
Fault F10 • Water inlet	The washing machine could not draw in enough water. ■ Check whether the tap has been turned on or turned on properly. ■ Check whether the water inlet hose is kinked. ■ Check that the water connection pressure is sufficient. The minimum pressure is 100 kPa (1 bar). If the water connection pressure is permanently below the minimum value, the “Low water pressure” setting can be activated.
Fault F11 • Water drainage	The drain pumps are dirty or blocked. ■ Clean the drain filters and drain pumps (see “Draining the suds in the event of a fault”).
	The drain hose has been fixed too high. ■ Observe the maximum delivery head of 1.0 m.
Fault F138	The water protection system has reacted. ■ Turn off the tap. ■ Contact Miele Customer Service.
Fault F373 • Leak at drain filter	The washing machine has detected a leak in the drain filter. ■ Check the drain filter and tighten it again. ■ Switch the washing machine off and on again. ■ If the fault occurs again, contact Miele Customer Service.

Fault messages and information in the display

Problem	Possible cause and remedy
Fault F210 • Circulation	The drain pumps and the nozzle in the door sealing ring are dirty. The washing machine has switched to an emergency programme. ■ Clean the drain pumps and the nozzle in the door sealing ring (see “Draining the suds in the event of a fault”). ■ Start a wash programme again after cleaning.
	If the same fault message appears again, contact Miele Customer Service.

Problem	Possible cause and remedy
Fault F585 • Nozzle in the door sealing ring and drain filter soiled Clean the nozzle and drain filter. If cleaning is unsuccessful, contact Customer Service.	The drain pumps and the nozzle in the door sealing ring are dirty. The washing machine has switched to an emergency programme. ■ Clean the drain pumps and the nozzle in the door sealing ring (see “Draining the suds in the event of a fault”). ■ Start a wash programme again after cleaning.
	If the same fault message appears again, contact Miele Customer Service.
Fault FXXX Switch the appliance off and on again. If the fault persists, call customer service.	The washing machine has detected a fault. ■ Disconnect the washing machine from the mains electricity supply. Switch off at the wall and withdraw the plug from the socket, or switch off the mains circuit breaker. Disconnect the washing machine from the mains supply **for at least 2 minutes**. ■ Reconnect the washing machine to the electricity supply. ■ Then switch the washing machine on again. ■ Restart the programme. If the fault occurs again, contact Miele Customer Service.
Select a programme with 60 °C or higher or start the “Clean machine” programme. “Clean machine” now?	A wash programme using a temperature above 60 °C has not been run for a long time. This can lead to a build-up of germs and odours in the washing machine. ■ Start the *Clean machine* programme by adding either Miele IntenseClean machine cleaner or a universal powder detergent.
Check detergent	Excessive foam has built up during washing. ■ Check the amount of detergent dispensed. ■ With automatic detergent dispensing, check the dispensing quantity set. ■ Observe the instructions on the detergent packaging and the degree of soiling of the laundry. ■ If necessary, reduce the basic dispensing quantity by increments of 10%.

Problem solving guide

Fault messages and problems with TwinDos

Problem	Possible cause and remedy
TwinDos empty sensor defective	The fill level of the TwinDos cartridges cannot be detected. The empty sensing is defective. ■ TwinDos can continue to be used. ■ Check the fill level of the TwinDos cartridges. ■ Contact Miele Customer Service to remedy the defect.
Use TwinDos	TwinDos has not been used for a long time. As a result, there is a risk of the hoses becoming blocked. ■ Use TwinDos for one of your next wash cycles.
Clean TwinDos	TwinDos needs to be cleaned. TwinDos has not been used for a long time. ■ Carry out TwinDos cleaning immediately.

Hygiene in the washing machine

Problem	Possible cause and remedy
The washing machine smells unpleasant.	Germs and/or a biofilm have formed in the washing machine. A wash programme using a temperature above 60 °C has not been run for a long time. ■ Start the *Clean machine* programme by adding either Miele IntenseClean machine cleaner or a universal powder detergent.
	The door and the dispenser drawer were left closed after washing. ■ Leave the door and the dispenser drawer slightly open to allow them to dry.

Problems with the dispenser drawer

Problem	Possible cause and remedy
Large amounts of detergent residues remain in the dispenser drawer.	The water connection pressure is too low. ■ Check the water connection pressure (at least 100 kPa (1 bar)). ■ Check the filter in the water inlet hose for soiling and clean the filter.
	Powder detergent used in conjunction with water softeners tends to become sticky. ■ Clean the dispenser drawer. ■ In future, observe the following dispensing sequence: 1. Add the powder detergent. 2. Add the softener to the powder detergent.
The fabric softener is not completely dispensed. A large amount of water remains in the ❀ compartment.	The siphon is not correctly positioned or is clogged. ■ Clean the siphon.
	For technical reasons, a small amount of water will remain in the ❀ compartment.
There is still liquid in the capsule at the end of the programme.	There is a blockage in the small pipe in the dispenser drawer onto which the capsule is placed. ■ Clean the dispenser drawer.
	For technical reasons, a small amount of water will remain in the capsule.
There is water next to the capsule in the ❀ compartment.	CapDosing was not activated. ■ Remove the capsules and dispose of them. ■ Switch on CapDosing the next time a capsule is used.
	An empty capsule was not removed after the last wash programme. ■ Remove the capsule.
	There is a blockage in the small pipe in the dispenser drawer onto which the capsule is placed. ■ Clean the dispenser drawer.

Problem solving guide

Poor wash results

Problem	Possible cause and remedy
Liquid detergent does not achieve the required result.	Commercially available liquid detergents do not usually contain bleaching agents. Stains from fruit, coffee or tea, for example, are difficult to remove without bleaching agent. ■ Use TwinDos with UltraPhase 1 and 2. The targeted addition of UltraPhase 2 (bleaching agent) during the wash process removes stains effectively. ■ Add a powder detergent containing bleach.
White residues which look like powder detergent are seen on dark fabrics after washing.	Powder detergents contain compounds (zeolites) to aid water softening which are not soluble in water. The zeolites have ended up on the laundry. ■ Try and brush off the residues with a soft brush once the laundry is dry. ■ In future, wash dark textiles using a liquid detergent. Liquid detergents do not usually contain zeolites. ■ Wash dark textiles in the special programme offered for this purpose.
Grey, greasy particles cling to washed laundry.	There are greasy particles on the textiles. Greasy particles can form on textiles soiled with grease (oils, ointments) and if not enough detergent has been dispensed. ■ Before the next wash, clean the washing machine with the *Clean machine* programme to remove residues from the washing machine. ■ Then wash the textiles again, if possible using a liquid detergent. Liquid detergents have a better cleaning effect on grease stains.
The textiles are unusually wet after the wash process.	The machine detected a high level of imbalance during the final spin and reduced the spin speed. A low final spin speed was selected when selecting the programme. ■ Always place large and small textiles together in the drum for a wash process. This ensures better distribution of the textiles during the final spin and reduces the chance of imbalance.

Noises and various other problems

Problem	Possible cause and remedy
The washing machine shakes during the spin cycle.	The washing machine is not standing evenly on all 4 adjustable feet. The feet are not secured. ■ Level the washing machine and secure the feet.
Strange pump noises can be heard.	This is not a fault. Slurping noises occur at the start and end of the pump sequence as a normal part of operation.

Draining the suds in the event of a fault

Follow the operating sequences listed.

You will find the individual operational steps below.

Draining the suds solution and opening the door in the event of a power cut

1. Remove the plinth flap
2. Drain the suds
3. Fit the plinth flap
4. Operate the emergency release

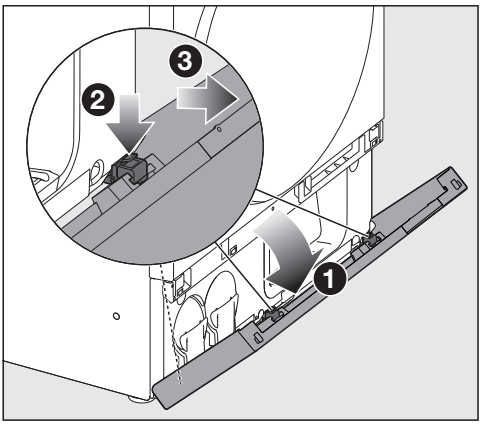
Draining the suds solution if the drain filter is clogged

1. Remove the plinth flap
2. Drain the suds
3. Clean the pump and drain filter
4. Fit the plinth flap

Draining the suds solution and cleaning the pump and nozzle for F 210 and F 585 Nozzle in the door sealing ring and drain filter soiled

1. Remove the plinth flap
2. Drain the suds
3. Clean the pump and drain filter
4. Clean the nozzle at the top of the door sealing ring
5. Fit the plinth flap

Remove the plinth flap



❶ Open the plinth flap by approx. 45°.

❷ Release the 3 retainers one after the other.

❸ Remove the plinth flap by pulling it forwards.

Useful tip: To avoid damaging the plinth flap, put it to one side.

Draining the suds

Requirement: the plinth flap has been removed.

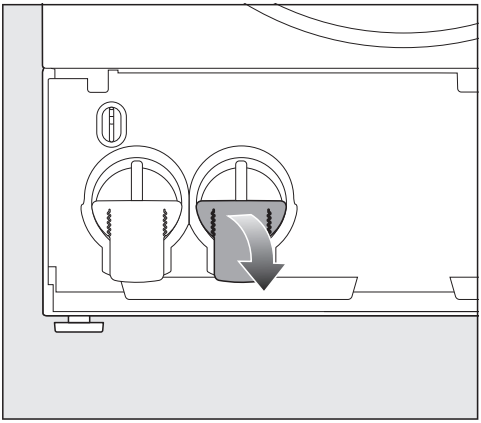
Depending on the wash programme and the progress of the wash cycle, there may be a large quantity of suds in the washing machine.

Emptying into a shallow container

This draining method is recommended if the washing machine is placed directly on the floor.

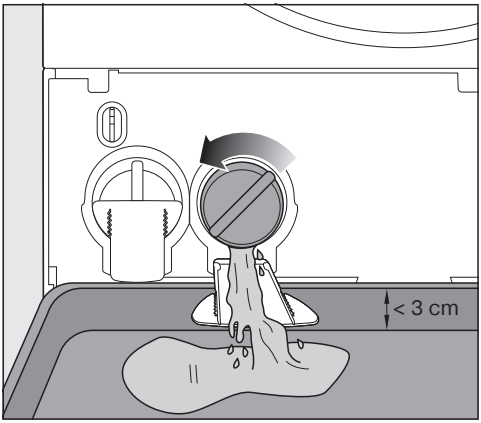
Tools required:
Container max. 3 cm high and ideally with a capacity of 2 litres, e.g. a universal tray from the oven.

- If the floor is sensitive, place a towel underneath to protect the floor.



- Fold down the right-hand pouring aid.
- Press the pouring aid all the way down until you feel it click into place.

⚠ Risk of scalding due to hot suds.
Escaping suds will be hot if laundry has been washed at high temperatures!
Carefully allow all suds to drain off.



- Slide a flat container under the pouring aids.
- Slowly and carefully unscrew the right-hand drain filter to let the suds out.
- To interrupt the suds drainage (e.g. to empty the container), tighten the drain filter again.

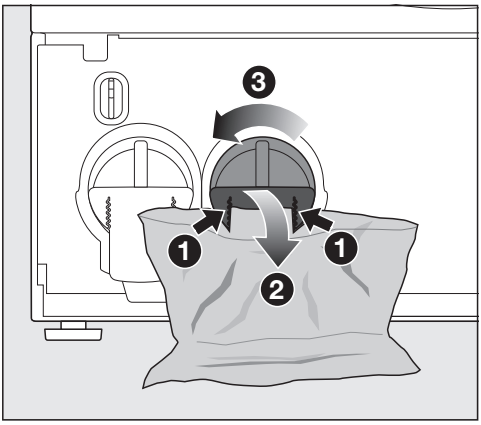
The process is complete when no more suds run out.

Emptying into a plastic bag

This draining method is recommended if the washing machine is slightly elevated, e.g. on a plinth.

Tools required:
1 plastic bag (freezer bag) with a volume of at least 3 litres and a towel for sensitive floors.

- If the floor is sensitive, place a towel underneath to protect the floor.



❶ Attach the plastic bag to both slots of the right-hand pouring aid.

❷ Fold down the pouring aid.

❸ Slowly and carefully unscrew the right-hand drain filter to let the suds out.

- To interrupt the drain (e.g. to empty the bag), tighten the drain filter again.

The process is complete when no more suds run out.

Next steps

You want to clean the drain filter

- Read “Cleaning the pumps and drain filters”.

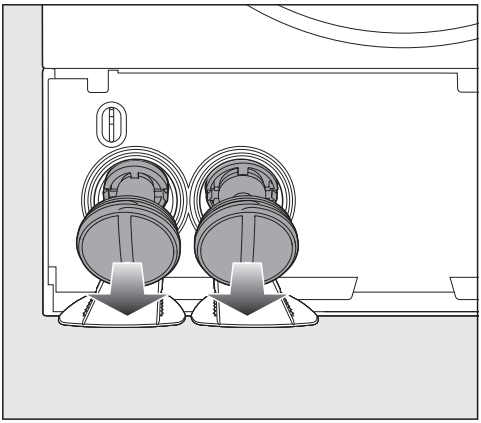
You do not want to clean the drain filter

- Tighten the drain filter back up again.
- Fold the pouring aid up again.

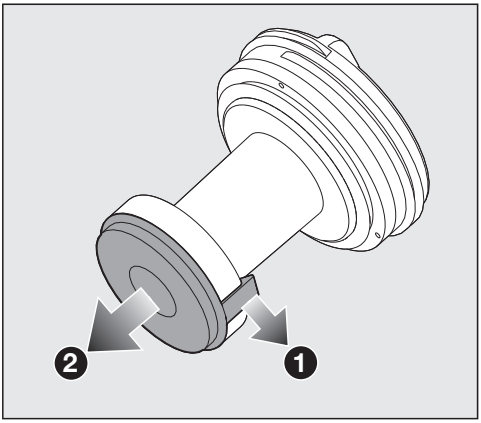
⚠ Risk of water damage
Make sure the drain filter is securely tightened. Otherwise there is a risk of water leakage during use.
Replace the drain filter correctly and tighten it securely.

Cleaning the pumps and drain filters

Requirement: suds have been drained.

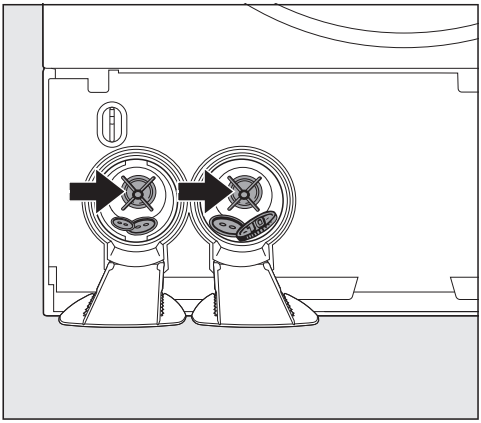


- Unscrew the drain filters completely and remove them.
- Clean the drain filters thoroughly.

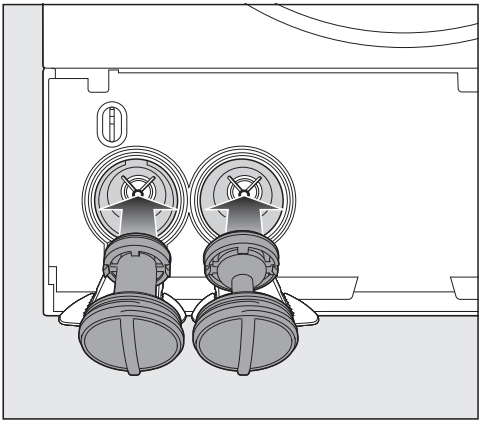


❶ Loosen the retainers on the drain filter lids.

❷ Remove the lids and clean the inside of the drain filters.



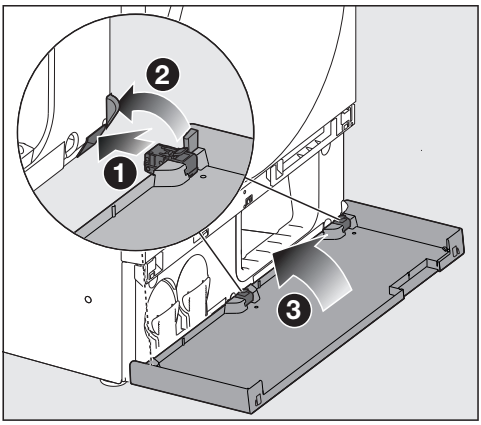
- Check whether the pump impellers can rotate freely.
- Remove any foreign objects (e.g. buttons, coins).
- Clean the inside thoroughly.



- Replace the drain filters correctly (on the right and left) and tighten them securely.
- Fold the pouring aids up again.

⚠ Risk of water damage
Make sure the drain filters are securely tightened. Otherwise there is a risk of water leakage during use.
Replace the drain filters correctly and tighten them securely.

Fitting the plinth flap

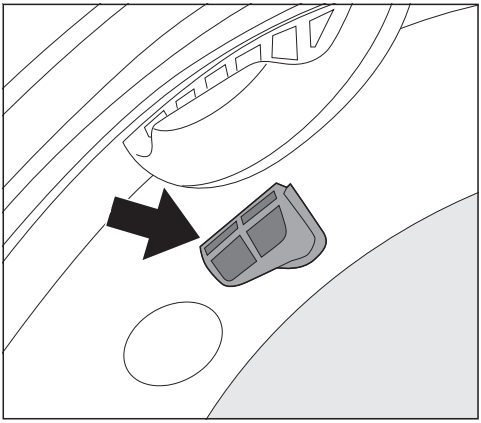


❶ Snap the 3 retainers back into place after use.

❷ Press the outer edge of the plinth flap slightly outwards.

❷ Close the plinth flap.

Cleaning the nozzle at the top of the sealing ring



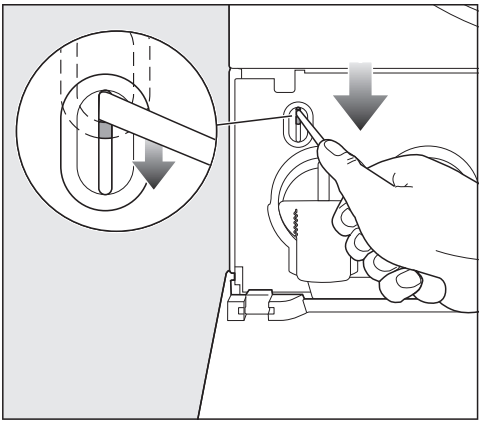
■ Remove the fluff with your finger. Do not use any sharp or pointed tools to do this.

Operating the emergency release

Requirement: suds have been drained.

Tools required:
Long thin screwdriver

In the event of a power cut during the wash process, the door remains locked. The door can be unlocked manually.



1. Use a screwdriver to push the door release mechanism all the way down without touching or opening the door.
2. Then pull the door open.

⚠ Danger of injury due to rotating drum.
Reaching into a moving drum is extremely dangerous and may result in injury.
Always make sure that the drum is stationary before reaching in to remove laundry.
Keep children away from the washing machine.

3. Close the door.
4. Open the door again.

If the door is locked, repeat steps 1 to 4 to avoid potential safety risks.

5. Remove the laundry.

You can find information on how to remedy faults yourself at www.miele.com.au/support/customer-assistance or www.miele.co.nz/support/customer-assistance and about Miele spare parts at www.miele.com.au/service or www.miele.co.nz/service.

Contact in case of fault

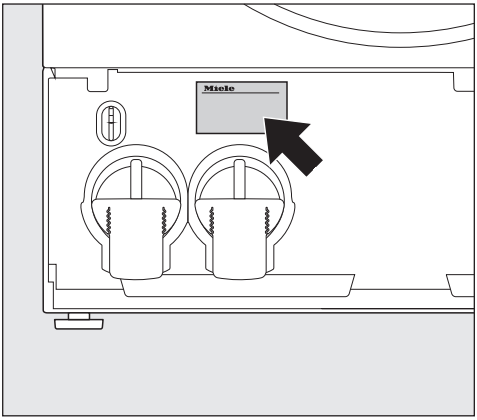
In the event of any faults which you cannot remedy yourself, please contact Miele.

You can book a Miele customer service call-out online at www.miele.com.au/service or www.miele.co.nz/service.

Contact information for Miele can be found at the end of this booklet.

Please quote the model and serial number of your appliance when contacting Miele. This information can be found on the data plate.

The data plate can be found above the right-hand drain pump when the plinth flap is open.



Warranty

The manufacturer's warranty for this appliance is 2 years.

For further information, please refer to your warranty booklet.

Miele Australia Pty. Ltd.
ACN 005 635 398
ABN 96 005 635 398

Level 4, 141 Camberwell Road
Hawthorn East, VIC 3123

1300 464 353 (1300 4 MIELE)
info@miele.com.au
www.miele.com.au

Miele New Zealand Limited
IRD 98 463 631

8 College Hill
Freemans Bay, Auckland 1011

0800 464 353 (0800 4 MIELE)
customercare@miele.co.nz
www.miele.co.nz

Miele Global Headquarters
Germany
Miele & Cie. KG
Carl-Miele-Straße 29
33332 Gütersloh
Federal Republic of Germany

Miele

WQ 1200 WPS

en-AU, NZ

M.-Nr. 12 702 644 / 01 / 002