Miele PWM 511 Professional Washing Machine

Miele PWM 511 Professional Washing Machine Instruction Manual

Contents

Miele PWM 511 Professional Washing Machine

Explanation of the safety notes and warnings on the machine

	Read the operating instructions
	Read all the instructions, e.g. the installation instructions
	Warning, hot surfaces
	Warning, voltage up to 1000 volts
	Earthing
	Equipotential bonding

Installation requirements

The washing machine must be installed and commissioned by a Miele Service technician or by an authorized dealer.

- The washing machine must be installed by applicable regulations and standards. Local energy suppliers and water au-thority regulations must also be observed.

- This washing machine must only be operated in a room that has sufficient ventilation and which is frost-free.

This machine should not be installed or operated in any area where there is a risk of explosion!

General operating conditions

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

- Ambient temperature: 0-40 °C
- Relative humidity: non-condensing
- Maximum height above sea level of location site: 2000 m

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

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

Transportation and site access

The machine must not be moved without the transit bars in place. Keep the transit bars in a safe place. They must be refitted if the machine is to be moved again (e.g. when relocating the machine).

Installation

Transport the washing machine to its installation site using a suitable pallet truck and remove the transport packaging. The washing machine must be set up on a completely level, horizontal, and firm surface with the minimum stated load-bearing capacity (see “Technical data”).

Tip: A concrete floor is the most suitable installation surface. It is far less prone to vibration during the spin cycle than wooden floorboards or a carpeted surface. The floor load created by the washing machine is the load exerted by the area of the machine in contact with and transferred to the installation surface. The washing machine requires a gap of at least 50 mm on each side to allow for movement during operation. Please ensure a minimum distance of 400 mm is maintained between the rear of the appliance and the rear wall. The washing machine must not be installed on a carpeted floor. The feet of the washing machine must be secured to the fastening points on the floor using the fittings supplied. The fittings supplied are for bolting the machine to a concrete floor. If other floor types are present at the installation site, the fastening material must be ordered by the customer.

Installation on a concrete plinth

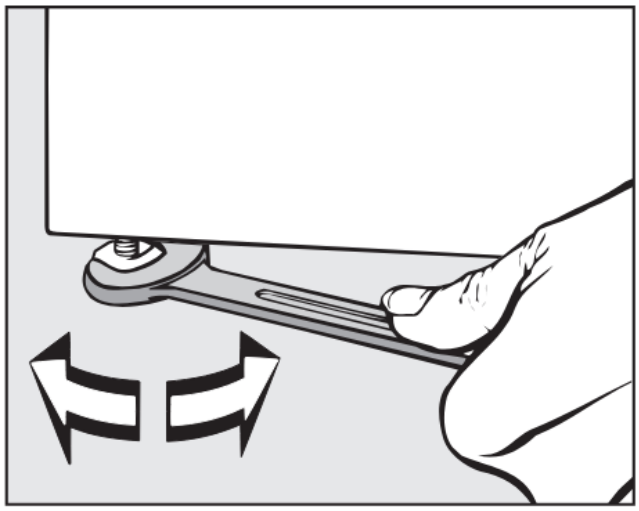
The washing machine can be installed on a concrete plinth if desired. The concrete materials and the durability of the concrete plinth must be assessed under the floor load-bearing capacity given in “Technical data”.

- To guarantee the stability of the washing machine, make sure that the concrete plinth is sufficiently stable on the floor and that it is capable of withstanding any burden or force from the washing machine.
- The washing machine must be secured to the concrete plinth using the fixtures and fastenings supplied.
- The washing machine must be secured to the plinth immediately after installation!

There is a risk of the washing machine falling off a raised plinth during a spin cycle if it is not secured.

Leveling the machine

- Align the washing machine vertically and horizontally using the adjustable feet and a spirit level. The washing machine must stand evenly and horizontally on all four feet to ensure trouble-free and energy-efficient operation. Otherwise, the water and energy consumption increases and the washing machine might move around.
- After aligning the machine, tighten the lock nuts by turning them in a counterclockwise direction with a spanner. This will prevent the feet from adjusting themselves.



Electrical connection
The electrical connection must only be carried out by a qualified electrician who must ensure that all electrical work is carried out by applicable electrical regulations and standards (BS 7671 in the UK).

- This washing machine must be connected to an electrical mains supply that complies with local and national regulations. Please also observe your insurance and energy supplier's regulations as well as any health and safety at work regulations.
- The required voltage, connected load, and fusing rating can be found on the data plate on the washing machine. Before connecting the machine to the power supply, please ensure that the main supply voltage complies with the values given on the data plate. Connection to a supply voltage other than the one quoted on the data plate can lead to functional faults and damage the washing machine! If more than one voltage is quoted on the data plate, the washing machine can be converted for connection to the voltages stated.
- Conversion to a different voltage must only be carried out by a Miele Service engineer or by an authorized Service Partner. The wiring instructions given on the wiring diagram must be followed.

Tip: We recommend connection to the power supply via a suitably rated plug and socket which must be easily accessible for servicing and maintenance work after the machine has been installed. An electrical safety test must be carried out after installation and after any service work.

The machine should be connected with a suitably rated plug and socket by IEC 60309-1 or hard-wired. For a hard wired connection an all-pole isolation device must be installed. For hard-wired machines, the connection should be made via a suitable mains switch with all-pole isolation which, when in the off position, ensures a 3 mm gap between all open contacts. These include circuit breakers, fuses, and relays (IEC/EN 60947). If the mains supply cannot be permanently disconnected, the isolator switch (including plug and socket) must be safeguarded against being switched on either unintentionally or without authorization.

- If it is necessary to install a residual current device (RCD) by local regulations, a residual current device type B (sensitive to universal current) must be used. An existing type A residual current device (RCD) must be exchanged for a type B RCD.

- If local and national installation specifications require equipotential bonding, good galvanic contact must be guaranteed. Equipotential bonding must have an earth current rating > 10 mA.

Water connection
For compliance with Regulation 4 of the water regulations guide please fit the supplied double-check valves to the on-site water supplies for each inlet hose used. The non-return valve prevents water from the water inlet hose from flowing back into the on-site drinking water supply. Non-return valves are supplied. The flow pressure must amount to a minimum of 100 kPa and must not exceed 1000 kPa. If the flow pressure is higher than 1000 kPa, a pressure reducing valve must be used. The machine must be connected to the water supply using the inlet hoses provided.

- The connection points are subject to water supply pressure. Turn on the stopcock slowly and check for leaks. Correct the position of the seal and screw thread if appropriate.

Cold water connection
For the cold water connection, one stopcock each with a ¾” screw thread is required. If a water connection is not available, only a qualified installer may connect the washing machine to the mains water supply. The water inlet hose for cold water is not suitable for connection to a hot water supply. If hot water is not available on-site, a cold water supply must be used for the hot water connection. The required amount of hot water should be added to the cold water volume. Alternatively, the hot water connection should be blocked using the blind stopper supplied with the machine and the machine controls should be set to cold water intake by the service technician.

Hot water connection
The same connection requirements as for cold water also apply to hot water up to 70 °C. A suitable connection hose with a threaded union is supplied with the machine. The machine witha hot water connection also requires a cold water connection.

Drain valve (depending on model)

In the case of washing machines with a drain valve, a motorised valve is used to drain the machine. An HT DN 70-angle connector can be used for draining the machine directly into the wastewater system (without a siphon) or into an on-site floor drain (with odor trap). Thanks to an improved closing mechanism and a larger cross-section, even the coarsest of soiling does not leave any deposits or debris behind which could result in blockages. The drain valve can also be operated manually to allow the suds container to be emptied in the event of a power outage. A vented drainage system is vital for unimpeded drainage. If several machines are connected to a single drain pipe, this should be sufficiently large to allow all machines to drain simultaneously. The appropriate Miele installation kit (mat. no.: 05 238 090) is available to order from the Miele Customer Service Department or your Miele dealer for venting an HT DN 70 pipe. If the slope for drainage is extremely steep, the piping must be vented to prevent the formation of a vacuum in the washing machine’s drainage system Slow or obstructed drainage or a backup of water in the washing machine drum as a result of undersized pipework can result in faults occurring during programs, which will result in fault messages appearing in the display.

- Outflowing suds can be as hot as 95 °C. The danger of burning! Avoid direct contact.

Drain pump (depending on model)
In machines with drain pumps, the suds are drained through a drain pump with a delivery head of max. 1 m.

The drain hose must be installed free of kinks for the suds to drain freely.

There are the following options for draining the machine:

- Drain hose connected to a plastic drain pipe with a rubber sleeve (there is no need to use a siphon)

- Drain hose is connected securely to a sink with a plastic nipple
- Connected securely to a floor drain (gully)

If required, the hose can be extended to a length of up to 5 m. The corresponding accessories are available from the Miele Customer Service Department or your Miele dealer. For a drain height of more than 1 m, a replacement drain pump for a delivery head of max. 1.8 m is available from the Miele Customer Service Department or your Miele dealer.

Water connection for variants with reduced heater rating (RH)

The appliance should be connected to cold and hot water supplies. A minimum hot water temperature of 80 °C is recommended for all programs Lower temperatures may result in longer program running times or cause pprogprogramsnterrupted. Water inlet temperatures below 60 °C are not permitted, as they can lead to significantly longer program running times.

Water connection for variants with external heating (EH)
The appliance should be connected to cold and hot water supplies. A minimum hot water temperature of 80 °C is recommended. The use of disinfection programs is not possible due to the absence of additional heating. The permissible wash temperatures are determined by the inlet temperature.

Dispenser connection
The machine is equipped with an interface for external dispenser systems. Adapters for pre-mixed suds or liquid detergent from external dispenser systems for up to 6 connections should be obtained from the Miele Customer Service Department and connected. A separate Connector Box is required for controlling the dispensing pumps electrically. This must be installed by your Miele dealer or the Miele Customer Service Department. It is particularly important to follow the manufacturer’s instructions when using a combination of cleaning agents and special application products.

Optional accessories

Only use genuine Miele spare parts and accessories with this machine. Using spare parts or accessories from other manufacturers will invalidate the warranty, and Miele cannot accept liability.

Connector Box
The Connector Box allows external hardware from Miele and other suppliers to be connected to the Miele Professional washing machine. The Connector Box is supplied with mains voltage by the Miele Professional washing machine. The separately available set consists of the Connector Box and fasteners for installation on the machine or the wall.

Peak load/energy management

A peak load or energy management system can be connected via the Connector Box. The energy management system monitors the energy consumption of a system and deactivates individual pieces of equipment temporarily using the peak-load negotiation to ensure that certain total load limits are not exceeded. When the peak-load function is activated, the heating is deactivated and the program stops. A message appears in the display to inform you of this. The program is resumed automatically when the peak-load function finishes.

Liquid dispensing connection
External liquid dispensing pumps with a “container empty” indicator and/or flow meter can be used via the Connector Box to dispense liquid detergents. It is particularly important to follow the manufacturer’s instructions when using a combination of cleaning agents and special application products.

Payment device

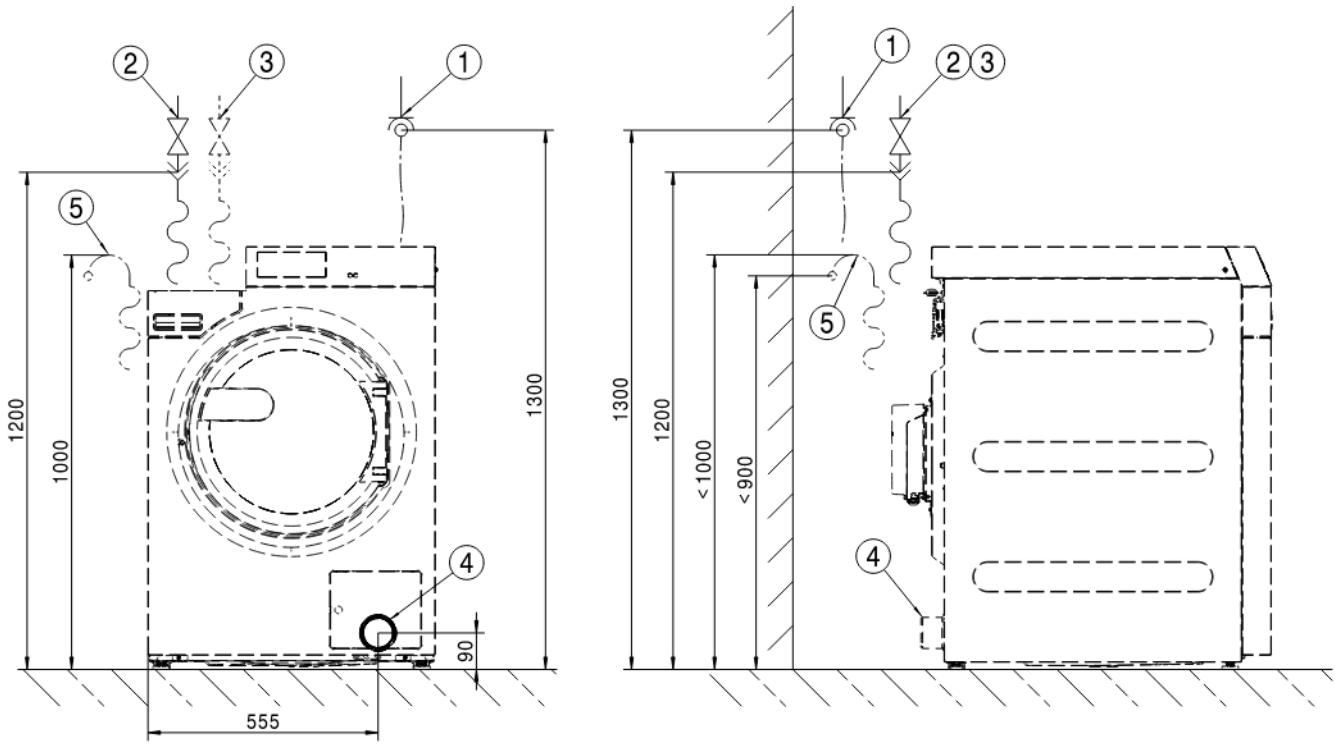
The washing machine can be fitted with a single-machine payment system as an optional accessory via the Connector Box. The programming required for connecting a payment system can be carried out during the initial commissioning process. After initial commissioning, changes may only be carried out by your Miele dealer or the Miele Customer Service Department. Please note that the status of the Connector Box must be set to “on” at the supervisor level as required.

WiFi/LAN interface
The washing machine is equipped with a WiFi/LAN interface for exchanging data. The data interface provided on the LAN connection complies with SELV (Safety Extra Low Voltage) by EN 60950. The LAN connection uses an RJ45 connector by EIA/ TIA 568-B. Connected machines must also comply with SELV.

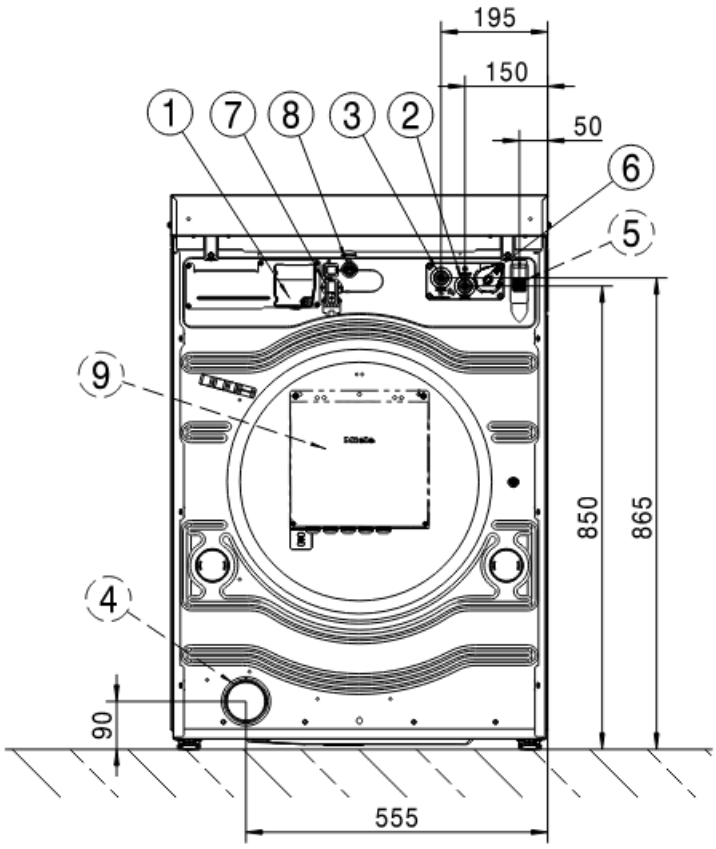
Plinth (APWM037/038/ 039)
The washing machine can be installed on a plinth (open or box plinth, available as an optional Miele accessory). Elevating the washing machine gives a better ergonomic working position when loading or unloading. It also simplifies the installation of a drain connection.

- The washing machine must be secured to the plinth immediately after installation. The plinth must be secured to the floor. There is a risk of the washing machine falling off a raised plinth during a spin cycle if it is not secured.

Standard

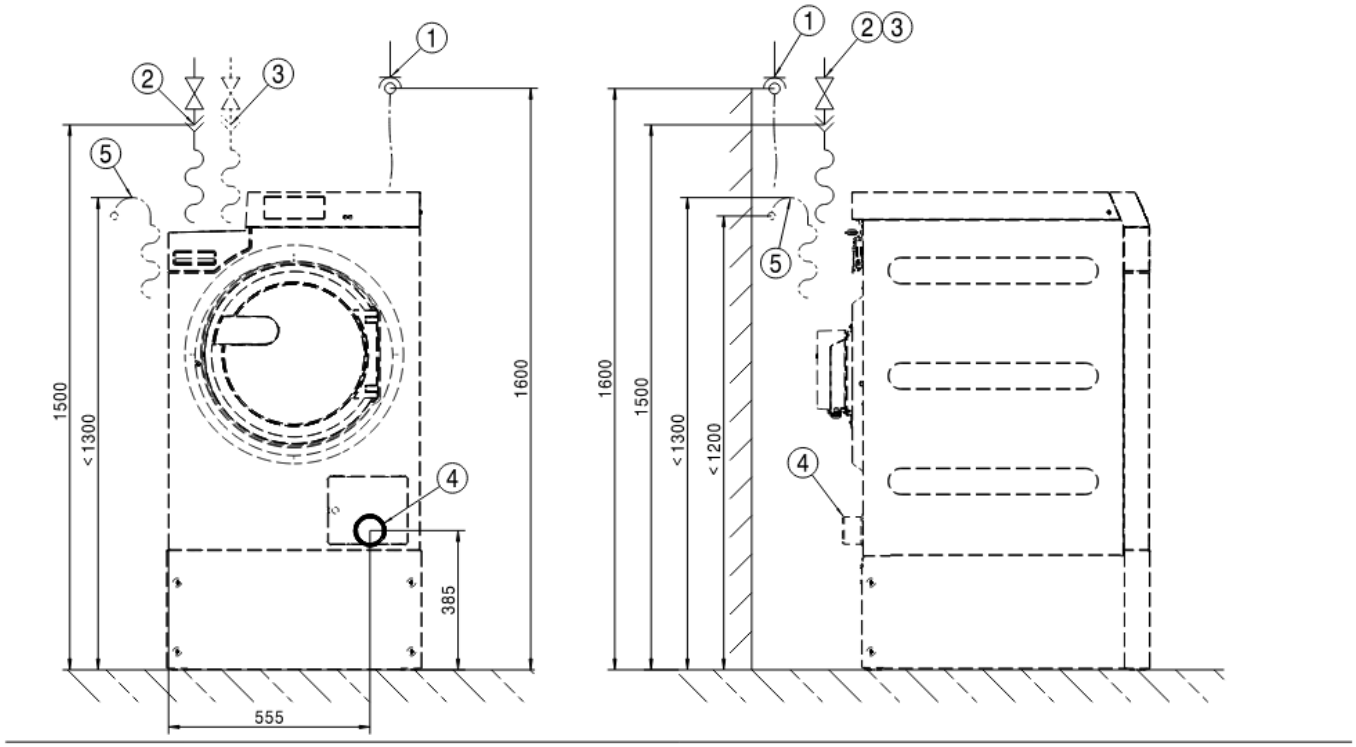


1. Electrical connection
2. Cold water connection
3. Hot water connection
4. Drain pipe (DV versions only)
5. Drain connection (DP versions only)



1. Electrical connection
2. Cold water connection
3. Hot water connection
4. Drain pipe (DV versions only)
5. Drain connection (DP versions only)
6. Dispenser pump connection
7. Connector Box connection
8. LAN connection
9. Connector Box (optional)

Plinth



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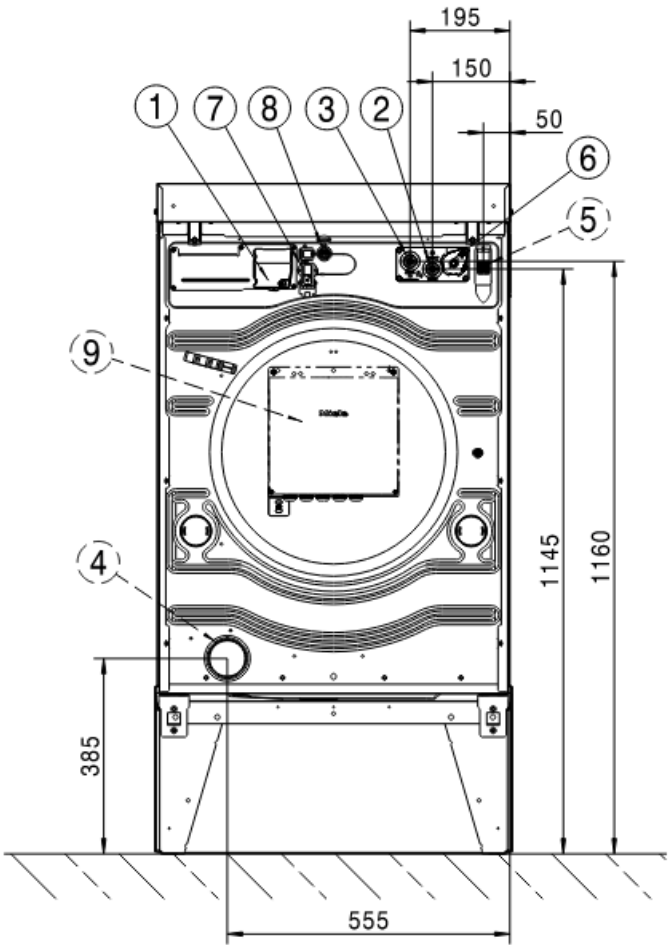

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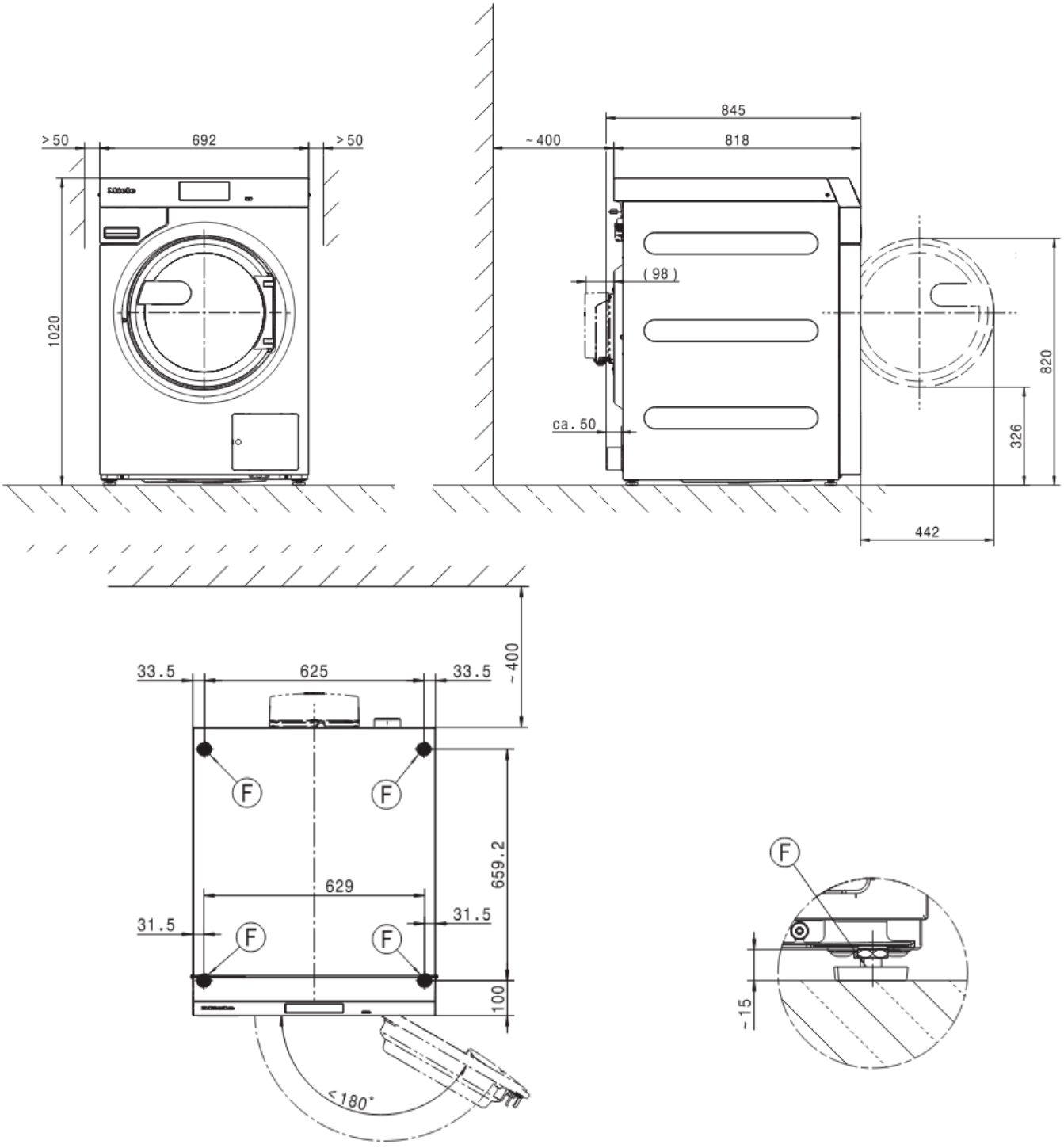
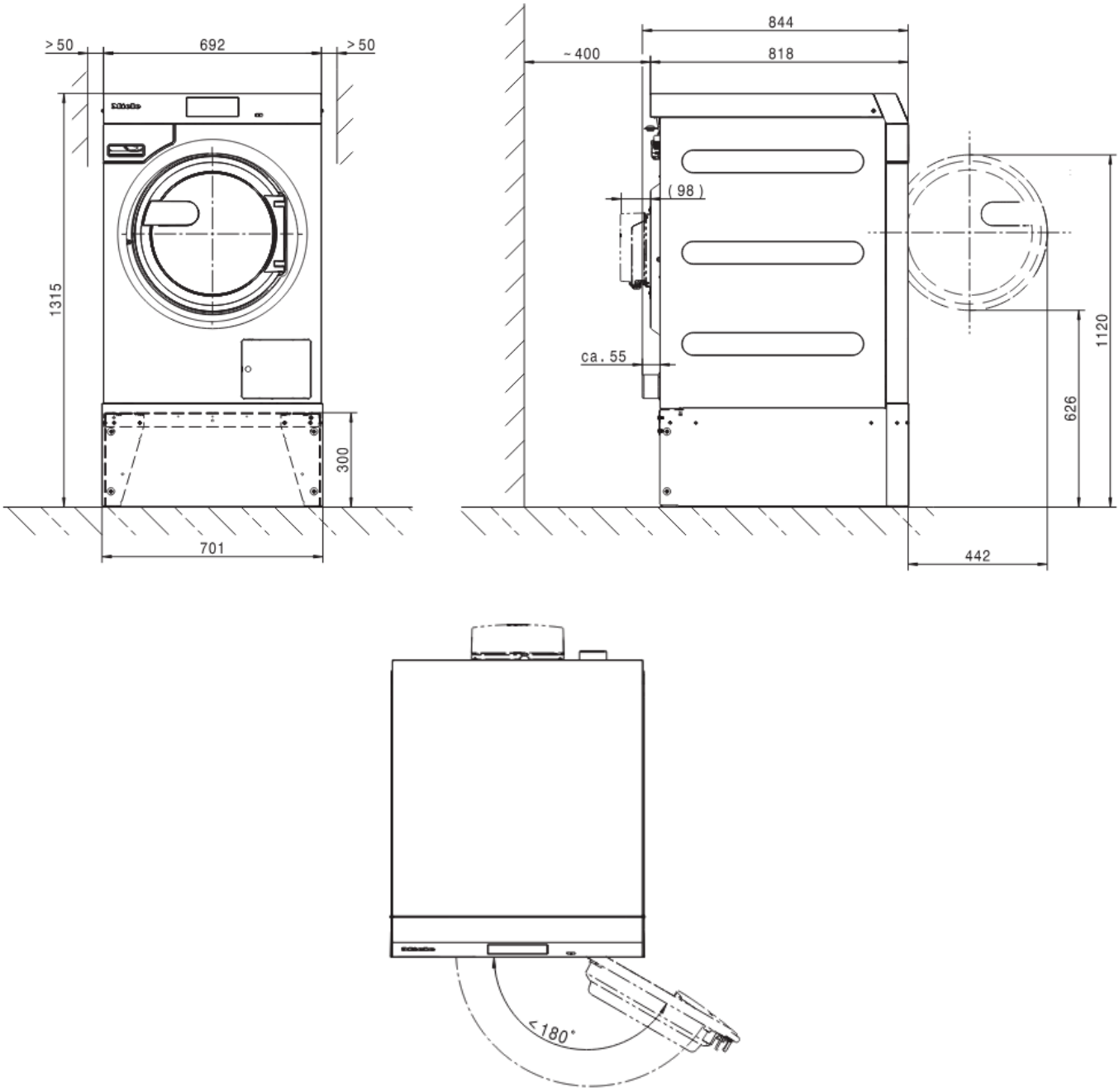


- Dimensions in mm
  - Machine foot

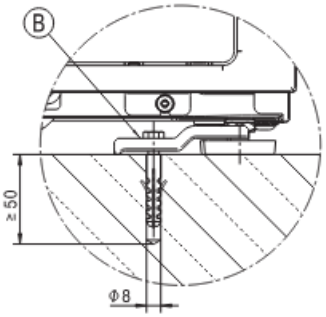
Plinth

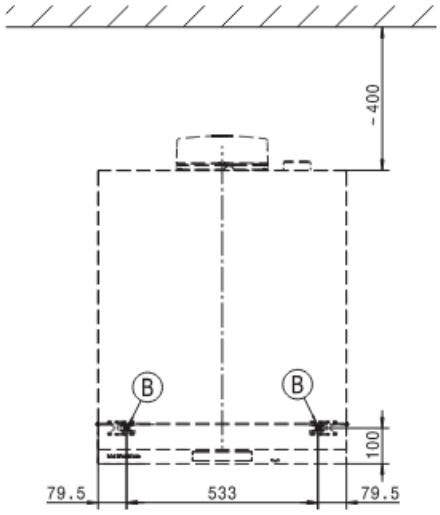


- Dimensions in mm
  - F Machine foot

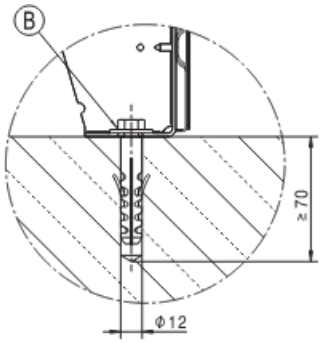
Floor anchoring

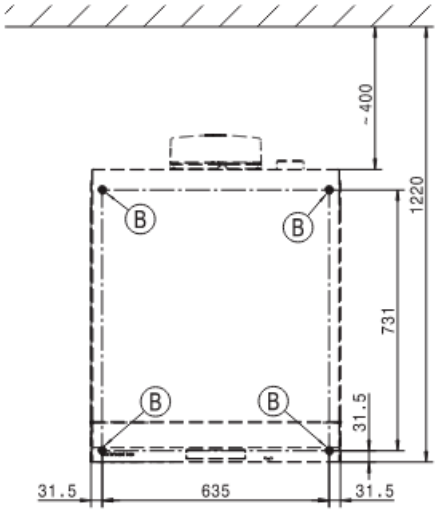
Standard





Plinth





Dimensions in mm

Ⓑ Screw/anchor point

Technical data

Voltage versions and electrical data

3N AC 400 V EL DV

- Supply voltage 3N AC 400 V
- Frequency 50/60 Hz
- Required fuse rating (on site) 3 x 16 A
- Circuit breaker trip characteristic Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 5 x 1,5 mm²

3N AC 400 V EL DP

- Supply voltage 3N AC 400 V

- Frequency 50 Hz
- Required fuse rating (on site 3 x 16 A
- Circuit breaker trip characteristic Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 5 x 1,5 mm²

3N AC 400 V EL DP

- Supply voltage 3N AC 400 V
- Frequency 60 Hz
- Required fuse rating (on site) 3 x 16 A
- Circuit breaker trip characteristic Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 5 x 1,5 mm²

3 AC 230 V EL DV

- Supply voltage 3 AC 230 V
- Frequency 50/60 Hz
- Required fuse rating (on site) 3 x 20 A
- Circuit breaker trip characteristic Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 4 x 2,5 mm²

3 AC 230 V EL DP

- Supply voltage 3 AC 230 V
- Frequency 50 Hz
- Required fuse rating (on site)
    - 3 x 20 A
- Circuit breaker trip characteristic
    - Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 4 x 2,5 mm²

3 AC 230 V EL DP

- Supply voltage 3 AC 230 V
- Frequency 60 Hz
- Required fuse rating (on site) 3 x 20 A
- Circuit breaker trip characteristic Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 4 x 2,5 mm²

3 AC 230 V EL DP

- Supply voltage 3 AC 230 V
- Frequency 60 Hz
- Required fuse rating (on site) 3 x 20 A
- Circuit breaker trip characteristic Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 4 x 2,5 mm²

1N AC 230 V EH DV

- Supply voltage 1N AC 230 V
- Frequency 50/60 Hz
- Required fuse rating (on site) 10 A
- Circuit breaker trip characteristic Type B
- Power rating 0,9 kW
- Connection cable, min. cross-section 3 x 2,5 mm²

1N AC 230 V EL DV

- Supply voltage 1N AC 230 V
- Frequency 50/60 Hz
- Required fuse rating (on site) 1 x 25 A
- Circuit breaker trip characteristic Type B
- Power rating 5,5 kW
- Connection cable, min. cross-section 3 x 2,5 mm²

1N AC 230 V EL DP

- Supply voltage 1N AC 230 V
- Frequency 50 Hz
- Required fuse rating (on site) 1 x 25 A
- Circuit breaker trip characteristic Type B
- Power rating 5,5 kW
- Connection cable, min. cross-section 3 x 2,5 mm²

3N AC 400 V EL DV MOP

- Supply voltage 3N AC 400 V
- Frequency 50/60 Hz
- Required fuse rating (on site) 3 x 16 A
- Circuit breaker trip characteristic Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 5 x 1,5 mm²

3 AC 230 V EL DV MOP

- Supply voltage 3 AC 230 V
- Frequency 50/60 Hz
- Required fuse rating (on site) 3 x 20 A
- Circuit breaker trip characteristic Type B
- Power rating 8,2 kW
- Connection cable, min. cross-section 4 x 2,5 mm²

Plumbing

Cold water connection

- Required flow pressure 100 – 1000 kPa (1 – 10 bar)
- Maximum flow rate 10 l/min
- Threaded union required (male thread, to be provided by the customer in accordance with DIN 44991, flat sealing) 3/4″
- Length of water inlet hose included in scope of supply 1550 mm

Hot water connection

- Maximum permissible hot water temperature 70 °C
- Required flow pressure 100 – 1000 kPa (1 – 10 bar)
- Maximum flow rate 10 l/min
- Threaded union required (male thread, by DIN 44991, flat sealing) 3/4″
- Length of water inlet hose supplied 1550 mm

Drain valve (DV)

- Maximum wastewater temperature 95 °C
- Drain connection (on the machine) Plastic pipe HT DN 70
- Drain (on site) Connection DN 70
- Maximum drainage rate 200 l/min

Drainage (DP)

- Maximum wastewater temperature 95 °C
- Drain connection (on the machine) External diameter 22 (DN 22)
- Maximum drainage rate 26 l/min

Equipotential bonding

- Connection with male thread 10×35 mm
- Washers and nuts M10

If local and national installation specifications require equipotential bonding, good galvanic contact must be guaranteed. Accessories for equipotential bonding are not supplied and need to be ordered separately.

Installation dimensions

- Casing width (without add-on components) 692 mm
- Casing height (without add-on components) 1012 mm
- Casing depth (without add-on components) 818 mm
- Overall machine width 700 mm
- Overall machine height 1020 mm
- Overall machine depth 845 mm
- Minimum width of transport opening 800 mm
- The minimum safety distance between the wall and the back of the machine is 400 mm
- The diameter of the door opening is 370 mm
- Door opening angle 180°

Anchoring

- Standard
- Required anchor points 2
- DIN 571 wood screw (diameter x length) 12 mm x 90 mm
- Rawl plugs (diameter x length) 14 mm x 80 mm

With plinth (APWM)

- Required anchor points 4
- DIN 571 wood screw (diameter x length) 12 mm x 90 mm
- Rawl plugs (diameter x length) 14 mm x 80 mm

Concrete plinth

- Required anchor points 2
- DIN 571 wood screw (diameter x length) 12 mm x 90 mm
- Rawl plugs (diameter x length) 14 mm x 80 mm

Transport data, weight, and floor load

- Packaging width 750 mm
- Packaging height 1214 mm
- Packaging depth 917 mm
- Gross volume 835 l
- Gross weight* 161 kg
- Net weight* 148 kg
- Maximum floor load in operation* 2577 N

depending on the equipment configuration

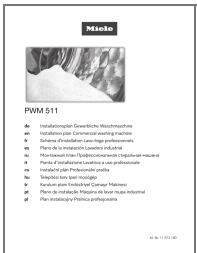
Emissions data

- Workplace-related sound pressure level, washing 51 dB (A)
- Sound power level, washing 60,1 dB (A)
- Workplace-related sound pressure level, spinning 60 dB (A)
- Sound power level, spinning 68,7 dB (A)
- Average heat dissipation rate to installation room 2,8 MJ/h
- Emission sound pressure level 61 dB (A) re 20 µPa

Miele & Cie. KG Carl-Miele-Straße 29 33332 Gütersloh Germany

- **Telefon:** 05241 89-0
- **Internet:** www.miele.com/professional

Documents / Resources

	**Miele PWM 511 Professional Washing Machine** [pdf] Instruction Manual PWM 511 Professional Washing Machine, PWM 511, Professional Washing Machine, Washing Machine, Machine

References

- **Professional**
- **User Manual**