### **Panasonic**

# Operating & Installation Instructions

Fully Automatic Washing Machine (Domestic use)

Model No.

NA-F100A1 NA-F90A1 NA-F85A1



### Contents

2
3
4
5
6
7
8
10
10
12
14
15

### Thank you for purchasing this product.

- Read these instructions carefully for optimum performance and safety before use.
- Keep this manual for future reference.



W9901-9EX20 A0115-2046(V) Printed in Vietnam 04/2016

### **Safety Precautions**

Read and follow these safety precautions.

### **⚠** WARNING



### Never do the following about the power plug and cord

(To prevent fire or electric shock)

- Do not plug in or unplug the power cord with wet hands.
- Do not hold or pull on the cord when removing the plug from the socket.
- Do not use a power cord or plug that is damaged.
   If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

### Observe the following about the power plug and cord

(To prevent fire or electric shock)

- Use a socket that satisfies the rating requirement solely for this appliance. Do not use a plug adaptor or extension cord.
- Always fully insert the power plug into the socket.
- Wipe the power plug periodically with a dry cloth. (Accumulated dust collects moisture, which may cause insulation failure, resulting in fire.)
- Unplug the power cord before cleaning.

### Never disassemble, repair or modify the appliance yourself.

 In case of malfunction or failure, immediately stop use, unplug the power cord, and ask your nearest service centre for repair.

### Do not allow children to use on their

- This appliance 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 use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

# Keep away from fire. Do not put flammable materials or clothes with such things attached in the tub. Keep them away from the appliance.

(To prevent explosion or fire)

 For example: Kerosene, gasoline, benzine/thinner, alcohol, etc.

### Do not touch the tub until it completely stops.

(To prevent injury)

 If the tub does not stop within 15 seconds when the lid is opened during spin process, switch off the appliance immediately and call a service person.

#### Provide a ground.

(To prevent electric shock by short circuit)

- Ask a service person to do the grounding work.
- In case of a 2-pin power cord, establish a ground.

# Keep magnets and magnetized objects away from the operation panel.

The tub may rotate even when the lid is open, resulting in injury.

### **Part Names**

### **CAUTION**



### Do not wash, rinse, or spin waterproof sheets or clothes.

(To prevent injury, damage to the main unit, walls, floor or laundry, or water leakage if the appliance falls over or oscillates extremely while spinning)

• Raincoats, wet suits, etc.

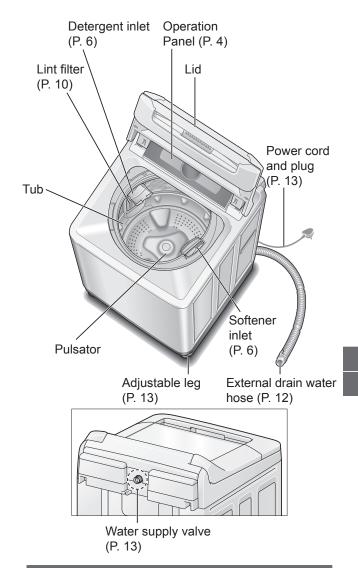
#### Observe the following

- Locate away from direct sunlight or heat. (To prevent malfunction or deformation)
- New hose-sets supplied with the appliance are to be used and old hose-sets should not be reused.
- Be careful not to get your fingers caught when opening and closing the lid.
- Do not insert your hands or feet under the main unit.
   (To prevent injury by rotating parts.)
- Do not climb or put heavy objects on the appliance.
   (To prevent deformation and breakage resulting in injury)
- If the lid is broken, immediately stop using the appliance.
  - (To prevent deformation and breakage resulting in injury)
- Do not connect to the hot water supply.
- Do not directly pour hot water of 50 °C or higher into the tub
- Do not obstruct the openings of the bottom face with carpet, etc.

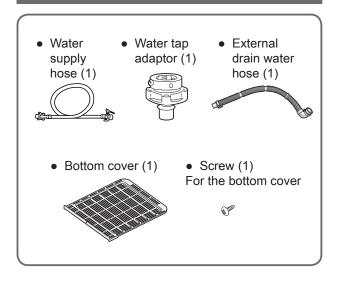
### Turn off the water faucet after operation.

(To prevent water leakage)

This appliance is only suitable for textiles labelled washing machine washable.



#### Accessories



### **Operation Panel**

#### Change water level

During the wash process, press "Water Level" to change the water level. By pressing "Water Level" repeatedly, the water level indication changes among 6 options.

- Some water levels cannot be selected depending on the program.
- When the remaining time is displayed, press "Water Level" to check the water level.

### Water level/ remaining time



After starting operation, indicates the water level according to the amount of laundry.



After approx. 5 seconds, indicates the approximate remaining time (min).

### Detergent volume guideline

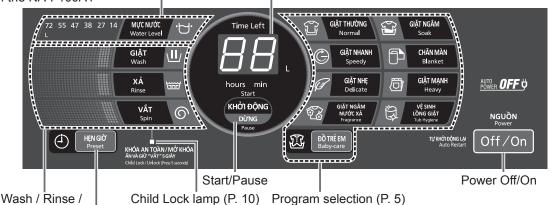
Water I	evel (L)	Detergent 1)
72 <sup>2)</sup>	55	
4	7	
38	27	
1	4	

1) T: 1 scoop of detergent

2) NA-F100A1: 72 L NA-F90A1: 69 L NA-F85A1: 66 L

 Operation panel of the NA-F100A1

Spin (P. 9)



#### **Preset**

Set the time to finish washing (in hours). ((1) lights.)



e.g.) 8 hours later

- Setting range: 2 24 hours later, in one-hour increments. (3 24 hours later for the Heavy program, 1 - 24 hours later for the Speedy program)
- Not available for the following programs:
   Delicate, Fragrance, Blanket, Tub Hygiene

#### NOTE

- In case of a power failure during operation, operation will resume from the point where it was stopped when the power is recovered (Auto Restart).
- The power turns off automatically if you do not press "Start/Pause" within 10 minutes after power-on.

### **Variety of Programs**

Purpose			Program	Maximum capacity NA-F100A1 NA-F90A1 NA-F85A1		
<b>Everyday</b> clothes	Daily washing		Normal (P. 7)	10.0 kg	9.0 kg	8.5 kg
	Speedy washing for light soil		Speedy (P. 7)	10.0 kg	9.0 kg	8.5 kg
<b>Delicates</b>	Washing delicates gently		Delicate (P. 8)	4.2 kg	4.2 kg	4.2 kg
Using extra softener	Stronger scent		Fragrance (P. 7)	10.0 kg	9.0 kg	8.5 kg
Heavily soiled	Presoaking to wash		Soak (P. 7)	10.0 kg	9.0 kg	8.5 kg
clothes	Presoaking then washing with powerful swirling water		Heavy (P. 7)	10.0 kg	9.0 kg	8.5 kg
Clothes for babies & people with sensitive skin	Rinsing thoroughly		Baby-care	10.0 kg	9.0 kg	8.5 kg
Blankets			Blanket (P. 8)	4.2 kg	4.2 kg	4.2 kg
Preventing black mould and smell	Tub cleaning		Tub Hygiene	_	_	_

### Laundry preparation and check

#### Wash separately



- · Clothes losing color easily
- Lint producers<sup>1)</sup> from lint collectors<sup>2)</sup>
  - 1) Lint producers: towel, sweater, etc.
  - 2) Lint collectors: polyester pants, fleece jacket, etc.

#### **Pre-laundry check**

To prevent damage to clothes, malfunction and drainage failure

- Remove coins, pins, paper clips, nails, etc.
- Fasten buttons and close zippers.
- Do not wash items (such as paper diapers) other than laundry.
- Reverse clothes with surface likely to flake off.
- Use a brush to remove pet and human hair, sand, etc.
- Tie strings, etc.

### For delicate underwear only Use laundry nets

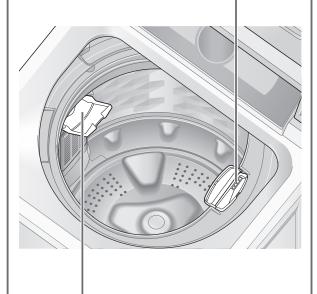
- Underwire brassieres
- Lacy clothes, lingerie and stockings When using a net
- Do not overpack.
- Put the zipper's slider into the cover.
   (To prevent damage to clothes and the main unit)

### Detergent

# Put in detergent, bleach and softener according to the water level displayed.

• Follow the instructions on each package.

■ Softener inlet Softener



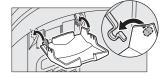
■ Detergent inlet Detergent/Bleach







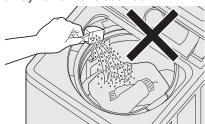
- Turn the tub by hand if it is difficult to put in the detergent inlet. (P. 10)
- Attach the detergent inlet cover if it comes off.



### **Putting in detergent**

Do not put detergent directly into the tub.

Detergent may remain undissolved.



 The level of foaming depends on conditions such as load size, degree of soiling, detergent type, and water hardness.

### Putting in bleach

- Do not use chlorine bleach for coloured clothes to prevent loss of colour.
- After using chlorine bleach, wash the tub with the Tub Hygiene program without bleach. (P. 11)
- Do not use bleach for the Delicate program.

#### **Putting in softener**

- Softener is automatically released during the final rinse process.
- To add softener during operation, press "Pause" first.
- Up to about 70 ml can be added. To add more softener, use the Fragrance program.
- Close the cover securely after the softener is put in.
- When using concentrated softener, dilute it with water before putting it in.



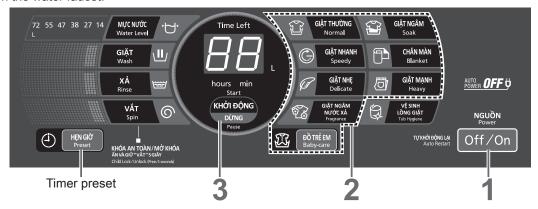
### (NOTE

• Do not use separated or solidified softener.

### Washing

#### Preparation:

- Check if the washing machine is properly installed. (P. 12)
- Turn on the water faucet.



After

After loading laundry

### Off /On Turn the power on.

• The Normal program is selected when the power is turned on.

2

#### Select a program. (P. 5)

■ Timer preset —

3



#### Start.

The pulsator moves without water and measures the amount of laundry (approx. 5 seconds).

### Water level indication (approx. 5 seconds)

Remaining time indication

To check the water level
 →Press "Water Level".

4

According to the water level indication **Put in detergent.** 

 Approx. 20 seconds after the water level is displayed, water supply begins.

5

#### Close the lid.



Operation ends with beeps.

### Set how many hours later to finish operation. (P. 4)



- 2 minutes after start-up, all indications except (1)
- To confirm after the timer has been set, press
- To cancel or change, press Off/On.
- The hours that can be set differ depending on the program.

### When the Fragrance program is selected

The buzzer sounds before the final rinse and operation is paused. Put the desired amount of softener which has been diluted with water directly into the tub.



- If the lid is left closed, the buzzer sounds every 10 minutes for up to 1 hour.
- If the lid is left closed for more than 1 hour, operation resumes.
- The Fragrance program cannot be selected when Child Lock (P. 10) is set.

#### ■ After pressing "Start"

- You can change the water level until the end of the wash process.
- You cannot change the program.

### **Washing Options**



#### **Delicate**

Use this program to gently wash delicate clothes and stylish garments.



Load laundry evenly.

- Load items that easily float first, and press them from above.
- Use laundry nets for delicate underwear only.
- Amount that can be washed at one time:

55 L	4.2 kg
47 L	3.0 kg

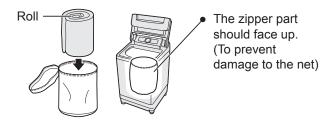
#### (NOTE)

- Do not use bleach.
- Use liquid delicate detergent.
- After operation ends, take out clothes immediately. (To prevent wrinkles and colour staining)

#### **Blanket**

#### ■ Washable blankets

- Material: 100 % synthetic fibre or 100 % cotton
- Weight: 4.2 kg or less
- · Blankets with a machine-washable tag attached
- Put a blanket in the net and load it in the tub.



#### NOTE

- Use liquid detergent.
- The water level indication shows the maximum and cannot be changed.

### Wash / Rinse / Spin

Preparation: Turn on the water faucet.

1

After loading laundry

Off/On

Turn the power on.

2



According to your purpose

### Change process settings.

• Change the water level as necessary.

3

After closing the lid



Start.



Operation ends with beeps.

### **Contents of Programs**

Program	Total time (approx.)	Wash	Rinse	Spin
Normal	60 min	12 min	Twice	5 min
Speedy	40 min	3 min	Twice	3 min
Delicate	40 min	9 min	Twice	1 min
Fragrance	75 min	12 min	Twice	5 min
Soak	90 min	42 min 1)	Twice	5 min
Heavy	120 min <sup>2)</sup>	72 min <sup>1)</sup>	Twice	5 min
Baby-care	65 min	12 min	Twice	7 min
Blanket	65 min	12 min	Twice	3 min
Tub Hygiene	140 min <sup>2)</sup>	72 min	Twice	30 min

(NOTE)

- Total time is an estimation.
   (When the standard water supply rate is 15 L / min)
- Total time may increase depending on low water pressure, bad draining conditions, and the amount and type of clothes.
- 1) This includes soaking time and washing time.
- 2) Remaining time of 90 minutes or less will be displayed.



### Convenient Functions Maintenance

### Cancelling end buzzer



Pressing down,

Off/On press.

Then hold on for

3 seconds.

To reset, do the same procedure.

4 short beeps

### **Setting Child Lock**

To prevent children from falling into the tub and drowning, if the lid is opened while the washing machine is operating, this function sounds a buzzer until it is closed. Not closing it within 10 seconds flushes the water out.

- This function does not lock the lid and button operations.
- When water is drained forcibly, "U 99" is displayed. (P. 15)

After closing the lid

Off/On

Turn the power on.



Press and hold for 2 short 5 seconds.



To cancel, do the same procedure.

4 short

### Turning the tub by hand

If it is difficult to reach the detergent or softener inlet.

Off/On

Turn the power on.

When a clicking sound is heard

Turn the tub.

(Clockwise only)



### NOTE )

• If there is water in the tub or "Start" is pressed, the tub cannot be turned.

#### Lint filter

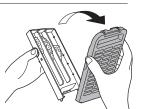
#### After each operation



Remove the filter.



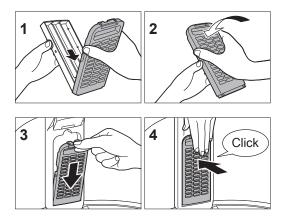
Open the filter and remove lint.



• If lint is difficult to remove, soak and wash the filter in water.



Attach the filter in its original position.



### NOTE )

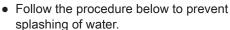
- Do not wash laundry without the filter. (To prevent damage to clothes)
- Turn the tub by hand if it is difficult to remove the filter.
- If the filter is broken, purchase a new one at nearest Panasonic Service Centre.
- Separate clothes following instructions (P.5) before operation so that lint can be collected by the filter.

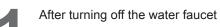
### Water supply filter

If water does not flow smoothly

#### NOTE )

- Do not throw away or puncture the filter to avoid damaging feeding valve.
- Please clean the feeding valve frequently if there is impurities in water supply such as mold, iron, etc.





Turn the power on. Off/On

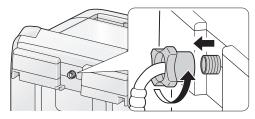
KHỞI ĐỘNG DỪNG

Start.

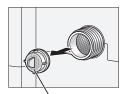
After approx. 40 seconds

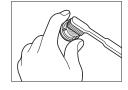
Turn the power off. Off/On

Loosen the nut and remove the hose.



Remove the filter and remove dirt on the filter.





Water supply filter

### Main unit, lid

If stained with detergent or softener

#### Wipe with a soft cloth.

(To prevent damage to resin parts or metal corrosion)

- For heavy soil, wipe with a neutral kitchen detergent.
- Do not splash water.

#### Tub

Once a month <Tub Hygiene>

Preparation: Turn on the water faucet.

Without loading laundry Turn the power on. Off/On

Press.

KHỞI ĐÔNG DỪNG

Start.



KHỞI ĐỘNG DỪNG

When the tub is filled with water Pause.

Put bleach in the tub. Use chlorine bleach for clothes.



Approx. 200 ml

After closing the lid Start. KHỞI ĐỘNG DỪNG



After approx. 2 hours and a half, tub cleaning ends.

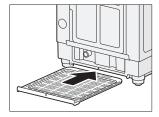
### Installation

#### 1. Check the location.

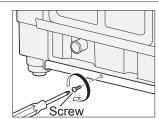
- Avoid the following locations for installation.
  - · Locations with a possibility of freezing
  - Damp locations or locations where it may be exposed to rain, etc.
    - (To prevent electric shock or fire)
  - Uneven or unstable locations (on blocks, timbers, a table with wheels, etc.)

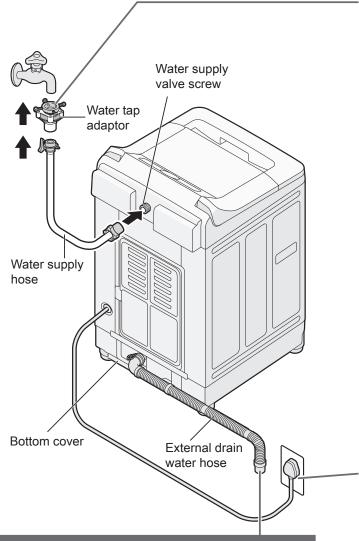
#### 2. Attach the bottom cover.

Insert the bottom cover along the guides.



Fix with a screw.





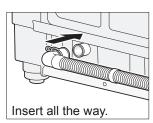
#### 3. Attach the external drain water hose.

Connect.



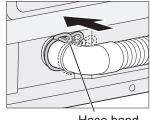
Do not direct the

elbow upward.



Slide the hose band in the arrow direction.

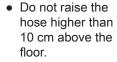
> Slide all the way until it stops.



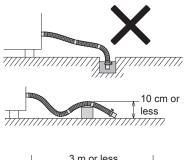
Hose band

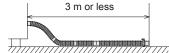
#### NOTE )

Do not put the hose tip under water.

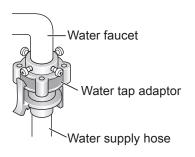


• Do not extend the overall length to more than 3 m.





### 4. Connect the water tap adaptor and water supply hose.



### **ACAUTION**

- Tighten the nut firmly.
- Do not twist, squash, modify or cut the hose.

### Connect the water tap adaptor to the water faucet.

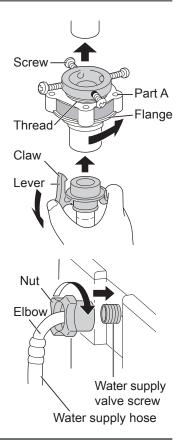
- Turn part A to the left until approx.
   4 mm of the thread becomes visible.
- 2 Loosen the 4 screws.
- **3** Connect to the faucet and tighten the screws.
- **4** Turn part A to the right and tighten securely. (To prevent water leakage)

# Connect the water supply hose to the water tap adaptor.

Insert the hose into the adaptor while pushing down the lever, and hook the claw of the lever on the flange of the adaptor.

# Connect the water supply hose to the water supply valve screw.

- 1 Hold the elbow and tighten the nut.
- 2 Check that the elbow is not loose.

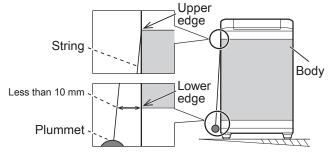


### 5. Connect the power plug and grounding wire.

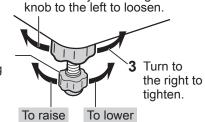
- Ask a service person to do the grounding work.
- In case of a 2-pin power cord, establish a ground.

### 6. Check that the washing machine is level.

- Check the balance state using a plummet:
- **1** Take upper edge of the body as the base. From this position, release the string to make it vertical to the ground.
- 2 Take lower edge of the body as the base. Measure the distance from the edge to the string. The distance must be less than 10 mm to the left, to the right, to the front, and to the back of the machine.



- If the washing machine wobbles
- 2 Turn the adjustable leg to eliminate wobble.



1 Turn the adjustable leg

# Installation

### 7. Perform a trial operation.

• Check that there is no water leakage, abnormal sounds or error display.

# **Troubleshooting**

	Symptoms	Points to be checked			
Time	Time indication increases or does not change	Time indication is approximate. Remaining time is corrected during operation and displayed.			
	Operation time is longer than the time indication. Operation does not stop even after the preset time.	<ul> <li>The operation time may be longer if laundry is concentrated on one side or the water supply or drainage is not good.</li> <li>(P. 15 "U 11" "U 14")</li> </ul>			
Main unit	No operation	<ul> <li>Power failure?</li> <li>Is the lid closed completely?</li> <li>Has the power fuse blown or the breaker tripped?</li> <li>Is the power plug inserted completely?</li> <li>Is the water faucet turned on?</li> <li>Did you press "Start"?</li> <li>Is the timer preset?</li> </ul>			
Wash	No water supply	<ul><li> Is the water faucet turned on?</li><li> Water outage?</li><li> Is the water supply filter clogged with dirt? (P. 11)</li></ul>			
	Water is supplied in the middle of wash process.	<ul> <li>If the water level drops, water is added automatically.</li> <li>With a large amount of laundry, water is added several times automatically.</li> </ul>			
	The water level is too high for the amount of laundry.	If laundry is wet or there is water in the tub before operation, the water level may be higher.			
	The water level is too low for the amount of laundry.	With light clothes (of synthetic fibre, etc.), the water level may be lower.			
	Operation started with rinse, but water is not supplied.	<ul> <li>If there is no water in the tub, water is supplied after spin.</li> <li>If there is water in the tub, water is supplied after water discharge.</li> </ul>			
Rinse/Spin	Operation suddenly changes to rinse process in the middle of spin. Only spin is desired, but operation starts with rinse.	<ul> <li>If clothes are concentrated on one side of the tub, the washing machine automatically corrects unevenness by starting rinse process.</li> <li>(Place clothes as evenly as possible.)</li> </ul>			
	Irregular rotation during spin	The tub rotation speed is adjusted to reduce foaming during spin.			
	Power failure/ The breaker has tripped.	Operation will resume from the point where it was stopped when the power is recovered (Auto Restart).			
Others	Water outage	When water supply is recovered, remove the water supply hose, release turbid water from the faucet, and then start the washing machine.			
	Cannot select the Fragrance program.	If Child Lock (P. 10) is set, the Fragrance program cannot be selected.			

## **Error Display**

- The buzzer sounds and "U"/"H" and a number are alternately displayed.
- Cancel Child Lock (P. 10) if it is set.

Error display	Points to be checked
<u></u>	Water cannot drain. Check the drain water hose for the following abnormalities:  Is it crushed?  Is it clogged with lint?  Is the hose tip under water?  Is it partially raised higher than 10 cm above the floor? (P. 12)  Is the total length longer than 3 m (including the extension hose)? (P. 12)  When the above problems are solved, you can resume operation by opening and closing the lid.
U 12	<ul> <li>The lid is open.</li> <li>Did you try to run the washing machine with the lid open?</li> <li>→Close the lid.</li> </ul>
<u> </u>	Spin is not possible.  • Are clothes concentrated on one side of the tub?  → Distribute the clothes evenly and close the lid.  • Is the washing machine installed on an unstable or inclined surface?  → You can resume operation by opening and closing the lid.
<u> 1</u> 4	<ul> <li>Water cannot be supplied.</li> <li>Is the water faucet turned on?</li> <li>Water outage?</li> <li>Is the water supply filter clogged with dirt? (P. 11)</li> <li>→You can resume operation by opening and closing the lid.</li> </ul>
U 99	<ul> <li>Water has been forcibly drained.</li> <li>• Water has been forcibly drained because the lid was open for 10 seconds or more with Child Lock (P. 10) set.</li> <li>→Unplug the power cord and plug it in again after 5 seconds.</li> </ul>
H	<ul> <li>Inspection is required.</li> <li>Unplug the power cord. Then, report the error displayed (2-digit number after "H") to a service person.</li> </ul>

### **Specifications**

	NA-F100A1	NA-F90A1	NA-F85A1	
Rated voltage		220 - 240 V		
Rated frequency	50 Hz			
Rated power consumption	460 W	420 W	390 W	
Standard water amount	72 L	69 L	66 L	
Maximum capacity	10.0 kg	9.0 kg	8.5 kg	
Product dimensions	595 mm (W) x 651 mm (D) x 1035 mm (H)	595 mm (W) x 651 m	mm (D) x 1015 mm (H)	
Product weight	36 kg	35	35 kg	
Pressure of tap water	0.01 - 1 MPa			

<sup>\*</sup> Operation is guaranteed with the voltage fluctuation from 195 V to 245 V, but not for performance.