Instruction manual

UWS
OUR WATER. SAFE.

Heaty Complete-Serie

Replenishments

- Heaty Complete Home
- Heaty Complete Home XL
- Heaty Complete Home Duplex
- Heaty Complete Fix Mini
- Heaty Complete Fix Small
- Heaty Complete Fix Big
- Heaty Complete Fix Tall

Index

1 Installation and operation

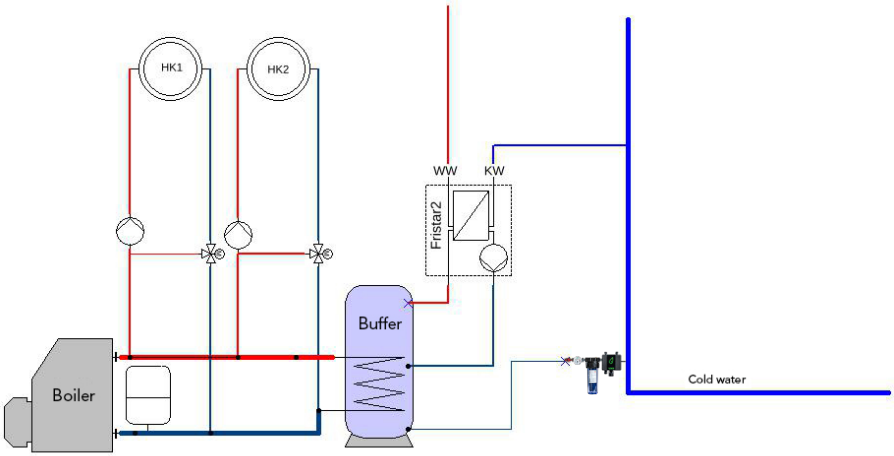
Installation

1. Please pay attention to the direction of flow for all components.

2. The unit is pre-assembled. The screw connections may become loose during transport. Please retighten them.

3. Note: The vent screws must always be closed again after any opening, otherwise water may escape in an uncontrolled manner!

Installation diagram



Changing the cartridge Home series

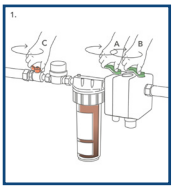
When should the cartridge be changed?

The cartridge must be replaced either according to the counter reading or LED display, in the case of indicator resin after the resin has changed colour (see marking, normally as soon as the change in colour has reached the last third of the cartridge).

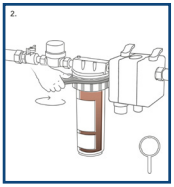
The cartridge must be replaced after 2 years at the latest!

Changing cartridges in the Home series is child's play

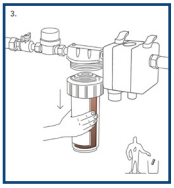
1. Close the inlet (A, B & C).



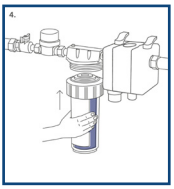
2. Use the spanner (included in the scope of delivery) to turn the replenishment clockwise on the union nut.



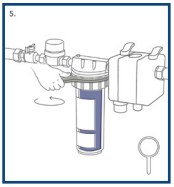
3. Remove the used cartridge and dispose of it.



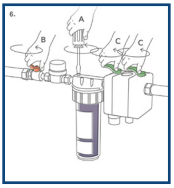
4. Insert the new cartridge.



5. Close the replenishment by turning the spanner (included in the scope of delivery) anti-clockwise.



6. Slightly open the bleed screw with the screwdriver (A). Open the inlet valves (C). As soon as water emerges from the bleed screw, close it again. The valve (B) can then be opened again.



Cartridge change Fix series

NOTE

Handling mixed bed resin

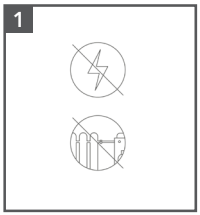
Observe the following points when handling the mixed bed resin:

- Do not store the mixed bed resin open, otherwise it will lose its capacity.
- Use the outer packaging of the refill pack to dispose of the replaced mixed bed resin.
- Replace the mixed bed resin over a drain so that the water separated from the replaced mixed bed resin can drain away.
- Wear suitable personal protective equipment (safety goggles, gloves).

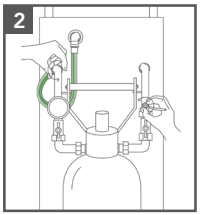
When the mixed bed resin has been used up, proceed as follows:

NOTE

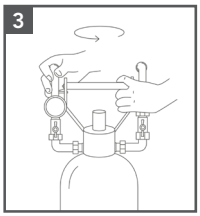
The resin can be changed anywhere. This allows immediate refilling.



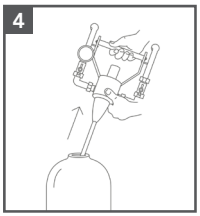
1.
Ensure that the appliance is disconnected from the power supply and the heating or cooling system.



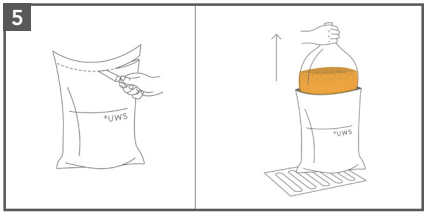
2.
Remove the hoses from the appliance and open all valves to drain the appliance.



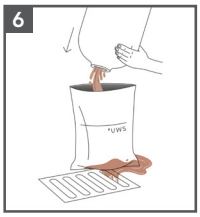
3.
Turn the 3-way head on the handle anti-clockwise to release the 3-way head.



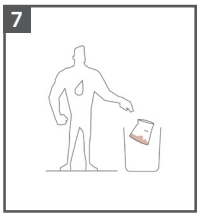
4.
Pull the 3-way head with the suction lance out of the composite container.



5.
Remove the mixed bed resin refill pack from the outer packaging and place the outer packaging over a drain.



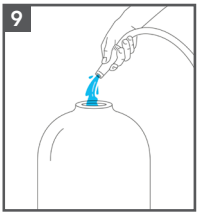
6.
Empty the exhausted mixed bed resin from the composite container into the outer packaging:



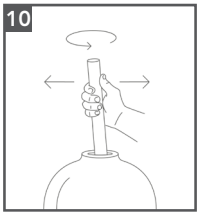
7.
Dispose of the mixed bed resin and empty the remaining water into a drain.

▶ The used mixed bed resin is retained by the outer packaging while the water flows into the drain.

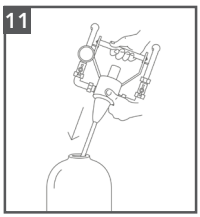
8.
Open the mixed bed resin refill pack and fill it into the composite container using a funnel. If necessary, compact the mixed bed resin by shaking or circling the composite container.



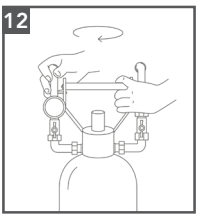
9.
Fill the composite container with water to a height of approx. 2 cm below the thread.



10.
Stir the mixed bed resin with a pipe or other suitable tool to make it easier to insert the 3-way head with suction lance.



11.
Insert the 3-way head with suction lance back into the composite container.



12.
Turn the 3-way head clockwise to hand-tight.

Video instruction resin change

▶ The mixed bed resin has been changed and the filler is working at full capacity again.

NOTE

Seal the packaging

Keeping the resin open will greatly reduce its capacity!

2 Device description

ATTENTION

When using an automatic replenishment system, pressurisation systems or systems that can generate pressure surges, the UWS replenishment station must either be installed downstream of the solenoid valve to protect against pressure surges or a pressure surge damper must be installed between the solenoid valve and the UWS replenishment station.

NOTE

The replenishment stations are not intended for initial filling. If you wish to use them for this purpose, you have the option of extending them (Complete initial filling set).

The measuring cell with LED display shows the remaining capacity of the mixed bed resin. The colours of the LED display have the following meanings:

Colour of the LED display	Conductivity (µS/cm)	Meaning
Green	<15	Capacity very good
	<30	Capacity good
	30 - <75	Capacity sufficient
Yellow	<90	Capacity insufficient, replace mixed bed resin **promptly** (see p. 6)
Rot	>90	Capacity exhausted, replace mixed bed resin **immediately** (see p. 6)

NOTE

LED function

At the beginning of the process, the individual LEDs are checked (light organ). If the Vadion pH-Control has been replaced, the LED display of the measuring cell may light up red. In this case, continue the process for approx. 5 minutes. If the display of the LED measuring cell does not change, bleed the measuring cell or check the measuring cell with a manual measuring device to rule out a fault. If there is no error, the capacity of the mixed-bed resin is exhausted and the mixed-bed resin must be replaced.

3 Technical data

Heaty Complete	Home	XL	Duplex	Mini	Small	Big	Tall
Article number	100330	100331	100332	100345	100346	100347	100348
Max. inlet temperature	40 °C	40 °C	40 °C	50 °C	50 °C	50 °C	50 °C
Max. inlet pressure	8 bar	8 bar	8 bar	8 bar	8 bar	8 bar	8 bar
Pipe connection	1/2“	1/2“	1/2“	1/2“	1/2“	1/2“	1/2“
Height / Width in mm	315 / 133	571 / 133	571 / 275	630 / 550	600 / 550	750 / 550	1.280 / 550
Mixed bed capacity	0.75 l	1,5 l	3 l	6 l	9,5 l	23 l	46 l
Max. flow rate	60 l/h	120 l/h	240 l/h	360 l/h	600 l/h	1,200 l/h	2,400 l/h

Kapazitäten*

Complete	Home	Home XL	Home XL Duplex	Mini	Small	Big	Tall
At 1°dH / 2°fH	1,350 l	2,700 l	5,400 l	10,800 l	17,100 l	41,400 l	82,800 l
At 12°dH / 21°fH	113 l	225 l	450 l	900 l	1,425 l	3,450 l	6,900 l
At 20°dH / 36°fH	68 l	135 l	270 l	540 l	855 l	2,070 l	4,140 l

*Note

The capacity depends on various parameters such as the water temperature, the chemical composition of the water or the flow pressure. For an exact determination, a water analysis of the raw water must be carried out. The values given here always refer to the optimum case and do not constitute a binding guarantee.

NOTE

Please note that the make-up water must be connected to the drinking water before a softening system.

4 Operating instructions

Area of application

The BA filling combination is used to automate the filling process in hot water heating systems.

The built-in BA system separator in accordance with EN 1717 prevents the heating water from flowing back into the drinking water pipe. This combination is approved for direct fixed connection to the heating system in accordance with EN 1717.

The integrated pressure regulator ensures that the system is correctly and constantly pressurised.

Construction

The BA filling combination consists of an integrated shut-off valve on the inlet and outlet side, BA system separator to EN 1717, drain funnel, test devices, pressure regulator, strainer and pressure gauge. Adjustment range of the pressure regulator between 1 and 5 bar. Screw connections on both sides.

Housing made of pressed brass. Internal parts and drain funnel made of high-quality plastic and NBR.

The BA filling combi contains all the components specified in EN 1717 for connecting the drinking water pipe directly to the heating circuit.

The built-in pressure regulator ensures a constant set outlet pressure to protect the heating system from unwanted overpressure during the filling process.

Once the filling and venting process is complete, the integrated shut-off valve should be closed to prevent uncontrolled refilling of the heating system

Installation

The suply line of the BA filling combination must be designed in such a way that no stagnation occurs.

Before installing the BA filling combi unit, the pipeline must be carefully flushed. The fitting must be installed in the pipeline in such a way that the drain funnel points vertically downwards so that the escaping water can drain away at a free gradient.

An easily accessible installation location simplifies maintenance and inspection. Ensure that the installation location is protected from flooding and frost and is well ventilated. The drain pipe must be provided with sufficient capacity.

We recommend installing a drinking water filter in accordance with EN 13443, Part 1 immediately downstream of the water meter to ensure long-lasting and trouble-free operation. The maintenance intervals for the BA Plus filling combination must also be observed.

The valid standard EN 12056 must be observed when connecting the funnel to the waste water system.

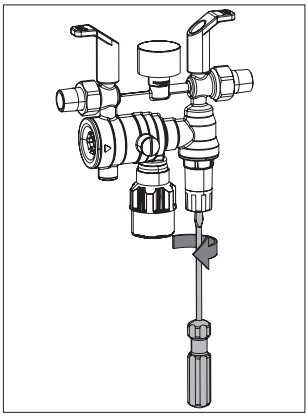
Pressure regulator setting

NOTE

Please note that the pressure regulator of the BA filling combination is set to 1.5 bar at the factory. Please remember: The inlet pressure must be at least 1 bar higher than the desired system pressure.

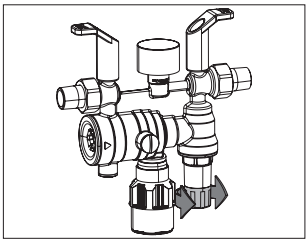
The pressure regulator can be adjusted as follows:

If a lower system pressure than 1.5 bar is required, loosen the locking screw in the pressure regulator's adjustment handle and turn it to the initial position in the direction of the arrow minus (-).



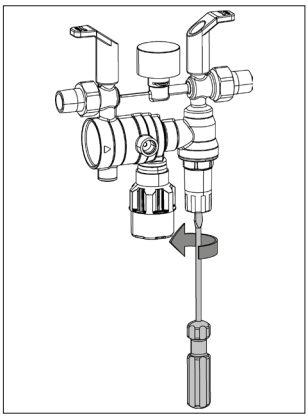
Once the appropriate starting position has been reached, open the inlet valve (1) to pressurise the fitting; the outlet side (2) remains closed.

Now turn the adjustment handle in the plus (+) direction to increase the filling pressure.



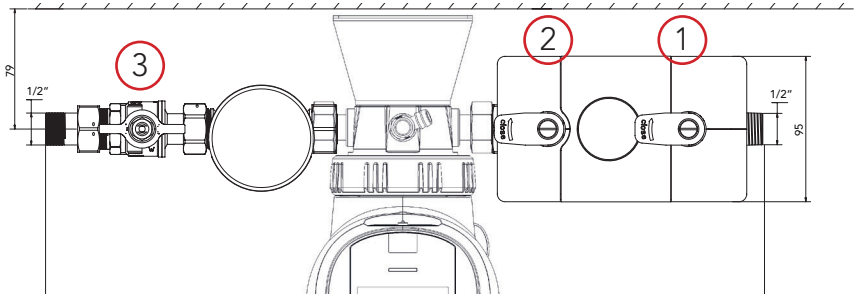
Now set the desired system pressure by SLOWLY (due to the sensitivity of the pressure gauge) turning the adjusting handle in the plus (+) direction.

Once the desired pressure value has been reached tighten the locking screw again.
You can now open the outlet valve (2).

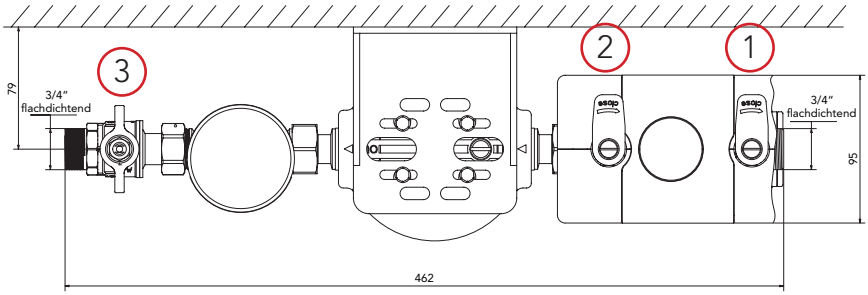


Filling the heating

In order to start the filling process, both filling combination shut-off valves (1 & 2) and the shut-off after the water meter (3) must now be opened.



Close all shut-off valves (1-3) after completion of the automatic filling process to prevent uncontrolled refilling.



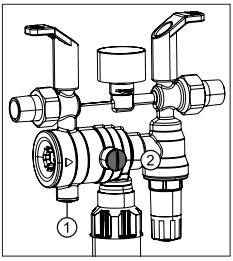
NOTE

To fill the heating system completely and quickly, it must be vented during the filling process!

Please note that the last 0.5 bar before reaching the set value can take a long time.

Checking the system separator

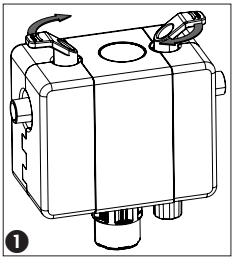
Remove the manometric plugs from the
① inlet and ② medium pressure chamber.
Place the connection pieces of the system separator system separator tester.
Details can be found in our instructions „UWS L-BOXX PST".



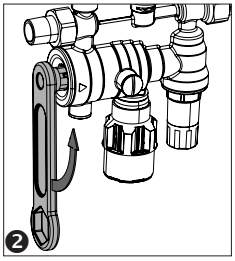
Changing the system separator cartridge

If the system separator cartridge is defective or dirty, it must be replaced or cleaned. The replacement set (system separator cartridge, installation aid, installation spanner, art. no. 300930) can be ordered as an option.

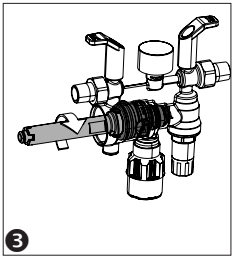
❶ Close both shut-off devices.



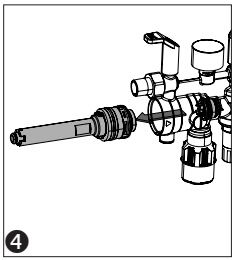
❷ Open the sealing plug with the spanner.



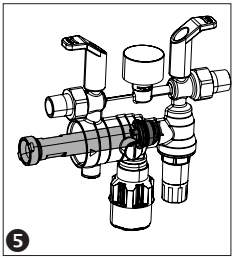
❸ Insert the installation aid into the system separator cartridge and turn clockwise.



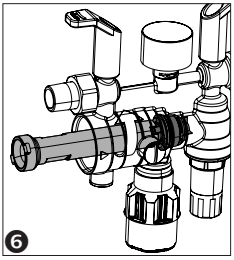
❹ Make sure that the two pins of the installation spanner engage in the tabs of the cartridge. Pull out the cartridge.



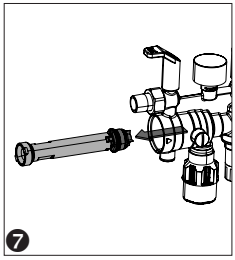
❺ Turn the installation aid over and place it on the non-return valve.



❻ Ensure that the recesses of the installation aid engage in the pins of the backflow preventer..

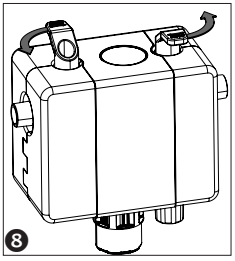


❼ Turn the installation aid anti-clockwise and pull out the backflow preventer..



Installation is carried out in reverse order.

❽ Open the two shut-off valves again.



Both maintenance and replacement must be documented.

Faults - Troubleshooting

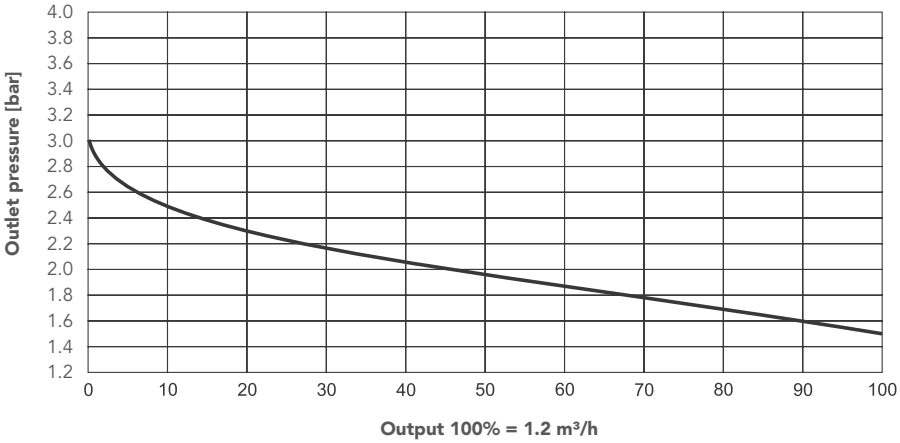
Defect	Cause	Remedy
The drain valve is open for no reason	Contamination of drain valve or non-return valve (inlet side)	Remove the cartridge insert and clean or replace it. (*
The drain valve does not close	Discharge valve soiled	Remove the cartridge insert and clean or replace it. (*
The flow rate is low or non-existent	The refill combination was not installed in the direction of flow	Install the refill combination in the direction of flow (see arrow directions)
	The shut-off valves are not sufficiently open	Open the shut-off valves completely
	The pressure regulator is not set to the desired outlet pressure	Set the outlet pressure
Higher system pressure desired	The inlet pressure must be at least 1 bar higher than the desired system pressure.	Install a pressure booster.
	Please note that the last 0.5 bar before reaching the set value can take a long time.	Wait until the pressure has automatically adjusted to the desired value.
Fluctuations in the set outlet pressure	Dirt or damage to the nozzle or sealing disc on the valve insert.	Replace the valve insert (pressure reducer cartridge)
Water leaks from the adjustment handle	The diaphragm on the valve insert pressure regulator defective	Replace the valve insert (pressure reducer cartridge)

*Cartridge inserts older than 1 year are not eligible for complaint, as these are wearing parts and must be serviced annually in accordance with DIN EN 1717 and DIN EN 806-5. (See UWS L-BOXX PST for simple inspection of system separators type BA in accordance with DIN EN 806-5, art. no. 200001)

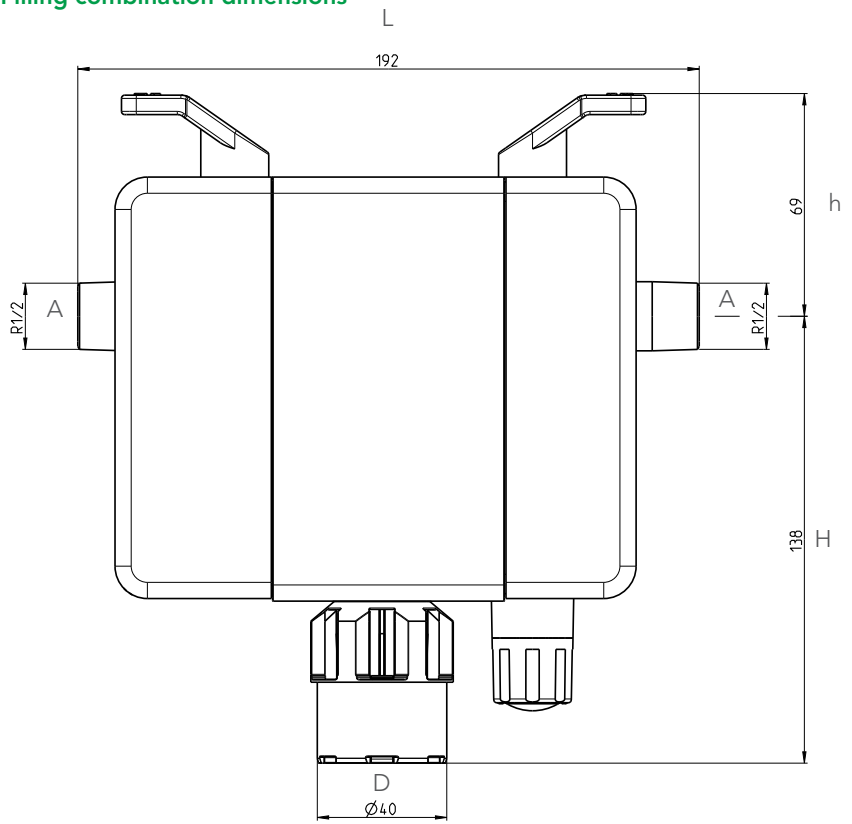
Technical data filling combination

	Filling combination BA
Article number	300920
Connections	R 1/2"
Nominal diameter	DN 15
Flow medium	Potable water
Max. Operating pressure	10 bar
Min. inlet pressure	2.5 bar for 1.5 bar heating system pressure
Outlet pressure	1.5 - 6 bar
Factory setting	1.5 bar
Installation position	Horizontal with drain funnel downwards
Max. Max. inlet temperature	30°C
Drain funnel connection	DN 40
Filling capacity	1,5 m³/h at Δp 1,5 bar

Performance diagram filling combi 300920

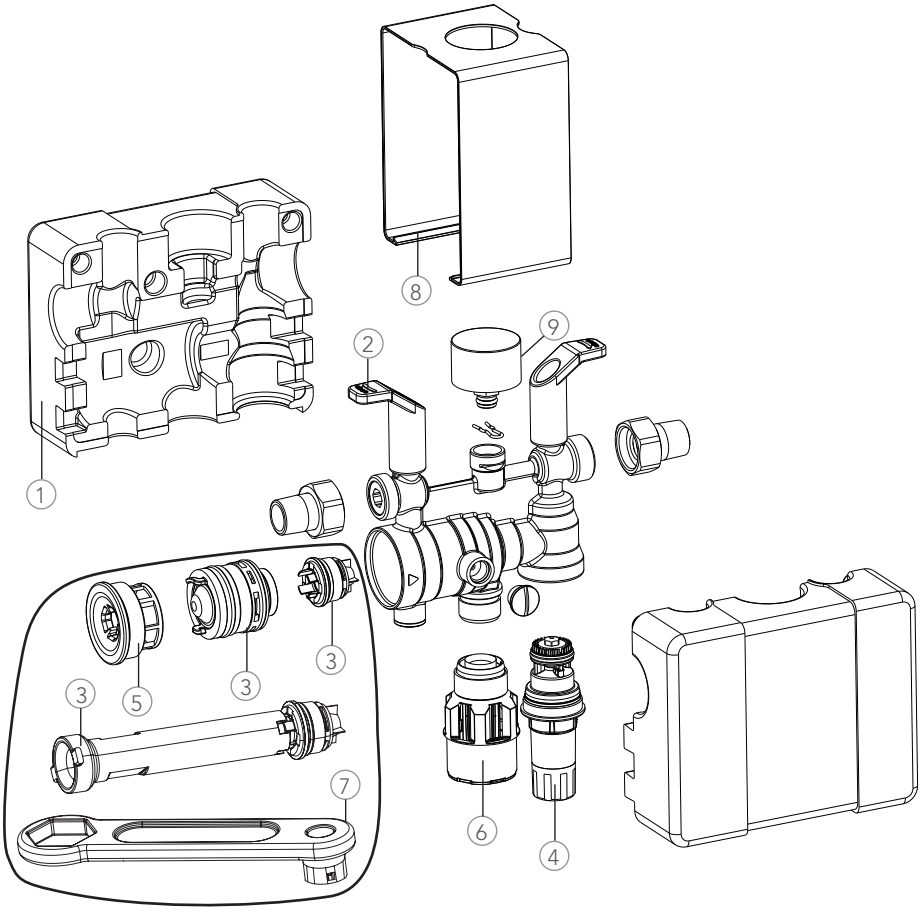


Filling combination dimensions



Type		Filling combination BA
Nominal diameter		DN 15
Construction dimensions	A	R ½"
	H	138 (mm)
	h	69 (mm)
	L	192 (mm)
	D	40 (mm)

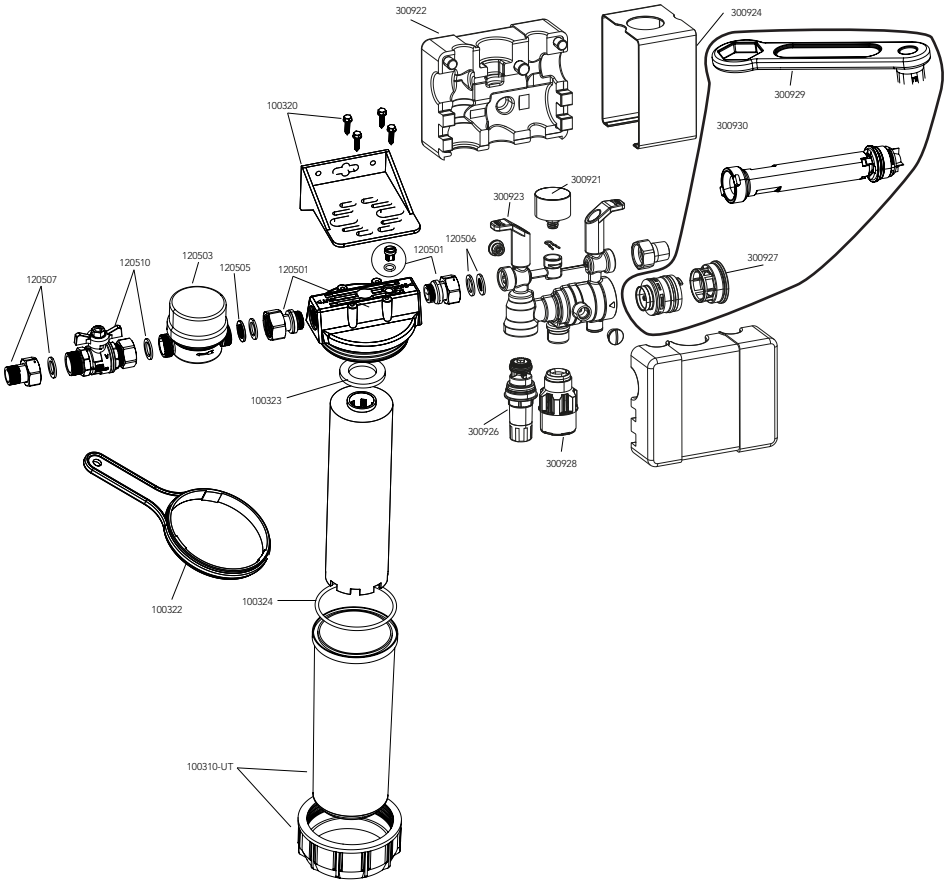
Spare parts filling combi



1. Thermal insulation shell
   300922
2. Barrier handles
   300923
4. Pressure reducer cartridge
   300926
5. sealing cap
   300927
6. Drain funnel
   300928
7. Ring spanner
   300929
8. Cover for thermal insulation shell
   300924
9. Pressure gauge for 300920
   300921

3 + 5 + 7 Mounting set for 300920
300930

Spare parts Heaty Complete Home



Art.-No.	Article
120501	Housing head
120503	Cold water meter 30° 3/4"
120505	Screen seal Complete
120506	Flow limiter disc + seal
120507	2x screw connection 1/2" with seal
120510	Special ball valve for Complete 3/4"
100310-UT	Transparent housing UWS Heaty Home
100320	Wall bracket for Home and Home XL
100322	Key for housing
100323	Flat gasket for cartridge
100324	O-ring for housing
300910	Pressure gauge for 300900
300921	Pressure gauge for 300920
300922	Thermal insulation shell filling combination
300923	Handles shut-off filling combination
300924	Cover for thermal insulation shell (housing)
300926	Pressure reducer cartridge Filling combination
300927	Sealing cap Filling combination
300928	Drain funnel Filling combination
300929	Ring spanner
300930	Assembly set (see page 17)

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Your contact: