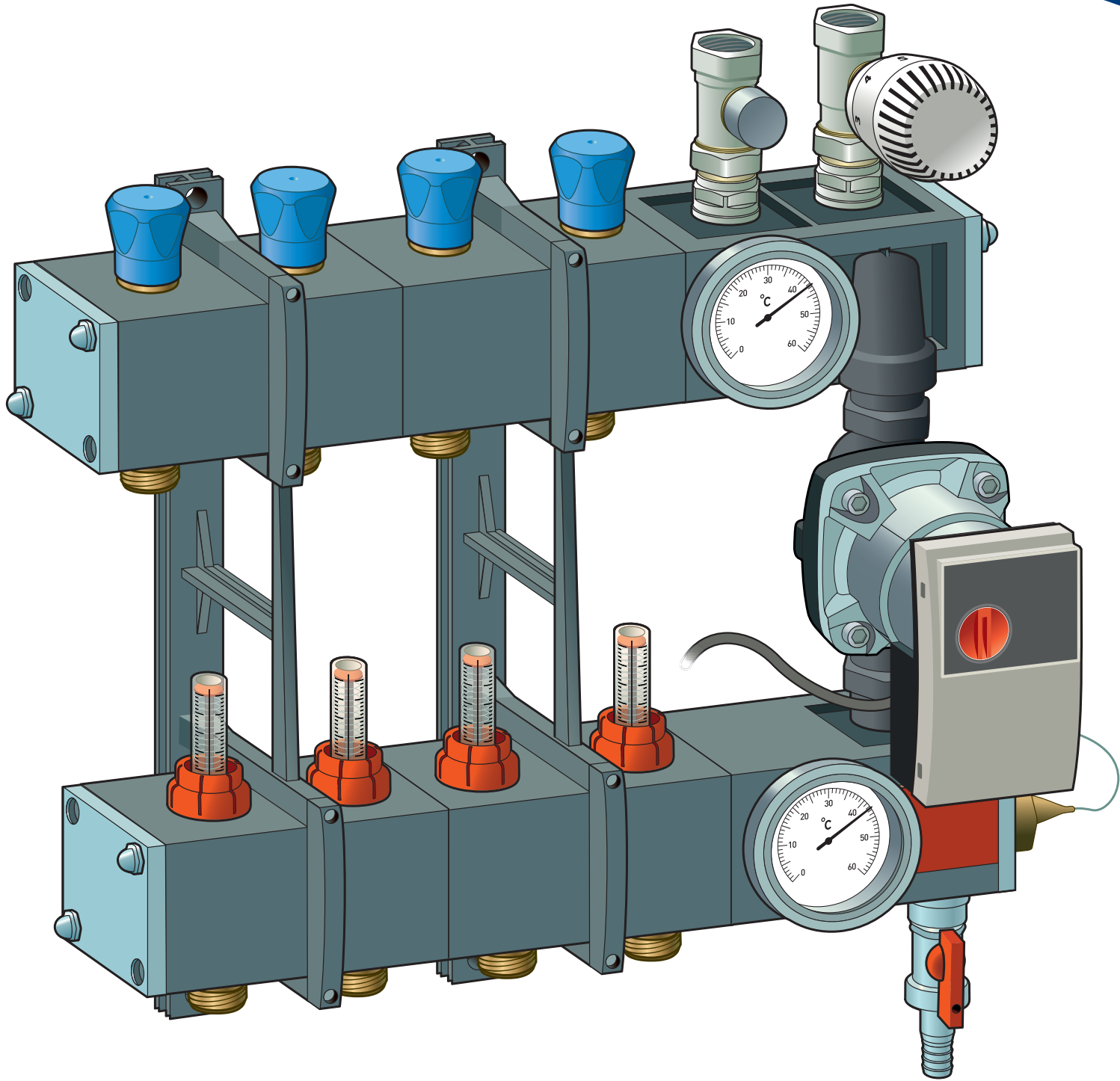


# HENCO INSTALLATION GUIDE

## COMPOSITE DISTRIBUTOR FOR DISTRICT HEATING



# Composite distributor for district heating

## Introduction

The composite distributor for district heating is used to distribute the medium in systems for underfloor heating and cooling. This series of distributors has been created using a special composite which makes it suitable for systems which use low temperatures.

## Two models

The composite distributor for district heating is available in two models. Both models have been fitted with a pump group, a thermostat valve with capillary and a check valve between the supply and the return. **The Essent model** is being extended with an extra thermostatic valve and zone valve. **The Nuon/Eneco model** has been equipped with an

RTL knob on the return (to help determine the temperature limits) and an RTL valve to the supply (to help determine the amount of water in litres).

## Static or dynamic adjustment

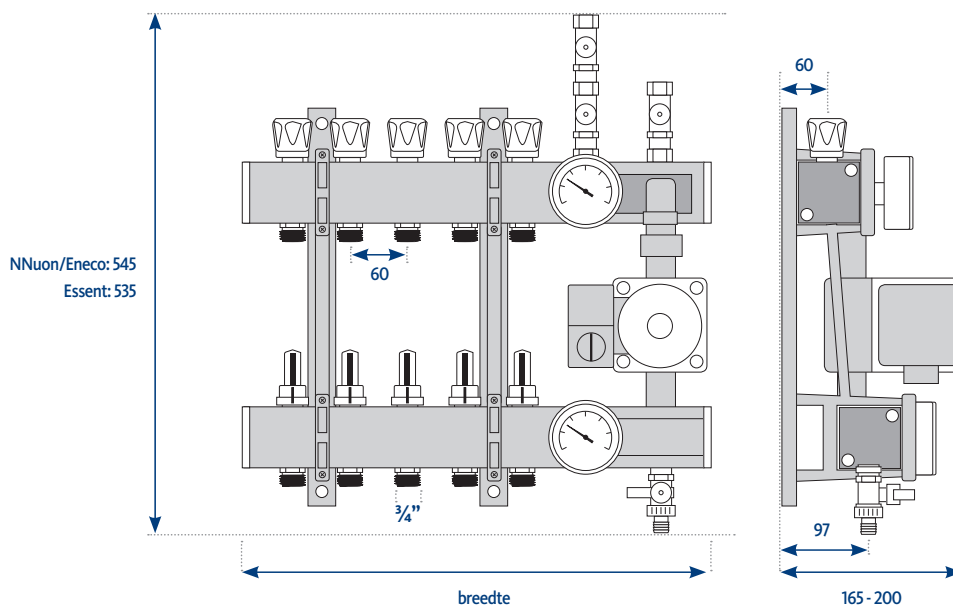
The distributors can be pre-assembled in two ways. The supply valve on the first type has been equipped with flow meters for the flow's **static setting**, the supply valve on the second type has been equipped with regulator valves for a **dynamic setting**. The other components are identical in both versions.

## Dimensions

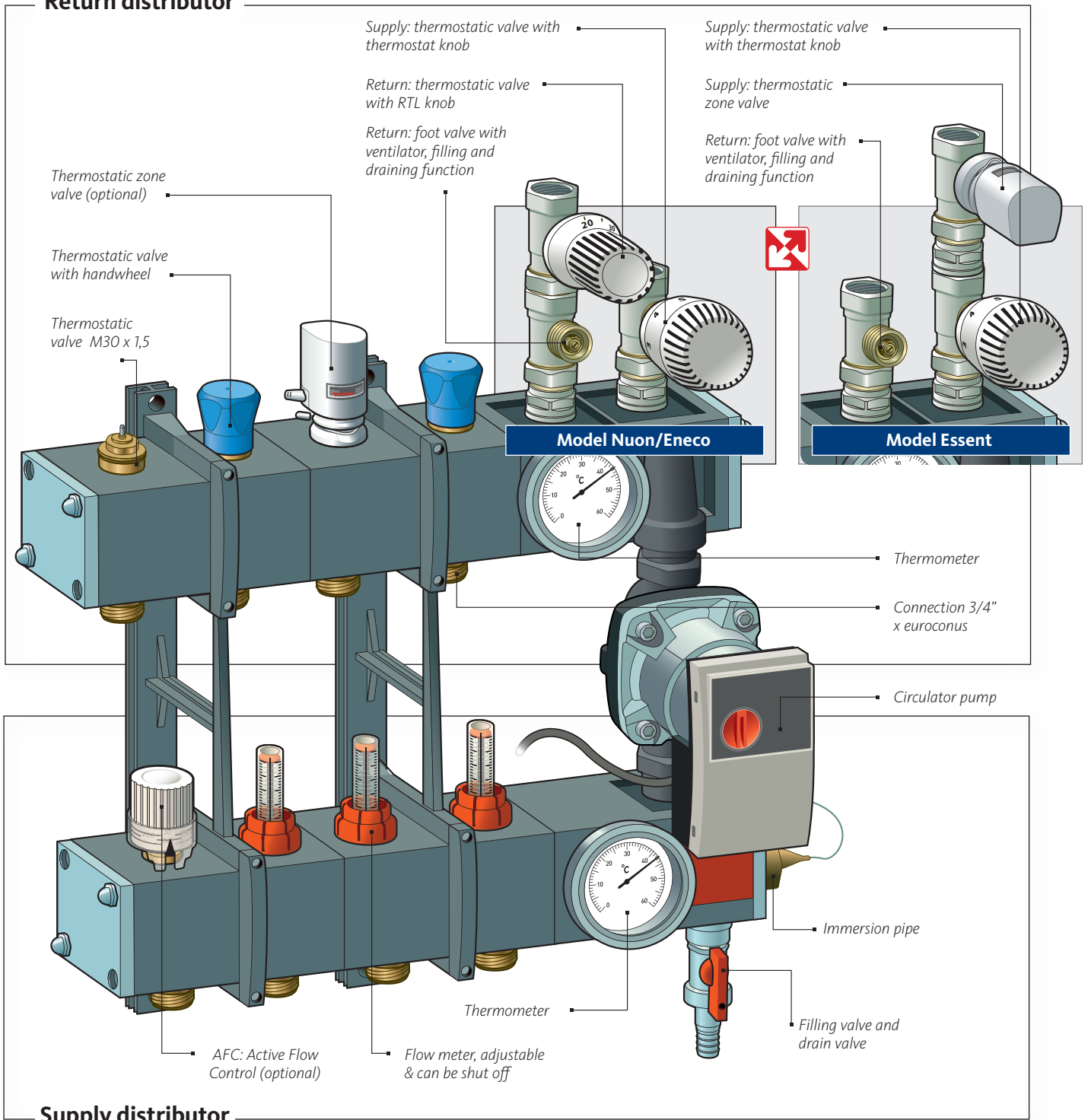
The **width** of the distributor depends on the number of groups.

The **depth** of the distributor depends on the type of pump and can be anywhere between 165 mm to 200 mm.

Groups	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Width (mm)	225	285	345	405	465	525	585	645	705	765	825	885	945	1005	1065	1125



## Return distributor



## Supply distributor

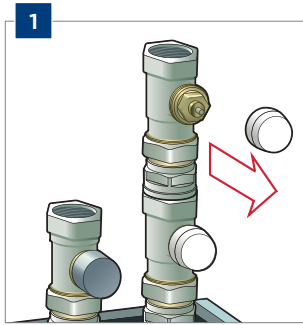
### Technical specifications

Medium:	water or water glycol solutions
Maximum percentage glycol:	30%
Maximum working pressure:	4 bar
Maximum static pressure using cold water:	6 bar
Temperature range:	5 - 55°C
Flow meter scale:	1 - 5 l/min
Thermometer scale:	0 - 60°C
Connecting the distributor:	1" F
Connecting the groups:	3/4" M - euroconus
Centre distance between the groups:	60 mm

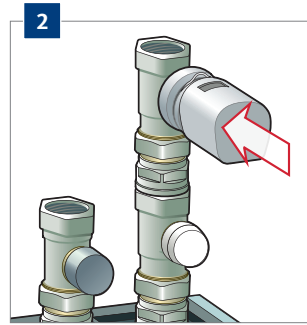
# 1. Assembly

Fix the extra parts to the distributor and attach the distributor to the wall using the bolts and plugs provided. The Nuon/Eneco model is used in this example unless stated otherwise.

## Model Essent



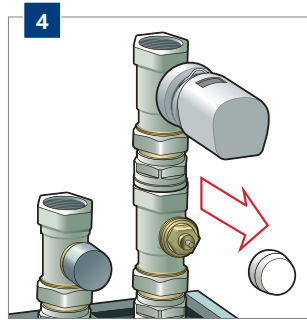
Remove the **protective cap** from the top **thermostat valve**.



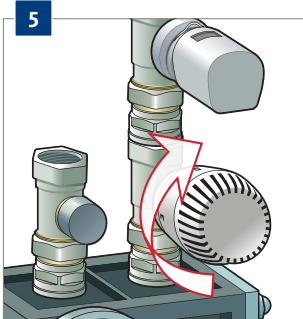
Attach the **zone valve** to the **thermostat valve** by hand.



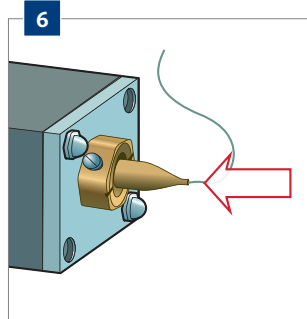
Remove the **circulator pump's cover** and connect the wires to the **zone valve** near the plugs wires. Take heed of the following colours: brown with L, blue with N.



Remove the **protective cap** from the bottom **thermostat valve**.

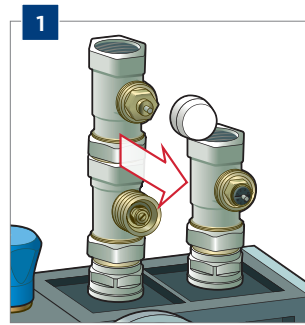


Attach the **thermostat knob** to 6 and connect it to the **thermostat valve** by hand.

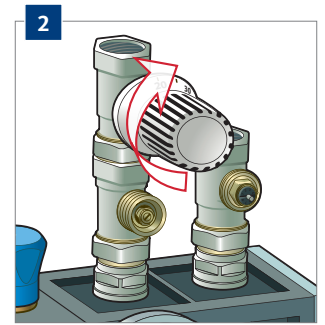


Assemble the **sensor** in immersion pipe.

## Model Nuon/Eneco



Remove the **protective cap** from the **thermostat valve**.



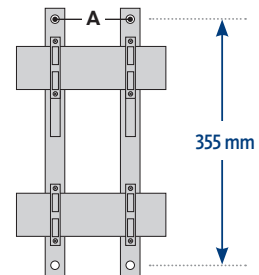
Turn the **RTL knob** to 50. Attach it to the **thermostat valve** by hand and set the parameters in accordance with the district heating supplier's instructions.

Fix the distributor to the wall.

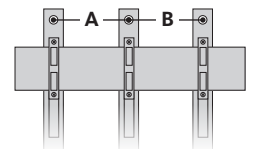
## Distance between the brackets

The **number of brackets** needed depends on the number of groups connected to the distributor. Distance in millimetres.

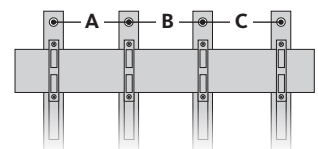
2 brackets	A (mm)
2-groups	60
3-groups	60
4-groups	120
5-groups	180
6-groups	240
7-groups	300
8-groups	360
9-groups	420
10-groups	480



3 brackets	A	B
11-groups	240	300
12-groups	300	300
13-groups	300	360
14-groups	360	360
15-groups	360	420
16-groups	420	420
17-groups	420	480
18-groups	480	480



4 brackets	A	B	C
19-groups	300	360	360
20-groups	360	360	360

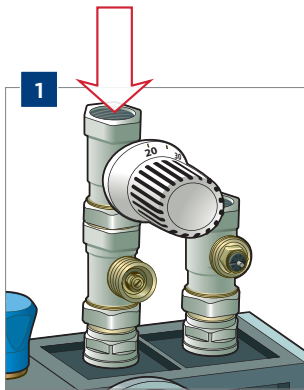


Fix the distributor to the wall.

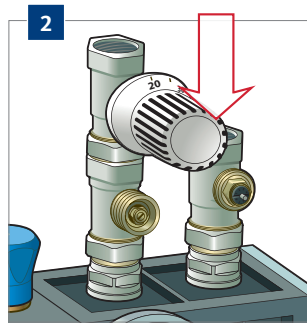


## 2. Connection

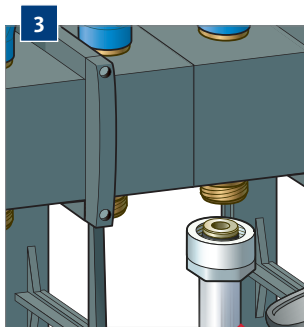
Connect the district heating's (primary) supply and return, and connect the underfloor heating pipes (secondary).



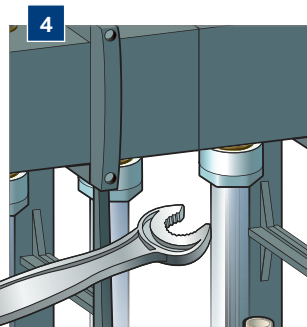
1 Connect the **return pipe** to the **return valve**.



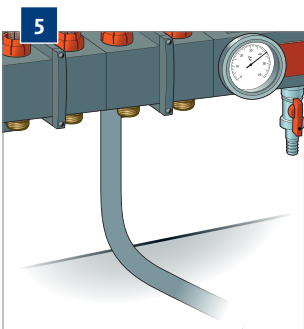
2 Connect the **supply pipe** to the **thermostat valve**.



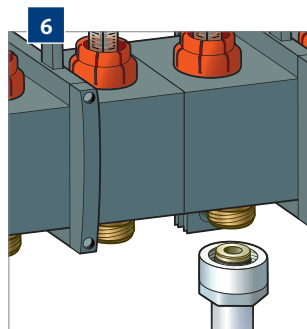
3 Connect the **underfloor heating pipe** to the **return distributor**.



4 Tighten the **coupling** using the included plastic **assembly spanner**.



5 **Install the pipe.** Avoid tension on the distributor by making a perpendicular, but fluid curve.

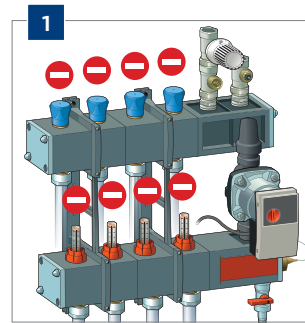


6 Cut the other end of the pipe to the **right length** and connect it to the **supply distributor** the same way.

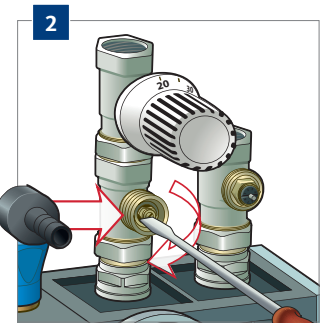
Repeat steps 3 through 6 for all the groups connected to the distributor.

## 3. Filling

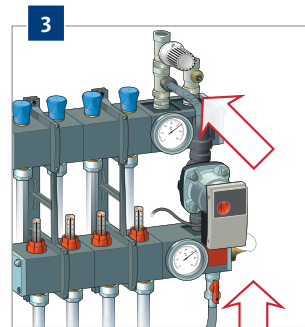
Fill the underfloor heating pipes.



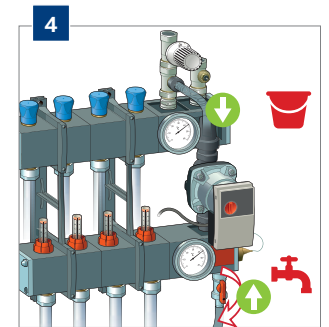
1 **Close all groups.** Turn the thermostat knob to 0.



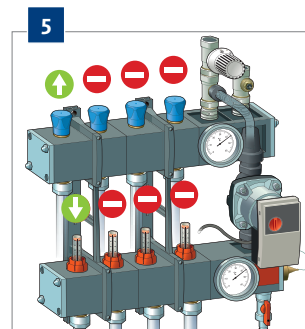
2 **Connect the return valve** using a screwdriver and screw the provided hose nipple to the return valve.



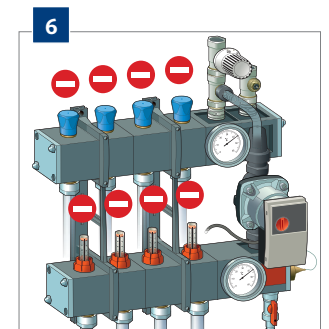
3 Connect the **filling pipe** to the filling and draining valves, and the **draining pipe** to the return valve (primary side).



4 **Open the filling and the draining valves.**



5 **Fill the first group** by opening it. Make sure that all air is removed from the circuit.

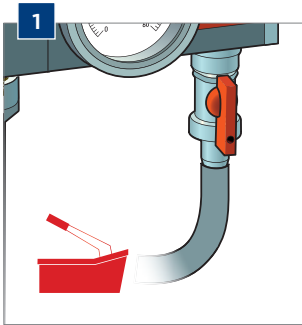


6 **Close the first group.**

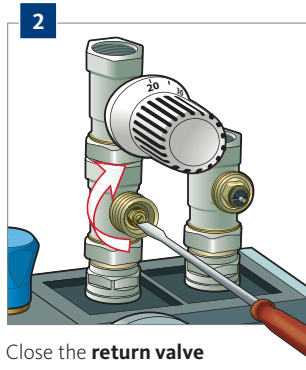
Repeat steps 5 and 6 for all the other groups.

## 4. Pressure test

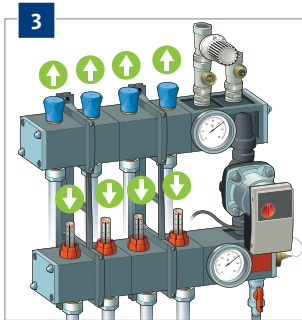
Pressurise the system and complete the pressure report.



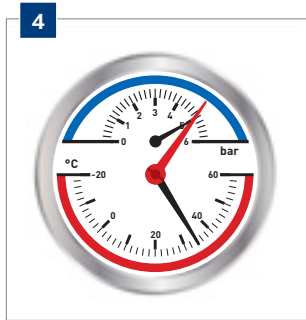
Connect the **test pump** to supply distributor's filling and draining valves.



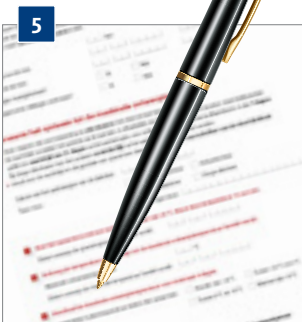
Close the **return valve** using a screwdriver.



Open all groups.



**Pressurize the distributor.**  
Minimum 4 bar, maximum 6 bar  
(in accordance with NEN-EN 1264-4 guidelines).



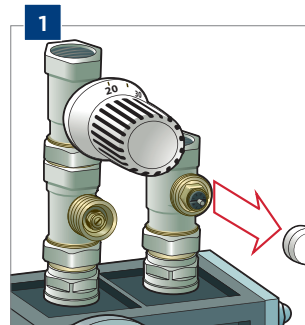
Check the operation and make sure there are no leaks in the **pressure report**.

You will find the pressure report on the supply's box.

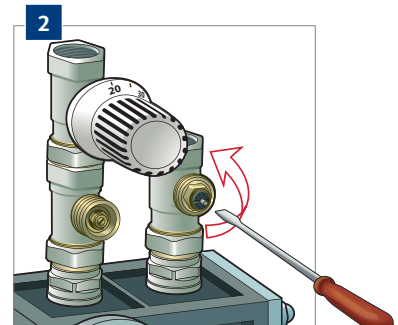
## 5. Adjustments

Set the calculated flow per group to guarantee optimal comfort. This will occur statically or dynamically depending on the version you choose.

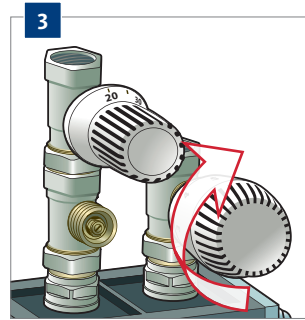
### Preparatory steps for the Nuon/Eneco model



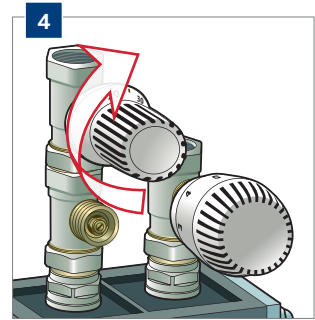
Remove the **protective cap** from the **thermostat valve**.



**Attach** the valve to the calculated capacity using a screwdriver. Please see the valve's manual provided.



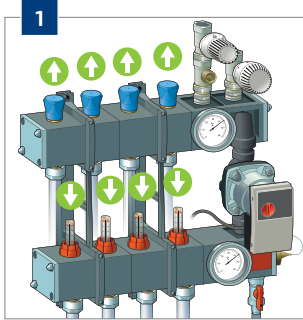
Turn the **thermostat knob** to 6 and connect it to the **thermostat valve** by hand.



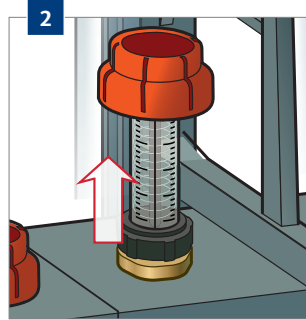
Adjust the **RTL knob** in accordance with the district heating supplier's instructions. Set the return temperature by turning the knob to the desired value(s) and lock this value/these values by using the two pins provided.

Set the calculated flow to static or dynamic.

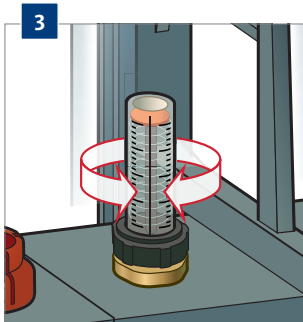
## Static



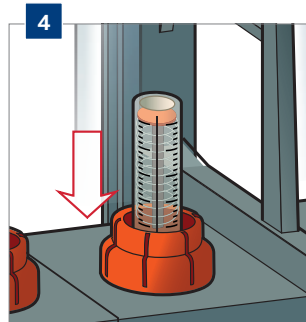
**1** Open all groups and operate the system as usual.



**2** Remove the the **red cap** from the flow meter.



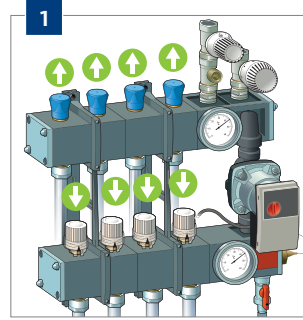
**3** Adjust the **RTL knob** in accordance with the district heating supplier's instructions. Set the return temperature by turning the knob to the desired value(s) and lock this value/these values by using the two pins provided.



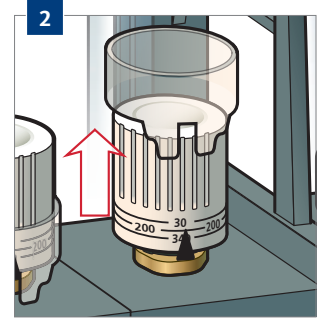
**4** **Reposition the red cap** back over the flow meter to prevent the settings from changing.

**Repeat steps 2 through 4 for all the groups connected to the distributor.**

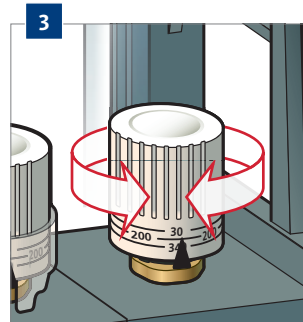
## Dynamic



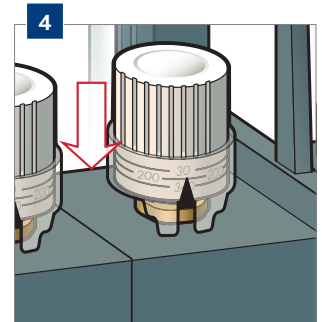
**1** Open all groups and make sure the installation runs under normal working conditions.



**2** Remove the **transparent locking cap**.



**3** Set the calculated flow by turning the **hand wheel** to the desired value.



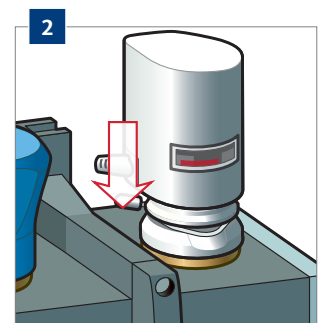
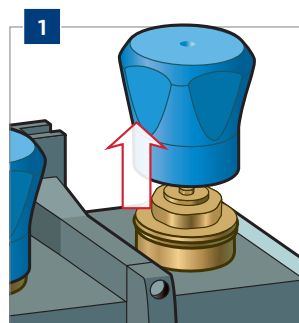
**4** **Reposition the transparent locking cap** to the handwheel to prevent the settings from changing.

**Repeat steps 2 through 4 for all the groups connected to the distributor.**

### Connecting zone valves (optional)

You can connect zone valves if desired. Zone valves, when combined with zone controls, allow you to independently determine the temperature in each area.

- 1** Remove the handwheel from the thermostat valve.
- 2** Attach the zone valve to the thermostat valve by hand.



# Tips & comments

## General safety regulations

- Please read this manual before using the distributor.
- The distributor should be installed by a qualified professional.
- The water in the distributor can reach 55°C. Please prevent skin contact at all times.
- We are not responsible for any damages or injuries resulting from a failure to comply with this manual.
- The distributor is solely intended for wall assembly using the bolts and plugs provided.
- Using the right pipes during installation is necessary to guarantee the distributor will function properly.

## Tips when removing the distributor

Follow the steps below if you wish to remove the distributor.

- 1 Release all the water from the distributor.
- 2 Remove the supply and the return pipes.
- 3 Remove the distributor from the wall.
- 4 After disassembly, take the distributor to the proper collection or recycling point.

## Emergency help in the event of a breakdown

Malfunction	Cause	Resolution
<b>The floor heating doesn't get warm.</b>	The thermostat valves and/or the flow meters are closed.	Open the thermostat valves and/or flow meters.
	The supply valve and/or return valve is closed.	Open the supply valve and/or return valve.
<b>All groups are open but there is little or no flow from the manifold.</b>	There is too much resistance in the circuit. Possible causes are: <ol style="list-style-type: none"> <li>1. Groups are too long</li> <li>2. Contamination in the system</li> <li>3. Incorrect installation</li> </ol>	<ol style="list-style-type: none"> <li>1. Check if the maximum length of the groups has been exceeded.</li> <li>2. Rinse the installation.</li> <li>3. Consult your installer.</li> </ol>



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