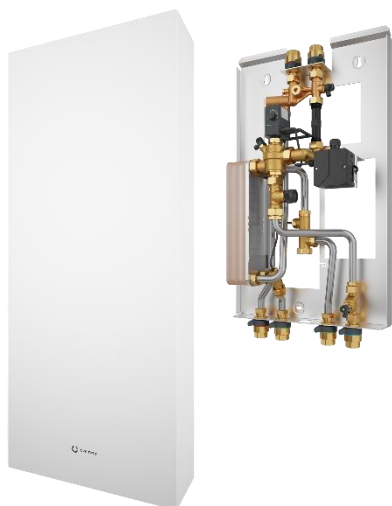


# Regudis W-HTE GT

## Electronic dwelling station



For the supply of individual dwellings with heating water and hot potable water. The required heat is provided by a central heat supply. Hot potable water is prepared decentrally via a plate heat exchanger according to the continuous flow principle. When selecting the dwelling station, it is necessary to consider the water quality of the area of use.

The stations consist of a plate heat exchanger, a control valve with integrated differential pressure and volume flow control, an actuator with integrated potable water temperature control, a zone valve, a volume flow sensor, a temperature sensor, a filter insert, a strainer, a spacer for heat meter, ceramic disc valves, vent valves and drain valves.

The Regudis W-HTE GT stations are specially designed for gas boiler replacement due to their slim design and their junction-free connection configuration. A precisely fitting surface-mounted bonnet is included and conceals the station and connections. The well-known Regudis W-HTE concept is characterised by high draw-off capacities at low excess temperatures and a design that is optimised in terms of pressure loss.

### Features

- + Slim design for gas boiler replacement
- + Junction-free connection sequence
- + Including precisely fitting surface-mounted bonnet
- + High draw-off capacity at low excess temperature
- + Optimised in terms of pressure loss

### General data

|                                                                     |                                                                                                                                                                                     |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Variants</b>                                                     | Performance range 1<br>Performance range 2<br>With copper brazed heat exchanger or<br>copper brazed heat exchanger with<br>Sealix® protective layer                                 |
| <b>Empty weight of the station (without surface-mounted bonnet)</b> | Performance range 1: 13.3 kg<br>Performance range 2: 14.4 kg                                                                                                                        |
| <b>Max. operating temperature</b>                                   | 90 °C                                                                                                                                                                               |
| <b>Max. operating pressure</b>                                      | 10 bar                                                                                                                                                                              |
| <b>Ambient temperature</b>                                          | 2...35 °C                                                                                                                                                                           |
| <b>Medium</b>                                                       | Heating water according to VDI 2035/Ö-Norm H 5195-1, fluid category ≤ 3 according to EN 1717. Observe the specifications of the Oventrop information sheet on corrosion protection. |

# Product Details

## Technical Data

### Dimensions and connections

|                                                          |                     |
|----------------------------------------------------------|---------------------|
| <b>Width x Height x Depth<br/>Surface-mounted bonnet</b> | 440 x 1050 x 150 mm |
| <b>Connections</b>                                       | G ¾ IT              |
| <b>Centre distance of the<br/>connections</b>            | 65 mm               |
| <b>Centre distance to wall</b>                           | 34 mm               |

### Hydraulic data: Primary circuit (buffer storage cylinder)

|                                   |                                                                                                                                                                                     |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Medium</b>                     | Heating water according to VDI 2035/Ö-Norm H 5195-1, fluid category ≤ 3 according to EN 1717. Observe the specifications of the Oventrop information sheet on corrosion protection. |
| <b>Min. differential pressure</b> | 150 mbar                                                                                                                                                                            |
| <b>Max. differential pressure</b> | 2.0 bar                                                                                                                                                                             |
| <b>Min. flow temperature</b>      | See charts in the appendix                                                                                                                                                          |

### Hydraulic data: Heating circuit (radiators)

|                                          |                                                                                                                                                                                     |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Medium</b>                            | Heating water according to VDI 2035/Ö-Norm H 5195-1, fluid category ≤ 3 according to EN 1717. Observe the specifications of the Oventrop information sheet on corrosion protection. |
| <b>Max. volume flow</b>                  | 460 l/h                                                                                                                                                                             |
| <b>Differential pressure<br/>control</b> | 150 mbar                                                                                                                                                                            |

### Hydraulic data: Potable water circuit

|                                       |                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Medium</b>                         | Potable water. Observe the specifications of the Oventrop information sheet on corrosion protection. |
| <b>Min. cold water pressure</b>       | See charts in the appendix                                                                           |
| <b>Control range</b>                  | 40...70 °C                                                                                           |
| <b>Max. hot water volume<br/>flow</b> | See charts in the appendix                                                                           |

### Electrical data: Power supply unit

|                                            |                      |
|--------------------------------------------|----------------------|
| <b>Mains input voltage</b>                 | 100...240 V AC ±10 % |
| <b>Mains input frequency</b>               | 50...60 Hz           |
| <b>Output voltage</b>                      | 5 V DC +7.5 %, -5 %  |
| <b>Rated output current</b>                | max. 1200 mA         |
| <b>Protection type:<br/>connection box</b> | IP65                 |
| <b>Protection class</b>                    | II                   |
| <b>Overvoltage category</b>                | III                  |
| <b>Ambient temperature</b>                 | 0...60 °C            |

### Electrical data: Actuator

|                            |                     |
|----------------------------|---------------------|
| <b>Input voltage</b>       | 5 V DC +7.5 %, -5 % |
| <b>Power consumption</b>   | 0.15...3 W          |
| <b>Protection type</b>     | IP54                |
| <b>Ambient temperature</b> | 0...60 °C           |

### Material

|                                                                           |                                                                                                                                           |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Heat exchanger copper<br/>brazed</b>                                   | Plate material: Stainless steel 1.4401<br>Connections: Stainless steel 1.4404<br>Brazing material: Copper                                 |
| <b>Heat exchanger copper<br/>brazed with Sealix®<br/>protective layer</b> | Plate material: Stainless steel 1.4401<br>Connections: Stainless steel 1.4404<br>Brazing material: Copper<br>Protective layer: SiO2 basis |
| <b>Pipes</b>                                                              | Stainless steel 1.4404                                                                                                                    |
| <b>Valves and fittings</b>                                                | Brass                                                                                                                                     |
| <b>Temperature sensor</b>                                                 | Stainless steel 1.4404                                                                                                                    |
| <b>Volume flow sensor</b>                                                 | Brass and plastic                                                                                                                         |
| <b>Meter spacer</b>                                                       | Plastic                                                                                                                                   |
| <b>Seals</b>                                                              | EPDM and fibre material                                                                                                                   |

## Functions

The dwelling station is an electronically controlled product assembly with heat exchanger for use in domestic areas. The product assembly provides heated potable water (hot water) within a residential unit and distributes the heating water (max. 90° C) to radiators.

The decentralised hot water preparation of the station makes the storage of hot potable water unnecessary.

In the heat exchanger, potable water is heated according to the continuous flow principle only when it is needed. The demand for hot water is detected by the volume flow sensor.

The setpoint temperature for the hot water is adjusted with the rotary knob on the actuator. During operation, the temperature sensor continuously measures the temperature of the hot water at the hot water outlet of the heat exchanger. The temperature sensor forwards this information to the electronic control.

The information from the volume flow sensor and the temperature sensor is passed on to the actuator by the electronic control.

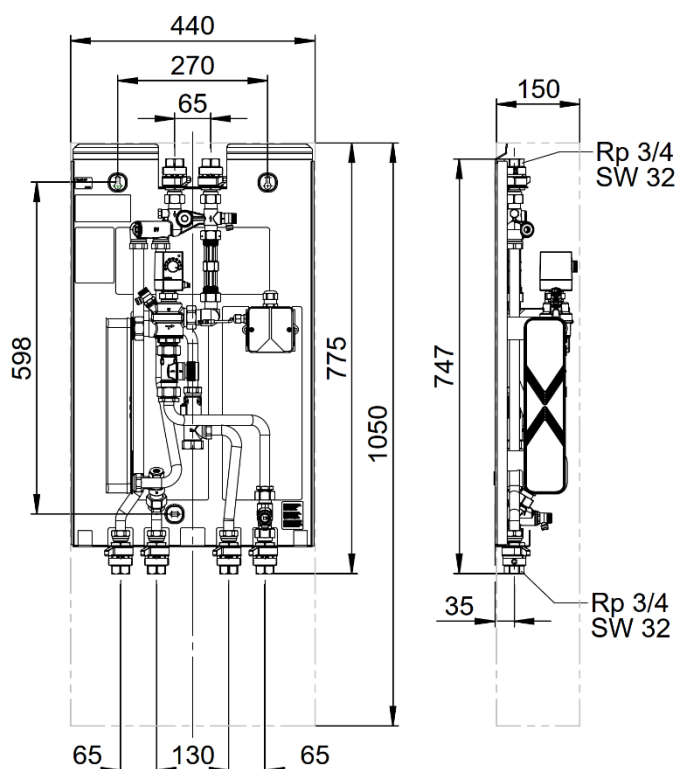
The actuator opens and closes the control valve. Depending on the position of the control valve, more or less hot heating water flows from the primary supply into the heat exchanger as required. In addition, the control valve keeps the necessary differential pressure in the system constant.

The heat output transferred to the potable water depends on the heating water quantity and the heating water temperature supplied to the heat exchanger. The control valve features a potable water priority function ensuring the supply of the required hot water quantity even in heating mode.

Optionally, an actuator can be mounted on the zone valve. This offers you the possibility to close the zone valve time-controlled.

The Regudis W-HTE GT dwelling station is available in different performance ranges. The performance ranges differ in the size of the heat exchanger (see charts in the appendix).

## Dimensions



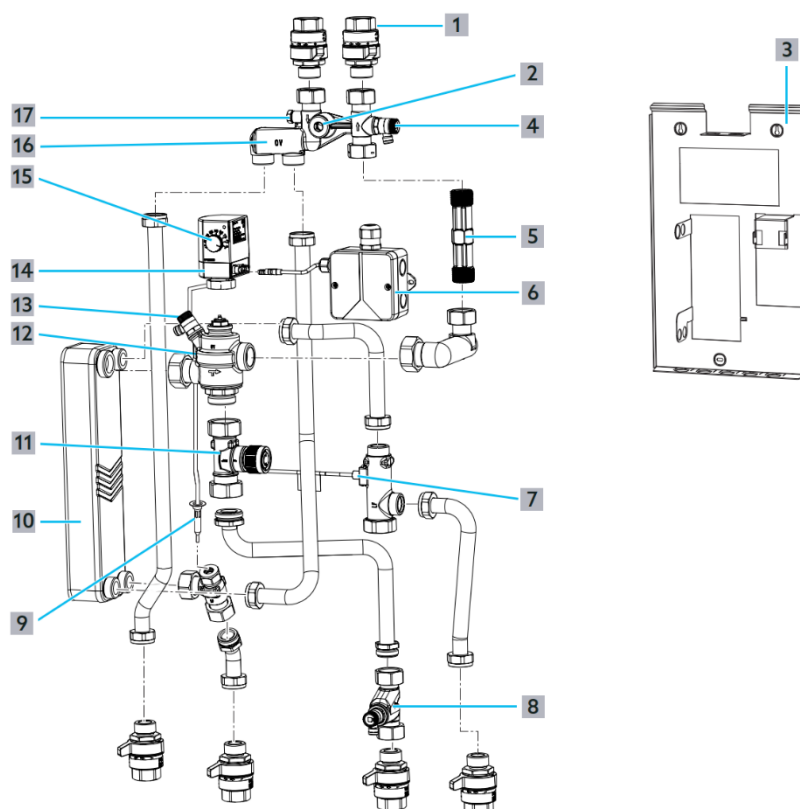
## Connections



### Description

- |   |                                                 |
|---|-------------------------------------------------|
| 1 | Primary supply from the buffer storage cylinder |
| 2 | Primary return to the buffer storage cylinder   |
| 3 | Heating circuit supply                          |
| 4 | Hot water outlet                                |
| 5 | Cold water inlet from the house connection      |
| 6 | Heating circuit return                          |

# Design



## Description

|    |                                                                               |
|----|-------------------------------------------------------------------------------|
| 1  | Ceramic disc valve                                                            |
| 2  | Connection for derivative temperature control set                             |
| 3  | Base plate                                                                    |
| 4  | Vent valve in the primary circuit                                             |
| 5  | Spacer for heat meter                                                         |
| 6  | Connection box for the power supply                                           |
| 7  | Volume flow sensor                                                            |
| 8  | Drain valve in the heating circuit with strainer                              |
| 9  | Hot water temperature sensor                                                  |
| 10 | Heat exchanger                                                                |
| 11 | Zone valve for heating circuit control                                        |
| 12 | Control valve with integrated differential pressure and volume flow control   |
| 13 | Vent valve in the heating circuit                                             |
| 14 | Actuator with integrated potable water temperature control                    |
| 15 | Rotary knob                                                                   |
| 16 | Filter insert in the primary supply                                           |
| 17 | Connection in the primary supply for the temperature sensor of the heat meter |

# Selection

## Item Numbers

### Regudis W-HTE GT

Station including shutoff valves and surface-mounted bonnet

|                                                                                   | Performance range   | Heat exchanger                              | Item no. |
|-----------------------------------------------------------------------------------|---------------------|---------------------------------------------|----------|
|  | Performance range 1 | Copper brazed                               | 1344230  |
|                                                                                   | Performance range 2 | Copper brazed                               | 1344231  |
|                                                                                   | Performance range 1 | Copper brazed with Sealix® protective layer | 1344250  |
|                                                                                   | Performance range 2 | Copper brazed with Sealix® protective layer | 1344251  |

## Accessories and Spare Parts

### Accessories

Selected accessories for the Regudis W-HTE GT station. For a complete overview, see product catalogue.

| Description                                       | Item no. |
|---------------------------------------------------|----------|
| Water meter installation set for Regudis W-HTE GT | 1344772  |
| Derivative temperature control set                | 1344490  |
| Stainless steel spacer                            | 1349052  |
| Earthing clamp                                    | 1341092  |
| ClimaCon F 210 room thermostat                    | 1155021  |
| Aktor T 2P thermal actuator                       | 1012452  |

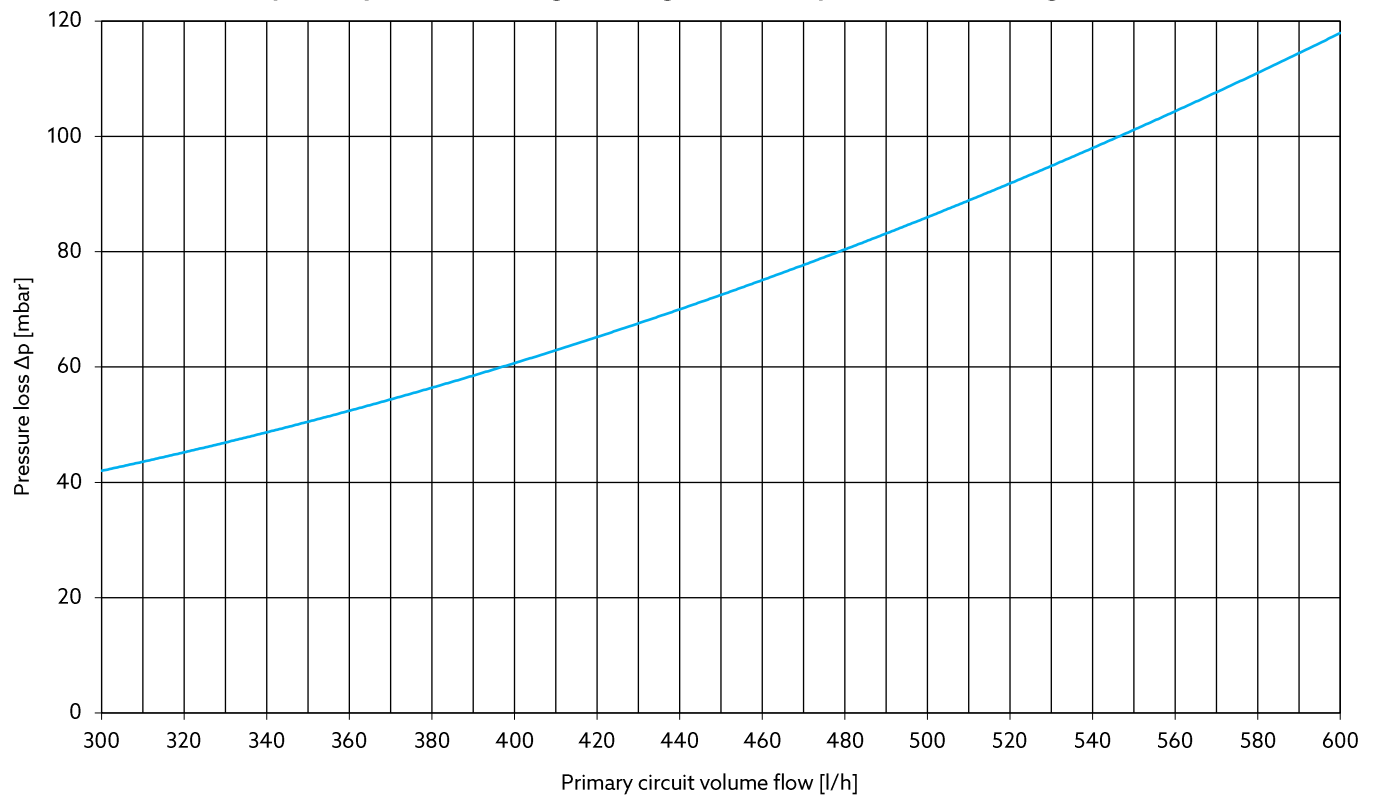
### Spare parts

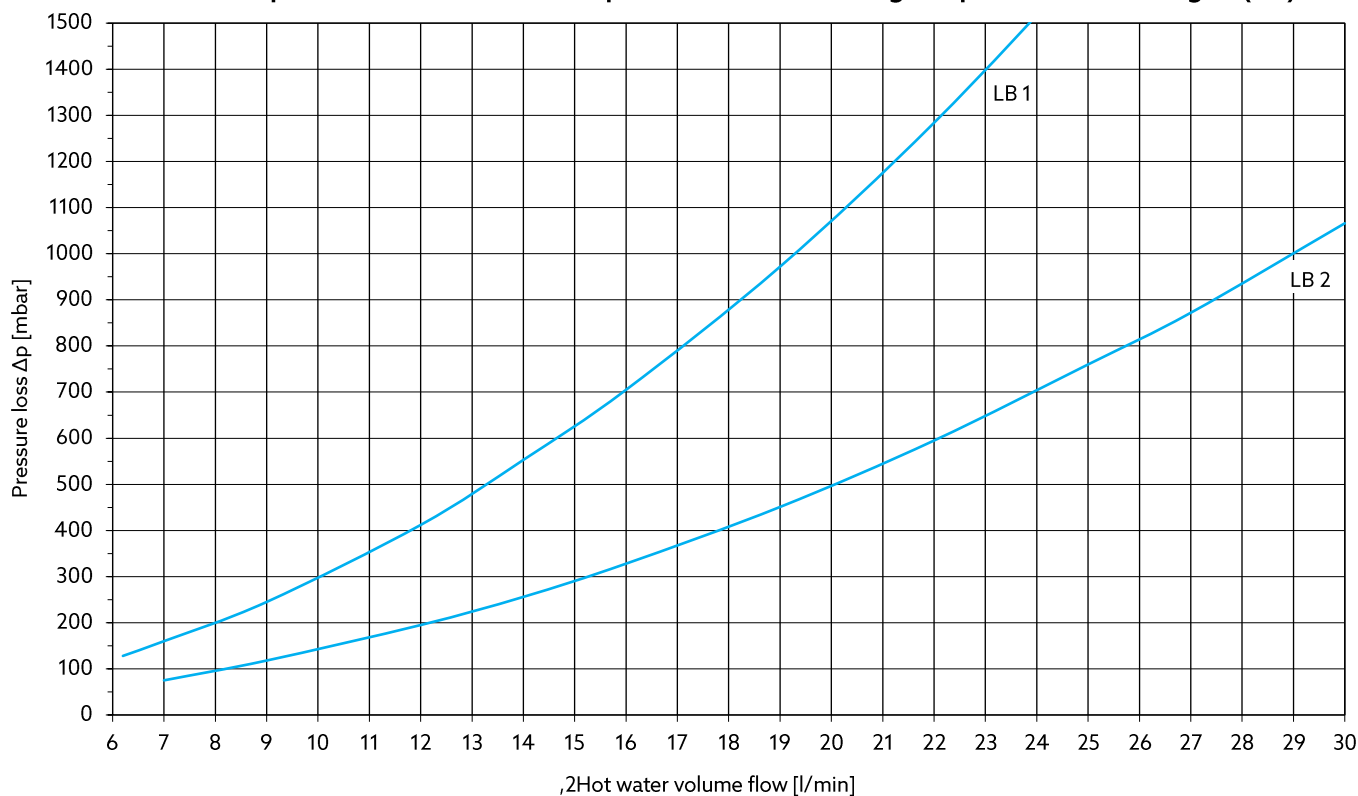
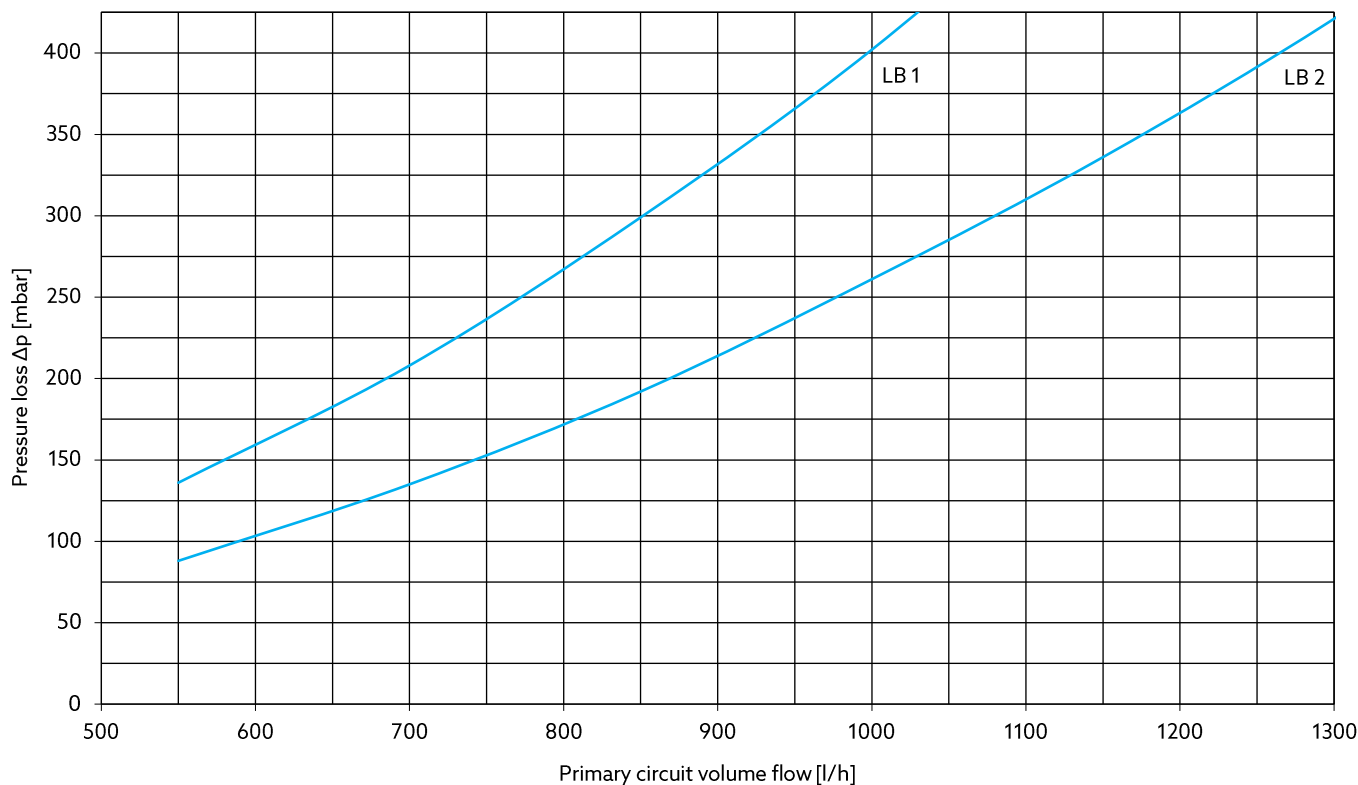
Selected spare parts for the Regudis W-HTE GT station. For a complete overview, see product catalogue.

| Description                                                                     | Item no. |
|---------------------------------------------------------------------------------|----------|
| Actuator with integrated potable water temperature control                      | 1344491  |
| Power supply unit                                                               | 1344496  |
| Volume flow sensor                                                              | 1344693  |
| Sealing ring for junction G ¾                                                   | 1344497  |
| Sealing ring for junction G 1                                                   | 1344498  |
| Potable water temperature sensor                                                | 1344494  |
| Heat exchanger copper brazed, performance range 1                               | 1344083  |
| Heat exchanger copper brazed, performance range 2                               | 1344084  |
| Heat exchanger copper brazed with Sealix® protective layer, performance range 1 | 1344093  |
| Heat exchanger copper brazed with Sealix® protective layer, performance range 2 | 1344094  |
| Control valve with integrated differential pressure and volume flow control     | 1344492  |

# Design Charts

## Pressure loss of the primary circuit during heating mode for performance ranges 1-2

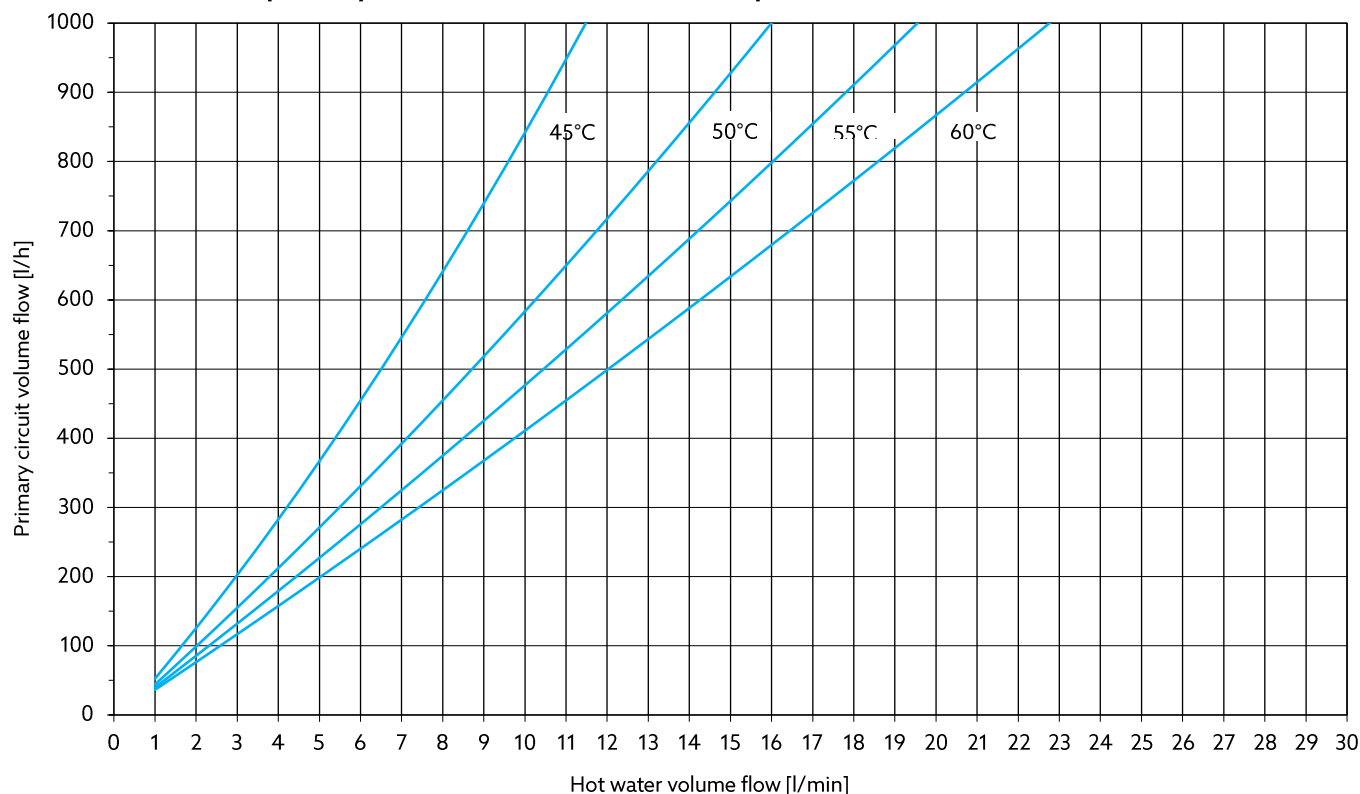


**Pressure loss of the potable water circuit for potable water heating for performance ranges (LB) 1-2****Pressure loss of the primary circuit for potable water heating for performance ranges (LB) 1-2**

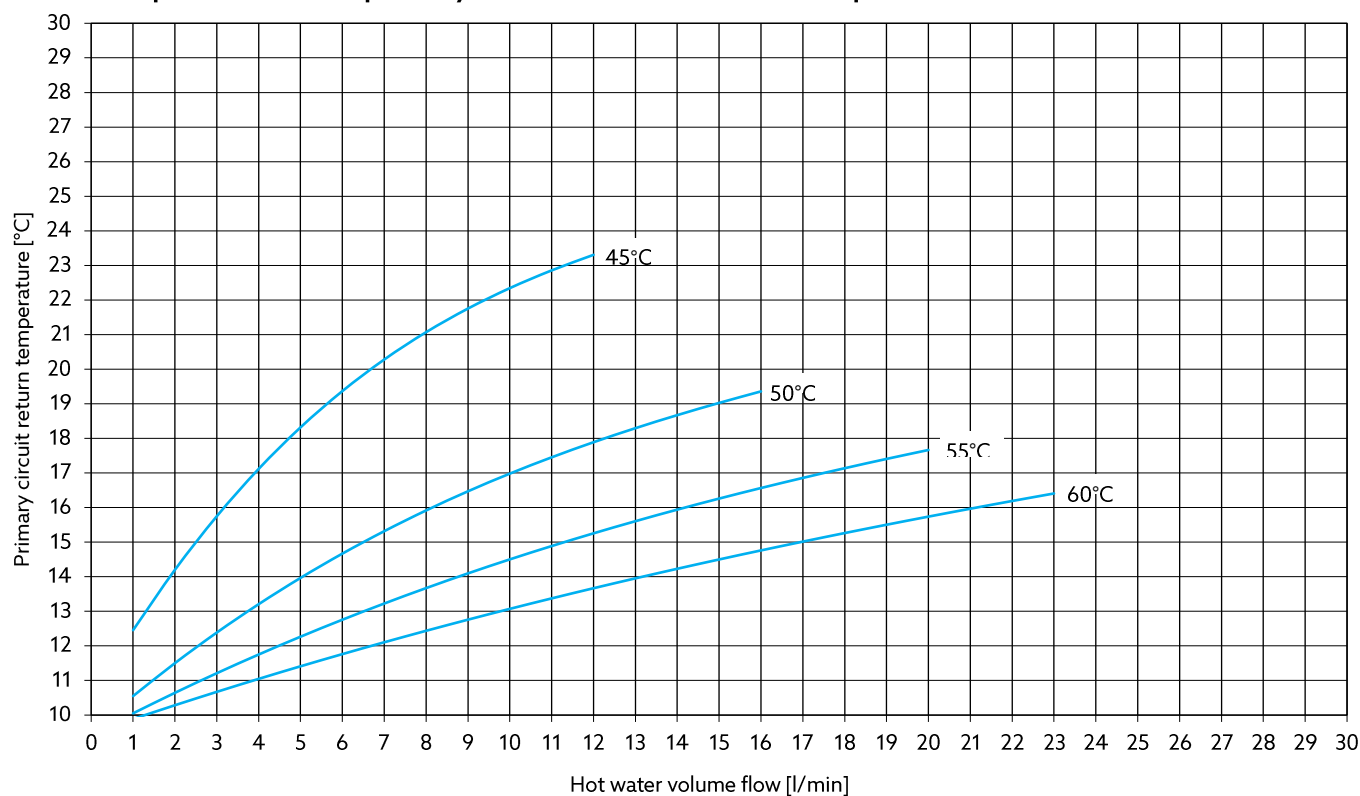
# Performance range 1: Heating of potable water from 10 °C to 45 °C

(Performance data according to SPF test procedure)

## Volume flow of the primary circuit at different flow temperatures



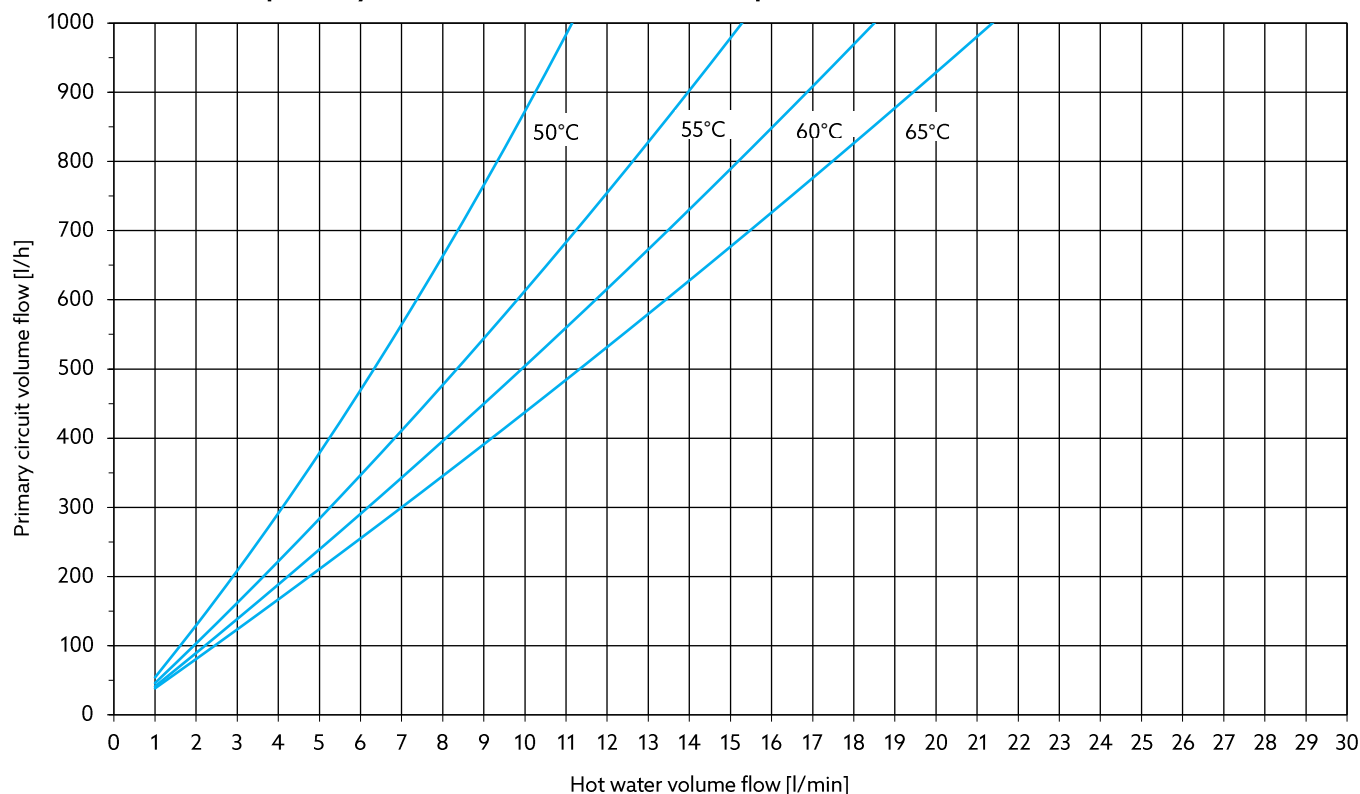
## Return temperature of the primary circuit at different flow temperatures



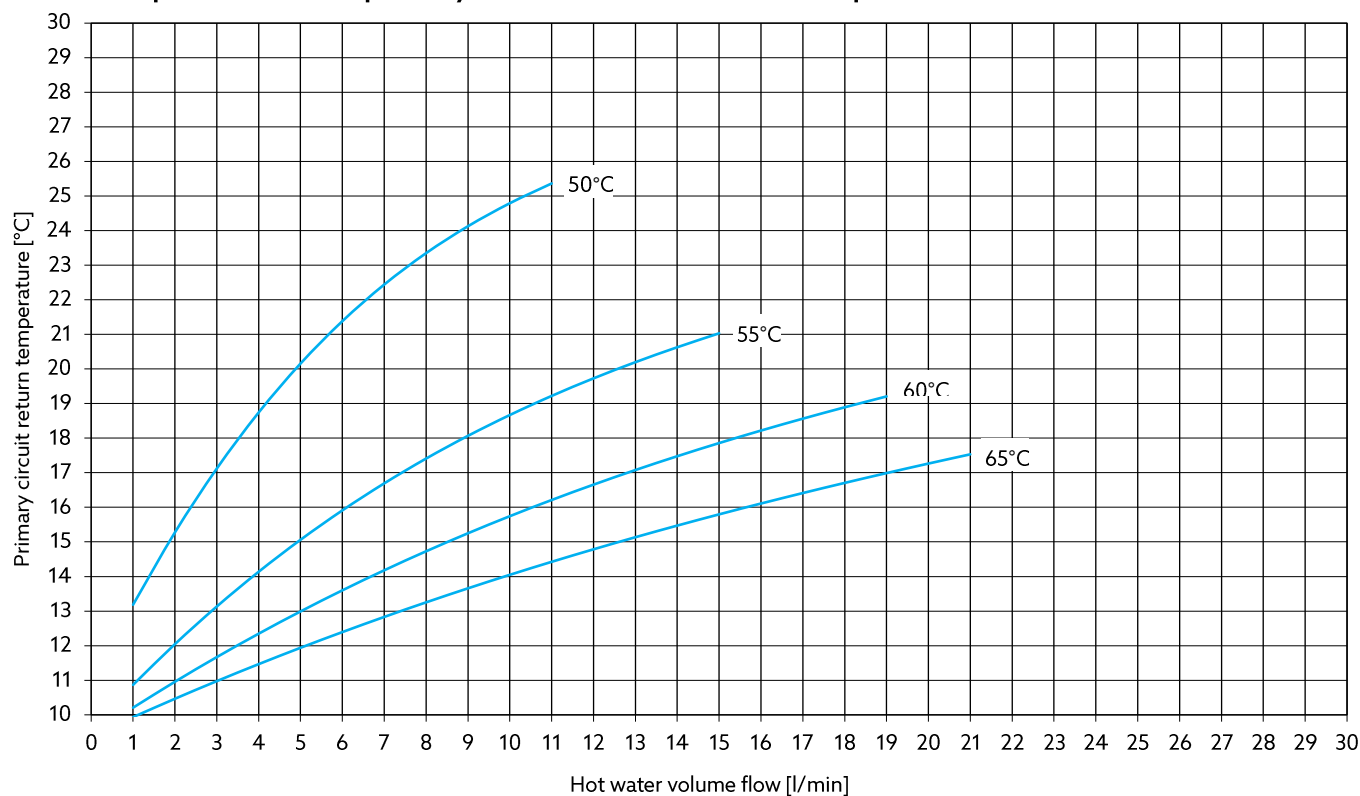
# Performance range 1: Heating of potable water from 10 °C to 50 °C

(Performance data according to SPF test procedure)

## Volume flow of the primary circuit at different flow temperatures



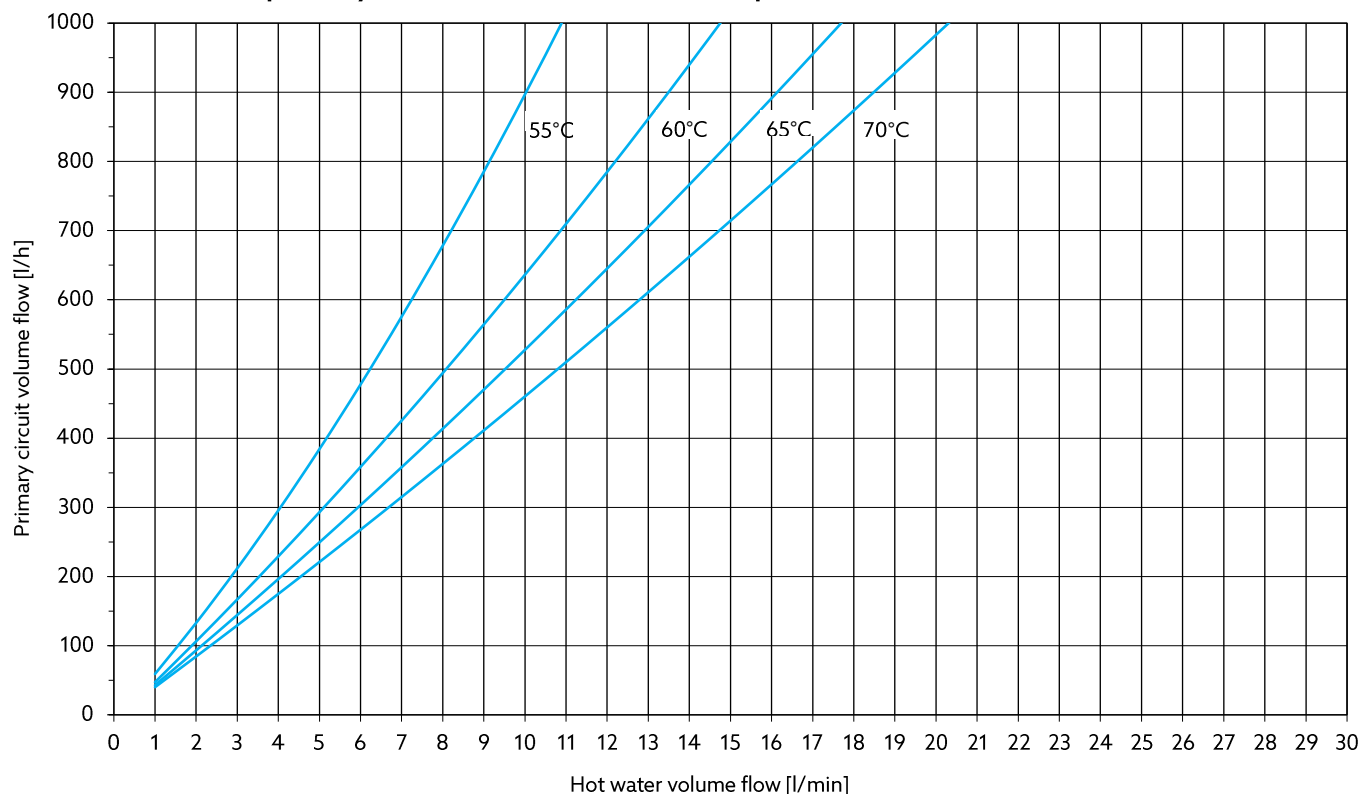
## Return temperature of the primary circuit at different flow temperatures



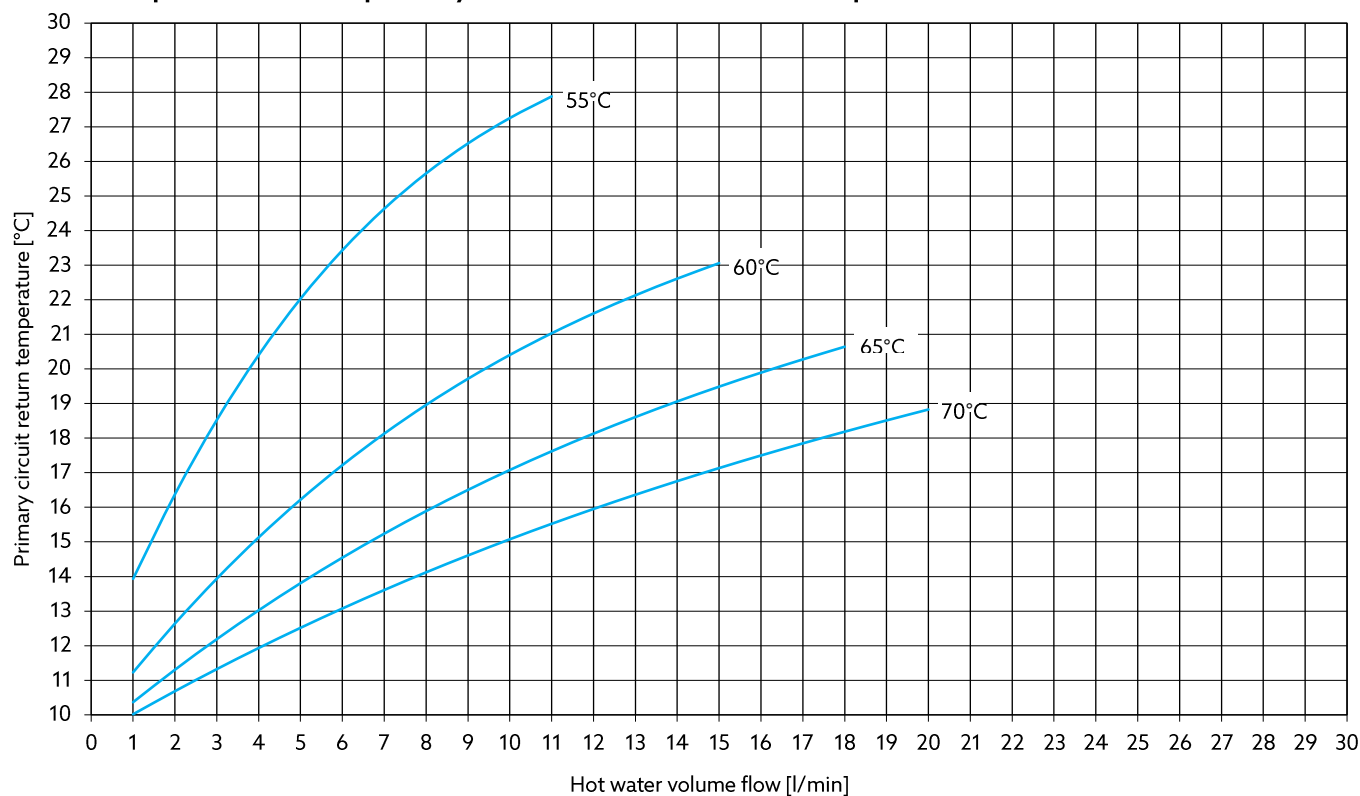
# Performance range 1: Heating of potable water from 10 °C to 55 °C

(Performance data according to SPF test procedure)

## Volume flow of the primary circuit at different flow temperatures



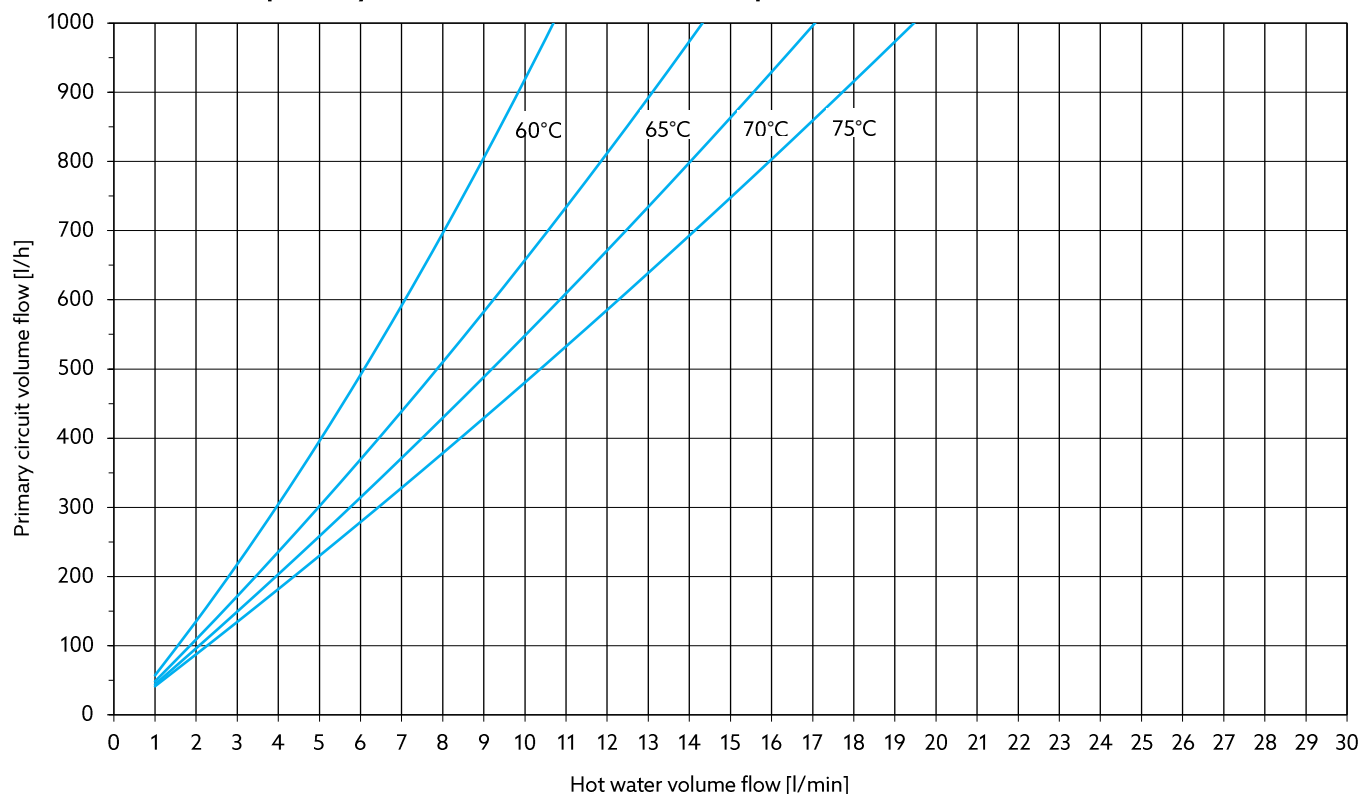
## Return temperature of the primary circuit at different flow temperatures



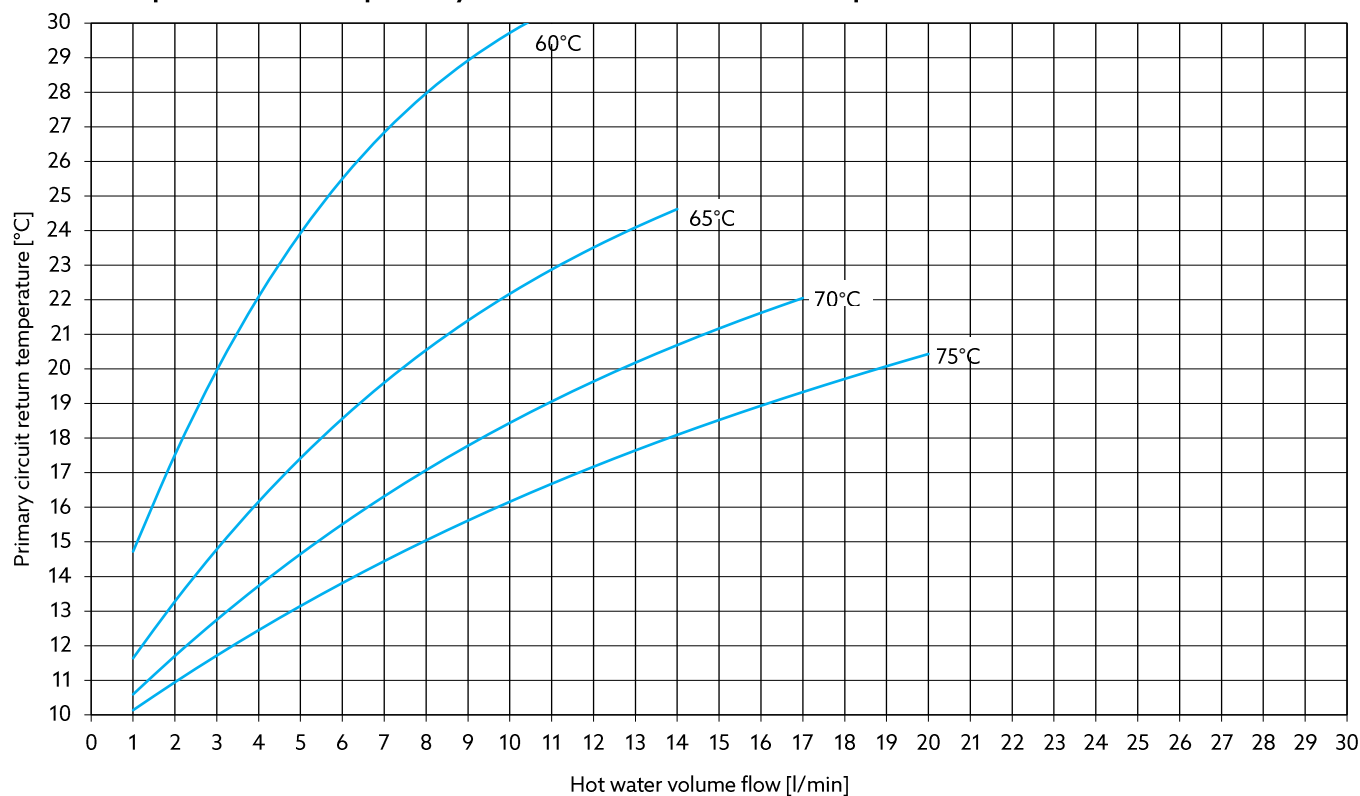
# Performance range 1: Heating of potable water from 10 °C to 60 °C

(Performance data according to SPF test procedure)

## Volume flow of the primary circuit at different flow temperatures



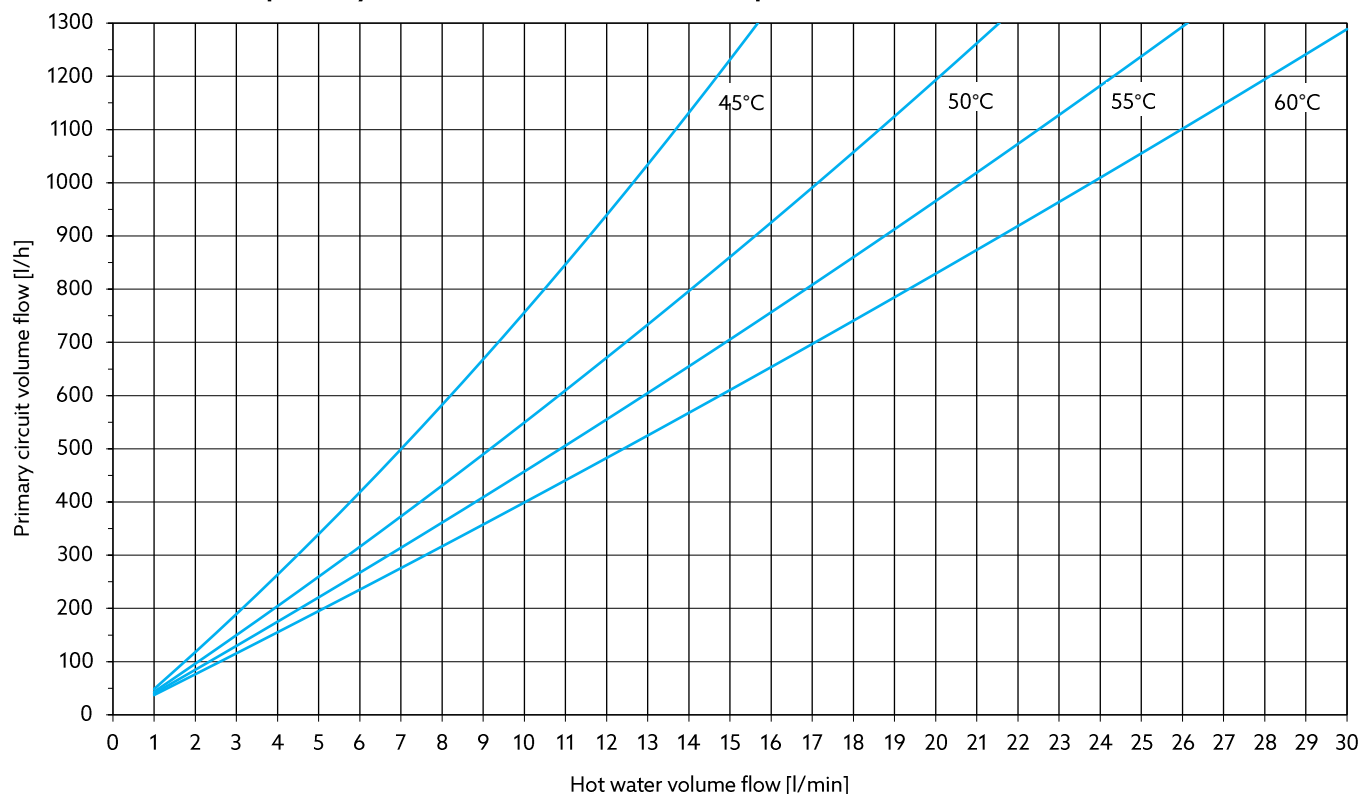
## Return temperature of the primary circuit at different flow temperatures



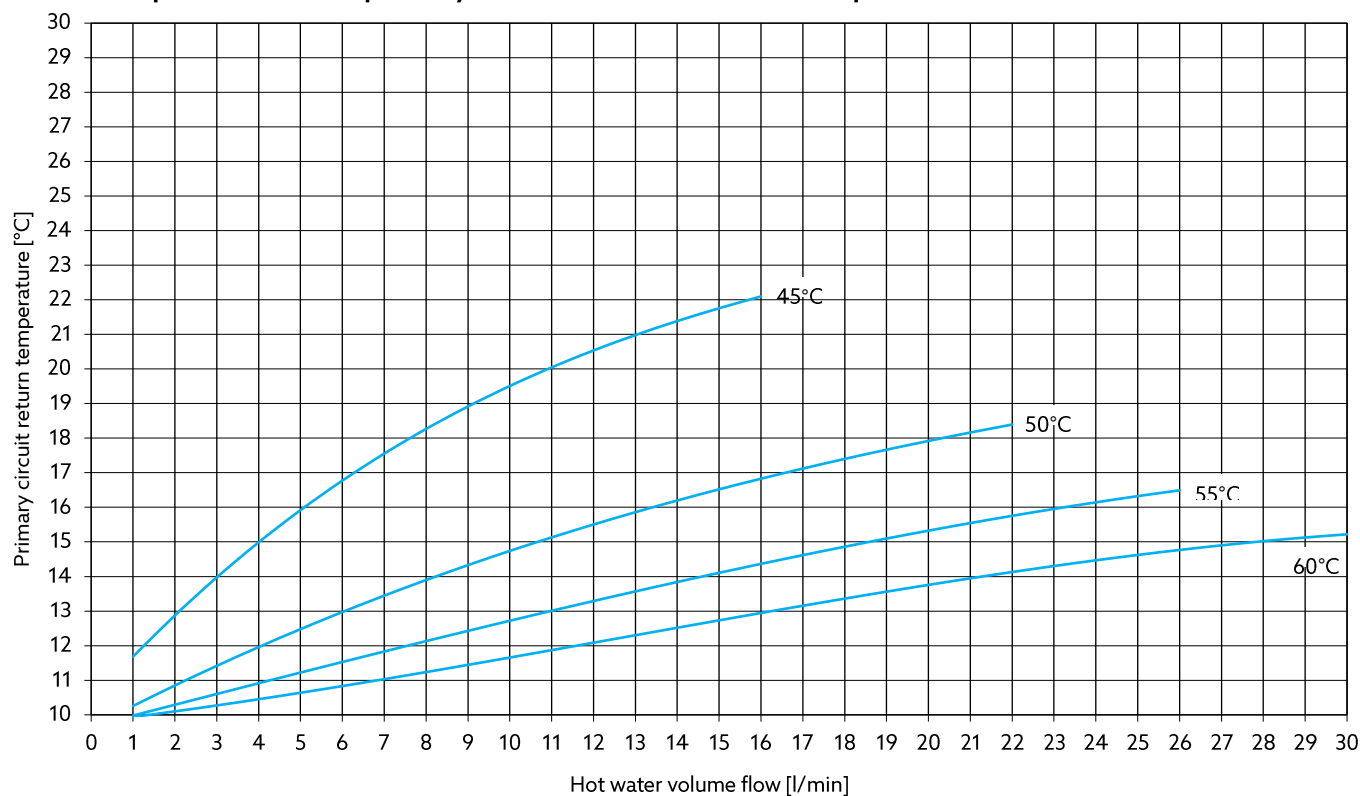
## Performance range 2: Heating of potable water from 10 °C to 45 °C

(Performance data according to SPF test procedure)

### Volume flow of the primary circuit at different flow temperatures



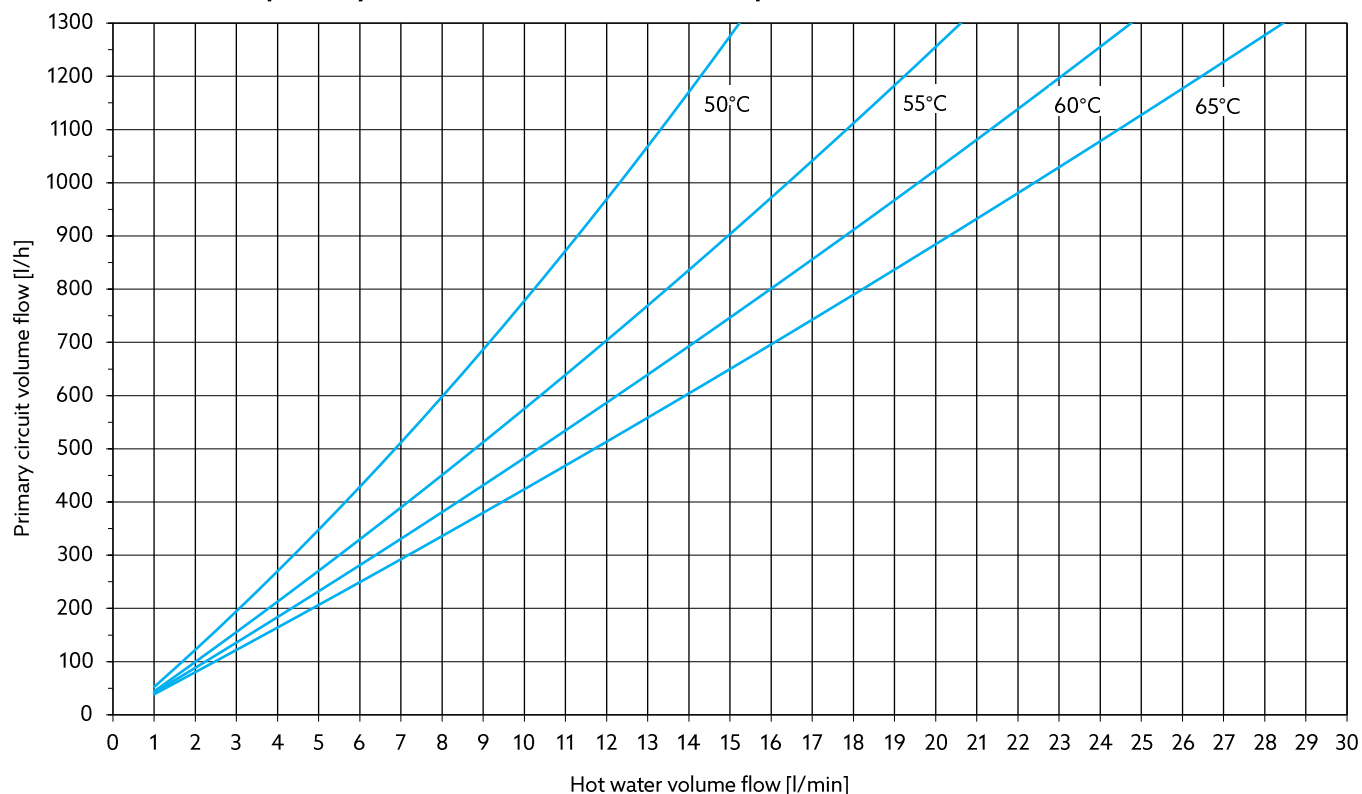
### Return temperature of the primary circuit at different flow temperatures



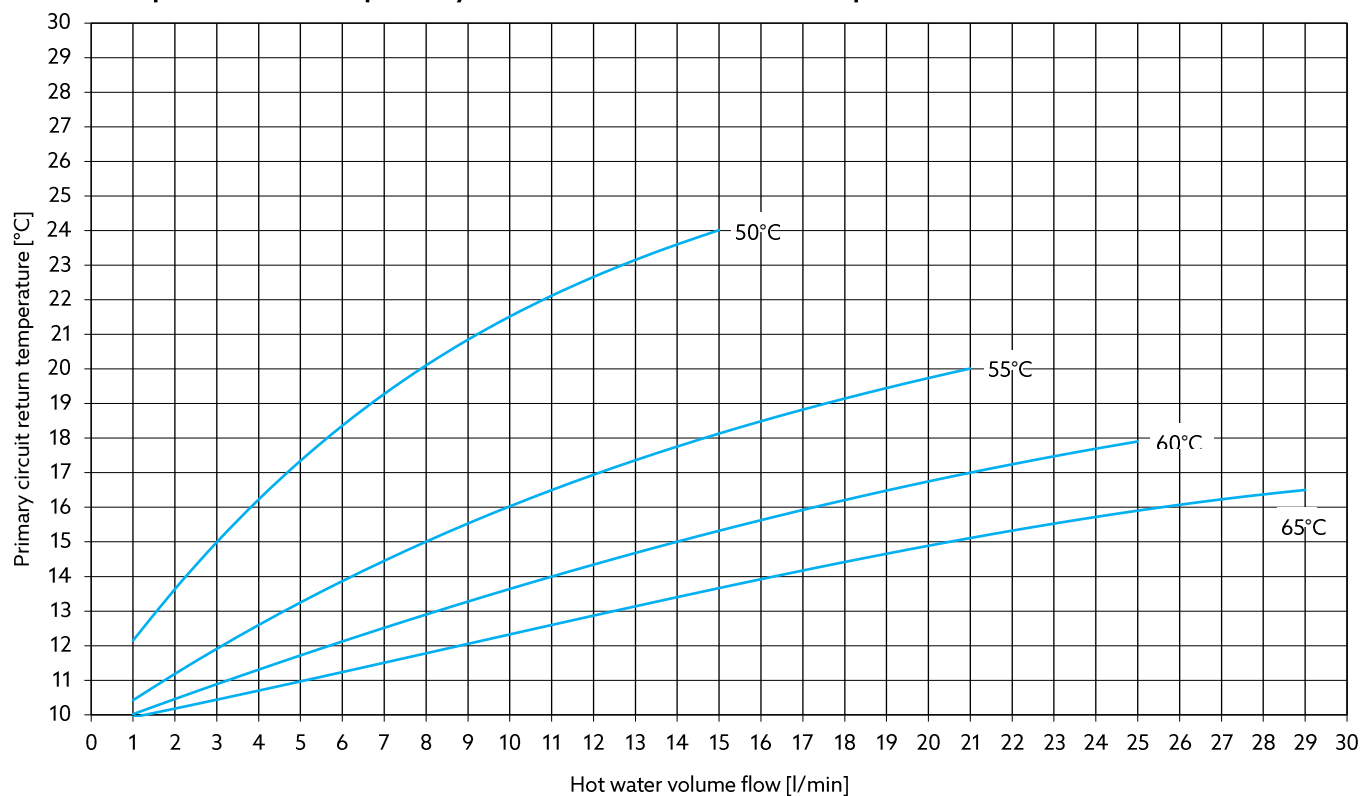
## Performance range 2: Heating of potable water from 10 °C to 50 °C

(Performance data according to SPF test procedure)

### Volume flow of the primary circuit at different flow temperatures



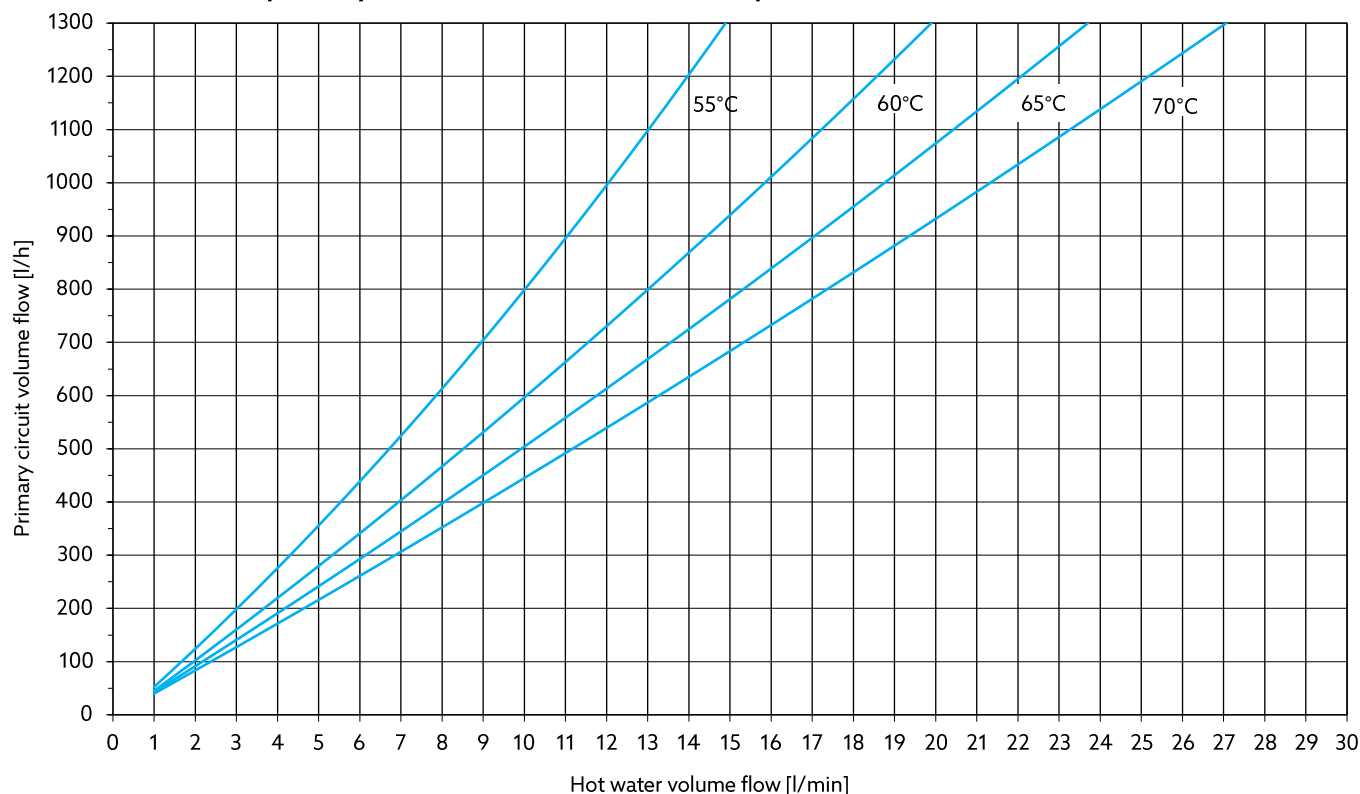
### Return temperature of the primary circuit at different flow temperatures



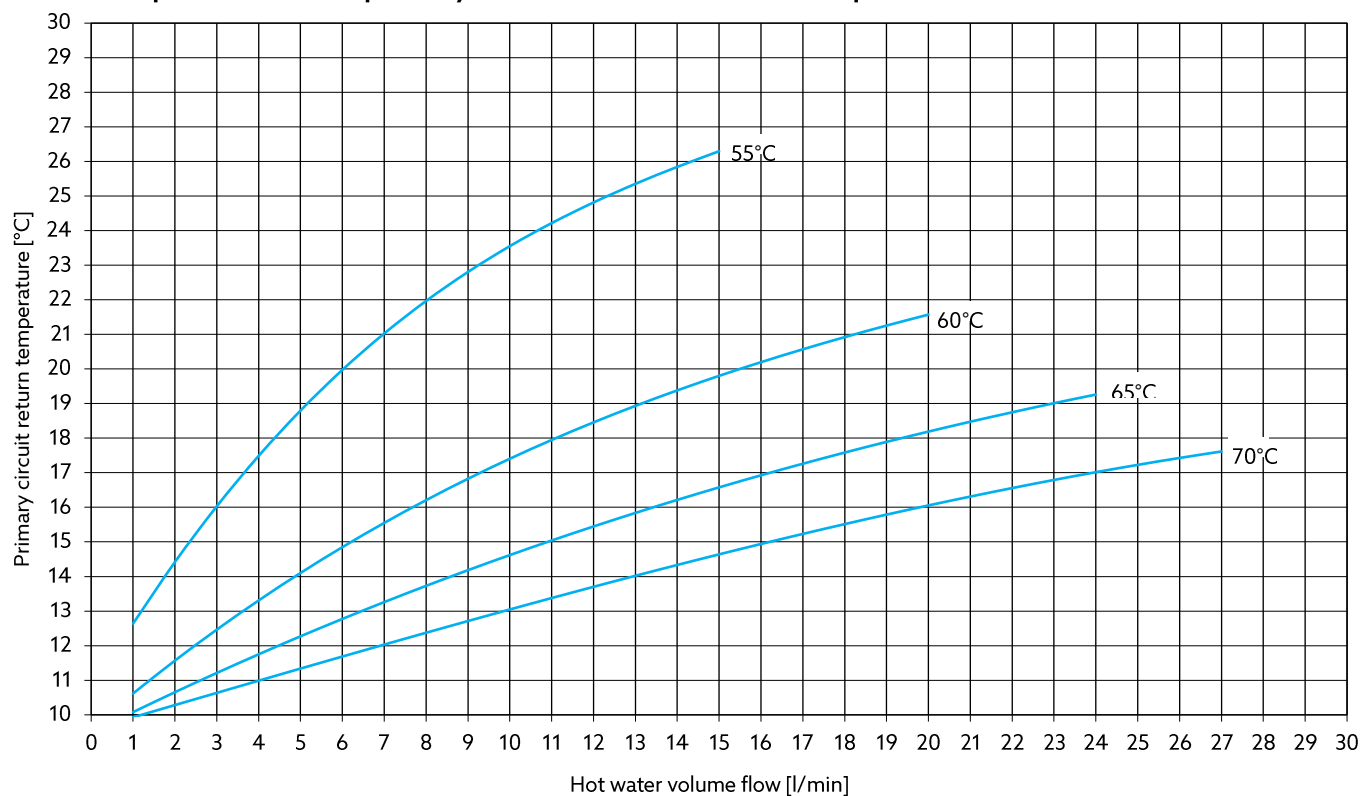
## Performance range 2: Heating of potable water from 10 °C to 55 °C

(Performance data according to SPF test procedure)

### Volume flow of the primary circuit at different flow temperatures



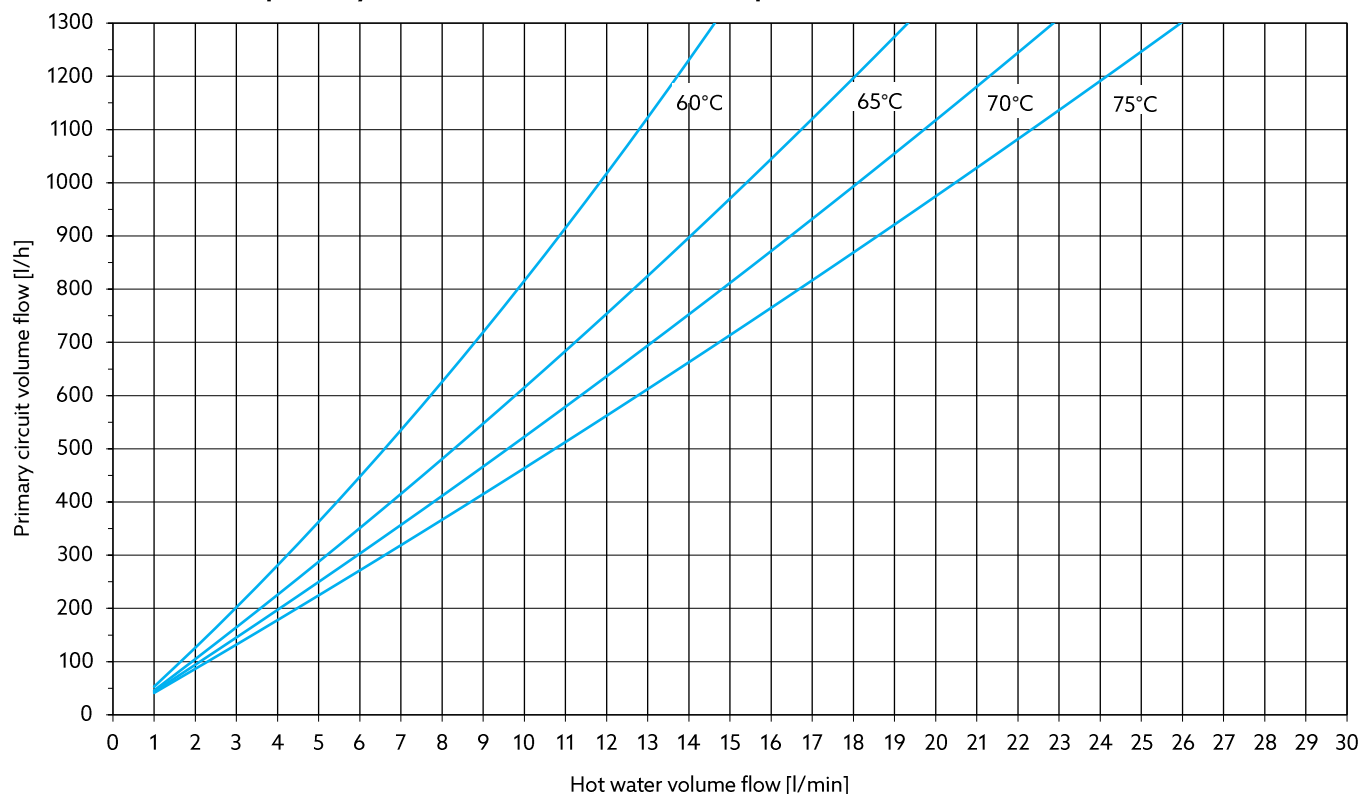
### Return temperature of the primary circuit at different flow temperatures



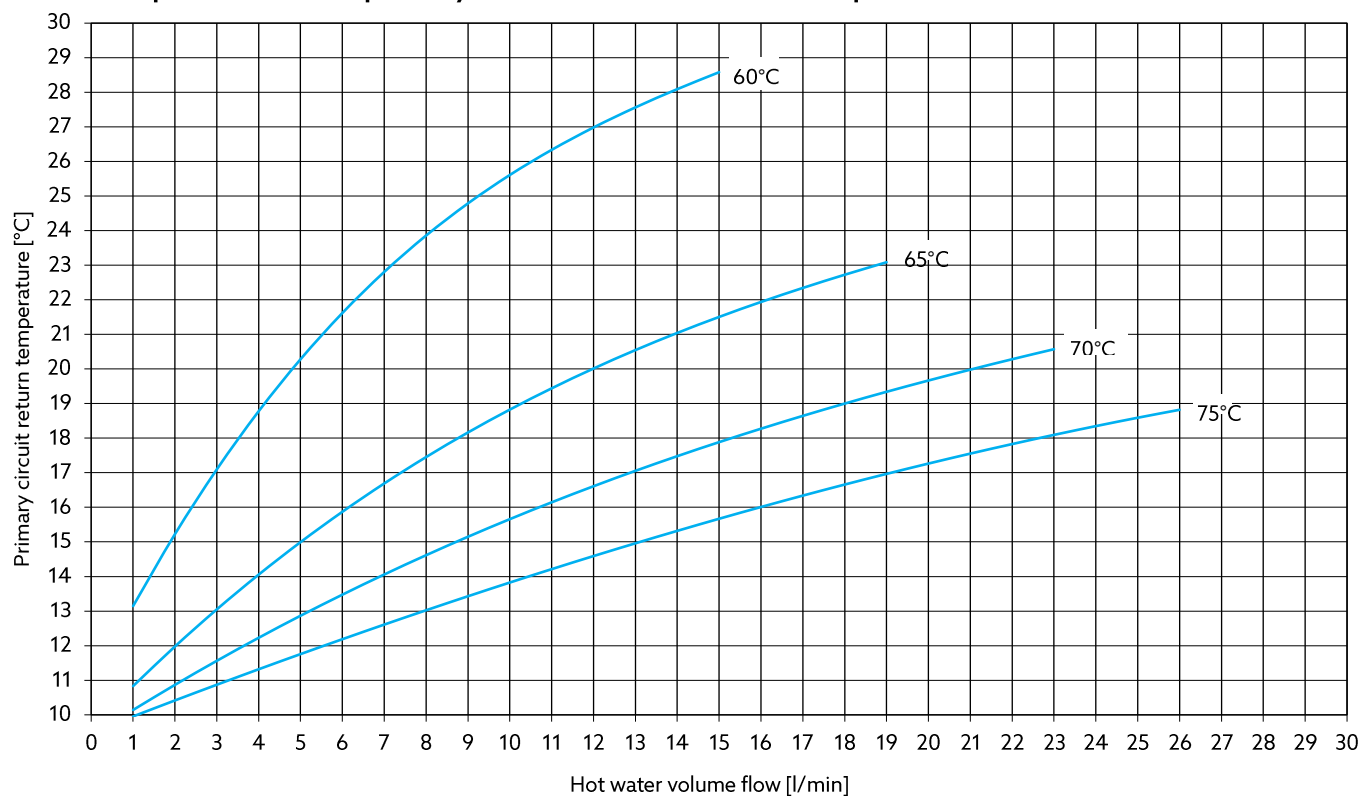
## Performance range 2: Heating of potable water from 10 °C to 60 °C

(Performance data according to SPF test procedure)

### Volume flow of the primary circuit at different flow temperatures



### Return temperature of the primary circuit at different flow temperatures



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