

# Regumaq X-45

## Fresh Water Station



The Regumaq X-45 fresh water station is an electronically controlled product assembly with heat exchanger for the hygienic heating of potable water according to the continuous flow principle for connection to a buffer storage cylinder. Depending on the temperature and the volume flow on the potable water side, the circulation pump on the heating side is speed controlled. When selecting the fresh water station, it is necessary to consider the water quality of the area of use.

The stations consist of a plate heat exchanger, a controller with touch control panel, a circulation pump, a backflow preventer, a volume flow sensor, a safety valve, temperature sensors, fill and drain ball valves and ball valves.

The compact stations are characterized by high draw-off capacities at low excess temperatures. The control technology is particularly fast and precise due to turbine sensor technology and LIN pump technology. With intuitive touch control panel for setting extensive functions such as circulation (continuous operation, timer, thermal or on demand), return water stratification or heat demand.

### Features

- + Powerful and versatile in use
- + Intuitive glass touch control panel with user or expert mode for qualified tradespeople
- + Numerous additional functions such as return water stratification or reheating
- + Suitable for low temperature systems
- + Precise control technology through turbine sensor technology and LIN pump technology (parallel connection possible)
- + Simple one-man installation

### General data

|                            |                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------|
| Variants                   | With copper brazed heat exchanger or copper brazed heat exchanger with Sealix® protective layer |
| Max. operating temperature | 95 °C                                                                                           |
| Max. operating pressure    | 10 bar                                                                                          |
| Weight                     | 15 kg                                                                                           |

# Product Details

## Technical Data

### Dimensions and connections

|                                                                      |                          |
|----------------------------------------------------------------------|--------------------------|
| <b>Width x Height x Depth</b>                                        | 400 x 625 x 240 mm       |
| <b>Primary and secondary circuit connections</b>                     | G 1 ET, flat sealing     |
| <b>Circulation connection</b>                                        | G 1 ET, flat sealing     |
| <b>Flush, fill and drain ball valve connections</b>                  | G ¾ ET, for hose fitting |
| <b>Distance between pipe centres - primary circuit connections</b>   | 100 mm                   |
| <b>Distance between pipe centres - secondary circuit connections</b> | 250 mm                   |
| <b>Centre distance to wall - primary circuit</b>                     | 105 mm                   |
| <b>Centre distance to wall - secondary circuit</b>                   | 65 mm                    |
| <b>Distance between sealing surfaces - primary to secondary side</b> | 565 mm                   |

### Hydraulic data: Primary circuit

|                 |                                                                                                                                                                                     |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>Kv value</b> | 3.41                                                                                                                                                                                |

### Hydraulic data: Secondary circuit

|                                                |                                                                                                      |
|------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Medium</b>                                  | Potable water. Observe the specifications of the Oventrop information sheet on corrosion protection. |
| <b>Kv value</b>                                | 2.55                                                                                                 |
| <b>Safety valve</b>                            | 10 bar                                                                                               |
| <b>Setting range potable water temperature</b> | 20...75 °C                                                                                           |

### Electrical data: Pump

|                          |                             |
|--------------------------|-----------------------------|
| <b>Pump</b>              | Wilo Para 15-130/8-75/LIN-9 |
| <b>Power consumption</b> | 2...75 W                    |

### Material

|                                                                   |                                                                                                                                           |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Heat exchanger copper brazed</b>                               | Plate material: Stainless steel 1.4401<br>Connections: Stainless steel 1.4404<br>Brazing material: Copper                                 |
| <b>Heat exchanger copper brazed with Sealix® 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 / DZR brass                                                                                                                         |
| <b>Seals</b>                                                      | Fibre material, EPDM                                                                                                                      |
| <b>Insulation</b>                                                 | EPP                                                                                                                                       |

## Applications

Operating safety is only guaranteed if the product is used correctly.

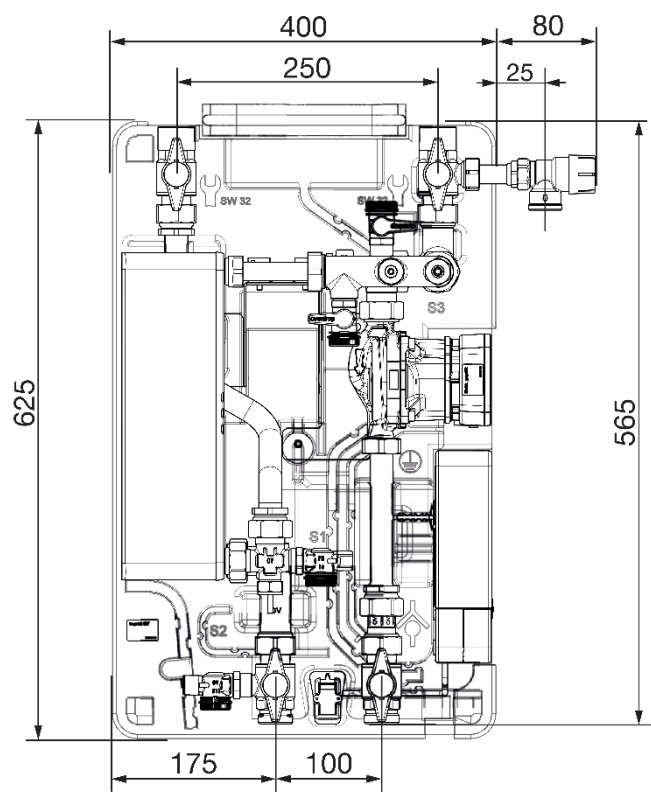
The station is an electronically controlled product assembly with heat exchanger for domestic use (e.g. rental units in residential and commercial buildings). The product assembly serves the supply of heated potable water (hot water). Use the product:

- In a technically perfect condition.
- At installation locations which are directly connected to the public low-voltage network

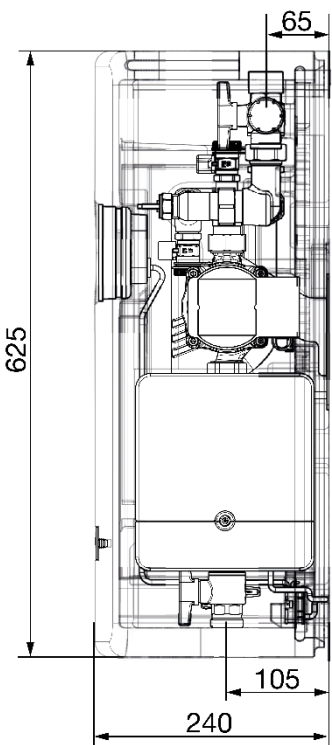
The passage of media other than heating water through the storage cylinder and fresh water through the potable water circuit will be considered incorrect. A direct connection of the fresh water station to local and/or district heating networks may lead to malfunctions. Parallel operation with other heating system components such as heating circuit stations is not permitted.

Any other use of the product will be considered incorrect use. Claims of any kind against the manufacturer and/or its authorised representatives due to damage caused by incorrect use will not be accepted. Observance of all operating instructions is part of compliance with correct use.

# Dimensions



Dimension Regumaq X-45 (front view)



Dimensions Regumaq X-45 (side view)

# Selection

## Item Numbers

### Regumaq X-45

|                                                                                     | Description                                                | Item no. |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|----------|
|                                                                                     |                                                            |          |
|  | Heat exchanger copper brazed                               | 1381140  |
|                                                                                     | Heat exchanger copper brazed with Sealix® protective layer | 1381142  |

## Accessories

Selected accessories for the Regumaq X-45 station. For a complete overview, see product catalogue.

| Description                                                                                                          | Art.-Nr. |
|----------------------------------------------------------------------------------------------------------------------|----------|
| Potable water circulation set for Regumaq X-45, with circulation pump Wilo PARA BZ Z 15-130/7-50/SC                  | 1381150  |
| Potable water circulation set for Regumaq X-45, without circulation pump                                             | 1381152  |
| Return stratification control valve for Regumaq X-45, with actuator, 230 V, running time 20 s, DN 25, kvs value 11.3 | 1381190  |
| Installation relay for the connection of high-performance pumps (> 1A)                                               | 1152089  |
| Earthing clamp, DN 20...32                                                                                           | 1359995  |
| Maintenance cable for Regumaq X-45, consisting of a connecting cable (2 m) incl. 2 magnetic contacts                 | 1381172  |
| Strainer, both sides flat sealing external thread, with double screen insert 250 µm, PN 25, DN 20                    | 1141006  |
| Aquastrom P water sampling valve, DN 8, PN 10, flame resistant, bronze/stainless steel, G 1/4                        | 4209102  |
| Aquastrom P water sampling valve, DN 10, PN 10, flame resistant, bronze/stainless steel, G 3/8                       | 4209103  |

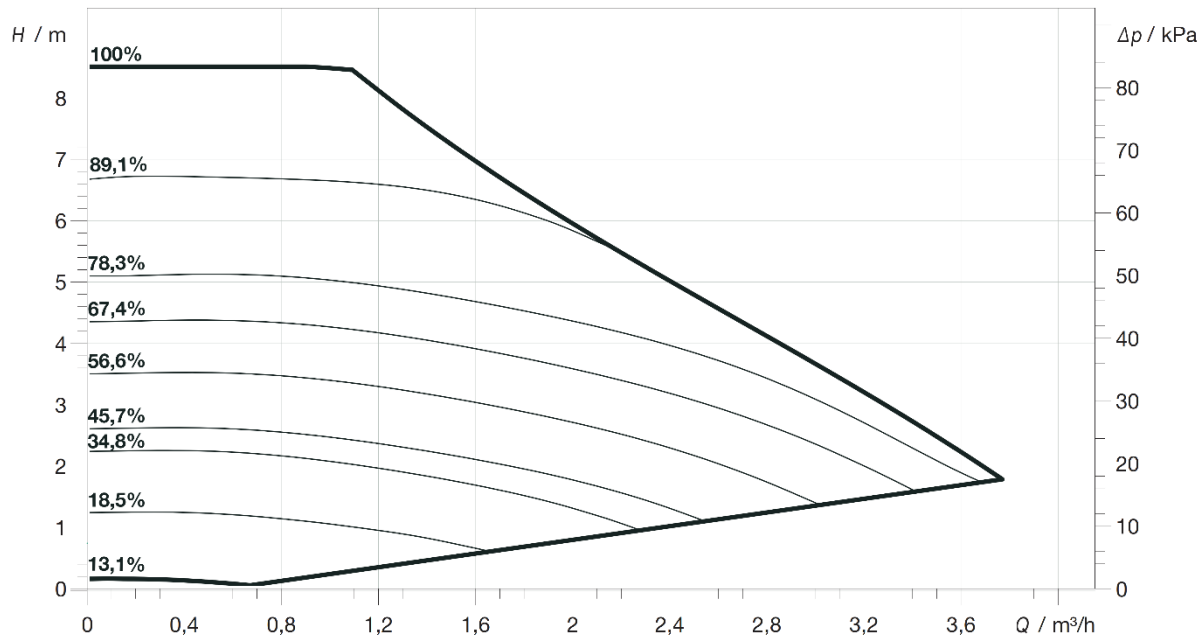
## Spare Parts

Selected spare parts for the Regumaq X-45 station. For a complete overview, see product catalogue.

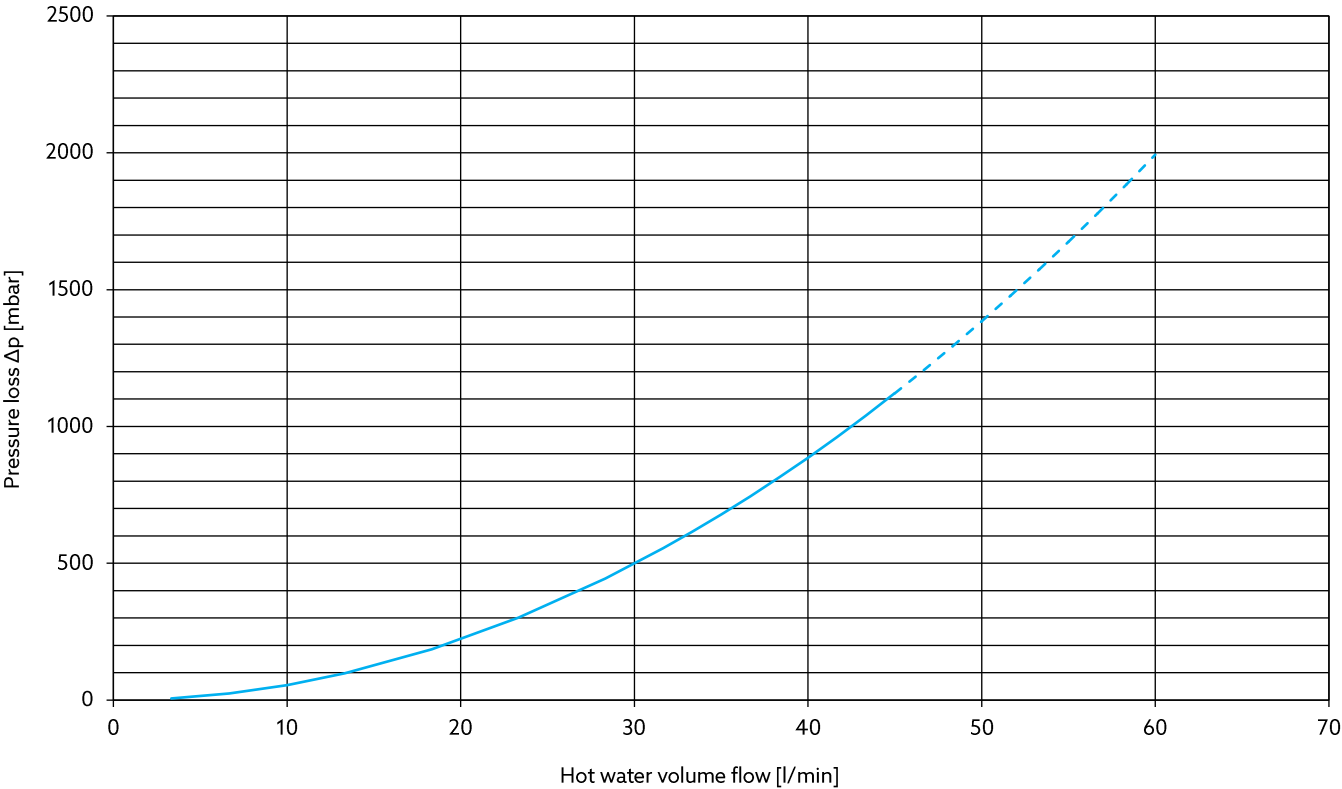
| Designation                                                                        | Item no. |
|------------------------------------------------------------------------------------|----------|
| Heat exchanger copper brazed                                                       | 1344085  |
| Heat exchanger copper brazed with Sealix® protective layer                         | 1344095  |
| Volume flow sensor, housing with slide-in turbine and hall effect sensor           | 1381174  |
| Potable water temperature sensor                                                   | 1381163  |
| Check valve for Regumaq X-45 primary circuit                                       | 1381167  |
| High-efficiency pump for Regumaq X-45 primary circuit, Wilo PARA 15-130/8-75/LIN-9 | 1381166  |
| Power supply cable for Wilo PARA, with right-angle plug                            | 1358172  |
| Sealing ring for junction G 3/4                                                    | 1344497  |
| Sealing ring for junction G 1                                                      | 1344498  |
| Controller for Regumaq X-45, cabled without touch control panel                    | 1381160  |
| Controller for Regumaq X-45, touch control panel                                   | 1381161  |

# Design Charts

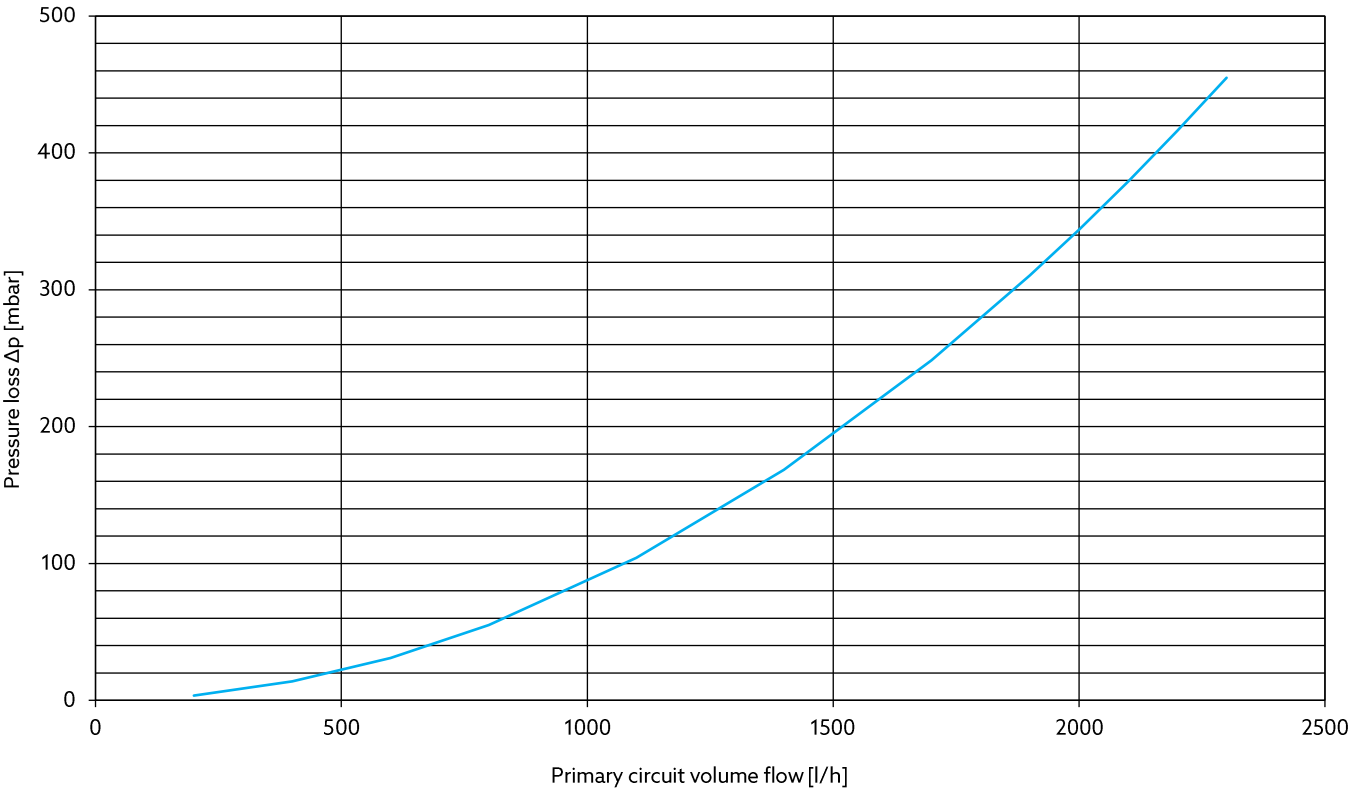
## Characteristic line Wilo Para 15-130/8-75/LIN-9



Pressure loss of the potable water circuit for potable water heating



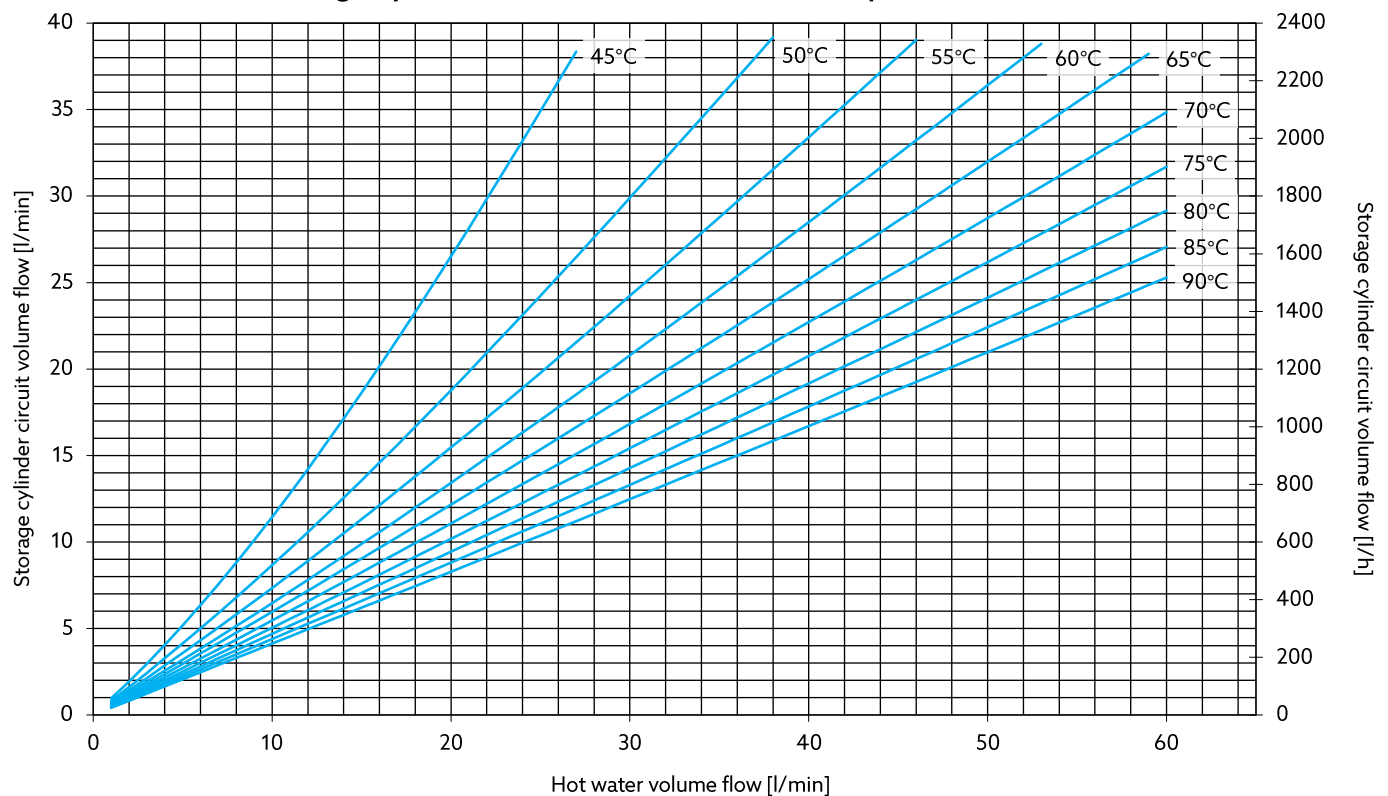
Pressure loss of the primary circuit for potable water heating



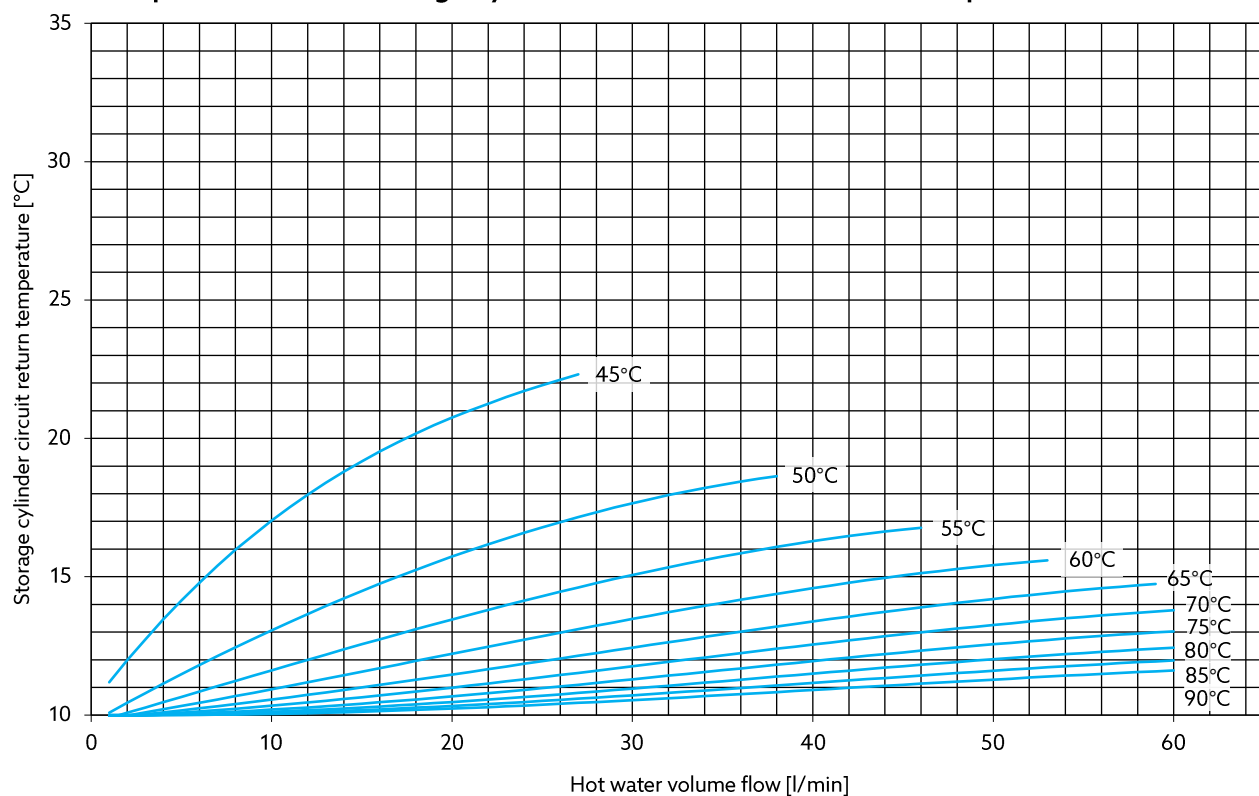
# Heating of potable water from 10 °C to 45 °C

(Performance data according to SPF test procedure)

## Volume flow of the storage cylinder circuit at different flow temperatures



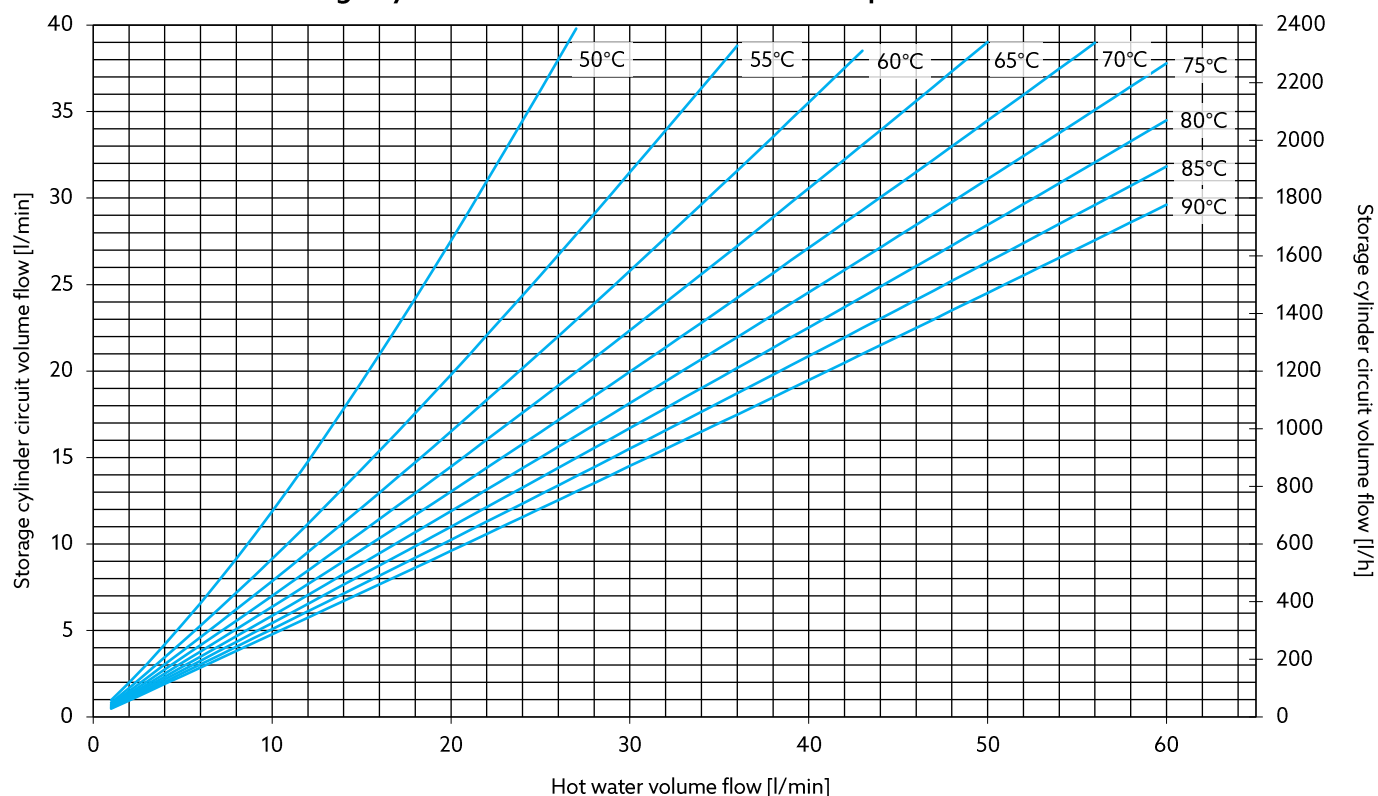
## Return temperature of the storage cylinder circuit at different flow temperatures



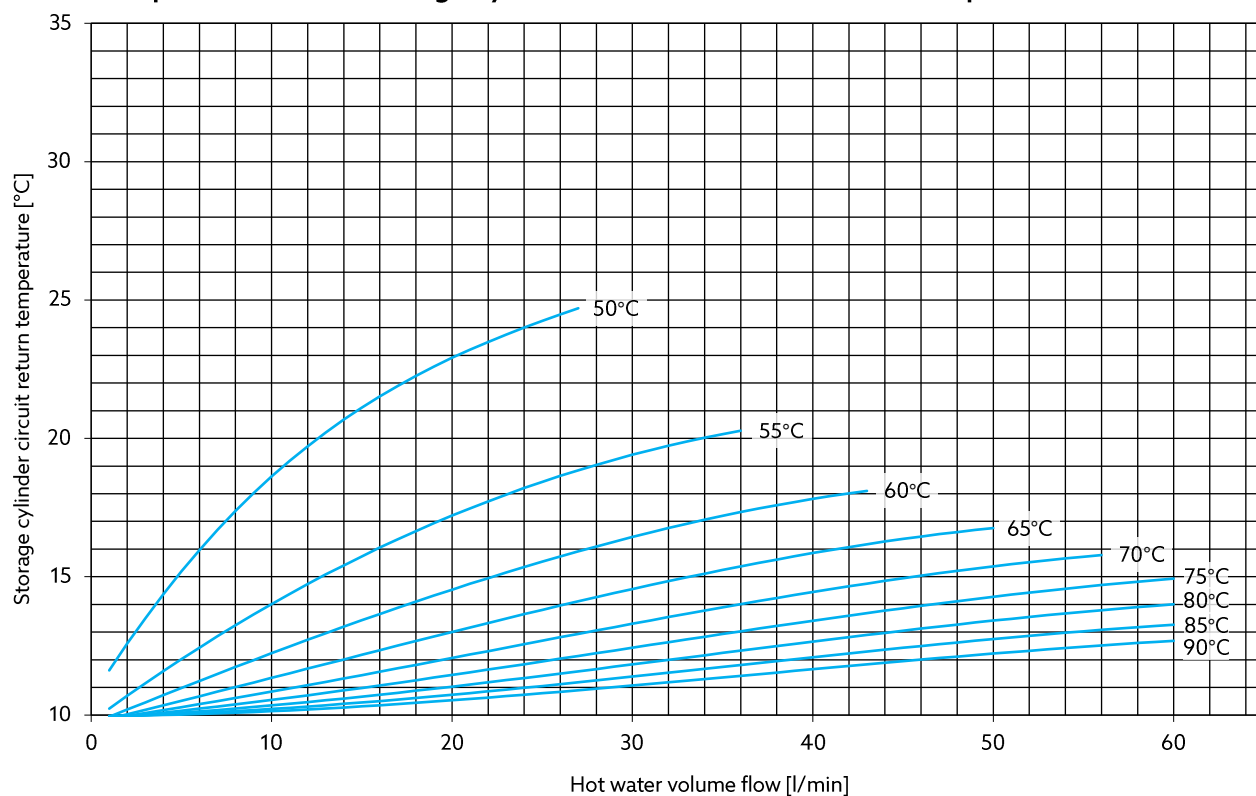
# Heating of potable water from 10 °C to 50 °C

(Performance data according to SPF test procedure)

## Volume flow of the storage cylinder circuit at different flow temperatures



## Return temperature of the storage cylinder circuit at different flow temperatures

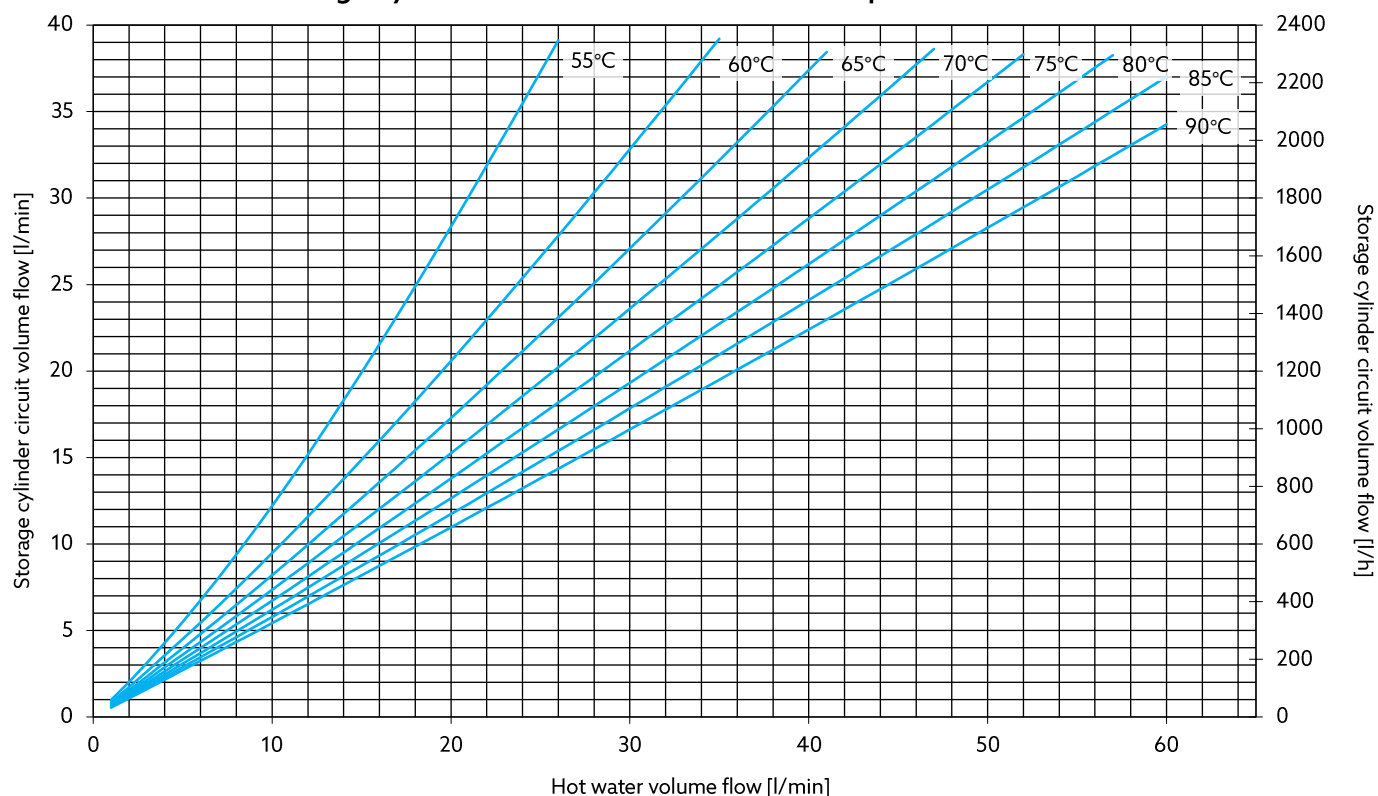




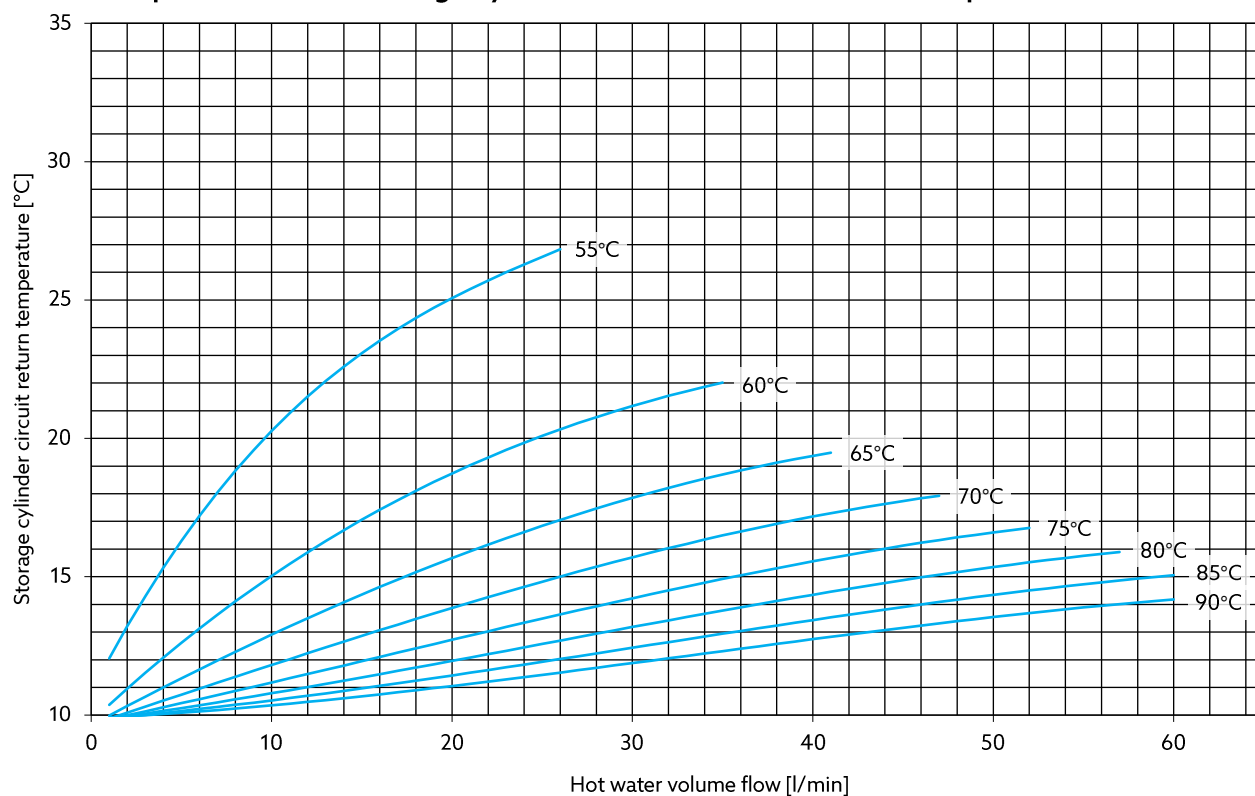
# Heating of potable water from 10 °C to 55 °C

(Performance data according to SPF test procedure)

## Volume flow of the storage cylinder circuit at different flow temperatures



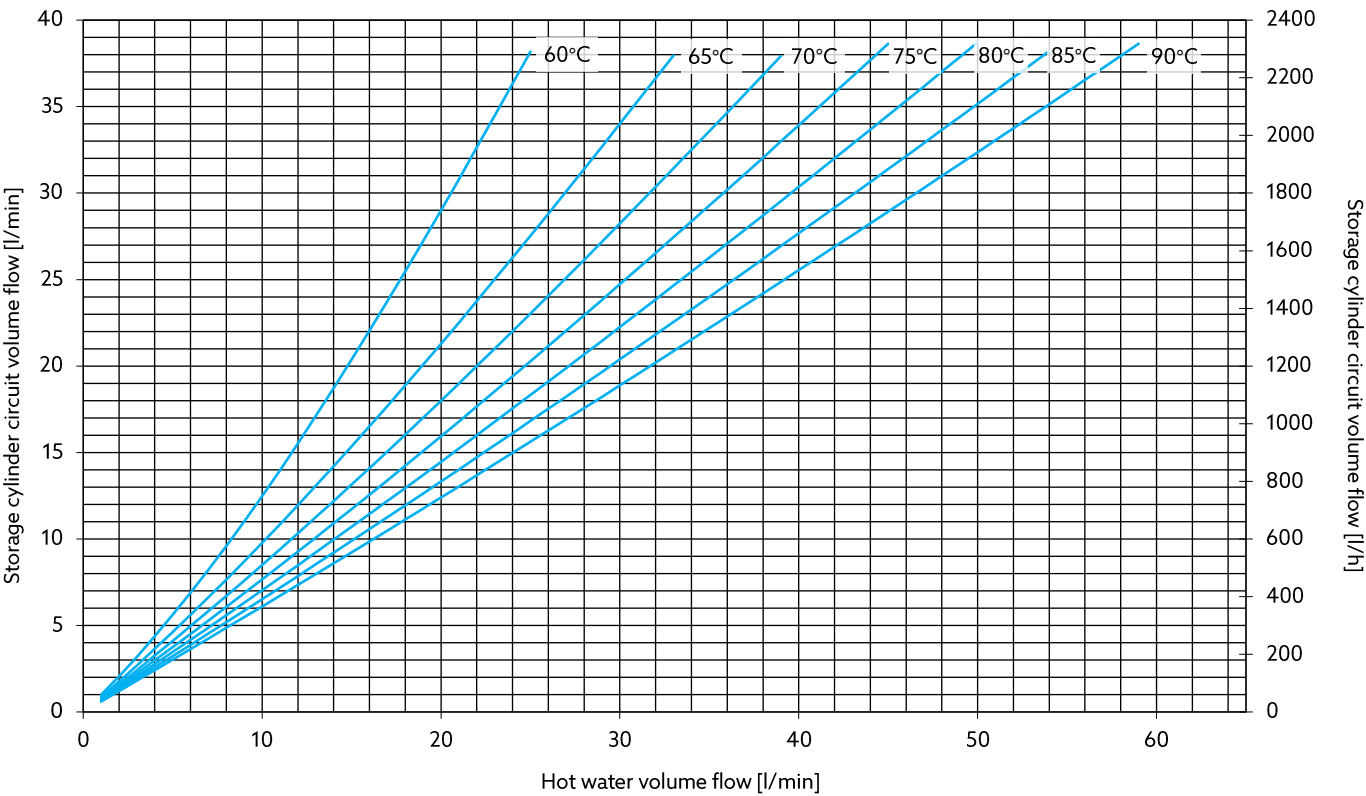
## Return temperature of the storage cylinder circuit at different flow temperatures



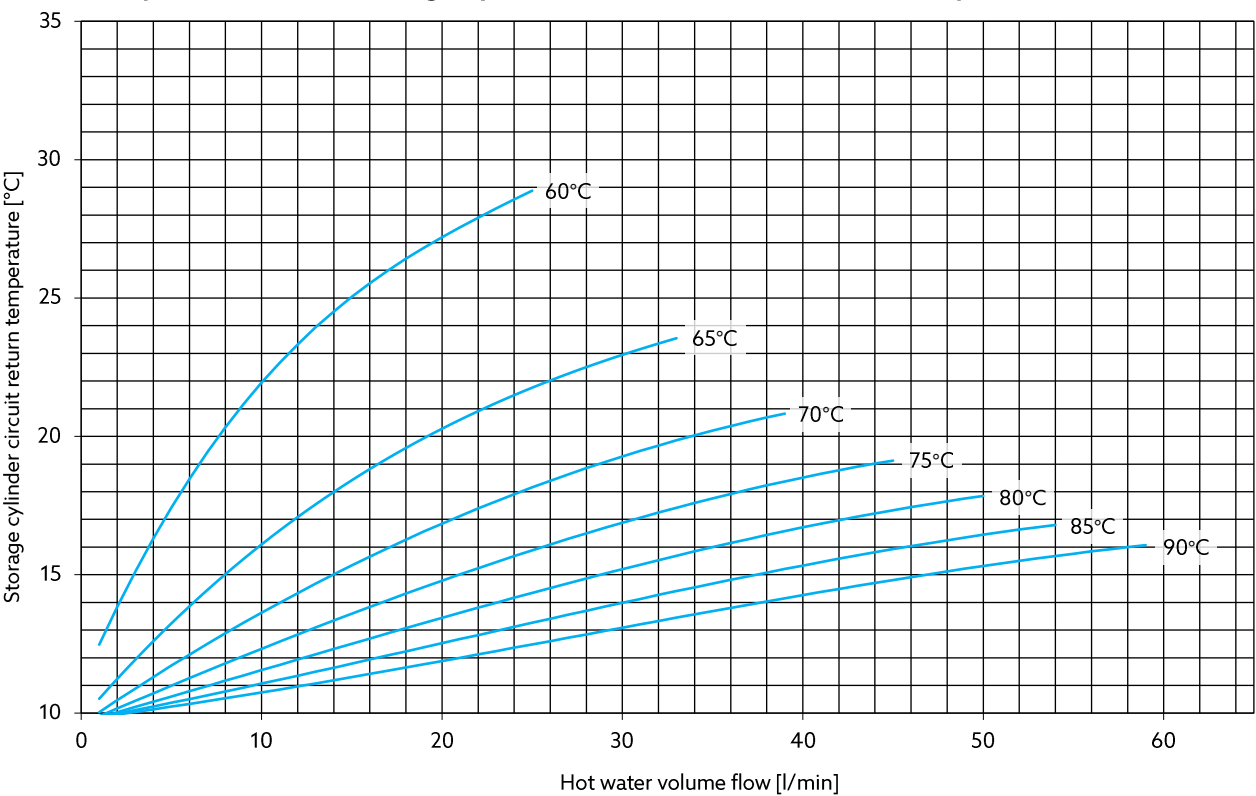
# Heating of potable water from 10 °C to 60 °C

(Performance data according to SPF test procedure)

## Volume flow of the storage cylinder circuit at different flow temperatures



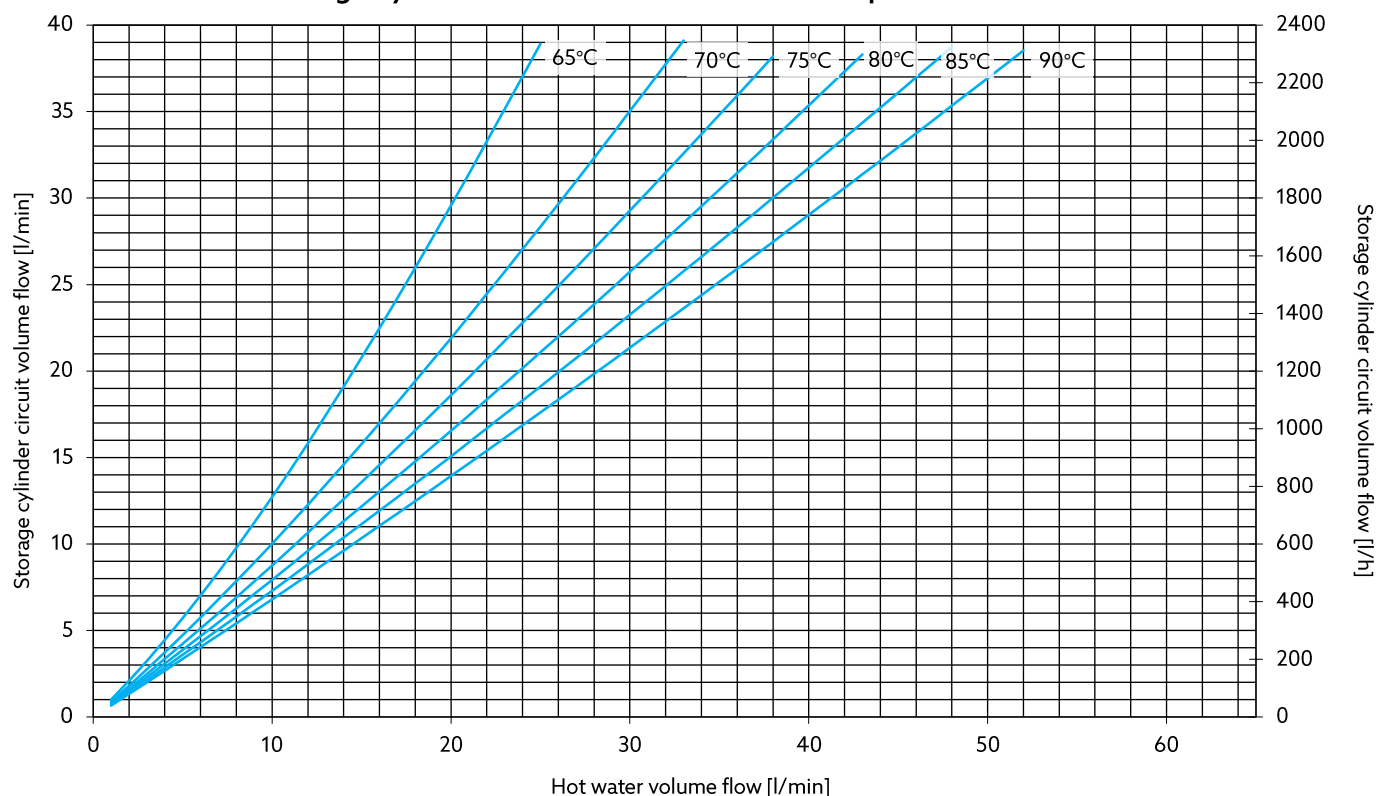
## Return temperature of the storage cylinder circuit at different flow temperatures



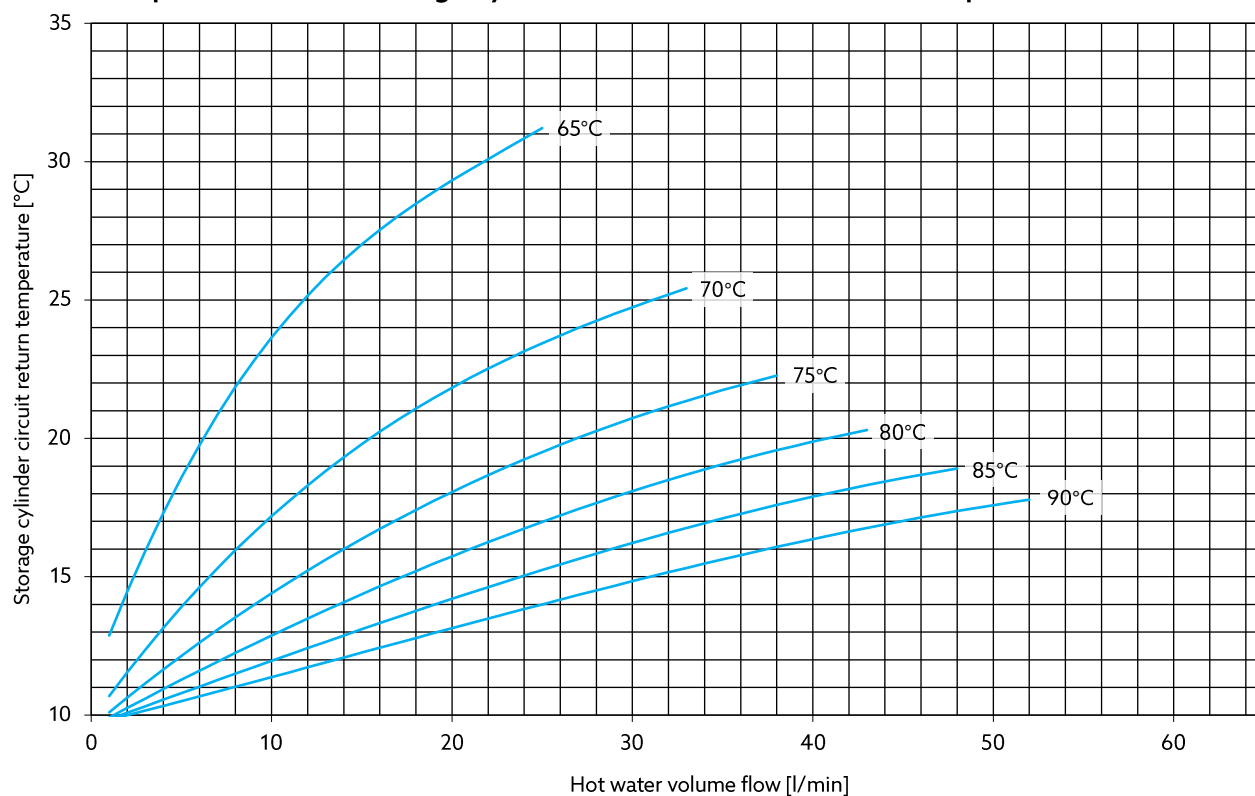
# Heating of potable water from 10 °C to 65 °C

(Performance data according to SPF test procedure)

## Volume flow of the storage cylinder circuit at different flow temperatures



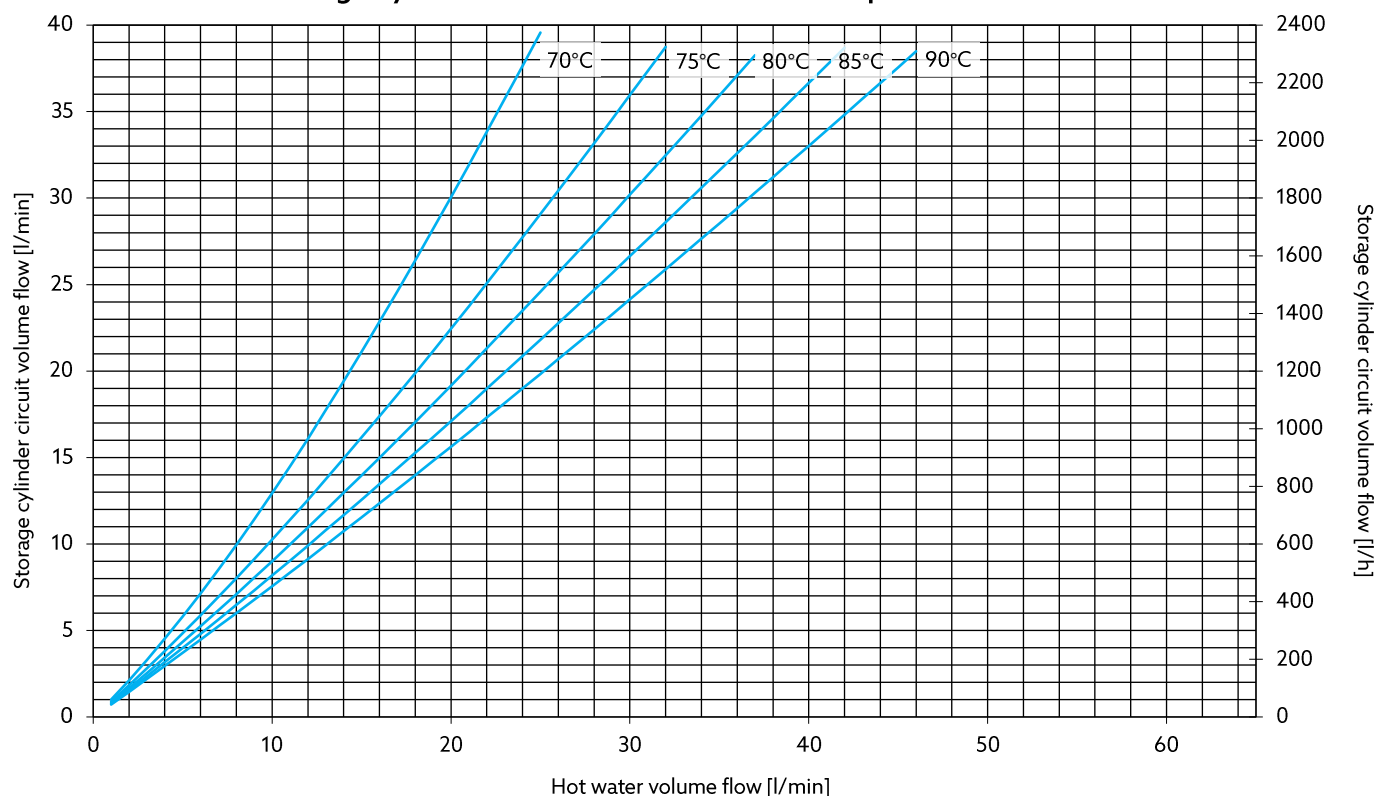
## Return temperature of the storage cylinder circuit at different flow temperatures



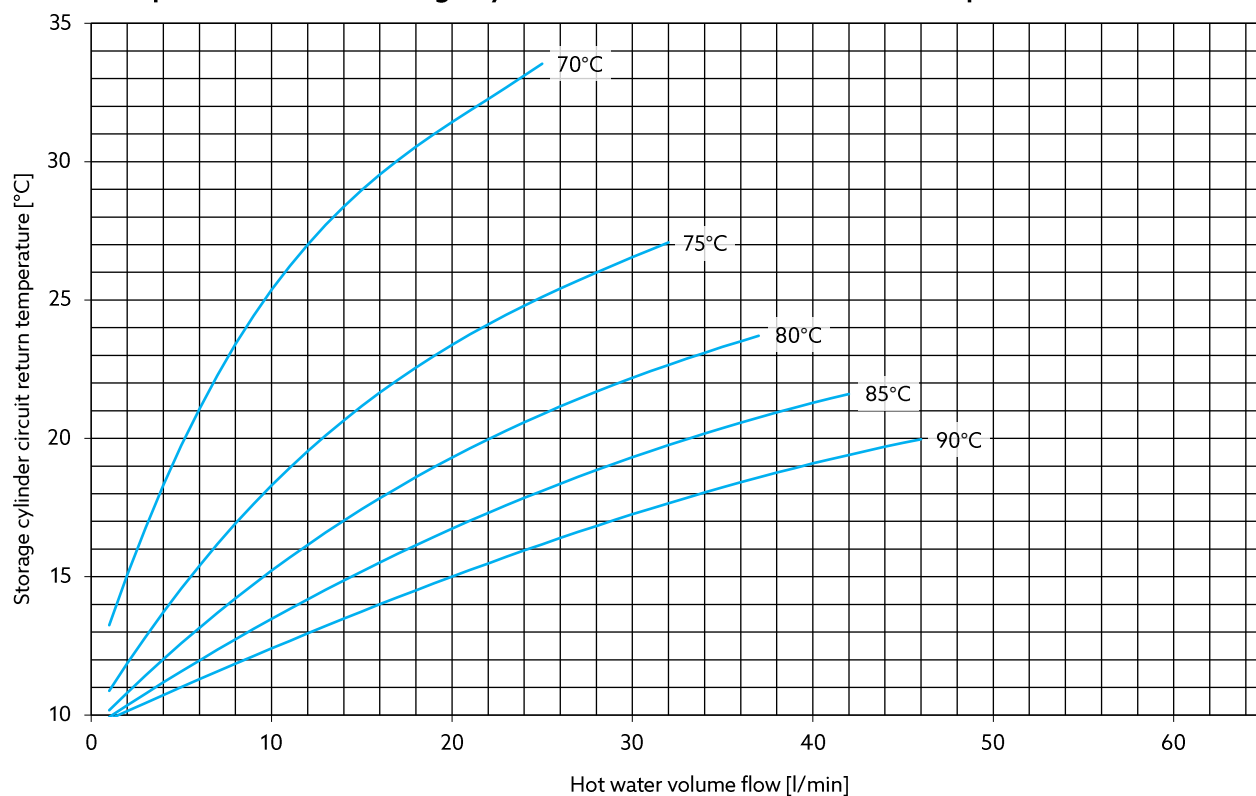
# Heating of potable water from 10 °C to 70 °C

(Performance data according to SPF test procedure)

## Volume flow of the storage cylinder circuit at different flow temperatures



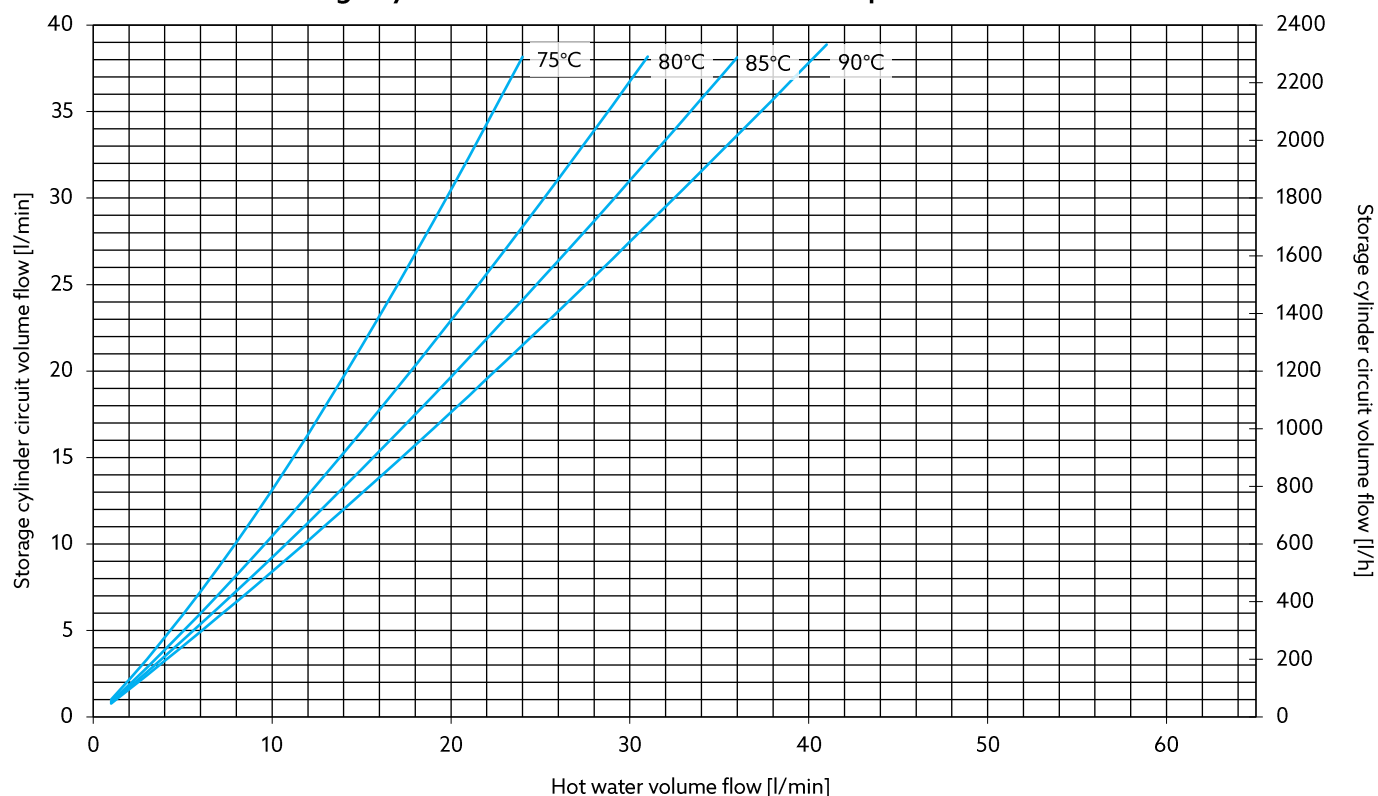
## Return temperature of the storage cylinder circuit at different flow temperatures



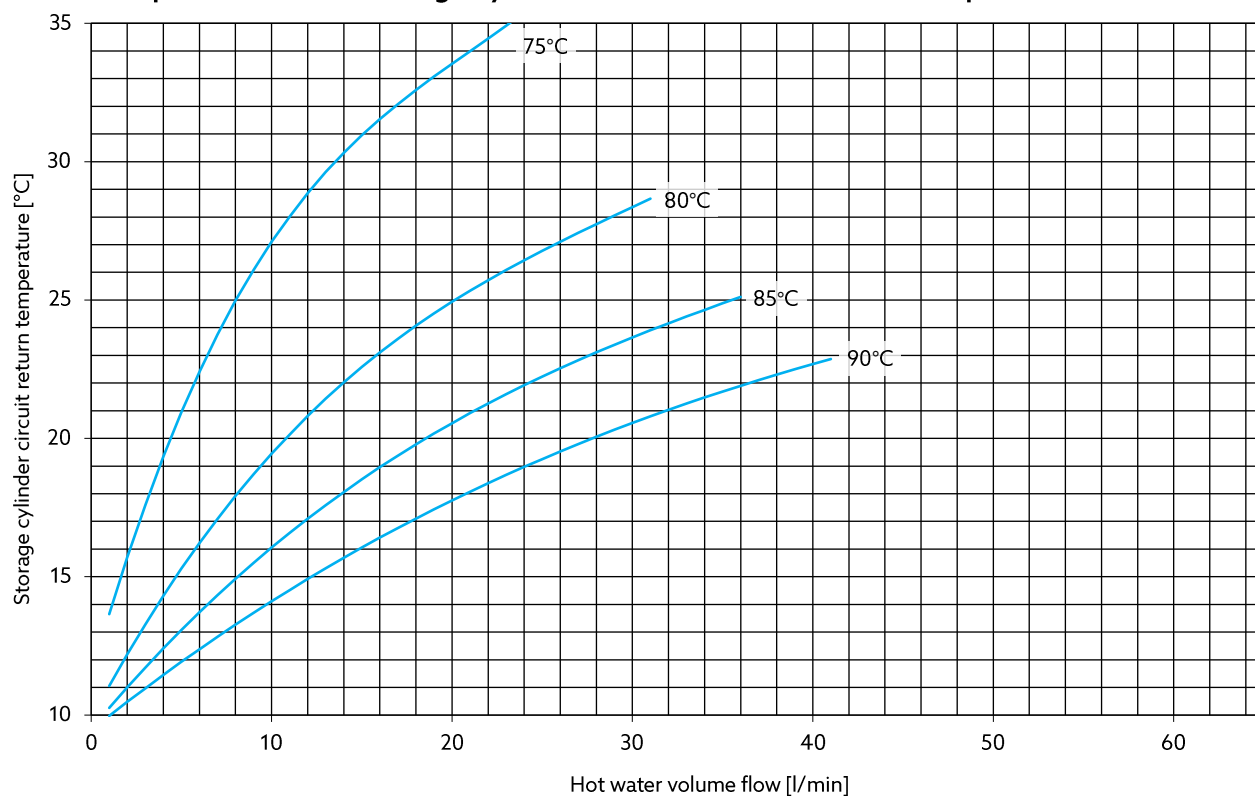
# Heating of potable water from 10 °C to 75 °C

(Performance data according to SPF test procedure)

## Volume flow of the storage cylinder circuit at different flow temperatures



## Return temperature of the storage cylinder circuit at different flow temperatures



Subject to changes • All rights reserved • © 2024 Oventrop GmbH & Co. KG  
EN-06202-13811-DB-V2434 – August 2024