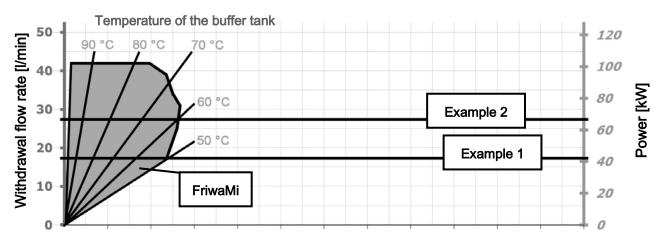
# FriwaMini (2-31 I/min)

7 Commissioning [specialist]

#### 7.3 Maximum withdrawal flow rate

The following diagram illustrates the maximum withdrawal flow rate depending on the tank temperature with a preset hot water temperature of 45 °C at the tap. The integrated control avoids temperature drops as long as the maximum flow rate is not exceeded.



Domestic hot water temperature: 45 °C

Boundary conditions: Cold water temperature: 10 °C

Maximum pressure drop on the domestic hot water side of the DHW module: 1000 mbars

The following examples illustrate the correlation between the domestic hot water temperature, the withdrawal flow rate and the temperature of the buffer tank and show their impact on the heat transfer capacity of the DHW module.

#### Example 1

Domestic hot water temperature at the withdrawal point: 45 °C

Temperature in the buffer tank: 50 °C

→ DHW module: max. withdrawal flow rate: 18 l/min, heat transfer capacity: 41 kW

## Example 2

Domestic hot water temperature at the withdrawal point: 45 °C

Maximum withdrawal flow rate: 27 l/min

→ DHW module: temperature in the buffer tank: 60 °C, heat transfer capacity: 67 kW

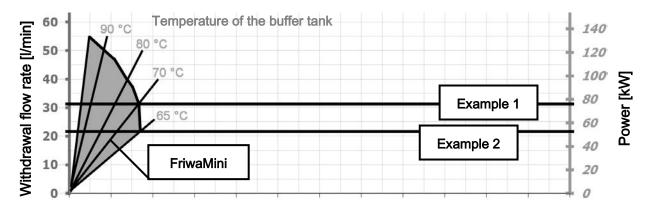
## FriwaMini (2-31 l/min)





The following diagram illustrates the maximum withdrawal flow rate at a domestic hot water temperature of 45 °C at the tap, after the addition of cold water of 10 °C.

The domestic hot water temperature set at the controller is of 60 °C.



Domestic hot water temperature: 45 °C,

after heating to 60 °C and addition of cold water (10 °C)

Boundary conditions: Cold water temperature: 10 °C

## Example 1

Domestic hot water temperature at the controller: 60 °C

Temperature in the buffer tank: 70 °C

→ DHW module: max. withdrawal flow rate: 31 l/min, heat transfer capacity: 77 kW

## Example 2

Domestic hot water temperature at the controller: 60 °C

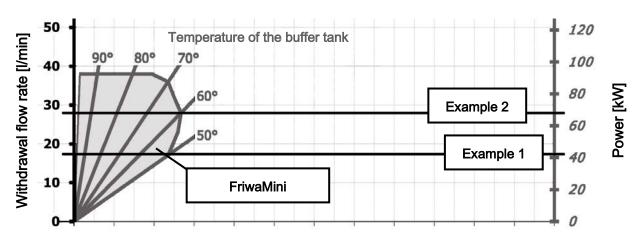
Maximum withdrawal flow rate: 21 l/min

→ DHW module: temperature in the buffer tank: ~65 °C, heat transfer capacity: 53 kW



#### 6.3 Maximum withdrawal flow rate

The following diagram shows the maximum withdrawal flow rate depending on the tank temperature with a preset **hot water temperature of 45** °C at the tap. The integrated control prevents the temperature from falling as long as the maximum flow rate is not exceeded.



Domestic hot water temperature: 45 °C

Boundary conditions: cold water temperature: 10 °C

Maximum pressure drop on the domestic hot water side of the DHW module: 1000 mbars

The following examples illustrate the correlation between the domestic hot water temperature, the withdrawal flow rate and the temperature of the buffer tank and show their impact on the heat transfer capacity of the DHW module.

## Example 1

Domestic hot water temperature at the withdrawal point: 45 °C

Temperature in the buffer tank: 50 °C

→ DHW module: maximum withdrawal flow rate: 17 l/min, heat transfer capacity: 41 kW

## Example 2

Domestic hot water temperature at the withdrawal point: 45 °C

Maximum withdrawal flow rate: 28 I/min

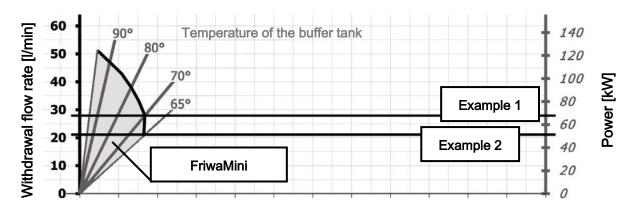
→ DHW module: temperature in the buffer tank: 60 °C, heat transfer capacity: 67 kW

## FriwaMini (2-28 I/min)

6 Commissioning [specialist]

The following diagram illustrates the maximum withdrawal flow rate depending on the tank temperature with a preset hot water temperature of 45 °C at the tap, after the addition of cold water of 10 °C.

The domestic hot water temperature adjusted at the controller is of 60 °C.



Domestic hot water temperature: 45 °C, after heating to 60 °C and addition of cold water (10 °C)

Boundary conditions: cold water temperature: 10 °C

## Example 1

Domestic hot water temperature at the controller: 60 °C

Temperature in the buffer tank: 70 °C

→ DHW module: maximum withdrawal flow rate: 28 l/min, heat transfer capacity: 69 kW

## Example 2

Domestic hot water temperature at the controller: 60 °C

Maximum withdrawal flow rate: 21 l/min

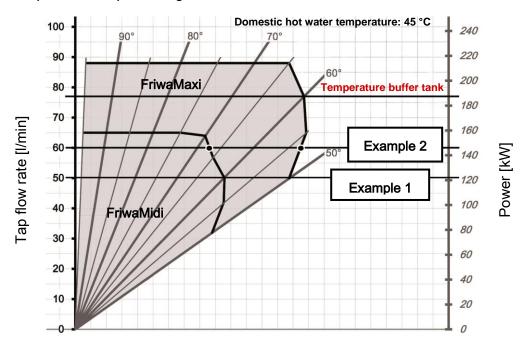
→ DHW module: temperature in the buffer tank: ~ 65 °C, heat transfer capacity: 53 kW



## FriwaMidi/Maxi

#### 7.3 Maximum withdrawal flow rate

The following diagram illustrates the maximum withdrawal flow rate depending on the tank temperature with a preset hot water temperature of 45 °C at the tap. The integrated control avoids temperature drops as long as the maximum flow rate is not exceeded.



Boundary conditions: Cold water temperature: 10 °C

Maximum pressure loss on the domestic hot water side of the Friwa: 1000 mbars

The following examples illustrate the correlation between the domestic hot water temperature, the withdrawal flow rate and the temperature of the buffer tank and show their impact on the heat transfer capacity of the Friwa.

## Example 1

Domestic hot water temperature at the withdrawal point: 45 °C

Temperature in the buffer tank: 60 °C

→ FriwaMidi: maximum withdrawal flow rate: 50 l/min, transfer capacity: 121 kW

→ FriwaMaxi: maximum withdrawal flow rate: 77 l/min, transfer capacity: 187 kW

#### Example 2

Domestic hot water temperature at the withdrawal point: 45 °C

Maximum tap volume rate: 60 l/min

→ FriwaMidi: temperature in the buffer tank: ~70 °C, transfer capacity: 145 kW

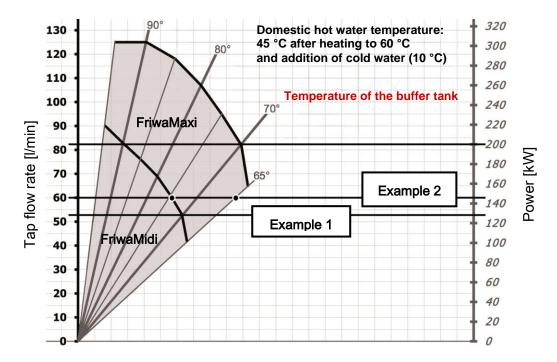
→ FriwaMaxi: temperature in the buffer tank: ~60 °C, transfer capacity: 145 kW



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The following diagram illustrates the maximum withdrawal flow rate at a hot water temperature of 45 °C at the tap, after the addition of cold water of 10 °C.

The **domestic hot water temperature** set at the controller is of **60 °C**.



Boundary conditions: Cold water temperature: 10 °C

## Example 1

Domestic hot water temperature at the controller: 60 °C

Temperature in the buffer tank: 70 °C

→ FriwaMidi: maximum withdrawal flow rate: 53 l/min, transfer capacity: 129 kW

→ FriwaMaxi: maximum withdrawal flow rate: 82 l/min, transfer capacity: 200 kW

## Example 2

Domestic hot water temperature at the controller: 60 °C

Maximum tap volume rate: 60 l/min

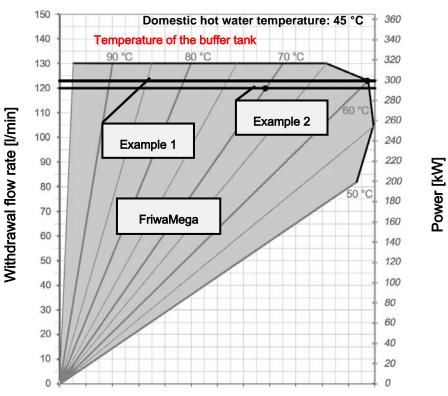
→ FriwaMidi: temperature in the buffer tank: ~75 °C, transfer capacity: 155 kW

→ FriwaMaxi: temperature in the buffer tank: ~65 °C, transfer capacity: 155 kW

# FriwaMega

#### 7.3 Maximum withdrawal flow rate

The following diagram illustrates the maximum withdrawal flow rate depending on the tank temperature with a preset hot water temperature of 45 °C at the tap. The integrated control prevents the temperature from falling, as long as the maximum flow rate is not exceeded and as long as the water in the buffer tank maintains a sufficient temperature.



Boundary conditions: Cold water temperature: 10 °C

Maximum pressure loss on the domestic hot water side of the Friwa: 1000 mbars

The following examples illustrate the correlation between the domestic hot water temperature, the withdrawal flow rate and the temperature of the buffer tank and show their impact on the heat transfer capacity of the Friwa.

## Example 1

Domestic hot water temperature at the withdrawal point: 45 °C

Temperature in the buffer tank: 60 °C

→ FriwaMega: maximum withdrawal flow rate: 123 l/min, transfer capacity: 300 kW

#### Example 2

Domestic hot water temperature at the withdrawal point: 45 °C

Maximum withdrawal flow rate: 120 l/min

→ FriwaMega: temperature in the buffer tank: ~70 °C, transfer capacity: 290 kW

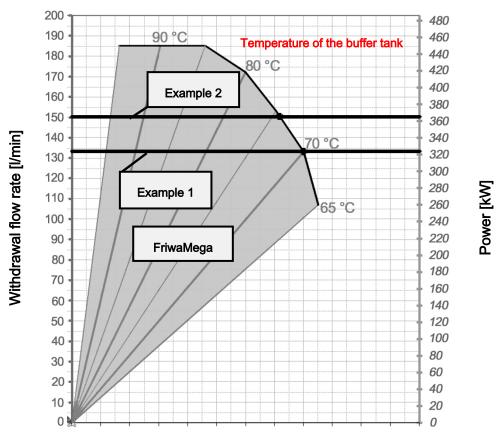
# FriwaMega



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The following diagram illustrates the maximum withdrawal flow rate at a domestic hot water temperature of 45 °C at the tap, after the addition of cold water of 10 °C.

The domestic hot water temperature set at the controller is of 60 °C.



Domestic hot water temperature: 45 °C, after heating to 60 °C and addition of cold water (10 °C) Boundary conditions: Cold water temperature: 10 °C

## Example 1

Domestic hot water temperature at the controller: 60 °C

Temperature in the buffer tank: 70 °C

→ FriwaMega: maximum withdrawal flow rate: 133 l/min, transfer capacity: 324 kW

## Example 2

Domestic hot water temperature at the controller: 60 °C

Maximum withdrawal flow rate: 150 l/min

→ FriwaMega: temperature in the buffer tank: ~75 °C, transfer capacity: ~365 kW