



English

Installation instructions

Circulation set for FriwaMini Premium





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Translation of the original instructions

We reserve the right to make technical changes without notice!

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PAW GmbH & Co.KG

Böcklerstraße 11

D-31789 Hameln,

Germany

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Carefully read these instructions before installation and commissioning. Save these instructions in the vicinity of the installation for future reference.

1 General Information

1.1 Scope of these instructions

These instructions describe the assembly and the installation of the circulation set for the domestic hot water module FriwaMini Premium. The chapters called [specialist] are intended for specialists only.

For other components of the system such as tanks, controllers or pumps, please observe the instructions of the corresponding manufacturer.

1.2 About this product

The circulation set allows you to connect a circulation line to the domestic hot water module FriwaMini Premium. Depending on the position of the circulation line, the circulation set can be mounted vertically or horizontally.

1.3 Designated use

The circulation set must only be used for the external installation on a FriwaMini Premium.

Only use PAW accessories with the circulation set.

Improper usage excludes any liability claims.

The wrapping materials are made of recyclable materials and can be disposed of with recyclable materials.



2 Safety instructions

The installation and commissioning as well as the connection of electrical components require technical knowledge commensurate with a recognised vocational qualification as a fitter for plumbing, heating and air conditioning technology, or a profession requiring a comparable level of knowledge [specialist]. The following must be observed during installation and commissioning:

- relevant local and national regulations
- accident prevention regulations of the professional association
- instructions and safety instructions mentioned in this manual

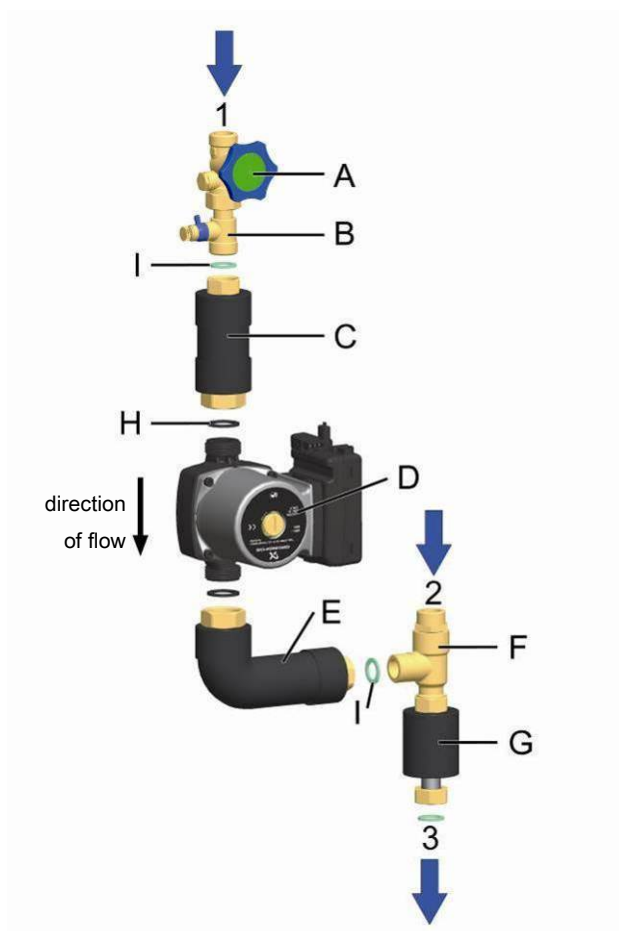
NOTICE

Material damage due to mineral oils!

Mineral oil products cause lasting damage to seals made of EPDM, whereby the sealant properties are lost. We do not assume liability nor provide warranty for damage to property resulting from sealants damaged in this way.

- It is imperative to avoid that EPDM gets in contact with substances containing mineral oils.
- Use a lubricant based on silicone or polyalkylene and free of mineral oils such as Unisilikon L250L and Syntheso Glep 1 of the Klüber company or a silicone spray.

3 Product description

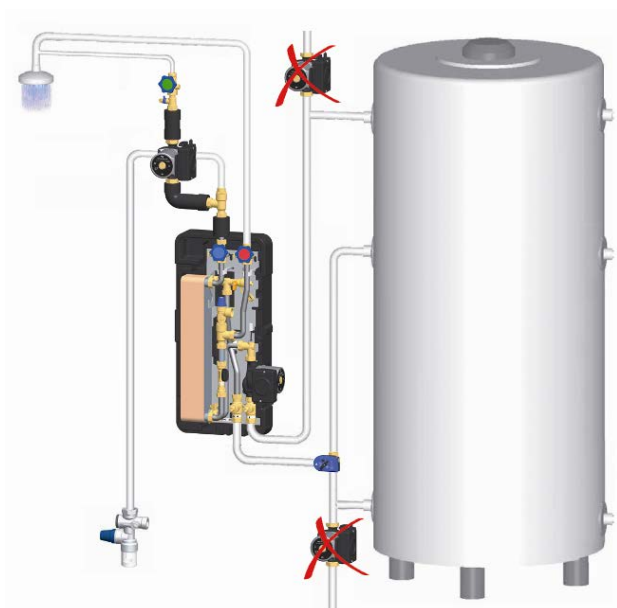


Connections

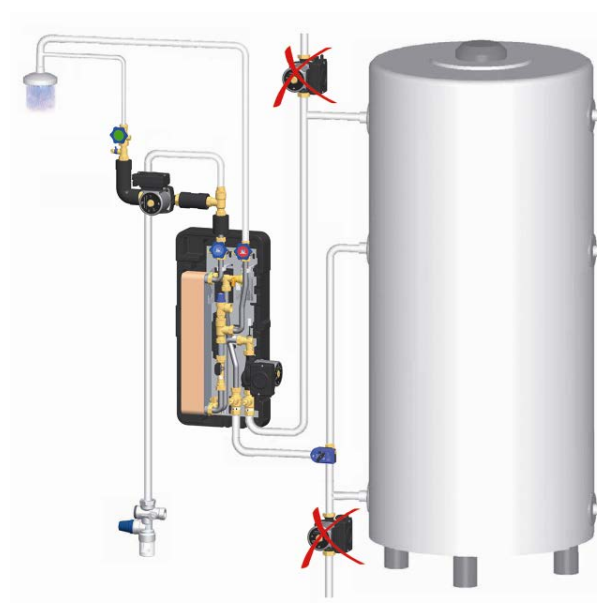
- 1 Circulation line
- 2 Cold domestic water inlet
- 3 Cold domestic water inlet FriwaMini

Equipment

- A Piston valve
- B Non return valve with drain valve
- C Stainless steel pipe insulated, $l = 100 \text{ mm}$
- D Circulation pump
- E Stainless steel pipe insulated, $l_1 = 61 \text{ mm}$, $l_2 = 123 \text{ mm}$
- F T-piece with double nipple
- G Stainless steel pipe insulated, $l = 81 \text{ mm}$
- H Gasket (EPDM), 2x
- I Gasket (Klingsil), 3x





Mounting example: circulation set vertical

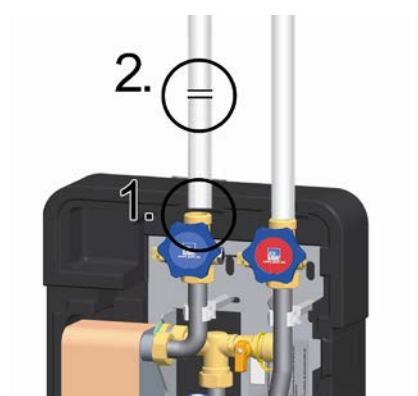


Mounting example: circulation set horizontal

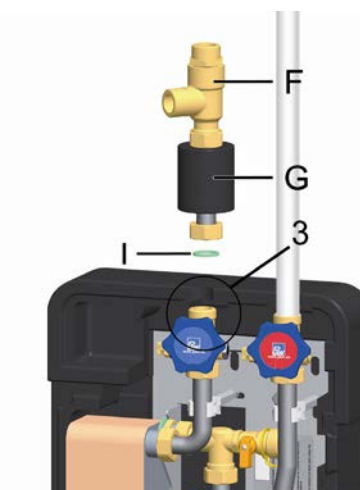
4 Assembly and installation [specialist]

	<div style="background-color: yellow; padding: 5px; border: 1px solid black;">  WARNING </div> <p>Risk to life and limb due to electric shock!</p> <ul style="list-style-type: none"> ➤ Prior to commencing electrical work on the controller, pull the mains plug! ➤ Only after completing all installation work, plug the mains plug of the controller into a socket. This avoids an unintentional start of the motors.
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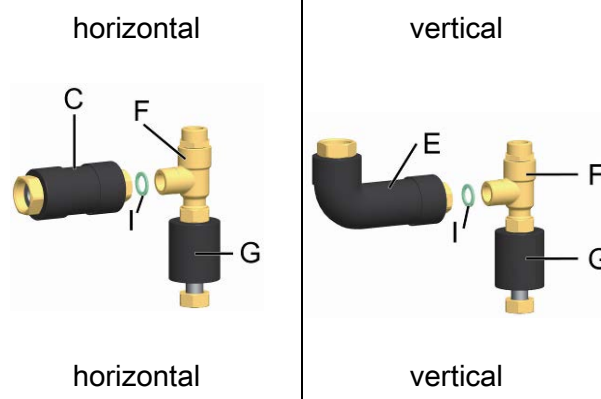
1. Retrofitting: Disconnect the domestic hot water module from the domestic cold water pipe.
2. Retrofitting: Shorten the pipe of about 171 mm.



3. Connect the stainless steel pipe [G] with T-piece [F] at the domestic cold water inlet with the domestic hot water module. Here, use a Klingersil gasket [I].



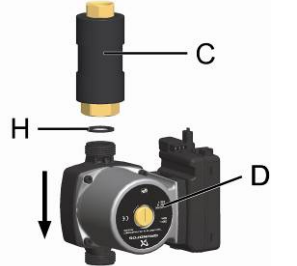
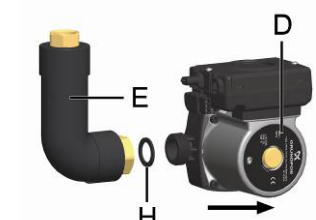
4. Circulation set horizontal: Connect the stainless steel pipe [C] with the T-piece [F].
5. Circulation set vertical: Connect the stainless steel pipe [E] with the T-piece [F].



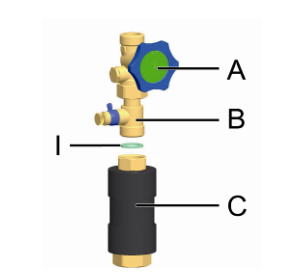
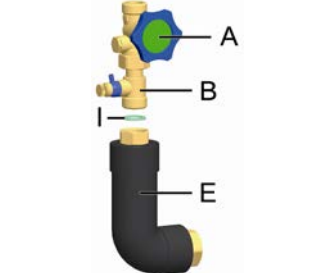
6. Mount the circulation pump [D] observing the direction of flow (see arrow). Here, use one of the black EPDM gaskets [H].



7. Connect the stainless steel pipe [E] or [C] with the pump. Here, use one of the black EPDM gaskets [H].



8. Connect the non return valve [B] with the stainless steel pipe [E] or [C]. Here, use a Klingersil gasket [I].



9. Pipe the circulation set with the installation according to the figures on the right.

- 1 Circulation line:
connection: $\frac{3}{4}$ " external thread
- 2 Domestic cold water:
connection: $\frac{3}{4}$ " external thread



4.1 Connection of the pump to the controller

NOTICE

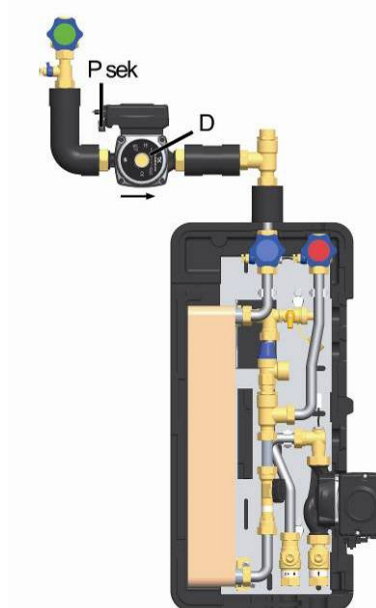
Damage to property!

When the Friwa is delivered, the circulation is not activated (see controller instructions, menu "Func" / "F02" set to "OFF"). When the circulation line is mounted, it is mandatory to select the mode of operation. The PWM signal must determine the speed of the circulation pump (factory setting: 40 %).

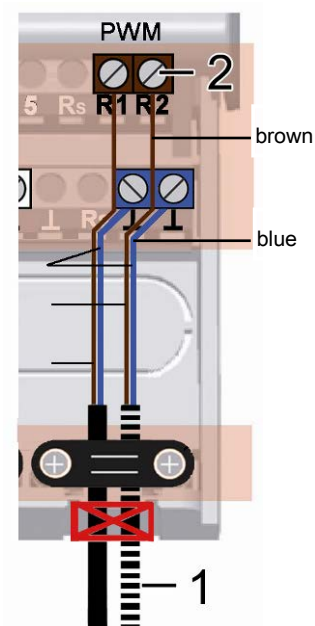
There are three different operation modes for the circulation pump stored in the controller (see controller instructions, menu "Func" / "F02").

The following figures show how to wire the circulation pump with the control.

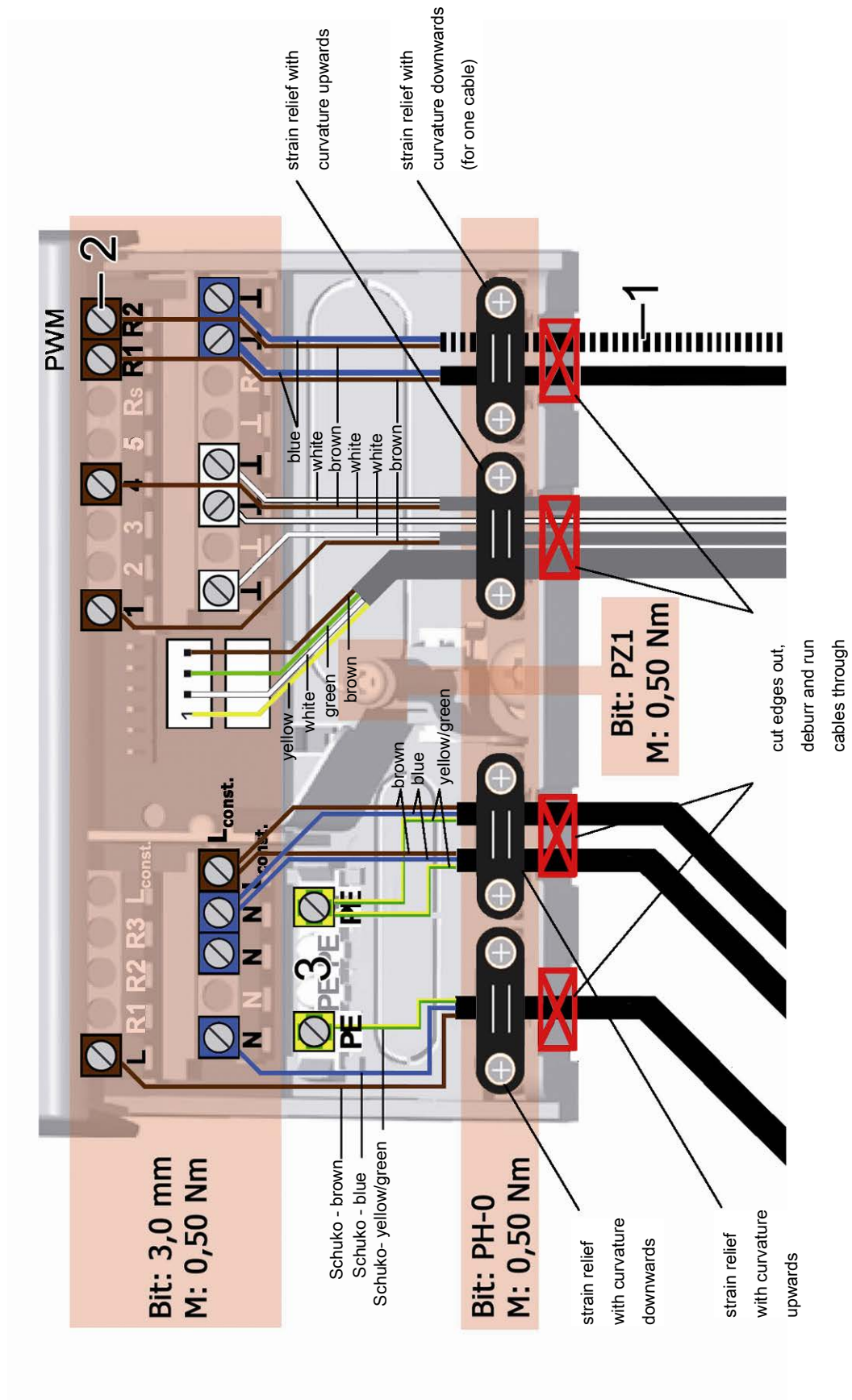
1. Pull the mains plug of the installation.
To do this, remove the Schuko plug from the power socket.
2. Remove the insulating front shell of the domestic hot water module.
3. Plug the plug of the premounted cable for pump "P sek" in the circulation pump.



4. Remove the front panel of the controller (see controller manual page 5).
5. Connect the PWM2 cable [1] of the circulation pump with the terminal "PWM" R2 [2].
6. Close the front panel of the controller.
7. Reinsert the insulating front shell.

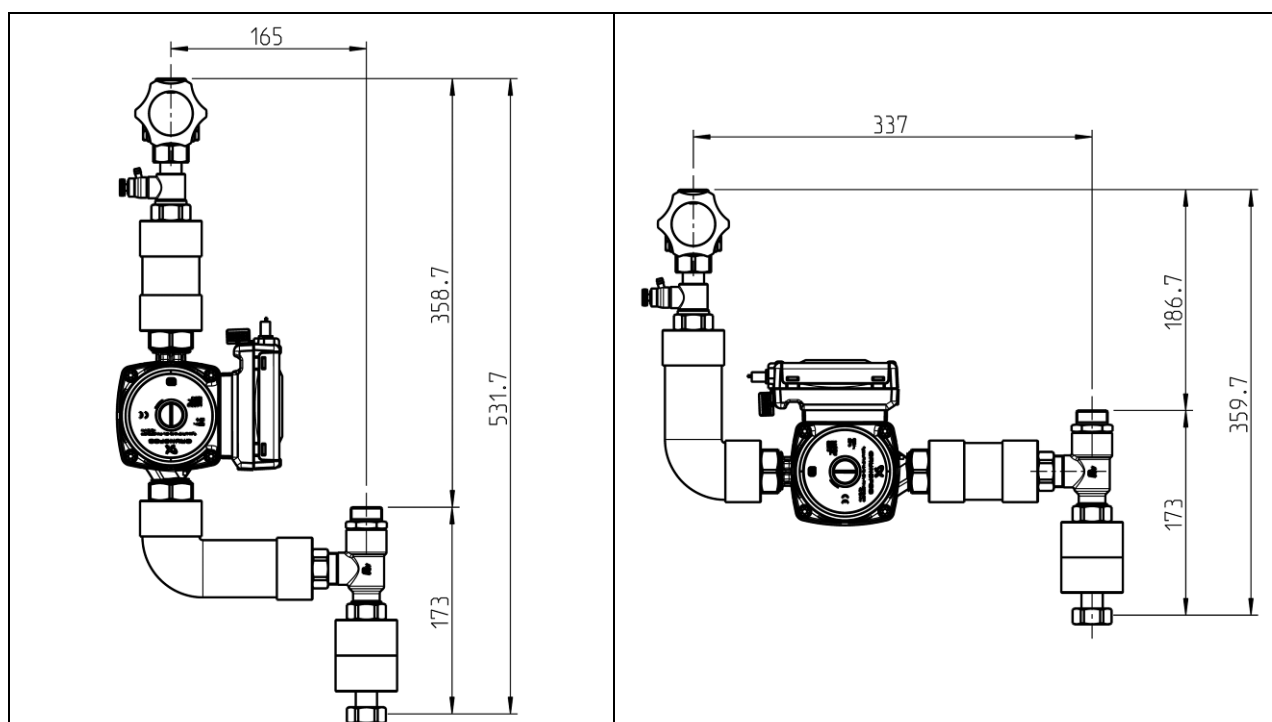
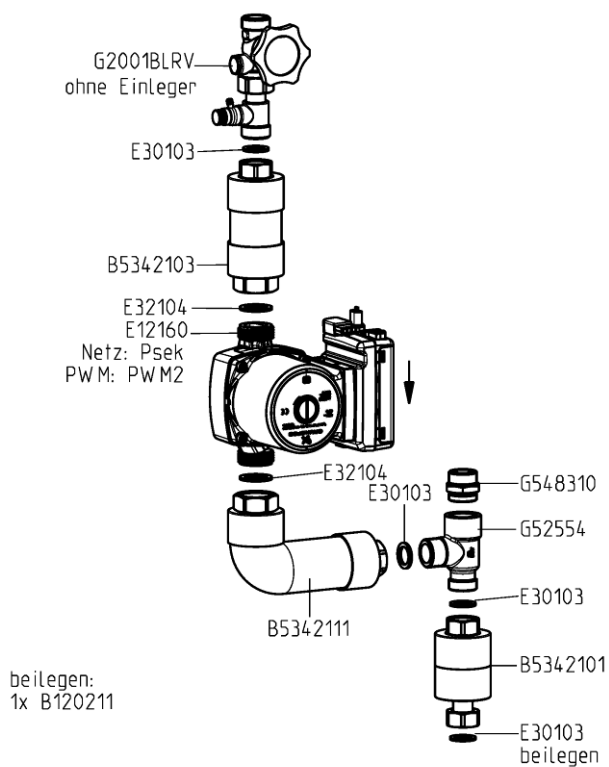


8. Plug the Schuko plug in the socket and start the controller according to the controller instructions.





5 Scope of delivery



Spare parts	Item number
Pump with PWM cable	E12160
Piston valve with non return valve with drain valve	B2001BLRV

PAW GmbH & Co.KG

Böcklerstraße 11

D-31789 Hameln, Germany

www.paw.eu

Phone: +49 (0) 5151 9856 - 0

Fax: +49 (0) 5151 9856 98