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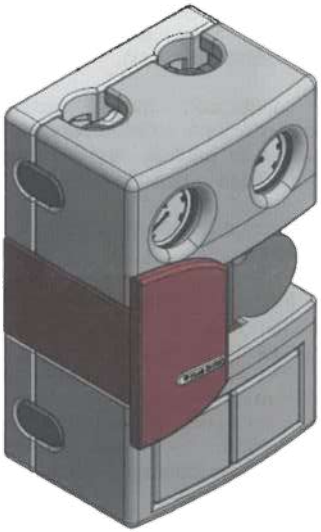

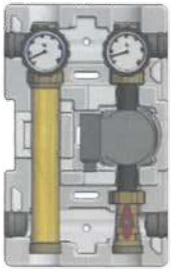

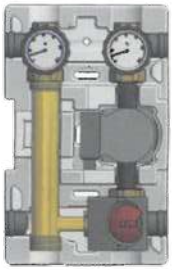

Installation & Operating Instructions

PUMP GROUP DN25

STRASSHOFER®

VERSION 04/2026

strasshofer.de

Contents Page

Symbols in the instructions


Warning: Be sure to follow these instructions!


Important information


Installation instructions

Safety instructions


Please follow these safety instructions carefully to prevent injury to persons and damage to property. Installation, initial commissioning, inspection, maintenance, and repair must be performed by a certified specialist company. Before starting work, familiarize yourself with all parts and their handling. Observe the applicable accident prevention regulations, environmental regulations, and legal requirements for assembly, installation, and operation. Furthermore, the relevant DIN, EN, DVGW, VDI, and VDE standards, as well as all current relevant country-specific standards, laws, and guidelines, must be observed.

Work on the system

Disconnect the system from the power supply and verify that it is de-energized (e.g., at the separate fuse or a main switch).

Secure the system against accidental restart. (In the case of gas fuel, close the gas shut-off valve and secure it against accidental opening). Repair work on components with safety-related functions is not permitted.

The installation site must be dry and frost-proof. Hazards caused by adjacent components must be avoided. Unobstructed access must be ensured.

Bestimmungsgemäße Verwendung beachten!

The components listed in the following instructions are intended for use in heating systems.
DIN EN 12828 – Heating systems in buildings – Design of hot-water heating systems; heating water in accordance with VDI 2535 – Scale formation in drinking water heating and hot-water heating systems.

1 PUMP GROUP

Technical Data

DN	25
Upper connection	1“ internal thread
Lower connection	1 ½“ external thread
Pump length	180mm, R6/4“, ext. thread
Component materials	Steel, brass, EPP Insulation
Sealing material	PTFE, EPDM
Temperature range	0 to 120°C
Operating temperature	max. 110°C
Operating pressure	max. 6bar
Kvs value	5,4 m³/h

The pump unit is used for unmixed and mixed heating circuits (HC) with the supply pipe on the left or right. The components installed in the pump unit are shown in the Components table and in Figures 1–3.

Components

1. ISO lower housing
2. ISO upper housing thermostatic valve
3. ISO upper housing actuator
4. ISO actuator plug
5. ISO plug for side outlets
6. ISO design element
7. Return pump ball valve
8. Supply pump ball valve
9. Union nut with EPDM sealing
10. Double nipple 2 x ext. thread 1 ½“
11. Double nipple 2x ext. thread 1 ½“ with T-outlet 1“ union nut
12. Mixing valve with Bypass for left/right operation
13. Ball valve with handle
14. Thermometer blue Return
15. Thermometer red Supply
16. Pump
17. Actuator for mixing valve
18. Pump flange ball valve

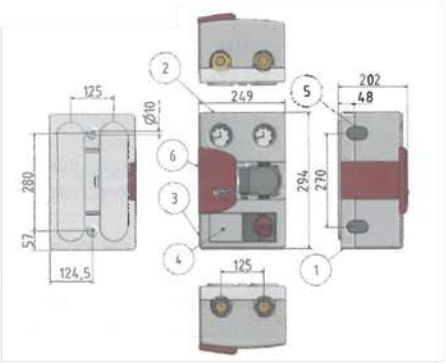

Fig. 1: DN25 pump assembly dimensions

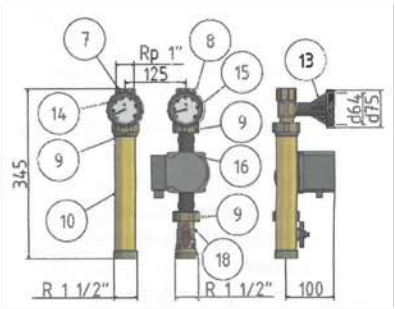

Fig. 2: DN25 pump assembly, unmixed heating circuit

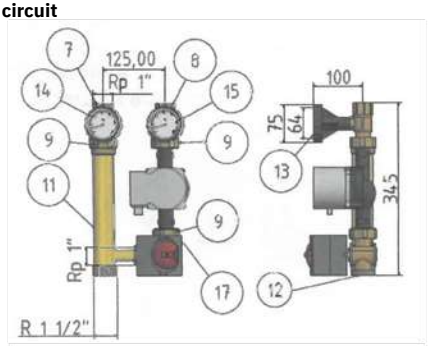

Fig. 3: DN25 pump assembly, mixed heating circuit

1.1 Wall Mounting

Procedure for installing the pump group directly on the wall (Fig. 4):

1. Remove the supply and return lines from the rear lso base plate.
2. Position the lso base plate against the wall and mark the drill holes, or alternatively mark the hole dimensions as shown in Fig. 4.
3. Drill 010 mm holes and insert the anchors.
4. Route the pump's power cord through the lso base plate.
5. Mount the ISO base plate to the wall using hex screws and washers.
6. Clip the supply and return lines into the ISO base plate. Secure them against falling if necessary.
7. Connect the piping to the connections.
8. Tighten all screw connections. Perform a leak test.
9. Snap the insulated front cover and plugs into the base.

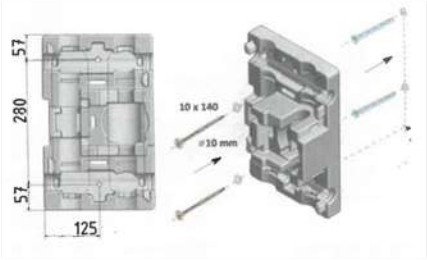

Fig. 4: Pump group wall mounting

1.2 Manifold Mounting

Procedure for installing the pump group on the heating circuit manifold (Fig. 5):

1. Remove the supply and return lines from the rear ISO base plate and screw them to the already installed manifold.
2. Connect the piping to the connections. Observe the 125mm clearance.
3. Attach the ISO bottom shell from the rear.
4. Clip the ISO front shell into the bottom shell.

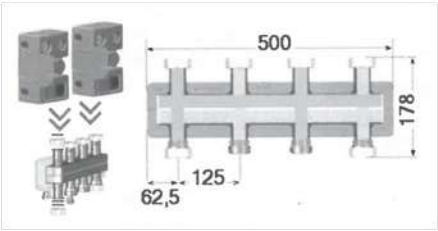

Fig. 5: PG DN25 Installation on a heating circuit manifold

Installation is only possible if the lso lower housing can be retrofitted from the rear.

The pump must not be put into operation until the system has been filled and vented. The installation and operating guidelines specified by the pump manufacturer apply to the pumps.

2. Components

2.1 Thermostatic valve

The thermostatic valves consist of a rotary handle (Fig. 6, No. 1) and a thermometer (Fig. 6, No. 2) with a blue/red scale that indicates the temperatures of the hot supply and cold return lines.

Fig. 6: Thermostatic valve with rotary handle

2.1.1 Gravity Brake

The gravity brake (SB) and/or check valve (RV) used in the system is integrated into the return line ball valve with a blue thermometer (Fig. 7, Nos. 1 and 2).

Fig. 7: Thermostatic valve with gravity brake

2.1.2 Thermometers

The thermometers are simply plugged in and can be easily replaced by pulling them out. Please note that a removed thermometer must be replaced with an identical one. Please pay attention to the color coding (Fig. 8, No. 1, blue text = return, red text = supply).

The thermometers can be reset to zero by removing them and turning the lower adjustment screw (Fig. 8, No. 2).

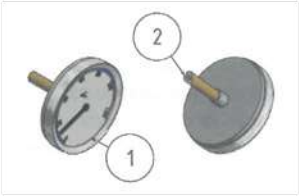

Fig.8: Thermometers

2.2 Mixing Valve

The mixing valve (Fig. 17) is used in mixed heating circuits. It is installed in the supply line and connected to the return line via a T-fitting. This allows the return water to be mixed with the supply water. Depending on how far the mixing valve is opened, more or less cold return water is mixed with the hot boiler water, thereby lowering the temperature provided by the heat generator to the required temperature in the heating circuit.

Fig. 17: Right/left mixing valve; configuration

Automatic regulation is achieved via a servomotor mounted on the mixing valve, which is controlled by an overlying control system.

The mixing valve can be converted from right-to-left operation to left-to-right operation with a few simple steps. To do this, loosen the screws marked with position number 1 as shown in Fig. 17, remove the internal components, and reinstall them in a mirror-image configuration on the other side. After the conversion, the removed screws must be tightened by hand.

Bypass Setting

The mixing valve has an integrated bypass that is closed as standard (Fig. 18, Position A).

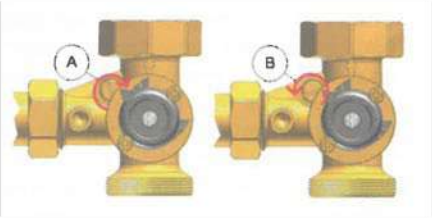

Fig. 18: Bypass setting for mixing valve

The bypass can be adjusted continuously. To open it, turn it 90° to the right to position B. In position B, the bypass is 100% open; turning it back closes it again.

Opening the bypass is advisable when the temperature output of the heat generator is higher than the required temperature in the heating circuit (e.g., a wood-fired boiler connected to underfloor heating).

Because this permanently lowers the temperature in the heating circuit flow, the mixing valve's adjustment range increases, allowing the servomotor to be tuned more precisely.

When adjusting the bypass, the following points should be observed:

1. The heating system must be in normal operation, e.g., heating system supply temperature 70°C!
2. Remove the actuator by loosening the central screw.
3. Open the bypass adjustment screw (Fig. 18, position A, 0% closed) by turning it clockwise 90° (Fig. 18, position B, 100% open).
4. Close the bypass very slowly (toward position A) until the maximum flow temperature is reached in the heating circuit (e.g., 40°C = safety temperature limit for underfloor heating)
5. Reinstall the actuator

2.3 Insulation

The insulation can be reconfigured to allow for forward operation on either the right or left side. To do this, rotate the ISO lower shell (item 1 in Fig. 21) by 180° and reassemble all insulation components. The design element will shift from the left to the right side.

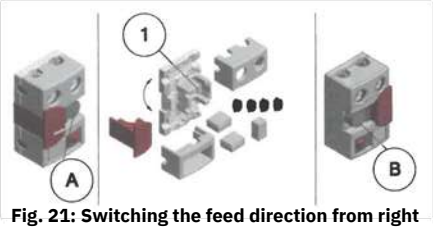

Fig. 21: Switching the feed direction from right to left

This changes pump position A (Fig. 21) from “Supply Right” to “Supply Left,” pump position B.

Removing the blind plugs allows for the installation of additional fittings with side outlets for further functions.

Under the chapter heading “Accessories,” fittings are listed that equip the pump group with a bypass valve, enabling it to function as a constant-value regulator or for return flow boosting. The insulation is thus multifunctional and can be used for various applications.

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