

Application:

Oventrop high-capacity plate heat exchanger with connection fitting, a modular complement to the boiler connection system “Regumat” DN 25 for use in open vented surface heating systems or existing installations with system related oxygen input.

Due to the heat transmission working on the inverse flow principle, an extremely high power transfer is achieved.

The heat exchanger is available in two capacities:

14 kW
28 kW

Item no.:
1351596
1351696

Technical data:

Distance between pipe centres: 125 mm
Heating circuit connection (at the top): 2 x pump flange, flat sealing, with collar nut G 1½

Boiler circuit connection (at the bottom): G 1½ male thread, flat sealing

Max. operating temperature t_s : 110 °C
Max. operating pressure p_s : 8 bar

Capacity 14 kW: 14 plates
 k_{VS} value primary/secondary: 2.4/2.6

Capacity 28 kW: 30 plates
 k_{VS} value primary/secondary: 3.3/3.5

The capacities are determined by the fixed default values in the primary circuit (70/50 °C) and the secondary circuit (40/50 °C).

Function:

The heat exchanger prevents the penetration of oxygen from the surface heating circuit into the boiler circuit which could cause damage to ferrous system components due to oxygen corrosion.

In reverse, a penetration of any corrosion products (rust pulp) from the boiler circuit into the surface heating circuit is also prevented.

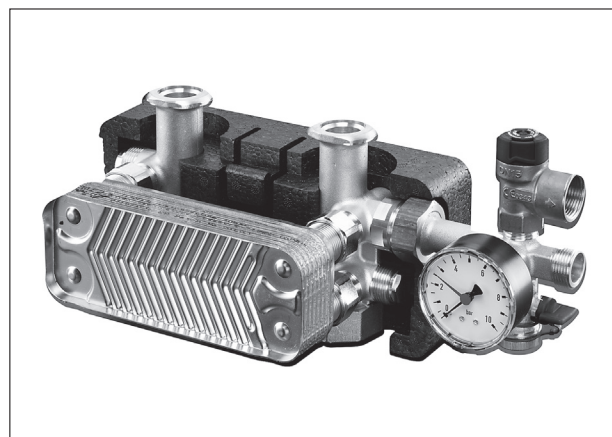
Due to turbulent flow conditions, an excellent self-cleaning effect is produced.

Example 1:

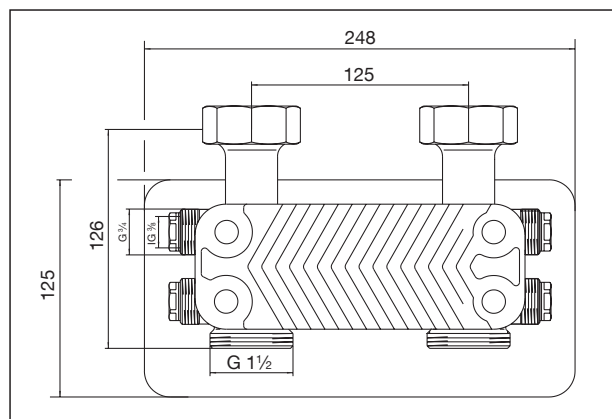
“Regumat FR-180” DN 25 with high-efficiency pump and “Regumat” heat exchanger

In combination with the “Regumat FR-180” with high-efficiency pump, the heat exchanger module complements a boiler connection system with adjustable flow temperature.

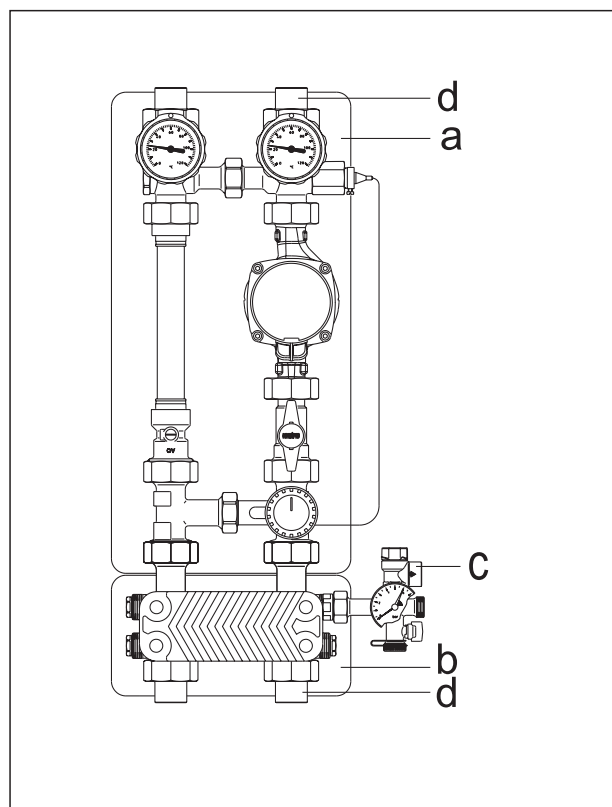
- a “Regumat FR-180” DN 25 with high-efficiency pump
Grundfos ALPHA 2.1 25-60 N or
Wilo-Stratos PICO 25/1-6 RG
- b “Regumat” Heat exchanger with 14 plates up to 14 kW
- c Safety group
- d Tailpipe set



„Regumat“ Heat exchanger



Dimensions heat exchanger “Regumat”



Example 1

Example 2:

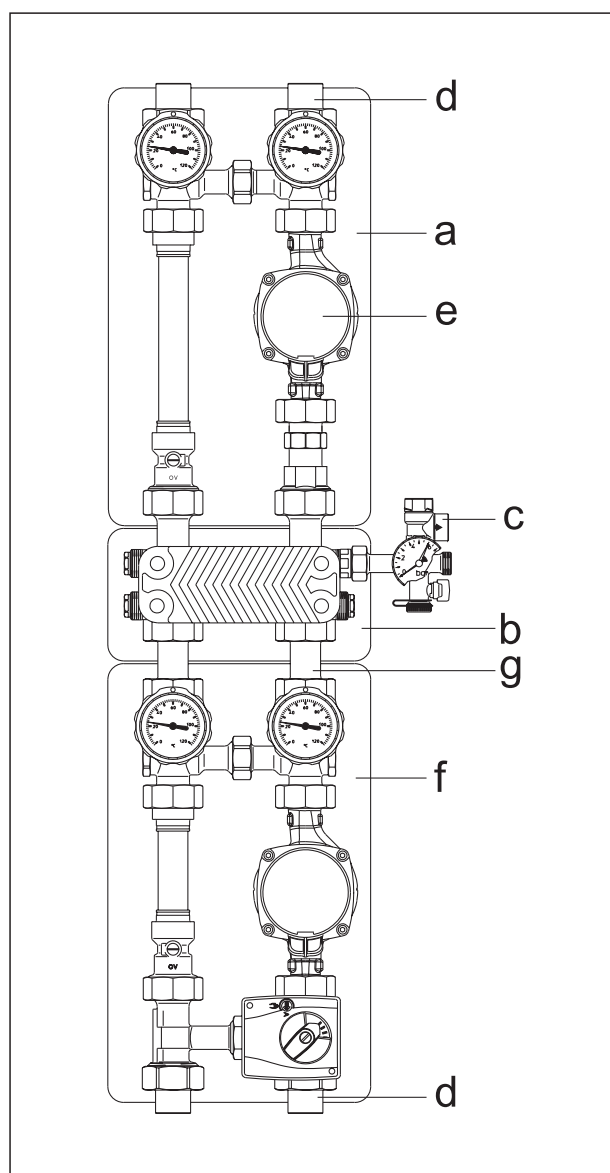
“Regumat S-180” DN 25 with high-efficiency pump with stainless steel/bronze body, “Regumat” heat exchanger and “Regumat M3-180” DN 25 with high-efficiency pump

In combination with the “Regumat S-180” with high-efficiency pump with stainless steel/bronze body in the boiler circuit and a “Regumat M3-180” with high-efficiency pump in the heating circuit, the heat exchanger module “Regumat” complements a boiler connection system with adjustable flow temperature.

- a “Regumat S-180” DN 25 without high-efficiency pump
- b “Regumat” heat exchanger with 30 plates up to 28 kW
- c Safety group
- d Tailpipe set
- e High-efficiency pump with stainless steel/bronze body 180 mm
Grundfos ALPHA 2.1 25-60 N or
Wilo-Stratos PICO 25/1-6 RG
- f “Regumat M3-180” DN 25 with high-efficiency pump
Grundfos ALPHA 2.1 25-60 or
Wilo-Stratos PICO 25/1-6
- g Set of connection fittings

On delivery, the supply or the high-efficiency pump of all Oventrop boiler connection systems “Regumat” are on the right hand side. The direction of flow can be reversed by exchanging the pump and the flanged pipe with due consideration of the opening direction of the check valve.

The maximum capacity of the heat exchanger is reached when working on the inverse flow principle (the cold fluid flows towards the hot fluid). When changing the flow direction, both high-efficiency pumps (above and below the heat exchanger) have to be exchanged.



Example 2

Accessories:

Safety group

For the protection of pressurized systems with

- Diaphragm safety valve 3 bar
- Pressure gauge
- Fill and drain cock
- Connection facility for a diaphragm expansion tank

The “Regumat” heat exchanger allows for the hydronic separation of the heating system into a heat generator and a consuming circuit. According to DIN EN 12828, the consuming circuit must be protected against an excess operating pressure by a safety valve.

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Set of connection fittings

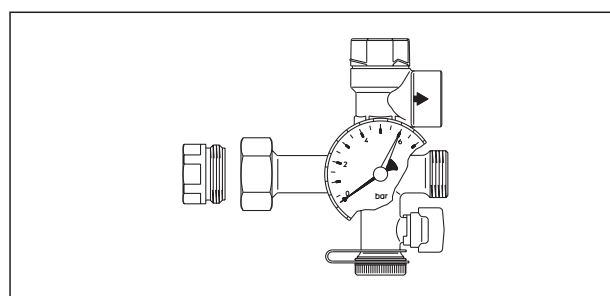
For the connection of the heat exchanger “Regumat” to a pump group “Regumat” on the boiler side.

G 1½ female thread x pump flange for G 1½ with collar nuts and seals

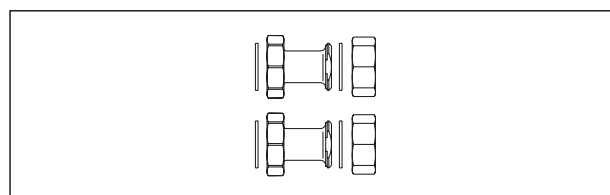
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Subject to technical modifications without notice.

Product range 6
ti 205-DE/10/MW
Edition 2017



Safety group



Set of connection fittings