

#### Application:

The Oventrop boiler connection system Regumat-180 DN 25 - pump length 180 mm - allows for a time-, cost- and space-saving connection of the boiler to the pipework. The Regumat-180 stations are available with or without high-efficiency pumps.

#### Advantages:

- pre-assembled connection system for pumps with a length of 180 mm
- high quality materials
- universal thermal insulation of modular construction supplied with each Regumat
- return pipe with check valve which can be opened manually
- easy installation by use of tailpipe sets
- no hemp sealing
- integrated wall mounting device
- supply and return pipe can be changed on site
- actuator with quick mounting technique "plug & play"

#### Choice of the Regumat-180 stations:

##### Product assembly DN 25 for pump length 180 mm

The Regumat-180 without pump ball valve is available with or without high-efficiency pump

- as basic model (without mixing valve)
- as model with three-mixing valve with check valve and mounted actuator

The actuator can be mounted without tools - "plug & play".

Outer dimensions thermal insulation:

H = 393 mm, W = 248 mm , D = 213 mm



Regumat M3-180 DN 25

|                                                                                                 | Model <u>without</u> mixing valve | Model <u>with</u> mixing valve |
|-------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------------|
|                                                                                                 | Regumat S-180                     | Regumat M3-180                 |
| Isolation device with 2 ball valves and 2 thermometers (without pressure relief device)         | X                                 | X                              |
| Wall mounting device                                                                            | X                                 | X                              |
| Flanged pipe with check valve                                                                   | X                                 |                                |
| Three-way mixing valve with check valve and actuator (suitable for standard boiler regulations) |                                   | X                              |
| Pump ball valve at the pump inlet                                                               | X                                 |                                |
| Thermal insulation                                                                              | X                                 | X                              |

**Tailpipe sets are available as accessories.**

**Tender specification: Regumat S-180 DN 25 - constant temperature heating circuit**

Product assembly for the connection of the boiler to the pipework.

Consisting of: Isolation device with 2 ball valves for the isolation of the heating circuit, 2 thermometers integrated in the handles of the ball valves for flow and return temperature display, pump ball valve at the pump inlet, flanged pipe with integrated check valve to avoid gravity circulation and universal thermal insulation of modular construction.

**Materials:**

Valves and fittings: Brass  
Seals: EPDM

**Connections:**

To heating circuit: G 1½ male thread, flat sealing  
To boiler: G 1½ male thread, flat sealing  
Pump: G 1½ male thread, flat sealing

**Technical data:**

Nominal size: DN 25  
Max. operating pressure: 10 bar (PN10)  
Max. operating temperature: 95 °C  
Opening pressure check valve: 20 mbar  
K<sub>vs</sub> value: 7  
Recommended application range: max. 50 kW  
( $\Delta T = 20\text{ K}$ ,  $\Delta p = 100\text{ mbar}$ )

**Models:**

|                                       |                          |
|---------------------------------------|--------------------------|
| without high-efficiency pump          | <b>Item no.:</b> 1357020 |
| with high-efficiency pump (EEI ≤ 0.2) |                          |
| Grundfos ALPHA 2.1 25-60              | 1357027                  |
| Wilo-Stratos PICO 25/1-6              | 1357029                  |

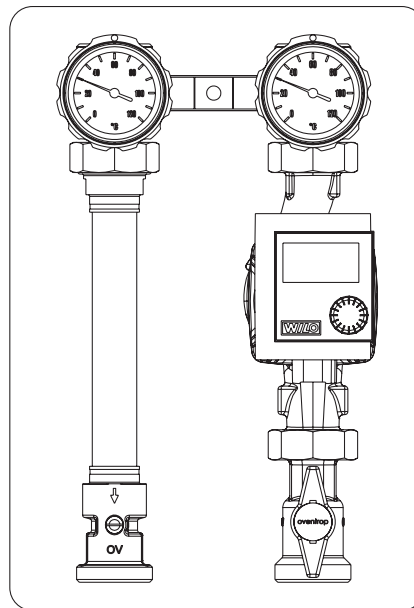
**Function:**

The station allows for the isolation of the supply and return pipe of the heating circuit. The check valve integrated in the return pipe avoids gravity circulation.

**Note:**

When the high-efficiency pump is switched off, a low gravity circulation depending on the circulation pressure is still possible within the heating system as the check valve is not tight sealing. On delivery, the supply pipe is on the right hand side. If required, the supply and the return pipe can be changed on site (see installation instructions).

To avoid malfunctions caused by impurities, the installation of an Oventrop strainer is recommended. The installation has to be flushed thoroughly before commissioning.



Regumat S-180 - reduced dimensions

**Tender specification: Regumat M3-180 DN 25 - variable temperature heating circuit**

Product assembly for the connection of the boiler to the pipework.

Consisting of: Isolation device with 2 ball valves for the isolation of the heating circuit, 2 thermometers integrated in the handles of the ball valves for flow and return temperature display, three-way mixing valve with check valve and mounted actuator as well as universal thermal insulation of modular construction. The actuator can be mounted without tools - "plug and play".

**Materials:**

Valves and fittings: Brass  
Seals: EPDM

**Connections:**

To heating circuit: G 1½ male thread, flat sealing  
To boiler: G 1½ male thread, flat sealing  
Pump: G 1½ male thread, flat sealing

**Technical data:**

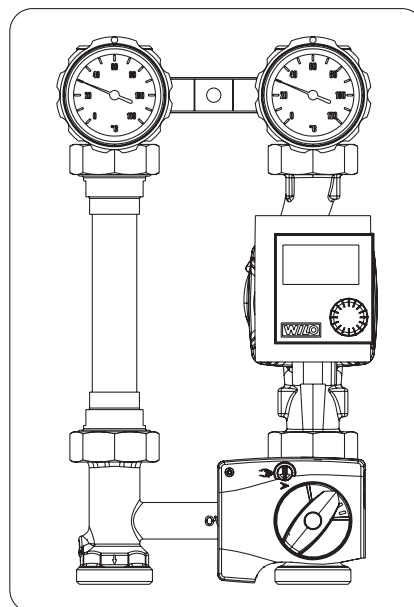
Nominal size: DN 25  
Max. operating pressure: 10 bar (PN10)  
Max. operating temperature: 95 °C  
Opening pressure check valve: 20 mbar  
Actuator: 230 V, 90°/140 sec., 5 Nm  
K<sub>vs</sub> value: 5.5  
Recommended application range: max. 40 kW  
( $\Delta T = 20\text{ K}$ ,  $\Delta p = 100\text{ mbar}$ )

**Models:**

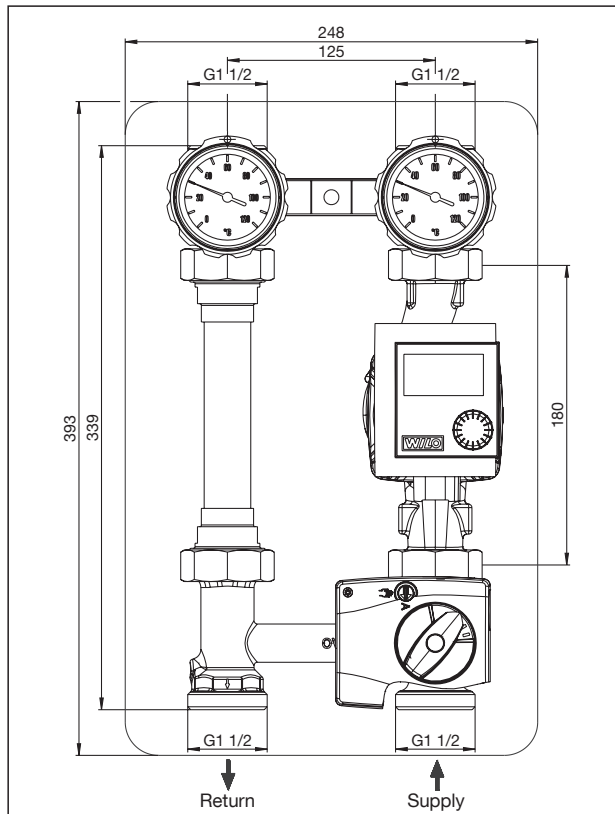
|                                       |                          |
|---------------------------------------|--------------------------|
| without high-efficiency pump          | <b>Item no.:</b> 1357220 |
| with high-efficiency pump (EEI ≤ 0.2) |                          |
| Grundfos ALPHA 2.1 25-60              | 1357227                  |
| Wilo-Stratos PICO 25/1-6              | 1357229                  |

**Function:**

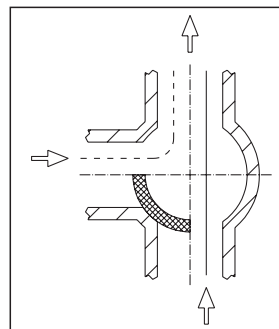
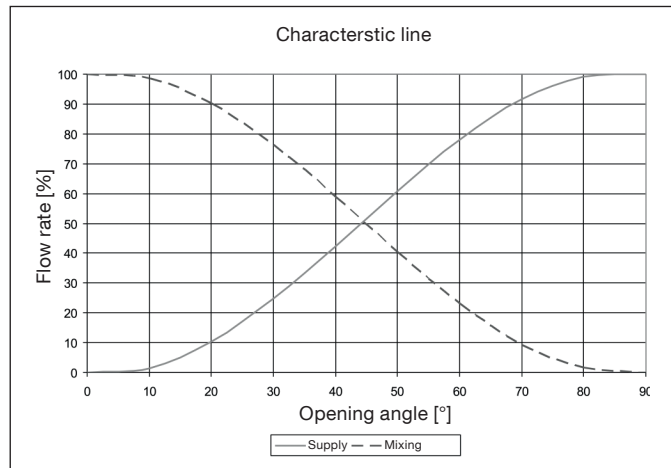
The Regumat M3-180 has the same design and function as the Regumat S-180. It is additionally equipped with a three-way mixing valve with check valve and mounted actuator. The three-way mixing valve serves to control the flow temperature.



Regumat M3-180 - reduced dimensions



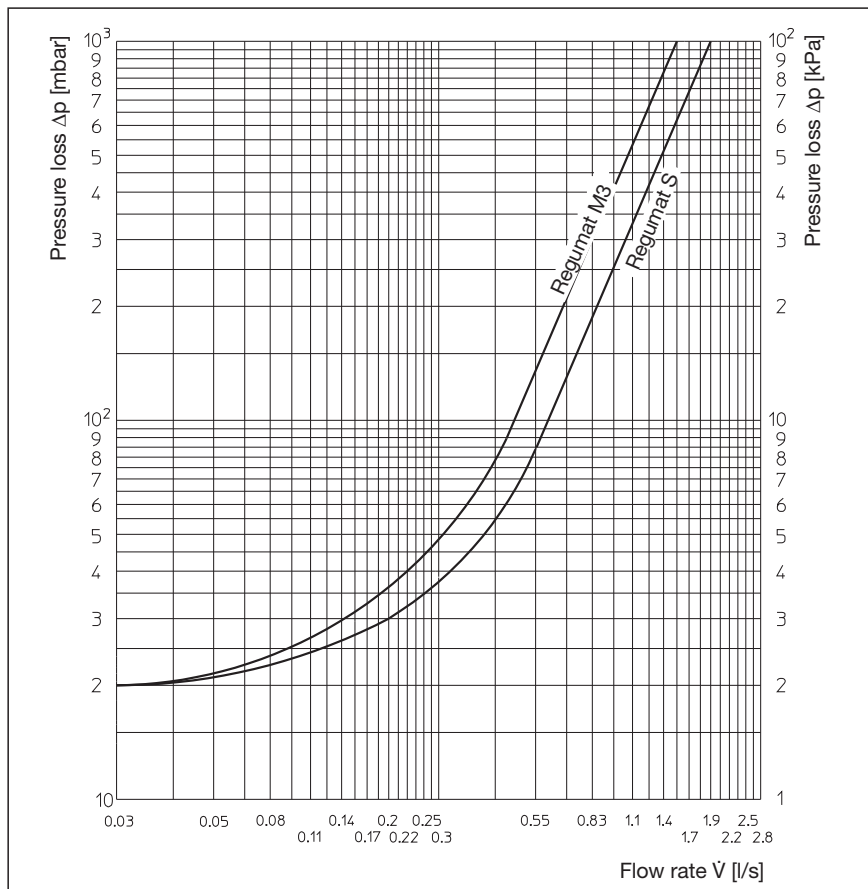
Dimensions Regumat 180 DN 25



Mixing of the volume flow is achieved by a rotation of the spindle of the mixing valve.

- The equal percentage characteristic line of the mixing valve allows for a mixing of the volume flow to equal proportions
- Optimum control accuracy
- Temperatures fluctuations in case of volume flow changes are avoided
- More efficient partial load behaviour

Mixing function principle



Flow chart

Tailpipe sets and a heating circuit controller extension set are available as accessories.

Subject to technical modifications without notice.

Product range 3.1  
ti 347-EN/10/MW  
Edition 2020