

Technical information

# Application:

The Oventrop boiler connection system "Regumat-180" – pump length 180 mm – for a time-, cost- and space-saving connection of the boiler to the pipework. The "Regumat-180" stations are available with high-efficiency pumps.

## Advantages:

- pre-assembled connection system for pumps with a length of 180 mm
- high quality materials
- with universal insulation of modular construction
- easy installation by use of tailpipe sets
- no hemp sealing
- supply and return pipe can be changed on site

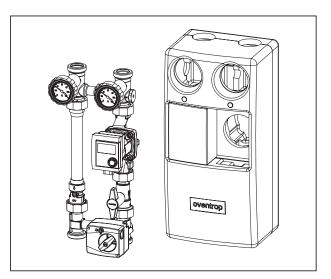
## Choice of the "Regumat-180" stations:

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

- The "Regumat" is available with or without circulation pump as basic model (without mixing valve)
- with three- or four-way mixing valve with bypass with manual presetting and actuator.

The "Regumat" can be upgraded with a differential pressure relief device.

Installation dimensions: H = 512 mm, W = 248 mm, D = 211 mm





	Model without mixing function	Model with mixing function	
	"Regumat S-180"	"Regumat M3-180"	"Regumat M4-180"
Isolation device with 2 ball valves and 2 thermometers	x	х	x
Flanged pipe with check valve	x	х	x
Three-way mixing valve with actuator (suitable for the standard boiler regulations)		х	
Four-way mixing valve with actuator (suitable for the standard boiler regulations)			x
Pump ball valve at the pump inlet	x	х	x
Insulation	x	х	х

Tailpipe sets are available as accessories.

## Tender specification: "Regumat S-180" DN 25

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 and 2 thermometers integrated in the handles for flow and return temperature display. 1 pump ball valve at the pump inlet. Flanged pipe with check valve in the return pipe to avoid any gravity circulation. Insulation with interchangeable plugs in red and blue for change of supply and return pipe.

Ball valves:	Body and stem made of brass with double O-ring seal. Hard chrome plated brass balls, PTFE seats, brass collar nuts.	
Connection:	To boiler and to heating circuit G $1^{1\!/_{\!2}}$ male thread without collar nuts for tailpipe sets, flat sealing.	
Size:	DN 25	
Max. operating temperature: 110 °C		

Max. operating pressure: 10 bar

Temperature range: 20°C - 120°C

Opening pressure of the check valve: 20 mbar

 $k_v = 7.4$ 

Pump connection: for pumps with G 11/2 male thread, pump length 180 mm.

Distance between supply and return pipe: 125 mm

Note: On delivery, components are loosely connected and 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).

### Tender specification: "Regumat M3-180" DN 25

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 and 2 thermometers integrated in the handles for flow and return temperature display. 1 pump ball valve at the pump inlet. Flanged pipe with check valve in the return pipe to avoid any gravity circulation. With three-way mixing valve with bypass with manual presetting and mounted actuator for flow temperature control. Insulation with interchangeable plugs in red and blue for change of supply and return pipe.

p.p.c.			
Ball v	alves:	Body and stem made of brass with double O-ring seal. Hard chrome plated brass balls, PTFE seats, brass collar nuts.	
Three	-wav		
	g valve:	Made of brass, with bypass with manual preset- ting, shaft of mixing valve with double O-ring seal.	
Conn	ection:	To boiler and hating circuit G $1\frac{1}{2}$ male thread without collar nuts for tailpipe sets, flat sealing.	
Size:		DN 25	
Max. operating temperature: 110°C			
Max. operating pressure: 10 bar			
Temperature range: 20°C – 120°C			
Opening pressure of the check valve: 20 mbar			
$k_v = 4$			
Pump connection: for pumps with G $1\frac{1}{2}$ male thread,			
pump length 180 mm.			
Actuator: Voltage 230 V			
Operating time for a 90° angle: 140 seconds			
Cable 2.2 m long			
Distance between supply and return pipe: 125 mm			
Note: On delivery, components are loosely connected and the			
supply pipe is on the right hand side. If required, the			
supply and the return pipe can be changed on site (the			
	mixing	valve does not have to be changed, see installa-	

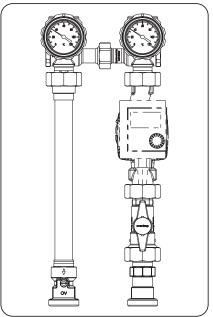
### Function:

Regarding the supply pipe, the "Regumat S-180" consists of a ball valve. The heating circuit may be shut off by use of the isolation device with thermometers integrated in the handles. Flanged pipe with check valve in the return pipe. If required, the "Regumat" can be upgraded with a differential pressure relief insert.

This product assembly allows the isolation of the supply and the return pipe of the heating circuit and the replacement of the pump under working conditions.

## Note:

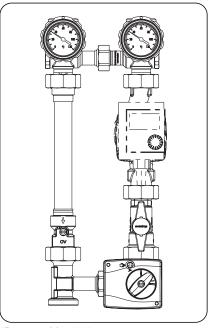
When the circulation pump is switched off, a low gravity circulation depending on the circulation pressure is still possible within the heating system despite the check valve as the latter is not tight sealing.



"Regumat S-180"

#### Function:

The "Regumat M3-180" has the same design and function as the "Regumat S-180". It is additionally equipped with a threeway mixing valve and an actuator. The three-way mixing valve serves to regulate the flow temperature and has a bypass with manual presetting. A manually set return flow share can be added to the supply pipe via this bypass in order to reduce the flow temperature of a surface heating e.g.



"Regumat M3-180"

tion instructions).

## Tender specification: "Regumat M4-180" DN 25

Product assembly for the connection of the boiler to the pipe-work.

Consisting of: Isolation device with 2 ball valves for the isolation of the heating circuit and 2 thermometers integrated in the handles for flow and return temperature display. 1 pump ball valve at the pump inlet. Flanged pipe with check valve in the return pipe to avoid any gravity circulation. With bronze fourway mixing valve with bypass with manual presetting and mounted actuator for flow temperature control. Insulation with interchangeable plugs in red and blue for change of supply and return pipe.

Four-way

- mixing valve: With bypass with manual presetting, body made of bronze, cover and regulating insert made of brass; shaft of mixing valve with double O-ring seal.
- Connection: To boiler and heating circuit G 1<sup>1</sup>/<sub>2</sub> male thread without collar nuts for tailpipe sets, flat sealing. Size: DN 25

Max. operating temperature: 110°C

Max. operating pressure: 10 bar

Temperature range: 20°C - 120°C

Opening pressure of the check valve: 20 mbar

 $k_{v} = 4.2$ 

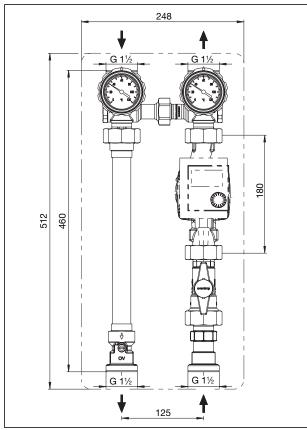
Pump connection: for pumps with G 1½ male thread, pump length 180 mm.

Actuator: Voltage 230 V

Operating time for a 90° angle: 140 seconds Cable 2.2 m long

Distance between supply and return pipe: 125 mm

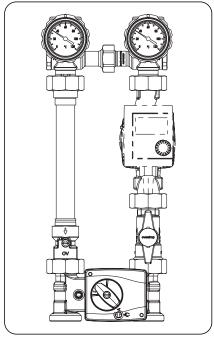
Note: On delivery, components are loosely connected and the supply pipe is on the right hand side. If required, the supply and the return pipe can be changed on site (the mixing valve does not have to be changed, see installation instructions).



"Regumat S-180" DN 25 with pump ball valve at the pump inlet

### Function:

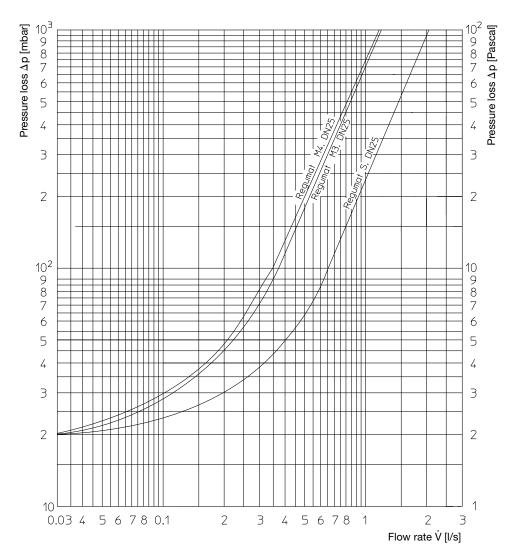
The "Regumat M4-180" has the same design and function as the "Regumat S-180". It is additionally equipped with a bronze fourway mixing valve and an actuator. The four-way mixing valve serves to regulate the flow temperature. The return temperature of the boiler is increased at the same time. The bypass with manual presetting integrated in the mixing valve serves to regulate the flow temperature in systems with a high boiler temperature and a low flow temperature (e.g. surface heating systems). This bypass constantly adds return water to the supply pipe.



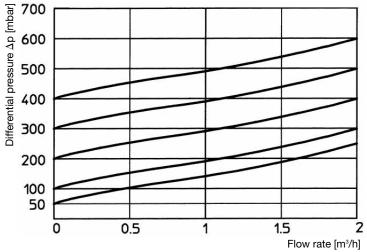
"Regumat M4-180"

## Flow chart "Regumat-180":

Regarding the models with mixing valve (M3-130 and M4-130), the mixing valve is completely opened.



Flow chart differential pressure relief device:



### Wall bracket:

For mounting the "Regumat" DN 25 onto the wall, a wall bracket, item no. 135 20 96, is available.

Tailpipe sets are available as accessories.

Subject to technical modification without notice. Product range 6 ti 65-1/10/MW Edition 2011 OVENTROP GmbH & Co. KG Paul-Oventrop-Straße 1 D-59939 Olsberg Phone +49 (0)29 62 82-0 Fax +49 (0)29 62 82-450 E-Mail mail@oventrop.de Internet www.oventrop.com