

oventrop

Innovation + Quality

Valves, controls + systems

Stations for the connection heat generator/heating circuit

Product range





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With the “Regumat” stations, Oventrop offers all components which are required for the connection of boiler, pump and pipework. The products are supplied as a complete system or, for size DN 25, as individual components. Oventrop may thus offer any system or individual component required on site.

Oventrop boiler valves are first class products for heating installations made of brass or bronze. The production is subject to a constant quality control guaranteeing a long lasting service life without malfunctions.

All Oventrop boiler valves are designed for a pressure rating of PN 10.

Advantages:

- universal thermal insulation of modular construction for all standard high-efficiency pumps
- variable connection of the heating circuit controller “Regtronic RH” to the station
- supply and return pipe can be changed on site
- high functional efficiency
- all components from one supplier
- complete systems available
- high quality materials
- time-saving installation
- with wall bracket
- maintenance-free
- thermal insulation serves as packaging and protection during transport
- “Regumat 180” can be upgraded with a heat meter installation set

1 “Regumat M3-180”

DN 25 with high-efficiency pump and pump ball valve at the pump inlet (energy efficiency class A)

Pump length 180 mm with three-way mixing valve with bypass with manual presetting, actuator and universal thermal insulation.

With heating circuit controller extension set.

2 “Regumat M3-130”

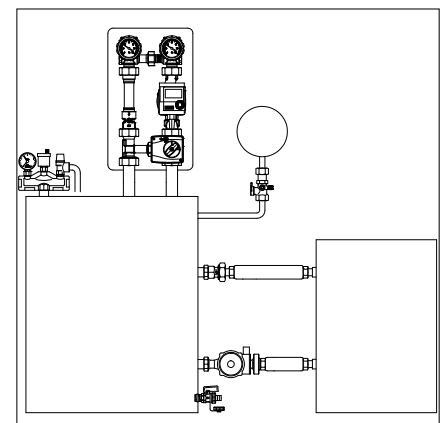
DN 25 with high-efficiency pump
Pump length 130 mm with three-way mixing valve with bypass with manual presetting, actuator and thermal insulation. The “Regumat” can be upgraded with a differential pressure relief device.

3 System illustration



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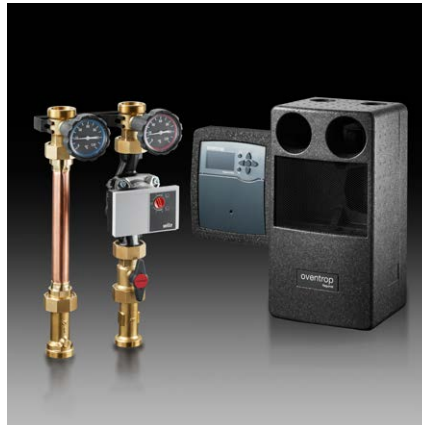
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Stations “Regumat 130/180” DN 25 for the connection of the boiler to the pipework. Connection: G 1½ flat sealing male thread. The “Regumat” are supplied with or without high-efficiency pump and the “Regumat 180” with or without pump ball valve.

1 “Regumat S-130”

DN 25 without high-efficiency pump consisting of an isolation device with two ball valves and two thermometers, a flanged pipe with check valve, a distance piece and a thermal insulation. The “Regumat” can be upgraded with a differential pressure relief device.

2 “Regumat S-180”

DN 25 with high-efficiency pump and pump ball valve at the pump inlet consisting of an isolation device with two ball valves and two thermometers, a flanged pipe with check valve and a universal thermal insulation. With heating circuit controller extension set (see also page 9 “Regtronic RH”).

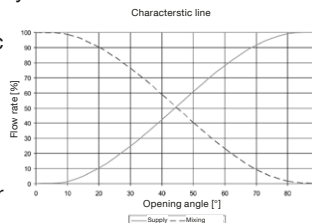
3 “Regumat M3-180”

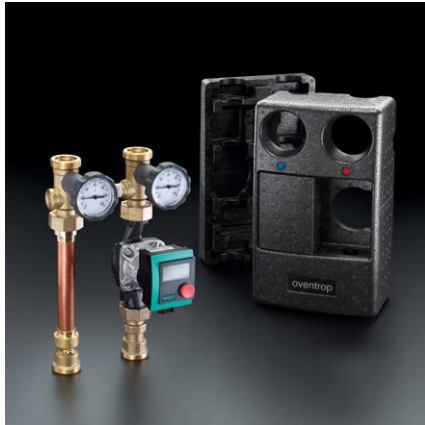
DN 25 with high-efficiency pump and pump ball valve at the pump inlet consisting of an isolation device with two ball valves and two thermometers, a flanged pipe with check valve, a three-way mixing valve with bypass with manual presetting, an actuator with quick mounting technique “plug & play” and a universal thermal insulation.

4 Heat meter installation set

Only for “Regumat S/M3-180” DN 25 with pump ball valve. With integrated temperature sensor connection at the pump ball valve and adapters. For heat meters G ¼, 100 mm or G 1, 130 mm.

	Model without mixing valve		Model <u>with</u> mixing valve	
	“Regumat” S-130 DN 25 S-180 DN 25	“Regumat” M3-130 DN 25 M3-180 DN 25	“Regumat” M4-180 DN 25	
k _{vs} value	7.4 7.4	4.3 4.3	4.2	
Isolation device (without differential pressure relief device)	X	X	X	
Check valve	X	X	X	
Three-way mixing valve with actuator (suitable for standard boiler controls) 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 - Increased control accuracy - Oscillation of the system is avoided - More efficient partial load behaviour		X		
Four-way mixing valve with actuator (suitable for standard boiler controls)			X	
Distance piece	X			
Thermal insulation	X	X	X	





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Stations “Regumat-180” DN 32
– pump length 180 mm –
for the connection of the boiler to the
pipework.

Connection: G 2 flat sealing male thread
The “Regumat” are supplied with or without
high-efficiency pump and with or without
pump ball valve at the pump inlet.

1 “Regumat S-180”

DN 32 with high-efficiency pump consisting
of an isolation device with two ball valves
and two thermometers, a flanged pipe with
check valve, a distance piece and a thermal
insulation.

2 “Regumat M3-180”

DN 32 with high-efficiency pump consisting
of an isolation device with two ball valves
and two thermometers, a flanged pipe with
check valve, a three-way mixing valve, an
actuator and a thermal insulation.

3 “Regumat M3-180”

DN 32 with high-efficiency pump and pump
ball valve at the pump inlet consisting of an
isolation device with two ball valves and two
thermometers, a flanged pipe with check
valve, a three-way mixing, an actuator and a
universal thermal insulation. The “Regumat”
can be upgraded with differential pressure
relief device.

	Model <u>without</u> mixing valve	Model <u>with</u> mixing valve
	“Regumat” S-180 DN 32	“Regumat” M3-180 DN 32
k_{vs} value	11.3	6.1
Isolation device (without differential pressure relief device)	X	X
Check valve	X	X
Three-way mixing valve with actuator (suitable for standard boiler controls)		X
Distance piece	X	
Thermal insulation	X	X



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Stations “Regumat 220/280” DN 40/50
– pump length 220/280 mm –
for the connection of the boiler to the
pipework.

Connection to boiler: G 2 flat sealing male
thread

Connection to heating circuit: G 2 female
thread

The “Regumat” are supplied with or without
high-efficiency pump.

1 “Regumat S-220”
DN 40 with high-efficiency pump consisting
of a supply isolating ball valve with
thermometer and draining/flushing valve,
a return isolating ball valve with integrated
check valve, thermometer and draining/
flushing valve, a pump ball valve with
draining/flushing valve, a distance piece and
a universal thermal insulation.

2 “Regumat M3-220”
DN 40 with high-efficiency pump consisting
of a supply isolating ball valve with
thermometer and draining/flushing valve,
a return isolating ball valve with integrated
check valve, thermometer and draining/
flushing valve, a pump ball valve with
draining/flushing valve, a three-way mixing
valve with actuator and a universal thermal
insulation.

3 “Regumat S-280”
DN 50 with high-efficiency pump consisting
of a supply isolating ball valve with
thermometer and draining/flushing valve,
a return isolating ball valve with integrated
check valve, thermometer and draining/
flushing valve, a pump ball valve with
draining/flushing valve, a distance piece and
a universal thermal insulation.

4 “Regumat M3-280”
DN 50 with high-efficiency pump consisting
of a supply isolating ball valve with
thermometer and draining/flushing valve,
a return isolating ball valve with integrated
check valve, thermometer and draining/
flushing valve, a pump ball valve with
draining/flushing valve, a three-way mixing
valve with actuator and a universal thermal
insulation.

	Model <u>without</u> mixing valve	Model <u>with</u> mixing valve
	Regumat S-220 DN 40 S-280 DN 50	Regumat M3-220 DN 40 M3-280 DN 50
k _{vs} value	29.0 29.3	24.8 25.1
Supply isolating ball valve with thermometer and draining/ flushing valve	X	X
Return isolating ball valve with integrated check valve, thermometer and draining/ flushing valve	X	X
Pump ball valve with draining/flushing valve	X	X
Three-way mixing valve with actuator (suitable for standard boiler controls)		X
Universal thermal insulation	X	X



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The stations “Regumat RTA” allow for the connection of the heating system/storage cylinder to the wood burning boiler. The minimum return temperature to the wood burning boiler amounts to 55 °C and thus lies above the dew point. It prevents the formation of pitch. During start-up, the boiler flow water is short circuited directly to the boiler return via the bypass. Having reached a return temperature of 55 °C, the mixing valve opens to the heat emitters.

Advantages:

- pre-assembled product group
- depending on the pump size, model “Regumat RTA-130” or “Regumat RTA-180” DN 25 and DN 32
- high quality materials
- thermal insulation made of expanded polypropylene supplied with each “Regumat RTA”
- easy installation by use of tailpipe sets
- sensor integrated in the return

The product assembly consist of an isolation set (ball valves with thermometers integrated in the handle for supply and return temperature display), a check valve in the supply pipe to avoid gravity circulation, a three-way mixing valve and a temperature controller with immersion sensor with a control range between 40 °C and 70 °C. The stations are available with or with high-efficiency pumps in the return pipe.

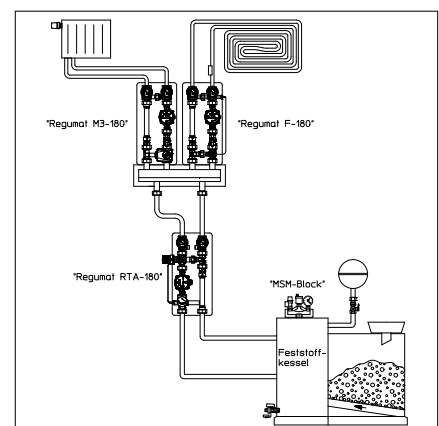
1 “Regumat RTA-130” DN 25

2 “Regumat RTA-180” DN 32

3 System illustration



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The fixed value control units “Regumat F/FR-130/180” are designed for flow temperature control and for limitation of combined radiator/surface heating systems. The flow temperature is controlled within a range between 20 °C and 50 °C. The pump of the “Regumat FR-180” is made of bronze to counteract the risk of corrosion in case of system related oxygen input.

The sensor in the supply pipe regulates the mixing valve according to the set flow temperature. If the flow temperature is too high, the electric pipe contact safety switch switches off the pump and switches it on again when the temperature has dropped.

Advantages:

- pre-assembled product group with pump lengths 130 or 180 mm
- high quality materials
- thermal insulation made of expanded polypropylene supplied with each “Regumat F/FR”
- easy installation by use of tailpipe sets
- sensor integrated in the supply
- including electric pipe contact safety switch

The product assembly consists of an isolation set with integrated thermometers, a check valve, a three-way mixing valve, a temperature controller with immersion sensor with a control range between 20 °C and 50 °C, an electric pipe contact safety switch and a safety temperature limiter. The fixed value control units are available with or without high-efficiency pump.

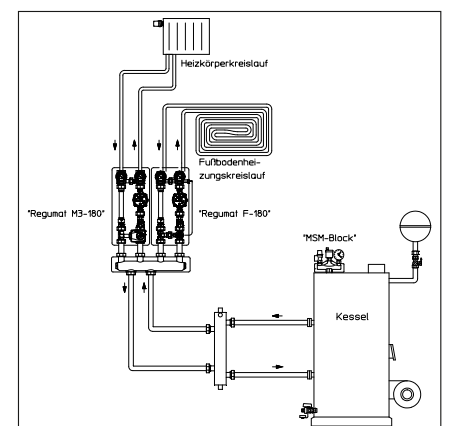
1 “Regumat F-130” DN 25

2 “Regumat FR-180” DN 25 with heat exchanger

3 System illustration



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1 Heat exchanger with insulation and safety group, modular complement to the "Regumat" stations DN 25.

2 "MSM-Block"
Boiler safety device for closed heating systems according to DIN EN 12828 with a capacity up to 50 kW.

The "MSM-Block" consists of: Brass body, pressure gauge, brass airvent with automatic shut-off, diaphragm safety valve 3 bar and insulation.

Models: Female threaded connection Rp 1 and male threaded connection G 1, flat sealing.

3 Distributor with insulation and wall brackets for the connection of 2 or 3 "Regumat" stations (up to 8 heating circuits).

4 "HydroFixx" DN 25

Hydronic heater/distributor combination with insulation and wall bracket. Compact design made of steel, for the connection of 2 or 3 "Regumat" stations.

5 "HydroFixx" DN 40/50

Hydronic header/distributor combination with insulation. Compact design made of steel for the connection of 2 or 3 "Regumat" stations.

6 Module distributor for "Regumat" DN 25
Heating distributor system of modular construction:

- subsequently extendable
- up to 6 groups can be connected to the boiler and heating system

7 Hydronic header

Made of steel with insulation. For the hydronic decoupling of the heating and boiler circuit.

8 "MonoFixx" for "Regumat" DN 25

Made of steel, with insulation and wall bracket. For the hydronic decoupling of the heating and boiler circuit.



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1 Heating circuit controller “Regtronic RH”
Weather guided control of the flow temperature of the heating system via the demand of a heat generator and/or a mixing valve (e.g. “Regumat M3” with three-way mixing valve).
The heating circuit controller can control a variable and a constant temperature heating circuit.

- 1 outdoor sensor
- 3 PT 1000 sensors
- 8 sensor inputs
- 2 inputs for electronic volume flow sensor
- 5 inputs (1 is a volt free relay)
- 2 PWM/0-10 V outputs (convertible)
- 1 data output S-bus
- 1 SD card slot

Extendable to up to 6 variable and 6 constant temperature heating circuits via the extension module “Regtronic EM” (item no. 1152098).

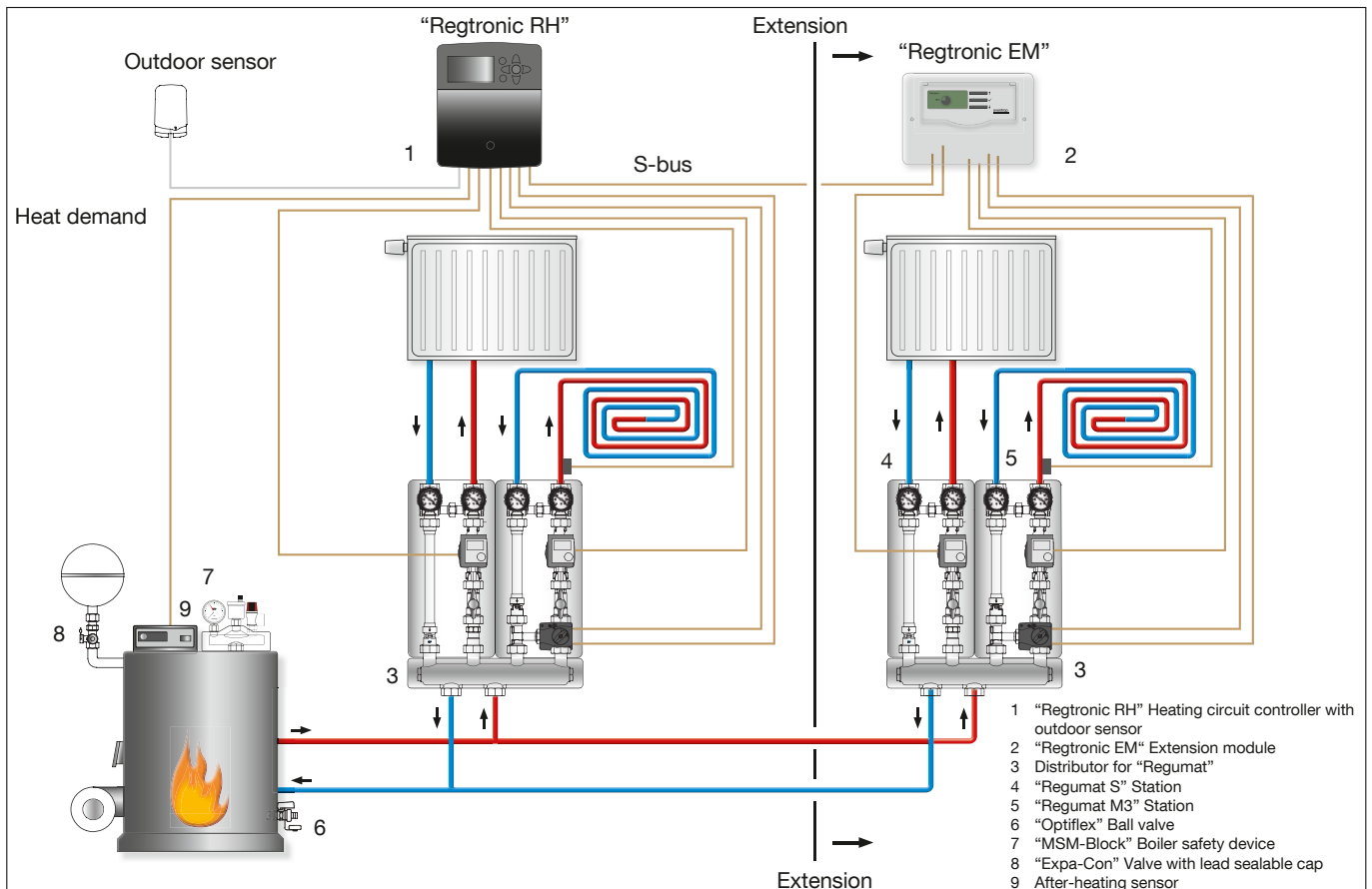
2 “Regtronic EM“ Extension module
For the extension of the heating circuit controller “Regtronic RH” by 6 sensor inputs and 5 relay outputs. Further variable or constant temperature heating circuits can thus be activated. Up to **5** extension modules can be connected to the heating circuit controller “Regtronic RH”. One sensor attached to the pipe PT 1000 is included.

3 ErP classification

4 System illustration “Regtronic RH” with extension module “Regtronic EM”

ErP classification heating circuit controller “Regtronic RH”						
Item no.	Controller	Required accessories	Boiler control		ErP %	Class
			modulating (0-10 V)	On/Off		
1152093	“Regtronic RH”	–	X		2.0	II
1152093	“Regtronic RH”	–		X	1.5	III
1152090	“Regtronic RH” incl. remote control with room temperature sensor	–	X		4.0	VI
1152090	“Regtronic RH” incl. remote control with room temperature sensor	–		X	3.5	VII
1152090	“Regtronic RH” incl. remote control with room temperature sensor	2x room temperature sensor 1152095 Adapter cable 1152086	X		5.0	VIII

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1 „Optibal P“ Pump ball valve
For a simple installation of circulation pipes for hot water central heating systems. The pump ball valve is available with or without check valve.

2 „Tri-CTR“ Three-way valve
The valve which can be used as diverting and mixing valve allows for a universal application. It can be used in combination with Oventrop temperature controllers or actuators.

3 „Expa-Con“ Valve with lead sealable cap
For the control, maintenance and possible replacement of diaphragm expansion tanks.

4 Airvents
With automatic shut-off, made of brass; angle pattern model without automatic shut-off or precision airvent with automatic shut-off.

5 Bronze strainer
With simple or double wire basket (for fine straining), wire basket made of stainless chromium steel.

6 Piston type spring assisted check valves and check valves
Piston type spring assisted check valves made of bronze, brass with FKM seal for horizontal and vertical installation. Brass check valves with and without automatic deaeration, with female/male thread or flanged connection.

7 Brass gauge cock
For the use of pressure gauges in heating systems. With gland and female thread, unplated or chrome plated.

8 „Optiflex“ Brass ball valve
With male or female thread, self-sealing, with counter nut, handle with stop, hose connection (soft sealing) and cap.

Further information can be found in our catalogue „Products“, our technical sheets and on the Internet under product range 6.

Subject to technical modifications without notice.

Private persons may purchase our products from their qualified installer.

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