

# Catalogue

## 2023



**oventrop**

Wir regeln das. Seit 1851.









# Catalogue

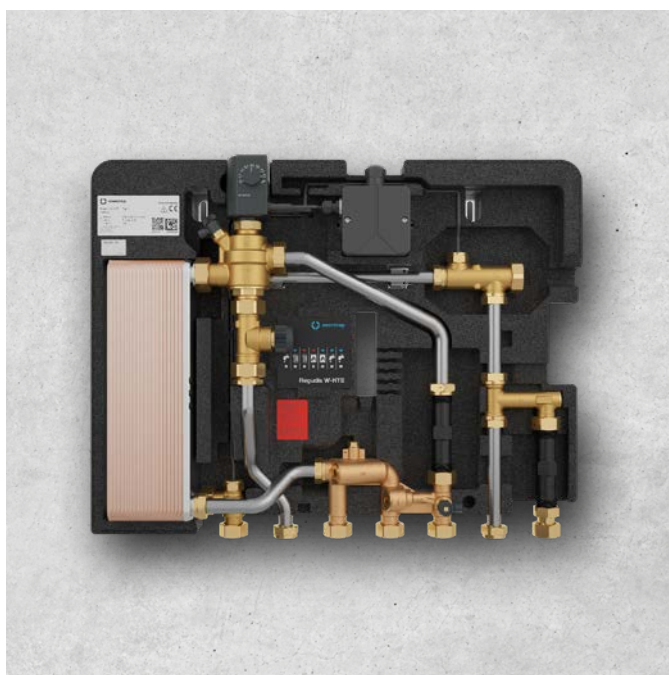
## 2023

**Oventrop**

Wir regeln das.  
Seit 1851.



**We are the partner**  
for efficient heating, cooling  
and clean potable water.



Regudis W-HTE Electronic dwelling station

*With our modular systems, all HVAC experts can work easily and flexibly* – due to the possibility of adapting our pioneering solutions to their requirements. Our close cooperation with craftsmen and our extensive experience make us the competent leader in hydronic systems.

*As a family business from the Sauerland region*, we accompany all our partners over years – reliably and personally – from planning to installation, over commissioning to maintenance. *With our digital services* we create an added value throughout the entire process.

*We produce long-lasting, high quality products* which can be globally connected to flexible systems – easy to install, energy-efficient and always reliable.

Wir regeln das. Seit 1851.

#### WHAT SETS US APART:



##### Modularly combinable product portfolio

With over 4,000 product components in the areas of indoor climate, hydronics, potable water, stations and smart home, we always find a suitable connection.



##### Personal service

Our competent staff will be happy to assist you by telephone or on site, for example with the design and commissioning of our products.



##### Pioneer

In the 1960s, our oil filters were instrumental in paving the way for oil heating. Today, our efficient dwelling stations are perfectly matched to regenerative energies.



##### Best in industry as for design

No other company in the heating fittings industry has received more awards than we have.



## Oventrop Academy

Our OV Academy is the training platform for plumbers, planning engineers as well as responsible persons in authorities and in residential construction.

For further information and our current regional offers, please contact **your local Oventrop contact person directly.**



### Face-to-face events

for direct exchange on site



### Online seminars

for more flexibility



## Contact at a glance

### INTERNATIONAL

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#### **Oventrop GmbH & Co. KG**

Paul-Oventrop-Str. 1  
59939 Olsberg, Germany

☎ +49 2962 820

☎ +49 2962 82400

✉ [mail@oventrop.com](mailto:mail@oventrop.com)

🌐 [www.oventrop.com](http://www.oventrop.com)



#### **Service Hotline**

☎ +49 2962 82100

🕒 Mo – Fr 7.30 – 16.30 h CET



#### **Software and Data**

☎ +49 2962 82303

✉ [software@oventrop.com](mailto:software@oventrop.com)

🕒 Mo – Fr 7.30 – 16.30 h CET



# System competence

for efficient heating, cooling  
and clean potable water







## Room climate



Radiator fittings and controllers  
Electronic room temperature control



## Hydronics



Control valves for hydronics  
Volume flow controllers



## Stations, Storage cylinders



Dwelling stations  
Stations for local and district heating



## Potable water



Potable water technology  
Aquanova System



## Oil



Oil heating technology



## Smart Home, Smart Building



Central control and regulation technology

1



Room climate



2



Hydronics



3

Stations  
Storage cylinders

4



Potable water



5



Oil



6

Smart Home  
Smart Building

7



Service and data

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Hydronic balancing with pressure independent control valves	
Connection and control of heating and cooling devices	
Differential pressure measurement and verification of water quantities	
Shutoff valves and other pipeline valves	Stations, Storage cylinders
Stations for heating circuit and cooling circuit connection	
Stations for solar thermal energy	
Stations for local and district heating	
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Products for the preservation of potable water hygiene	
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**1**



# 1 Room climate

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# 1.1 Room temperature control

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## 1.1 Room temperature control

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# Uni L Thermostats



The **Uni L thermostat** impresses with its **simple** and **timeless design**. Handling and readability are optimally matched. The radiator thermostat is equipped with a memo disc to mark a selected setting, which makes it easy to re-set a desired temperature after turning the handwheel.

The setting range can be limited or blocked using the two concealed internal **limiting elements**. In case of unfavourable lighting conditions or for visually impaired persons, the basic setting "3" can easily be found again by using the palpable setting aids.

Control element	Liquid sensor	Max. heating medium temperature	120 °C
Remote control with room temperature sensor	No		

## Uni LH with M 30 x 1.5



Thermostat thread	M 30 x 1.5	Blocking / Limiting	Yes
Setting aid for visually impaired persons	Yes	PU	10
Anti-theft ring	Accessories		

Colour	RAL*	Zero position	Frost protection	Setting range (°C)	Item No.
White	9016	Yes	Yes	7 up to 28	1011465
White	9016	No	Yes	7 up to 28	1011464
White	9016	Yes	Yes	7 up to 21	1011462
Anthracite	7016	Yes	Yes	7 up to 28	1011467
White	9016	No	No	8 up to 38	1011488

## Uni LH with remote sensor, M 30 x 1.5



Thermostat thread	M 30 x 1.5	Anti-theft ring	Accessories
Frost protection	Yes	Blocking / Limiting	Yes
Setting aid for visually impaired persons	Yes		

Colour	RAL*	Zero position	Capillary tube length* (mm)	Setting range (°C)	PU	Item No.
White	9016	Yes	2,000	7 up to 28	792	1011665
White	9016	Yes	5,000	7 up to 28	75	1011666
White	9016	No	2,000	7 up to 28	75	1011682
White	9016	No	2,000	8 up to 38	10	1011688



**Uni LHB (lockshield configuration) with M 30 x 1.5**

Thermostat thread	M 30 x 1.5	Anti-theft ring	Yes
Frost protection	Yes	Protection against vandalism	Yes
Lockshield configuration	Yes	PU	10
Setting aid for visually impaired persons	No		

Colour	RAL*	Zero position	Setting range (°C)	Item No.
White	9016	No	7 up to 28	1011410

**Uni LD with squeeze connection**

Suitable for Danfoss thermostatic valves series RA.



Thermostat thread	Squeeze connection	Anti-theft ring	Accessories
Frost protection	Yes	Blocking / Limiting	Yes
Setting aid for visually impaired persons	Yes	PU	10

Colour	RAL*	Zero position	Setting range (°C)	Item No.
White	9016	No	7 up to 28	1011472
White	9016	Yes	7 up to 28	1011475
Anthracite	7016	Yes	7 up to 28	1011478

**Uni LD with remote sensor, squeeze connection**

Suitable for Danfoss thermostatic valves series RA.



Frost protection	Yes	Anti-theft ring	Accessories
Thermostat thread	Squeeze connection	Blocking / Limiting	Yes
Setting aid for visually impaired persons	Yes	PU	75

Colour	RAL*	Zero position	Setting range (°C)	Capillary tube length* (mm)	Item No.
White	9016	Yes	7 up to 28	2,000	1011685

**Uni LDB (lockshield configuration) with squeeze connection**

Suitable for Danfoss thermostatic valves series RA.



Thermostat thread	Squeeze connection	Anti-theft ring	Yes
Frost protection	Yes	Protection against vandalism	Yes
Setting aid for visually impaired persons	No	PU	10

Colour	RAL*	Zero position	Setting range (°C)	Item No.
White	9016	No	7 up to 28	1011440

# Uni L Special thermostats



The special thermostats follow the **design of the Uni L thermostat**. Handling and readability are optimally matched. The radiator thermostat is equipped with a memo disc to mark a selected setting, which makes it easy to re-set a desired temperature after turning the handwheel.  
The setting range can be limited or blocked

using the concealed **limiting elements**. In case of unfavourable lighting conditions or for visually impaired persons, the basic setting "3" can easily be found again by using the palpable setting aids.  
The connection threads are specially adapted to the specified valve manufacturers.

Control element	Liquid sensor	Setting aid for visually impaired persons	Yes
Zero position	Yes	Blocking / Limiting	Yes
Frost protection	Yes	Max. heating medium temperature	120 °C
Setting range	7 up to 28 °C		
Remote sensor	No		
Remote control with room temperature sensor	No		

## Uni L with M 30 x 1.0

Suitable for Oventrop thermostatic valves manufactured until 1998.



RAL*	9016	Protection against vandalism	No
Thermostat thread	M 30 x 1.0	Anti-theft ring	Accessories

Colour	Item No.
White	1011401

## Uni LK with M 28 x 1.0

Suitable for Kosmia thermostatic valves.



RAL*	9016	Protection against vandalism	No
Thermostat thread	M 28 x 1.0	Anti-theft ring	No

Colour	Item No.
White	1613501

## Uni LA with M 28 x 1.5

Suitable for Herz thermostatic valves.



RAL*	9016	Protection against vandalism	Accessory
Thermostat thread	M 28 x 1.5	Anti-theft ring	Accessories

Colour	Item No.
White	1613401

**Uni LI with M 32 x 1.0**

Suitable for Ista thermostatic valves manufactured from 1985.



RAL*	9016	Protection against vandalism	No
Thermostat thread	M 32 x 1.0	Anti-theft ring	No

**Colour**

White

**Item No.**

1616200

**Uni LR with M 33 x 2.0**

Suitable for Rossweiner thermostatic valves.



RAL*	9016	Protection against vandalism	No
Thermostat thread	M 33 x 2.0	Anti-theft ring	No

**Colour**

White

**Item No.**

1616301

**Uni LM with M 38 x 1.5**

Suitable for Meges thermostatic valves.



RAL*	9016	Protection against vandalism	No
Thermostat thread	M 38 x 1.5	Anti-theft ring	No

**Colour**

White

**Item No.**

1616100

**Uni LO with M 38 x 1.5**

Suitable for Oreg (Ondal) thermostatic valves.



RAL*	9016	Protection against vandalism	No
Thermostat thread	M 38 x 1.5	Anti-theft ring	No

**Colour**

White

**Item No.**

1616500

**Uni LDVL with squeeze connection**

Suitable for Danfoss thermostatic valves series RAVL.



RAL*	9016	Protection against vandalism	No
Thermostat thread	Squeeze connection (Ø 26 mm)	Anti-theft ring	No

**Colour**

White

**Item No.**

1616675



### Uni LDV with squeeze connection

Suitable for Danfoss thermostatic valves series RAV.

RAL*	9016	Protection against vandalism	No
Thermostat thread	Squeeze connection (Ø 34 mm)	Anti-theft ring	No

Colour	Item No.
White	1616575



### Uni LV with squeeze connection

Suitable for Vaillant thermostatic valves manufactured from 1981.

RAL*	9016	Protection against vandalism	No
Thermostat thread	Squeeze connection	Anti-theft ring	No

Colour	Item No.
White	1616001



### maxi/mini with M 40 x 1.5

Suitable for Oventrop maxi/mini thermostatic valves manufactured until 1974.

RAL*	9010	Protection against vandalism	No
Thermostat thread	M 40 x 1.5	Anti-theft ring	No

Colour	Item No.
White	1015500

# Uni X Thermostats



The **Uni X thermostat** is a **design oriented** radiator thermostat. Handling and readability are optimally matched. The radiator thermostat is equipped with a memo disc to mark a selected setting, which makes it easy to reset a desired temperature after turning the handwheel.

The setting range can be limited or blocked by moving the **limiting elements** out of the

park position (factory setting). In case of unfavourable lighting conditions or for visually impaired persons, the basic setting "3" can easily be found again by using the palpable setting aids.

The radiator thermostat is characterised by excellent control behaviour, optimal handling and excellent design.

Control element	Liquid sensor	Anti-theft ring	Accessories
Frost protection	Yes	Blocking / Limiting	Yes
Setting range	7 up to 28 °C	Max. heating medium temperature	120 °C
Setting aid for visually impaired persons	Yes		

## Uni XH with M 30 x 1.5



Thermostat thread M 30 x 1.5

Colour	RAL*	Zero position	Item No.
White	9016	Yes	1011365
White	9016	No	1011364

## Uni XH with remote sensor, M 30 x 1,5



Thermostat thread M 30 x 1.5 Zero position Yes

Colour	RAL*	Capillary tube length* (mm)	Item No.
White	9016	2,000	1011565
White	9016	5,000	1011566

## Uni XHM with M 30 x 1.5

Especially suitable for valve sizing with **1K P-deviation**. With larger specific stroke.



Thermostat thread M 30 x 1.5 Zero position Yes

Colour	RAL*	Item No.
White	9016	1011360

### Uni XD with squeeze connection



Thermostat thread

Squeeze connection

Colour	RAL*	Zero position	Item No.
White	9016	Yes	1011375
White	9016	No	1011374

### Uni XD with remote sensor, squeeze connection



Thermostat thread

Squeeze connection

Capillary tube length\*

2,000 mm

Zero position

Yes

Colour	RAL*	Item No.
White	9016	1011575



# Uni SH Thermostats



The **Uni SH** thermostat with liquid sensor enables the room temperature to be controlled in a **modern design**. The radiator thermostat in the new, slim design combines extraordinary shape with outstanding function. Handling and readability are excellent.

The discreet contours on the chrome plated handle sleeve increase the ease of handling. In case of unfavourable lighting conditions or for visually impaired persons, the basic setting can easily be found again by using the palpable setting aids. The elegant thermostat is balanced in itself. The lines are clear and uncluttered, unnecessary corners and edges have

been avoided.

In addition, white, chrome-plated and anthracite SH-Caps are available for use in combination with a Multiblock T and the corresponding design cover (see chapter "Thermostats Accessories and spare parts"). The colour variants of the **SH-Caps** are matched to the colour palette of modern radiators and bathroom radiators.

The Uni SH thermostat is particularly recommended in combination with the Oventrop **E thermostatic valves** for modern living room design.

## Uni SH with M 30 x 1.5



Control element	Liquid sensor	Setting aid for visually impaired persons	Yes
Zero position	Yes	Blocking / Limiting	No
Frost protection	Yes	Max. heating medium temperature	120 °C
Setting range	7 up to 28 °C		

Colour	RAL*	Thermostat thread	Item No.
White / Chrome	9016	M 30 x 1.5	1012065
White	9016	M 30 x 1.5	1012066
Chrome	-	M 30 x 1.5	1012069
Stainless steel	-	M 30 x 1.5	1012085



## SH-Cap

For improved appearance of the Uni SH thermostat by covering the union nut when used with Multiblock and design cover.

Description	Item No.
Anthracite (RAL 7016), for Uni SH thermostat	1012080
Chrome plated, for Uni SH thermostat	1012081
White, for Uni SH thermostat	1012082

# Design thermostats



2016



2018



2018

The design thermostats set special accents.

**pinox. The thermostat.** Functional and perfectly shaped, it cuts a fine figure on radiators. The handle allows for easy and precise temperature setting.

Since its market launch, the pinox thermostat has already received numerous design awards in a wide range of competitions.

The pinox thermostat is particularly recom-

mended in combination with the Oventrop **E thermostatic valves** for modern living room design.

The **Uni CH thermostat** speaks for an **extravagante design** which was created by Luigi Colani.

The design-oriented appearance is rounded off by a precisely coordinated functionality.

The union nut of the thermostat can be concealed by a sliding cover.

Control element	Liquid sensor	Anti-theft ring	No
Zero position	No	Blocking / Limiting	No
Frost protection	Yes	Max. heating medium temperature	120 °C
Setting range	7 up to 28 °C		



## pinox H with M 30 x 1.5

Thermostat thread M 30 x 1.5

Colour	RAL*	Item No.
Chrome	-	1012165
White	9016	1012166



## pinox D with squeeze connection

Thermostat thread Squeeze connection

Colour	RAL*	Item No.
Chrome	-	1012175
White	9016	1012176



## Uni CH with M 30 x 1.5

Colour	RAL*	Thermostat thread	Item No.
White	9016	M 30 x 1.5	1011265



# vindo Thermostats



The **vindo thermostat** is characterised by a **simple** and **slim** design. The reduced dimensions combine extraordinary shape with outstanding function.

Handling and readability are excellent. In case of unfavourable lighting conditions or for visually impaired persons, the basic setting "3" can easily be found again by using the palpable setting aids.

Control element	Liquid sensor	Blocking / Limiting	Yes
Zero position	Yes	Max. heating medium temperature	120 °C
Frost protection	Yes		
Setting range	7 up to 28 °C		
Setting aid for visually impaired persons	Yes		

## vindo TH with M 30 x 1.5



Colour	White	Anti-theft ring	Accessories
Thermostat thread	M 30 x 1.5		

**RAL\***

9016

**Item No.**

1013066

## vindo TD with squeeze connection

Suitable for Danfoss thermostatic valves series RA.



Colour	White	Anti-theft ring	Accessories
Thermostat thread	Squeeze connection		

**RAL\***

9016

**Item No.**

1013076

## vindo RTD with squeeze connection

Suitable for Danfoss thermostatic valves series RTD.



Colour	White	Anti-theft ring	No
Thermostat thread	Squeeze connection		

**RAL\***

9016

**Item No.**

1613066

# Uni F Thermostats



The **Uni F thermostat with remote control** is particularly suitable for underfloor convectors, surface heating systems and covered or concealed radiators.

The versions with connection thread M 30 x 1.5 are also available with an additional remote sensor.

Control element	Liquid sensor	Setting aid for visually impaired persons	No
RAL*	9016	Blocking / Limiting	Yes
Frost protection	Yes	Max. heating medium temperature	120 °C
Setting range	7 up to 28 °C		
Remote control with room temperature sensor	Yes		

## Uni FH with remote control, M 30 x 1.5



Colour	White	Thermostat thread	M 30 x 1.5
<b>Zero position</b>		<b>Capillary tube length 2* (mm)</b>	<b>Item No.</b>
Yes		2,000	1012295
Yes		5,000	1012296
Yes		10,000	1012297

## Uni FH with remote control and remote sensor, M 30 x 1.5



Colour	White	Thermostat thread	M 30 x 1.5
<b>Zero position</b>	<b>Capillary tube length* (mm)</b>	<b>Capillary tube length 2* (mm)</b>	<b>Item No.</b>
Yes	2,000	2,000	1012395
Yes	5,000	5,000	1012396

## Uni FD with remote control, squeeze connection



Colour	White	Capillary tube length 2*	2,000 mm
Thermostat thread	Squeeze connection		
<b>Zero position</b>		<b>Item No.</b>	
Yes		1012275	

# Manual regulating heads



The manual regulating heads allow for later conversion to actuators or thermostats without draining the system.

Zero position	No	Blocking / Limiting	No
Frost protection	No		

## Manual regulating head



Colour	RAL*	Thermostat thread	Item No.
White	9010	M 30 x 1.5	1012565
White	9010	Squeeze connection	1012575



# Thermostats - Accessories and spare parts



## Adapter

### Description

For conversion from M 30 x 1.0 to M 30 x 1.5

### Item No.

1011445

## Angle adapter



### Description

White, connection thread M 30 x 1.5

White, both sides squeeze connection

Anthracite, connection thread M 30 x 1.5

### Item No.

1011450

1011452

1641451



## Extension for thermostatic valves

### Description

For thermostatic valves and Uniboxes (manufactured until 2019), 20 mm

### Item No.

1022698



## Anti-theft ring

### Description

White, for Uni XH, XHM, LH, LHZ, L, LA, SH and vindo TH thermostats, set = 5 pieces

White, for Uni XD, LD and vindo TD thermostats, set = 5 pieces

### Item No.

1011766

1011775



## Union nut cover

### Description

Anthracite, for Uni LH, SH, XH, LA, XHM, vindo TH and pinox thermostats, set = 5 pieces

Chrome plated, for Uni LH, SH, XH, LA, XHM, vindo TH and pinox thermostats, set = 5 pieces

Stainless steel design, for Uni LH, SH, XH, LA, XHM, vindo TH and pinox thermostats, set = 5 pieces

White, for Uni LH, SH, XH, LA, XHM, vindo TH and pinox thermostats, set = 5 pieces

### Item No.

1011380

1011381

1011383

1011393



**Reinforcing cap**

For the protection against vandalism.

**Description****Item No.**

For Uni LH, LHZ and LA thermostats, not lockable, white

1011865

For Uni LH, LHZ and LA thermostats, lockable, white

1011866

**Combined cap****Description****Item No.**

For thermostatic valves, opening and closing possible with Allen screw, M 30 x 1.5

1627965

**Setting key****Description****Item No.**

For Uni LHB and LDB thermostats

1011497

**Universal tool****Description****Item No.**

For Uni LHB, LDB, LH and L thermostats as well as AV 9 and AQ thermostatic valves

1011489

**Tool for thermostats****Description****Item No.**

For Uni LH, LHZ, LD, LDV, LDVL and L thermostats as well as special thermostats, for loosening the handwheel and clips, set = 5 pieces

1989100



1.1 Room temperature control

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# ClimaCon F Room thermostats for surface heating



The ClimaCon F room thermostats are used to control the temperature of surface heating and cooling systems as well as heating and cooling ceilings in detached houses or dwellings. Depending on the room thermostat, switching between heating and cooling is possible via a change-over signal, e.g. from the heat pump.

The ClimaCon F room thermostats can be

used in combination with electrothermal actuators (e.g. Aktor T 2P). Alternatively, connection to a connecting block (e.g. FloorCon) is possible. The simple surface-mounted installation and quick configuration make the product very installer-friendly.

Depending on the model, there are room thermostats with reduced display, with integrated time switch and setting options via app.



## ClimaCon F 100 for two pipe applications, heating or cooling, follower



Control	On/off / PWM	Operation	At the room thermostat
Installation	Surface mounting	Switching h / c*	Via change-over
Setback*	Via leader room thermostat		

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators (on/off), "normally closed"	1155010
24 V AC	Electrothermal actuators (on/off), "normally closed"	1155510

## ClimaCon F 310 for two pipe applications, heating or cooling, leader

Switching between time programme and manual mode possible.



Control	On/off / PWM	Switching h / c*	Via change-over
Installation	Surface mounting	Other outputs	1 x potential-free
Setback*	Via time programme (adjustable in the app) Via Eco button at the room thermostat	Communication	Bluetooth
Operation	At the room thermostat With smartphone app		

Voltage	0 - 10 V*	Temperature sensor*	Suitable for	Item No.
230 V AC	No	No	Electrothermal actuators (on/off), "normally closed"	1155031
24 V AC	Yes	Yes	Electrothermal actuators (on/off), "normally closed" Electrothermal actuators (0 - 10 V) "normally closed"	1155531





**ClimaCon F 90 for two pipe applications, heating only/cooling only, follower**

Control	On/off	Setback*	Via leader room thermostat
Installation	Surface mounting	Operation	At the room thermostat

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1155009



**ClimaCon F 210 for two pipe applications, heating only/cooling only, leader**

Switching between time programme and manual mode possible.

Control	On/off / PWM	Operation	At the room thermostat
Installation	Surface mounting		With smartphone app
Setback*	Via time programme (adjustable in the app) Via Eco button at the room thermostat	Communication	Bluetooth

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators (on/off), "normally closed"	1155021



	ClimaCon F 90		ClimaCon F 100		ClimaCon F 210	ClimaCon F 310	
							
	230 V		230 V	24 V	230 V	230 V	24 V
Item no.	1155009	1155010	1155510	1155021	1155031	1155531	
<b>Application</b>							
Heating only / Cooling only	●	—	—	●	—	—	
Heating or cooling (switchable)	—	●	●	—	●	●	
<b>Display</b>							
Setpoint temperature	●	●	●	●	●	●	
Actual temperature	—	—	—	●	●	●	
Status (heating / cooling)	—	—	—	●	●	●	
Mode (Auto / Eco)	—	—	—	●	●	●	
<b>Setting options</b>							
Temperature setting at the room thermostat	●	●	●	●	●	●	
Temperature setting via time profiles in the app	—	—	—	●	●	●	
Setback activation at the room thermostat	—	—	—	●	●	●	
Timed setback via app	●*	●*	●*	●	●	●	
Setback temperature	4 K	4 K	4 K	Flexible via app	Flexible via app	Flexible via app	
Temperature limitation via app	—	—	—	●	●	●	
External limiter function – automatic switch-off when reaching the max. / min. temperature set via app	—	—	—	—	—	●	

\* Leader function - only possible if leader room thermostats (ClimaCon F 210 / F 310) or a FloorCon connecting block are used.

# Room thermostats heating, flush mounting



The flush-mounted electric room thermostat is required in conjunction with the Aktor T 2P electrothermal actuators (on/off) for individual room temperature control.

Heating: Use electrothermal actuators (on/off) "normally closed". Temperature setback possible via external time switch.

Cooling: Use electrothermal acutators (on/off) "normally open".

Temperature range between 5 and 30 °C. Setpoint range can be limited by concealed locking clips.




## Room thermostat for two pipe applications, flush mounting

Setpoint range can be limited by concealed locking clips.

Control	On/off	Setback*	Via external time switch (follower function)
---------	--------	----------	----------------------------------------------

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1152071

# Room thermostats heating/cooling



The electronic surface-mounted room thermostat is used in conjunction with electromotive or electrothermal actuators for individual room temperature control in heating and cooling systems. It can also be used in three or four pipe systems and has an adjustable neutral zone between heating and cooling stage. The temperature is set at the room thermostat.

**Room thermostat for four pipe applications, surface mounting**

Neutral zone      Adjustable between 0.5 K and 7.5 K



Voltage	Control	Suitable for	Item No.
24 V AC	0 - 10 V (2x)	Electrothermal actuators (0 - 10 V) "normally closed"	1152151

# Room thermostats heating/cooling with fan control



Room thermostats for electrical control of fan coil units for demand-oriented heating and cooling. Depending on the room thermostat, fan coil units in two or four pipe systems can be controlled.  
The temperature as well as the fan speed can be set at the room thermostat. Furthermore, various operating modes can be set.



## Room thermostat for two pipe applications, heating only/cooling only, 230 V

Setback*	Via adjustable time programme	Installation	Flush mounting
Voltage	Control	Suitable for	Item No.
230 V AC	On/off	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1152453



## Room thermostat for two pipe applications, heating or cooling, 24 V

Installation	Surface mounting	Other outputs	On/off auxiliary heating
Voltage	Control	Suitable for	Item No.
24 V AC	0 - 10 V	Electrothermal actuators (0 - 10 V) "normally closed"	1152064



## Room thermostat for four pipe applications, heating and cooling, 24 V

Installation	Surface mounting	Other outputs	On/off auxiliary heating
Voltage	Control	Suitable for	Item No.
24 V AC	0 - 10 V (2x)	Electrothermal actuators (0 - 10 V) "normally closed"	1152065



# Room thermostats - Accessories

## Electrical connecting block for surface heating

When using item no. 1400980 / 82 with 24 V, an external power supply of 24 V must be available. Item no. 1153053 can be used as transformer.



Description	Item No.
6 control zones, heating, 24 V / 230 V	1400980
10 control zones, heating / cooling (change-over), pump control, 230 V	1400981
10 control zones, heating / cooling (change-over), pump control, 24 V	1400982
10 control zones, heating / cooling (change-over), pump and boiler control and integrated time switch, 230 V	1400983

## FloorCon Electrical connecting block with automatic hydronic balancing for surface heating and cooling



Description	Item No.
FloorCon F 200, without channel allocation, connection of 8 room thermostats / 12 actuators, 230 V	1400984
FloorCon F 300, with channel allocation, connection of 8 room thermostats / 12 actuators, 230 V	1400985

## Temperature sensor for FloorCon

The temperature sensor is required 1x for the supply of the heating circuit manifold and 1x in the return per heating circuit.



Description	Item No.
Temperature sensor for FloorCon F, 850 mm	1029094

## Aktor T 2P electrothermal actuator for FloorCon connecting block



Description	Item No.
On/off control, "normally closed", 230 V, 2 m cable	1012452

**Safety temperature limiter**



Description	Item No.
For max. limitation of the heating circuit temperature, 20 °C - 90 °C	1344583

**Sensor GA FD Dew point monitor**

Is required in conjunction with room thermostats to protect against condensation on cooling surfaces.



Description	Item No.
For heating/cooling applications to prevent condensation, 24 V, with change-over contact	1141951

# wibutler Smart Home system



The Smart Home sector includes the networking of several trades within individual dwellings or detached houses. By means of a gateway, various components can be integrated into the Smart Home system and controlled via smartphone, tablet or PC. By connecting the gateway to a commercially available rout-

er, remote access is easily possible while on the move.

The intelligent wibutler pro 2 gateway is the heart of the smart home. In addition to surface heating and radiators, other systems such as lighting and shading can also be integrated.

## OVbalance Home Basic set - radiator with wibutler pro 2



### Scope of delivery

1 x wibutler pro 2 item no. 1150791  
1 x R-Tronic RT B wireless thermostat item no. 1150780  
1 x mote 420 wireless actuator item no. 1150766

### Item No.

1150792



## wibutler pro 2 gateway (EnOcean, Zigbee, LAN, WLAN)

The lighting, shading, heating and sanitary, air conditioning, ventilation and security systems can be interconnected with the help of the wibutler gateway.

### Operation

With smartphone app  
With tablet app  
Via computer  
Amazon Alexa  
Google home

### System requirements terminals

Apple: at least iOS 9  
Android: at least Android 5

### Voltage

100 - 230 V AC

### Item No.

1150791



### R-Tronic Wireless thermostat (EnOcean)

Installation	Surface mounting	Power supply	Battery operated
Communication	EnOcean	Compatible with wibutler	Yes

Designation	Humidity sensor*	EEP*	Item No.
RT B (EnOcean)	No	A5-10-02	1150780
		A5-10-03	
		A5-10-04	
		A5-10-06	
		A5-10-06 + RPS	
RTF B (EnOcean)	Yes	A5-10-11	1150781
		A5-10-12	
		A5-10-22	
		A5-10-23	

### mote 420 Wireless actuator (EnOcean)

Only functions in combination with communication centres / gateways (e.g. with the wibutler gateway) and room thermostats supporting this EnOcean Equipment Profile.

Communication	EnOcean	Battery lifespan	About 2 years
Power supply	Battery operated		



Valve connection	EEP*	Item No.
Connection thread M 30 x 1.5	A5-20-01	1150766



# R-Tronic System for individual room temperature control



The R-Tronic wireless thermostats with closed radio communication (proprietary) are used in stand-alone operation in connection with wireless actuators to control radiators or in connection with a multi-channel wireless receiver to control surface heating systems.

The temperature setting as well as the storage of time programmes is carried out at the wireless thermostat. Depending on the model, an additional measurement of the relative humidity in % is possible.

ity in % is possible.

Power is supplied by batteries or a power supply unit (100 - 240 V). For the battery-operated models, power supply via the mains is possible as an alternative.

In battery operation, up to 3 participants can be taught in, in mains operation, up to 8 participants can be taught in. In mains operation it is also possible to teach in window contacts.

## R-Tronic Wireless thermostat (proprietary radio communication)



Installation	Surface mounting	Power supply	Battery operated
Communication	Proprietary radio		

Designation	Humidity sensor*	Item No.
RT B	No	1150680
RTF B	Yes	1150681

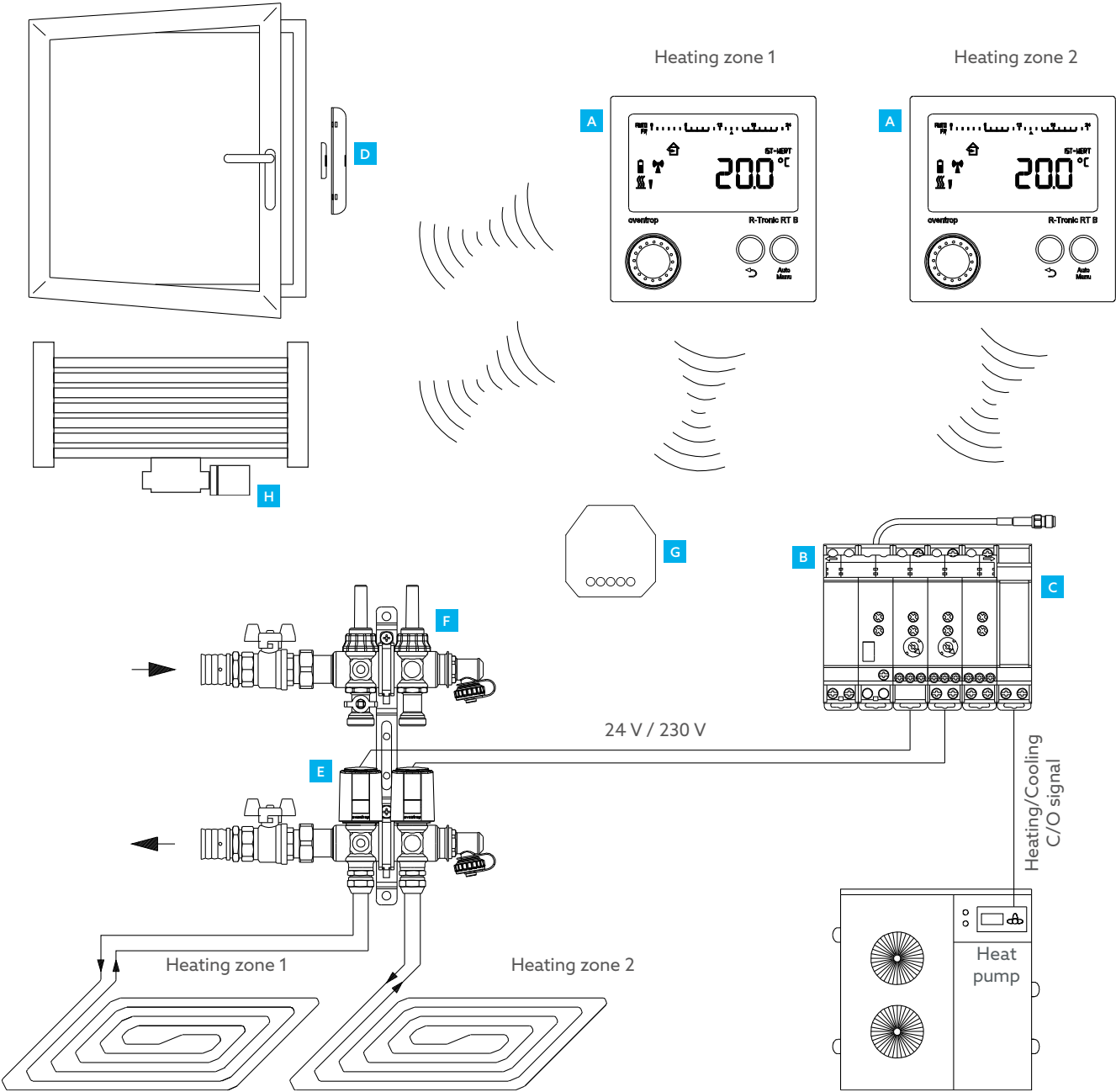
## mote 320 Wireless actuator (proprietary radio communication)

Compatible with R-Tronic wireless thermostats (proprietary radio communication).



Power supply	Battery operated	Communication	Proprietary radio
Battery lifespan	About 2 years	Valve connection	Connection thread M 30 x 1.5

Item No.
1150665



<b>A</b>	<b>R-Tronic RT B / R-Tronic RTF B</b> Wireless thermostat	1150680/81
<b>B</b>	<b>R-Con</b> Wireless receiver	1150770-73
<b>C</b>	<b>R-Con HC</b> Extension module heating / cooling	1150774
<b>D</b>	<b>FK-C F</b> Wireless window contact	1153070

<b>E</b>	<b>Aktor T 2P</b> Electrothermal actuator two point control	1012415/16
<b>F</b>	<b>Multidis SF</b> Heating circuit distributor/collector	1406552-62 1404952-62
<b>G</b>	Wireless repeater	1153060
<b>H</b>	<b>mote 320</b> Wireless actuator	1150665/75



## 1.1 Room temperature control

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# Aktor T Electrothermal actuators



Electrothermal actuators are used for heating, ventilation and air conditioning. The actuators can be used for room temperature control or as zone valves. They can be used, for example, with conventional radiators, radiators with integrated valve sets, heating circuit manifolds, radiant heating ceilings, cooling ceilings and induction units in conjunction with on/off room thermostats.

All electrothermal actuators are protected against overvoltage, a varistor is not required.

Oventrop offers actuators in the variants "normally closed" and "normally open". The model with auxiliary switch can switch e.g. a pump directly via the integrated, potential-free contact.



## Aktor T 2P on/off control

Valve connection	Connection thread M 30 x 1.5	Stroke	5 mm
Installation position	Any		
Mounting	Plug-in connection with valve adapter		

Voltage	Version	Cable* (m)	Item No.
230 V AC	"Normally closed"	1	1012415
24 V AC / DC	"Normally closed"	1	1012416
230 V AC	"Normally open"	1	1012425
24 V AC / DC	"Normally open"	1	1012426
230 V AC	"Normally closed" with integrated auxiliary switch	1	1012435
24 V AC / DC	"Normally closed"	2	1012442
230 V AC	"Normally closed"	2	1012452
230 V AC	"Normally closed"	5	1012455
230 V AC	"Normally closed"	10	1012459



## Aktor T ST 0 - 10 V control

Valve connection	Connection thread M 30 x 1.5	Stroke	5 mm
Installation position	Any		
Mounting	Plug-in connection with valve adapter		

Voltage	Version	Cable* (m)	Item No.
24 V AC	"Normally closed"	1	1012953



# Aktor T - Accessories

## Valve adapter



### Description

Connection thread M 30 x 1.5

Connection thread M 30 x 1.5, high model (11 mm), necessary when using the actuators item no. 10124.. and 1012953 with Hycocan ETZ/HTZ or Multiblock T/TU/TFU/TQ and the design cover

For Oventrop valves with connection thread M 30 x 1.0 (manufactured until 1998)

For valves with squeeze connection

### Item No.

1012461

1012462

1012890

1012463

## Reinforcing cap



### Description

For electrothermal actuators, including special valve adapter with connection thread M 30 x 1.5 for installation

### Item No.

1012450

# Aktor M Electromotive actuators



Electromotive actuators are used for heating, ventilation and air conditioning. Amongst others, the actuators can be used for room temperature control. They can be used, for example, with conventional radiators, radiators with integrated valve sets, heating circuit manifolds

(except for item no. 1012710 / 11), radiant heating ceilings, cooling ceilings and induction units.

Oventrop offers electromotive actuators with and without communication interfaces.



## Aktor M modulating with 0 - 10 V

With the electrical emergency control function, the actuator moves to a predefined stroke position in the event of a supply voltage failure. Various characteristic lines can be set for Cocon QTZ (item no. 1012717, PN 25 only).

Modulating proportional actuator	Yes	Stroke	4 mm
Automatic valve blocking protection function	Yes	Cable*	1.5 m
Direction of action adjustable	Yes	Zero point detection	Yes

Voltage	Electrical emergency control function	Additional on/off / floating control	Position feedback	Item No.
24 V AC / DC	Yes	No	Yes	1012717
24 V AC / DC	No	Yes	No	1012725
24 V AC / DC	No	No	Yes	1012726



## Aktor M on/off and floating control

Automatic valve blocking protection function	No	Cable*	1.5 m
Direction of action adjustable	No	Zero point detection	Yes
Stroke	4 mm		

Voltage	Item No.
230 V AC	1012729



## Aktor M on/off control, with short running time (3 s), connection thread M 30 x 1.5

Automatic valve blocking protection function	No	Contact open - drive tappet retracts	Yes
Stroke	6.5 mm	Cable*	1.5 m

Voltage	Item No.
230 V AC	1012710
24 V AC / DC	1012711

**Aktor M with KNX interface**

Power consumption extremely low, no external power supply necessary. With integrated binary input (e.g. for window contact, dew point sensor, motion detector).

Stroke 4 mm

**Voltage**

21 - 32 V DC (from KNX bus)

**Item No.**

1012746

**Aktor M with Modbus RTU interface**

Various parameters can be configured and/or read out via Modbus RTU (e.g. volume flow, valve characteristic line, sensor type, operating hours, operating and fault messages). Two universal inputs/outputs enable the connection of temperature sensors, window contacts and humidity sensors, as well as the control of 0 - 10 V rotary actuators.

Automatic valve blocking protection function	Yes	Cable*	1.5 m
Position feedback	0 - 100 %	Zero point detection	Yes

**Voltage**

24 V AC / DC

24 V AC / DC

**Suitable for**

Cocon QTZ

Cocon QTR/QFC DN 40/50

**Stroke  
(mm)**

9

14

**Item No.**

1012745

1158014

# Actuators with radio interface

Electronic battery operated actuators for room temperature control at the radiator with communication interface:

The mote 420 wireless actuator can be used in combination with R-Tronic wireless thermostats (EnOcean) or be integrated into Smart Home systems (e.g. wibutler). The actuator is configured in the Smart Home system via app.

The mote 320 wireless actuator can be used in combination with R-Tronic wireless thermostats (proprietary radio communication). The actuator is configured at the R-Tronic wireless thermostat.

The mote 200 wireless actuator offers a stand-alone solution. The actuator with Bluetooth interface is configured via a mobile terminal or directly at the actuator.

## mote 420 Wireless actuator (EnOcean)



Only functions in combination with communication centres / gateways (e.g. with the wibutler gateway) and room thermostats supporting this EnOcean Equipment Profile.

Communication	EnOcean	Battery lifespan	About 2 years
Power supply	Battery operated		

Valve connection	EEP*	Item No.
Connection thread M 30 x 1.5	A5-20-01	1150766



## mote 320 Wireless actuator (proprietary radio communication)



Compatible with R-Tronic wireless thermostats (proprietary radio communication).

Communication	Proprietary radio	Battery lifespan	About 2 years
Power supply	Battery operated		

Valve connection	Item No.
Connection thread M 30 x 1.5	1150665





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## 1.2 Hydronic balancing at the radiator

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# AQ Pressure independent thermostatic valves



For automatic hydronic balancing at the radiator in central heating and cooling systems with closed circuits. Installation in the supply pipe. The Q-Tech valves are ideal for retrofitting and refurbishment of existing heating systems, as complex calculations of preset values are not necessary. The volume flow is kept constant even if the differential pressure in the system fluctuates. The flow range can be variably ad-

justed between 10 and 170 l/h. A corresponding presetting key is included.

The AQ thermostatic valves are available in angle, straight, reversed angle and double angle versions.

The body of the valve is made of brass and the surface is nickel plated. The stem is made of stainless steel.

Body material	Brass	Max. operating pressure	10 bar
Thermostat thread	M 30 x 1.5	Colour protection cap	Grey
Q-Tech*	Yes	Two pipe*	Yes
Presetting	Yes	One pipe*	No
Medium	Water-glycol mixture Water		

## AQ Angle

Flow range 10 up to 170 l/h



Nominal size	Radiator connection	Pipe connection	Item No.
DN 10	R 3/8	Rp 3/8	1182063
DN 15	R 1/2	Rp 1/2	1182064
DN 20	R 3/4	Rp 3/4	1182066
DN 25	R 1	Rp 1	1182068

## AQ Angle (self-sealing)

Flow range 10 up to 170 l/h



Nominal size	Radiator connection	Pipe connection	Item No.
DN 15	R 1/2	Rp 1/2	1182084

## AQ Straight



Flow range (l/h)	Nominal size	Radiator connection	Pipe connection	Item No.
10 up to 170	DN 10	R 3/8	Rp 3/8	1182163
35 up to 420	DN 15	R 1/2	Rp 1/2	1182164
10 up to 170	DN 20	R 3/4	Rp 3/4	1182166
10 up to 170	DN 25	R 1	Rp 1	1182168

### AQ Straight (self-sealing)



Flow range 10 up to 170 l/h

Nominal size	Radiator connection	Pipe connection	Item No.
DN 15	R 1/2	Rp 1/2	1182184

### AQ Double angle left



Flow range (l/h)	Nominal size	Radiator connection	Pipe connection	Item No.
35 up to 420	DN 15	R 3/8	Rp 3/8	1182360
10 up to 170	DN 15	R 1/2	Rp 1/2	1182362

### AQ Double angle right



Flow range (l/h)	Nominal size	Radiator connection	Pipe connection	Item No.
35 up to 420	DN 15	R 3/8	Rp 3/8	1182361
10 up to 170	DN 15	R 1/2	Rp 1/2	1182363

### AQ Reversed angle



Flow range (l/h)	Nominal size	Radiator connection	Pipe connection	Item No.
35 up to 420	DN 15	R 3/8	Rp 3/8	1182263
35 up to 420	DN 15	R 1/2	Rp 1/2	1182264
10 up to 170	DN 20	R 3/4	Rp 3/4	1182266



#### Sets with AQ thermostatic valve

Flow range 10 up to 170 l/h Operating temperature 2 to 110 °C

Consisting of	Type	Nominal size	Colour	Item No.
Combi 2 Radiator lockshield valve Combi 2 Radiator lockshield valve Uni LH Thermostat	Angle	DN 10	White	1703063
Combi 2 Radiator lockshield valve Combi 2 Radiator lockshield valve Uni LH Thermostat	Angle	DN 15	White	1703064
Combi 2 Radiator lockshield valve Combi 2 Radiator lockshield valve Uni LH Thermostat	Straight	DN 10	White	1703163
Combi 2 Radiator lockshield valve Combi 2 Radiator lockshield valve Uni LH Thermostat	Straight	DN 15	White	1703164

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# AQH Pressure independent thermostatic valves for high flow rates



For automatic hydronic balancing in heating and cooling systems with closed circuits. Installation in the supply pipe. The Q-Tech valves with **high flow rate (AQH)** are ideal for new construction, refurbishment and retrofitting in combination with radiant ceiling panels, fan coils, radiators and other consumers. Complex pipework calculations are not necessary. The volume flow is kept constant even if the differential pressure in the system

fluctuates. The **flow range** can be variably adjusted between **35 and 420 l/h**. A corresponding presetting key is included.

The AQH thermostatic valves DN 15 are available in angle, straight and reversed angle versions.

The body of the valve is made of brass and the surface is nickel plated. The stem is made of stainless steel.

Body material	Brass	Operating temperature	2 to 110 °C
Flow range	35 up to 420 l/h	Max. operating pressure	10 bar
Thermostat thread	M 30 x 1.5	Colour protection cap	Grey
Q-Tech*	Yes	One pipe*	No
Presetting	Yes	Two pipe*	Yes
Medium	Water Water-glycol mixture		

## AQH Straight



Nominal size	Radiator connection	Pipe connection	Item No.
DN 15	R 1/2	Rp 1/2	1183194

## AQH Angle



Nominal size	Radiator connection	Pipe connection	Item No.
DN 15	R 1/2	Rp 1/2	1183094

## AQH Reversed angle



Nominal size	Radiator connection	Pipe connection	Item No.
DN 15	R 1/2	Rp 1/2	1183294



# EQ Pressure independent design thermostatic valves



For automatic hydronic balancing at the radiator in central heating and cooling systems with closed circuits. Installation in the supply pipe. The Q-Tech valves are ideal for retrofitting and refurbishment of existing heating systems, as complex calculations of preset values are not necessary. The volume flow is kept constant even if the differential pressure in the system fluctuates. The flow range can be variably adjusted between 10 and 170 l/h. A correspond-

ing presetting key is included.

The EQ thermostatic valves are available in angle and straight versions.

The design of the exclusive radiator fittings combines extraordinary shape with outstanding function, especially for modern radiators and bathroom radiators. The body of the valve is made of brass and the surface is chrome plated or white powder coated. The stem is made of stainless steel.

Body material	Brass	Max. operating pressure	10 bar
Flow range	10 up to 170 l/h	Colour protection cap	Grey
Thermostat thread	M 30 x 1.5	One pipe*	No
Q-Tech*	Yes	Two pipe*	Yes
Presetting	Yes		
Medium	Water-glycol mixture Water		

## EQ Angle

Nominal size DN 15



Surface	Operating temperature	Radiator connection	Pipe connection	Item No.
Chrome plated	2 to 110 °C	R 1/2	Rp 1/2	1163552
White powder coated	2 to 90 °C	R 1/2	Rp 1/2	1163562

## EQ Straight

Nominal size DN 15



Surface	Operating temperature	Radiator connection	Pipe connection	Item No.
Chrome plated	2 to 110 °C	R 1/2	Rp 1/2	1163652
White powder coated	2 to 90 °C	R 1/2	Rp 1/2	1163662

# Multiblock TQ Connection fittings with thermostatic valve



The Multiblock TQ connection fitting is a combination consisting of a thermostatic valve and a connection fitting at the radiator. The special QA valve insert makes the fitting suitable for automatic hydronic balancing at the radiator in central heating and cooling systems with closed circuits. The fitting is soft sealing to the radiator. The connection fitting is suitable for connection to radiators with G 1/2 internal thread.

The following functions are available: Infinitely adjustable presetting for automatic hydronic balancing, shutoff as well as draining and filling. The Multiblock TQ connection fitting is available in straight and angle versions and is made of nickel plated brass, the centre distance is 50 mm. Design covers are available in various colours and surfaces (see chapter "Q-Tech Accessories and spare parts").

Body material	Brass	Max. operating pressure	10 bar
Surface	Nickel plated	Operating temperature	2 to 110 °C
Q-Tech	Yes	One pipe*	No
Presetting	Yes	Two pipe*	Yes
Flow range	10 up to 170 l/h	Medium	Water
Distance between pipe centres	50 mm		Water-glycol mixture
Shutoff	Yes	Thermostat thread	M 30 x 1.5
Filling and draining	Yes		

## Multiblock TQ Angle

Thermostat connection right No



### Radiator connection

G 1/2 external

### Pipe connection

G 3/4 Eurocone

### Thermostat connection

Left hand side

### Item No.

1184074

## Multiblock TQ Straight

Thermostat connection right Yes



### Radiator connection

G 1/2 external

### Pipe connection

G 3/4 Eurocone

### Thermostat connection

Left or right hand side

### Item No.

1184073



# Multiblock TQ-RTL Connection fitting with thermostatic valve and return temperature limiter



The Multiblock TQ-RTL connection fitting is designed for the combined use of radiators and surface temperature regulation in two pipe systems. The fitting includes a QA valve insert for automatic hydronic balancing and an RTL controller for return temperature limitation. The room temperature and return temperature are controlled separately. The fitting is soft sealing to the radiator. The connection fitting is suitable for connection to radiators with G 1/2 internal thread.

The following functions are available: Infinitely adjustable presetting for automatic hydronic balancing, shutoff and return temperature limitation for surface temperature regulation. The connection fitting Multiblock TQ-RTL is available in angle version and is made of nickel plated brass. A mounting aid is included in the scope of delivery. Design covers are available in white and chrome plated (see chapter "Q-Tech Accessories and spare parts").

Q-Tech	Yes	Two pipe*	Yes
Presetting	Yes	Surface	Nickel plated
Surface heating*	Yes	Medium	Water Water-glycol mixture
Distance between pipe centres	50 mm	Thermostat thread	M 30 x 1.5
Body material	Brass	Thermostat connection	Left hand side
Shutoff	Yes	Filling and draining	No
Max. operating pressure	10 bar	Return temperature*	Yes
Operating temperature	2 to 70 °C		
One pipe*	No		

## Multiblock TQ-RTL Angle



### Radiator connection

G 1/2 external

### Pipe connection

G 3/4 Eurocone

### Item No.

1184076

# Multiflex FQ Connection fittings with flow limitation



The Multiflex FQ connection fittings are designed for the connection of radiators with integrated valve set. The special QA valve insert makes the fitting suitable for automatic hydronic balancing at the radiator in central heating and cooling systems with closed circuits.

The fitting is soft sealing to the radiator. Depending on the version, the connection to the radiator is either with G 3/4 union nut and in-

sert to radiators with G 3/4 external thread (Eurocone) or with G 3/4 union nut and screw-in connection piece to radiators with G 1/2 internal thread.

The following functions are available: Shutoff, draining, filling and presetting. The Multiflex connection fitting is available in straight and angle versions and is made of nickel plated brass, the centre distance is 50 mm.

Presetting	Yes	Shutoff	Yes
Q-Tech	Yes	One pipe*	No
Body material	Brass	Two pipe*	Yes
Distance between pipe centres	50 mm	Surface	Nickel plated
Max. operating pressure	10 bar	Medium	Water
Operating temperature	2 to 110 °C		Water-glycol mixture
Flow range	10 up to 170 l/h	Filling and draining	No

## Multiflex FQ Straight



Radiator connection	Pipe connection	Item No.
G 3/4 union nut	G 3/4 Eurocone	1015803
G 1/2 external	G 3/4 Eurocone	1015873

## Multiflex FQ Angle



Radiator connection	Pipe connection	Connection	Item No.
G 3/4 union nut	G 3/4 Eurocone	Left hand side	1015804
G 3/4 union nut	G 3/4 Eurocone	Right hand side	1015805
G 1/2 external	G 3/4 Eurocone	Left hand side	1015874
G 1/2 external	G 3/4 Eurocone	Right hand side	1015875



# Q-Tech - Accessories and spare parts

## Design cover for Multiblock T/TU/TQ, angle version



Description	Item No.
Anthracite	1184089
Stainless steel design	1184091
White	1184096
Chrome plated	1184098

## Design cover for Multiblock T/TU/TQ, straight version



Description	Item No.
Anthracite	1184088
Stainless steel design	1184090
White	1184095
Chrome plated	1184097

## Design cover for Multiblock T-RTL/TQ-RTL



Description	Item No.
Chrome plated	1184077
White	1184087

## Covering rosette



Description	Item No.
For Multiblock T-RTL and TQ-RTL, white	1189087



### Demo-Bloc Special tool

#### Description

Including coupling set for thermostatic valves M 30 x 1.5 and AQ/AQH thermostatic valves

#### Item No.

1188051

### Coupling set



#### Description

For Demo-Bloc, for valves with connection thread M 30 x 1.0

For Demo-Bloc, for replacing the HRV and Combi LR inserts

#### Item No.

1188089

1188095

### Differential pressure measuring spindle



#### Description

Spindle for differential pressure measurement at the thermostatic valve

#### Item No.

1188093



### Screen insert

#### Description

For AQ and AQH thermostatic valves, set = 10 pieces

#### Item No.

1187090

### Commissioning block



#### Description

For Multiblock T-RTL and TQ-RTL

#### Item No.

1184094

### Mounting aid



Mounting aid for fixing the pipes of the Multiblock T-RTL connection fitting. After creating the wall slots, the mounting aid must be fixed in the exact position on the unplastered wall using screws (not included in the scope of delivery). During installation, ensure that the pipes are fed in parallel. The protruding pipes must be fixed in the mounting aid with the enclosed membrane sleeves.

Then plaster the wall. Do not plaster the wall slot, as the installation of the pipes for the surface temperature regulation is only carried out after the wall plastering work. The pipes for the surface temperature regulation must then be fixed in the mounting aid according to the same principle.

#### Description

For Multiblock T-RTL and TQ-RTL

#### Item No.

1189094

### Presetting key



#### Description

For AQ, RFQ and EQ thermostatic valves, Multiblock TQ, TQ-RTL, Multiflex FQ, Unibox TQ, TQ vario, Multidis SFQ and GHQ valve insert

#### Item No.

1651182

### Replacement valve insert AQ/AQH



#### Description

For AQ, RFQ and EQ thermostatic valves, Multiblock TQ and TQ-RTL, Multiflex FQ as well as Unibox TQ and TQ vario, 10 - 170 l/h, M 30 x 1.5

#### Item No.

1187065

For AQH thermostatic valves, 35 - 420 l/h, M 30 x 1.5

1187095

### Replacement screw-in connection piece



#### Description

For Multiflex F, FQ, Multiblock T, TU, TFU, TQ, T-RTL and TQ-RTL, G 1/2 self-sealing external thread x G 3/4 flat sealing external thread, brass, unplated, set = 10 pieces

#### Item No.

1028252



## 1.2 Hydronic balancing at the radiator

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# AV 9 Presettable thermostatic valves



For manual hydronic balancing at the radiator in central heating and cooling system with closed circuits. Installation in the supply pipe. The integrated AV 9 valve insert allows for infinitely adjustable presetting to adapt the volume flow to the required heat demand. The

AV 9 thermostatic valves are available in angle, straight, reversed angle and double angle versions.

The body of the valve is made of brass and the surface is nickel plated. The spindle is made of stainless steel.

Body material	Brass	Max. operating pressure	10 bar
Surface	Nickel plated	Operating temperature	2 to 120 °C
Presetting	Yes	Colour protection cap	White
Thermostat thread	M 30 x 1.5	One pipe*	No
Medium	Water-glycol mixture Water	Two pipe*	Yes

## AV 9 Angle



Nominal size	kvs	Pipe connection	Radiator connection	Certification	Item No.
DN 10	1.10	Rp 3/8	R 3/8	Keymark	1183703
DN 15	1.20	Rp 1/2	R 1/2	Keymark	1183704
DN 15	1.20	G 3/4 external	R 1/2		1183747
DN 20	1.30	Rp 3/4	R 3/4	Keymark	1183706
DN 25	1.30	Rp 1	R 1		1183708

## AV 9 Angle (self-sealing)



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 15	1.20	Rp 1/2	R 1/2	1183784

## AV 9 Straight



Nominal size	kvs	Pipe connection	Radiator connection	Certification	Item No.
DN 10	0.90	Rp 3/8	R 3/8	Keymark	1183803
DN 15	1.00	Rp 1/2	R 1/2	Keymark	1183804
DN 20	1.20	Rp 3/4	R 3/4	Keymark	1183806
DN 25	1.20	Rp 1	R 1		1183808
DN 15	1.00	G 3/4 external	R 1/2		1183847

#### AV 9 Straight (self-sealing)



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 15	1.00	Rp 1/2	R 1/2	1183884

#### AV 9 Double angle left



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 15	1.00	G 3/4 external	R 1/2	1183446
DN 10	0.90	Rp 3/8	R 3/8	1183470
DN 15	1.00	Rp 1/2	R 1/2	1183472

#### AV 9 Double angle right



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 15	1.00	G 3/4 external	R 1/2	1183447
DN 10	0.90	Rp 3/8	R 3/8	1183471
DN 15	1.00	Rp 1/2	R 1/2	1183473

#### AV 9 Reversed angle



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	0.90	Rp 3/8	R 3/8	1183903
DN 15	1.00	Rp 1/2	R 1/2	1183904
DN 20	1.20	Rp 3/4	R 3/4	1183906
DN 15	1.00	G 3/4 external	R 1/2	1183942

#### AV 9 Straight for the return



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	0.90	Rp 3/8	R 3/8	1183893
DN 15	1.00	Rp 1/2	R 1/2	1183894

### AV 9 Reversed angle for the return



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	1.10	Rp 3/8	R 3/8	1183793
DN 15	1.20	Rp 1/2	R 1/2	1183794

### Sets with AV 9 thermostatic valve



Consisting of	Type	Colour	Item No.
AV 9 Thermostatic valve Combi 2 Radiator lockshield valve Uni LH Thermostat	Angle	White	1683703
AV 9 Thermostatic valve Combi 2 Radiator lockshield valve Uni LH Thermostat	Angle	White	1683704
AV 9 Thermostatic valve Combi 2 Radiator lockshield valve Uni LH Thermostat	Straight	White	1683803
Combi 2 Radiator lockshield valve Combi 2 Radiator lockshield valve Uni LH Thermostat	Straight	White	1683804

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# RFV 9 Presettable thermostatic valves with reduced dimensions



For manual hydronic balancing at the radiator in central heating and cooling system with closed circuits. Installation in the supply pipe. The integrated AV 9 valve insert allows for infinitely adjustable presetting to adapt the volume flow to the required heat demand. The RFV 9 thermostatic valves are available

in angle and straight versions. The thermostatic valve RFV 9 with reduced dimensions has been specially designed for use in confined installation conditions.

The body of the valve is made of brass and the surface is nickel plated. The spindle is made of stainless steel.

Body material	Brass	Operating temperature	2 to 120 °C
Surface	Nickel plated	Colour protection cap	Green
Presetting	Yes	One pipe*	No
Thermostat thread	M 30 x 1.5	Two pipe*	Yes
Medium	Water-glycol mixture Water	Compact design	Yes
Max. operating pressure	10 bar		

## RFV 9 Angle



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	1.10	Rp 3/8	R 3/8	1185003
DN 15	1.20	Rp 1/2	R 1/2	1185004
DN 20	1.30	Rp 3/4	R 3/4	1185006

## RFV 9 Straight



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	0.90	Rp 3/8	R 3/8	1185103
DN 15	1.00	Rp 1/2	R 1/2	1185104
DN 20	1.20	Rp 3/4	R 3/4	1185106

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# CV 9 Presettable thermostatic valves with chrome plated body



For manual hydronic balancing at the radiator in central heating and cooling system with closed circuits. Installation in the supply pipe. The integrated AV 9 valve insert allows for infinitely adjustable presetting to adapt the volume flow to the required heat demand. The

CV 9 thermostatic valves are available in angle, straight, and double angle versions. The body of the valve is made of brass and the surface is chrome plated. The spindle is made of stainless steel.

Body material	Brass	Max. operating pressure	10 bar
Surface	Chrome plated	Operating temperature	2 to 120 °C
Presetting	Yes	Colour protection cap	White
Thermostat thread	M 30 x 1.5	One pipe*	No
Medium	Water-glycol mixture Water	Two pipe*	Yes

## CV 9 Angle



Nominal size DN 15

kvs	Pipe connection	Radiator connection	Item No.
1.20	Rp 1/2	R 1/2	1162054

## CV 9 Straight



Nominal size DN 15

kvs	Pipe connection	Radiator connection	Item No.
1.00	Rp 1/2	R 1/2	1162154

## CV 9 Double angle left



Nominal size DN 15

kvs	Pipe connection	Radiator connection	Item No.
1.00	Rp 1/2	R 1/2	1162472

CV 9 Double angle right



kvs	Nominal size	Pipe connection	Radiator connection	Item No.
1.00	DN 15	Rp 1/2	R 1/2	1162473

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# ADV 9 Presettable thermostatic valves, self-closing in case of vandalism on the thermostat



For manual hydronic balancing at the radiator in central heating and cooling system with closed circuits. Installation in the supply pipe. The integrated ADV 9 valve insert allows for infinitely adjustable presetting to adapt the volume flow to the required heat demand. The ADV 9 thermostatic valves are available in angle and straight versions. The body of the valve is made of brass and the

surface is nickel plated. The spindle is made of stainless steel.

The double function of these valves causes the valve to close automatically to 5% of the nominal flow rate if the thermostat is dismantled or destroyed (vandalism). This provides the frost protection function and prevents an uncontrolled rise in room temperature.

Body material	Brass	Max. operating pressure	10 bar
Surface	Nickel plated	Operating temperature	2 to 120 °C
Presetting	Yes	Colour protection cap	Cement grey
Thermostat thread	M 30 x 1.5	One pipe*	No
Medium	Water-glycol mixture Water	Two pipe*	Yes

## ADV 9 Angle



Nominal size	Pipe connection	Radiator connection	Item No.
DN 10	Rp 3/8	R 3/8	1188363
DN 15	Rp 1/2	R 1/2	1188364
DN 20	Rp 3/4	R 3/4	1188366

## ADV 9 Straight



Nominal size	Pipe connection	Radiator connection	Item No.
DN 10	Rp 3/8	R 3/8	1188463
DN 15	Rp 1/2	R 1/2	1188464
DN 20	Rp 3/4	R 3/4	1188466

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# E Presettable design thermostatic valves



For manual hydronic balancing at the radiator in central heating and cooling system with closed circuits. Installation in the supply pipe. The integrated AV 9 valve insert allows for infinitely adjustable presetting to adapt the volume flow to the required heat demand. The E thermostatic valves are available in angle,

straight, reversed angle and double angle versions.

The body of the fitting is made of brass and the surface is offered in different colours. The spindle is made of stainless steel. With their exclusive design, the valves fit in perfectly with modern living room design.

Body material	Brass	Max. operating pressure	10 bar
Thermostat thread	M 30 x 1.5	Colour protection cap	White
Presetting	Yes	One pipe*	No
Medium	Water-glycol mixture Water	Two pipe*	Yes

## E Angle



Nominal size	Surface	kvs	Operating temperature	Pipe connection	Radiator connection	Item No.
DN 15	Anthracite	1.20	2 to 120 °C	Rp 1/2	R 1/2	1163032
DN 15	Chrome plated	1.20	2 to 120 °C	Rp 1/2	R 1/2	1163052
DN 15	White powder coated	1.20	2 to 90 °C	Rp 1/2	R 1/2	1163062
DN 15	Stainless steel design	1.20	2 to 90 °C	Rp 1/2	R 1/2	1163082

## E Straight



Nominal size	Surface	kvs	Operating temperature	Pipe connection	Radiator connection	Item No.
DN 15	Anthracite	1.00	2 to 120 °C	Rp 1/2	R 1/2	1163132
DN 15	Chrome plated	1.00	2 to 120 °C	Rp 1/2	R 1/2	1163152
DN 15	White powder coated	1.00	2 to 90 °C	Rp 1/2	R 1/2	1163162
DN 15	Stainless steel design	1.00	2 to 90 °C	Rp 1/2	R 1/2	1163182

## E Double angle left



Nominal size	Surface	kvs	Operating temperature	Pipe connection	Radiator connection	Item No.
DN 15	Anthracite	1.00	2 to 120 °C	Rp 1/2	R 1/2	1163432
DN 15	Chrome plated	1.00	2 to 120 °C	Rp 1/2	R 1/2	1163452
DN 15	White powder coated	1.00	2 to 90 °C	Rp 1/2	R 1/2	1163462
DN 15	Stainless steel design	1.00	2 to 90 °C	Rp 1/2	R 1/2	1163482



### E Double angle right



Nominal size	Surface	kvs	Operating temperature	Pipe connection	Radiator connection	Item No.
DN 15	Anthracite	1.00	2 to 120 °C	Rp 1/2	R 1/2	1163433
DN 15	Chrome plated	1.00	2 to 120 °C	Rp 1/2	R 1/2	1163453
DN 15	White powder coated	1.00	2 to 90 °C	Rp 1/2	R 1/2	1163463
DN 15	Stainless steel design	1.00	2 to 90 °C	Rp 1/2	R 1/2	1163483

### E Reversed angle



Nominal size	Surface	kvs	Operating temperature	Pipe connection	Radiator connection	Item No.
DN 15	Anthracite	1.00	2 to 120 °C	Rp 1/2	R 1/2	1163232
DN 15	Chrome plated	1.00	2 to 120 °C	Rp 1/2	R 1/2	1163252
DN 15	White powder coated	1.00	2 to 90 °C	Rp 1/2	R 1/2	1163262

### Sets with E thermostatic valve



Consisting of	Nominal size	Type	Surface	Pipe connection	Radiator connection	Item No.
E Thermostatic valve Combi E Radiator lockshield valve Uni SH Thermostat	DN 15	Angle	Chrome plated	Rp 1/2	R 1/2	1164052
E Thermostatic valve Combi E Radiator lockshield valve Uni SH Thermostat	DN 15	Straight	Chrome plated	Rp 1/2	R 1/2	1164152
E Thermostatic valve Combi E Radiator lockshield valve Uni SH Thermostat	DN 15	Double angle left	Chrome plated	Rp 1/2	R 1/2	1164352
E Thermostatic valve Combi E Radiator lockshield valve Uni SH Thermostat	DN 15	Double angle right	Chrome plated	Rp 1/2	R 1/2	1164452

# A Thermostatic valves for high flow rates



For use at the radiator in central heating and cooling system with closed circuits. Installation in the supply pipe.

The integrated A valve insert provides a high flow rate, which enables use in one pipe, two pipe and gravity systems. The A thermostatic

valves are available in angle, straight, reversed angle and double angle versions.

The body of the valve is made of brass and the surface is nickel plated. The spindle is made of stainless steel.

Body material	Brass	Max. operating pressure	10 bar
Surface	Nickel plated	Operating temperature	2 to 120 °C
Presetting	No	Colour protection cap	Black
Thermostat thread	M 30 x 1.5	One pipe*	Yes
Medium	Water-glycol mixture Water	Two pipe*	Yes

## A Angle



Nominal size	kvs	Pipe connection	Radiator connection	Certification	Item No.
DN 10	1.20	Rp 3/8	R 3/8	Keymark	1181003
DN 15	1.20	Rp 1/2	R 1/2	Keymark	1181004
DN 20	3.50	Rp 3/4	R 3/4	Keymark	1181006
DN 25	3.50	Rp 1	R 1		1181008
DN 32	4.10	Rp 1 1/4	R 1 1/4		1181010
DN 15	1.20	G 3/4 external	R 1/2		1181097

## A Straight



Nominal size	kvs	Pipe connection	Radiator connection	Certification	Item No.
DN 10	1.20	Rp 3/8	R 3/8	Keymark	1181103
DN 15	1.20	Rp 1/2	R 1/2	Keymark	1181104
DN 20	2.50	Rp 3/4	R 3/4	Keymark	1181106
DN 25	3.30	Rp 1	R 1		1181108
DN 32	4.10	Rp 1 1/4	R 1 1/4		1181110
DN 15	1.20	G 3/4 external	R 1/2		1181197

## A Double angle left



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	1.20	Rp 3/8	R 3/8	1181390
DN 15	1.20	Rp 1/2	R 1/2	1181392
DN 15	1.20	G 3/4 external	R 1/2	1181396



#### A Double angle right

Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	1.35	Rp $\frac{3}{8}$	R $\frac{3}{8}$	1181391
DN 15	1.20	Rp $\frac{1}{2}$	R $\frac{1}{2}$	1181393
DN 15	1.20	G $\frac{3}{4}$ external	R $\frac{1}{2}$	1181397

#### A Reversed angle



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 15	1.20	Rp $\frac{1}{2}$	R $\frac{1}{2}$	1181404
DN 10	1.20	Rp $\frac{3}{8}$	R $\frac{3}{8}$	1181403
DN 20	2.20	Rp $\frac{3}{4}$	R $\frac{3}{4}$	1181406
DN 15	1.20	G $\frac{3}{4}$ external	R $\frac{1}{2}$	1181492

# AF Presettable thermostatic valves for low flow rates



For manual hydronic balancing at the radiator in central heating and cooling system with closed circuits. Installation in the supply pipe. The integrated AF valve insert allows for infinitely adjustable presetting to adapt the volume flow to the required heat demand. The AF thermostatic valves are available in angle, straight, reversed angle and double angle versions.

The body of the valve is made of brass and the surface is nickel plated. The spindle is made of stainless steel.

The AF thermostatic valve is used especially in heating systems with a high temperature spread (district heating systems) or in systems with small flow rates. A great advantage of the valve is the litre-precise adjustment of the flow rate at the radiator.

Surface	Nickel plated	Operating temperature	2 to 120 °C
Thermostat thread	M 30 x 1.5	Colour protection cap	Red
Presetting	Yes	One pipe*	No
Medium	Water-glycol mixture Water	Two pipe*	Yes
Max. operating pressure	16 bar		

## AF Angle



Certification Keymark

Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	0.37	Rp 3/8	R 3/8	1180603
DN 15	0.37	Rp 1/2	R 1/2	1180604
DN 20	0.37	Rp 3/4	R 3/4	1180606

## AF Straight



Certification Keymark

Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	0.37	Rp 3/8	R 3/8	1180703
DN 15	0.37	Rp 1/2	R 1/2	1180704
DN 20	0.37	Rp 3/4	R 3/4	1180706

## AF Double angle left



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	0.37	Rp 3/8	R 3/8	1181460
DN 15	0.37	Rp 1/2	R 1/2	1181462





### AF Double angle right

Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	0.37	Rp 3/8	R 3/8	1181461
DN 15	0.37	Rp 1/2	R 1/2	1181463

### AF Reversed angle



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	0.37	Rp 3/8	R 3/8	1180903
DN 15	0.37	Rp 1/2	R 1/2	1180904

# AZ V Pressure-balanced, presettable thermostatic valves for high flow rates



For use at radiators in central heating and cooling system with closed circuits. Installation in the supply pipe.

The integrated valve insert, which is also used in balancing and pipeline valves, provides a very high flow rate, which enables use for

zone control in combination with thermostats or actuators. The AZ V thermostatic valves are available in angle and straight versions.

The body of the valve is made of brass and the surface is nickel plated. The spindle is made of stainless steel.

Body material	Brass	Max. operating pressure	10 bar
Surface	Nickel plated	Operating temperature	2 to 120 °C
Presetting	Yes	Colour protection cap	Green
Thermostat thread	M 30 x 1.5	One pipe*	Yes
Medium	Water-glycol mixture Water	Two pipe*	Yes

## AZ V Angle



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 15	3.00	Rp 1/2	R 1/2	1187504
DN 20	3.00	Rp 3/4	R 3/4	1187506

## AZ V Straight



Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 15	1.70	Rp 1/2	R 1/2	1187604
DN 20	2.30	Rp 3/4	R 3/4	1187606
DN 25	3.00	Rp 1	R 1	1187608

# Manual regulating valves



The manual regulating valves for radiators can be used in one and two pipe central heating systems. They enable precise manual regulation of the room temperature. The heat output of the radiator is proportional to the setting of the handwheel. This sensitive regulation is achieved by a specially shaped valve plug. The presetting is infinitely variable. It is concealed and can be adjusted easily, quickly and precisely with a screwdriver. This makes it impossible for unauthorised persons to change the setting. The valve body is identical to other Oventrop thermostatic valves. This enables

the possibility of subsequent conversion to thermostatic operation by replacing the valve inserts. With the special tool Demo-Bloc the conversion can be carried out without draining the heating system.

The HRV manual regulating valves with pre-setting ensure exact hydronic balancing of the system. They offer good manual regulation and also the possibility of a later, problem-free and inexpensive conversion to thermostatic operation.

Body material	Brass	Max. operating pressure	10 bar
Surface	Nickel plated	One pipe*	Yes
Thermostat thread	M 30 x 1.5	Two pipe*	Yes
Protection cap	No	Operation	Handwheel
Medium	Water Water-glycol mixture	Operating element colour	White
Operating temperature	2 to 120 °C		

## HRV Angle



Presetting	Yes	kvs	3.20
------------	-----	-----	------

Nominal size	Pipe connection	Radiator connection	Item No.
DN 10	Rp 3/8	R 3/8	1191503
DN 15	Rp 1/2	R 1/2	1191504
DN 20	Rp 3/4	R 3/4	1191506
DN 10	Rp 3/8	R 3/8	1194503
DN 15	Rp 1/2	R 1/2	1194504
DN 20	Rp 3/4	R 3/4	1194506

## HRV Straight



Presetting	Yes
------------	-----

Nominal size	kvs	Pipe connection	Radiator connection	Item No.
DN 10	1.70	Rp 3/8	R 3/8	1191603
DN 15	1.70	Rp 1/2	R 1/2	1191604
DN 20	2.30	Rp 3/4	R 3/4	1191606
DN 10	1.70	Rp 3/8	R 3/8	1194603
DN 15	1.70	Rp 1/2	R 1/2	1194604
DN 20	2.30	Rp 3/4	R 3/4	1194606



### HR Angle

Cannot be converted to thermostatic operation.

Presetting No kvs 1.45

Nominal size	Pipe connection	Radiator connection	Item No.
DN 10	Rp 3/8	R 3/8	1190503
DN 15	Rp 1/2	R 1/2	1190504
DN 20	Rp 3/4	R 3/4	1190506



### HR Straight

Cannot be converted to thermostatic operation.

Presetting No kvs 1.20

Nominal size	Pipe connection	Radiator connection	Item No.
DN 10	Rp 3/8	R 3/8	1190603
DN 15	Rp 1/2	R 1/2	1190604
DN 20	Rp 3/4	R 3/4	1190606



# Thermostatic valves - Accessories and spare parts



## Extension for thermostatic valves

### Description

For thermostatic valves and Uniboxes (manufactured until 2019), 20 mm

### Item No.

1022698



## Compression fitting set (1-fold)

### Description

for E thermostatic valves, G 1/2 external thread x 15 mm, chrome plated

1169093

For E thermostatic valves, G 1/2 external thread x 15 mm, white powder coated

1169193

For E thermostatic valves, G 1/2 external thread x 15 mm, anthracite

1169493

For E thermostatic valves, G 1/2 external thread x 15 mm, stainless steel design

1169593



## Demo-Bloc Special tool

### Description

Including coupling set for thermostatic valves M 30 x 1.5 and AQ/AQH thermostatic valves

### Item No.

1188051

## Coupling set

### Description

For Demo-Bloc, for valves with connection thread M 30 x 1.0

1188089

For Demo-Bloc, for replacing the HRV and Combi LR inserts

1188095



## Differential pressure measuring spindle

### Description

Spindle for differential pressure measurement at the thermostatic valve

### Item No.

1188093





### Cleaning head

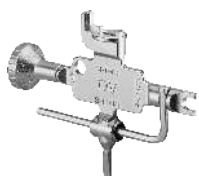
The valve seat can be cleaned with the Demo-Bloc and the cleaning head.

Description	Item No.
Cleaning head for all valves	1188400

### Wall connection set (1-fold)



Description	Item No.
For E thermostatic valves, DN 15, chrome plated	1169553
For E thermostatic valves, DN 15, white	1169563



### Universal tool

Description	Item No.
For Uni LHB, LDB, LH and L thermostats as well as AV 9 and AQ thermostatic valves	1011489



### Presetting key

Description	Item No.
For AF thermostatic valves and GHF valve inserts	1180791
For AV 6, ADV 6, RFV 6 and E thermostatic valves as well as GH valve inserts	1183961
For AV 9, ADV 9, RFV 9, CV 9 and E thermostatic valves	1183962



### Measuring device

Description	Item No.
For AF thermostatic valves, for checking preset values	1180793



### Replacement stuffing gland screw

Description	Item No.
For all thermostatic valves (exception: AV 9, CV 9, RFV 9, ADV 9, E, AQ, RFQ, EQ, A (manufactured from 2013) and RF (manufactured from 2014), spanner size 14 mm, set = 5 pieces	1017501

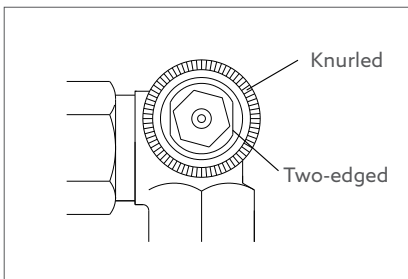
# Replacement valve inserts



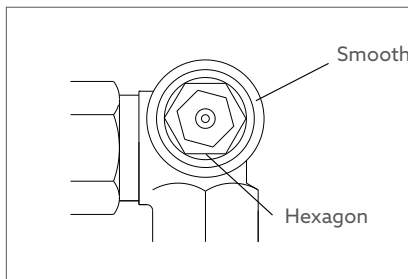
The valve inserts are suitable for replacement in thermostatic valves. The valve inserts can be preset for adaptation to the system requirements and for manual or automatic hydronic balancing. The valve inserts are suitable for all thermostatic valves, so you can benefit from the advantages of the different valve inserts at any time without having to replace the entire

valve. We recommend our Demo-Bloc for replacement. With this special tool, the valve insert can be replaced without draining the system. Our thermostats with connection thread M 30 x 1.5, such as the Uni LH, Uni SH and pinox or the Uni L with connection thread M 30 x 1.0, fit the valve inserts.

Connection thread M 30 x 1.0  
until 1998



Connection thread M 30 x 1.5  
from 1998



The new **valve version** has a hexagon (old: two-edged) on the upper part and is smooth on the housing collar (old: knurled).



Valve insert for valves with connection thread M 30 x 1.5

Description	Item No.
For ADV 9 thermostatic valves, M 30 x 1.5, kvs = 0.67	1186002
For A thermostatic valves (especially for steam systems), M 30 x 1.5	1186200
For AV 9, CV 9, RFV 9, and E thermostatic valves, Multiblock T-RTL and Unibox, M 30 x 1.5, DN 10 - DN 20, kv = 0.67	1187047
For A and RF thermostatic valves, DN 20 - DN 32, M 30 x 1.5, kv = 1.00 - 1.10	1187049
For A and RF thermostatic valves, DN 10 - DN 15, M 30 x 1.5, kv = 0.95	1187059
For AQ, RFQ and EQ thermostatic valves, Multiblock TQ and TQ-RTL, Multiflex FQ as well as Unibox TQ and TQ vario, 10 - 170 l/h, M 30 x 1.5	1187065
For reversed supply and return pipe, for A, AV 9, ADV 9, CV 9, E, AF, RF and RFV 9 thermostatic valves as well as Hycocon ATZ and VTZ, M 30 x 1.5, without presetting	1187070
For reversed supply and return pipe, for A, AV 9, ADV 9, CV 9, E, AF, RF and RFV 9 thermostatic valves, Multiblock T, TU and TFU as well as Unibox, M 30 x 1.5, with presetting	1187078
For AF thermostatic valves, M 30 x 1.5, kv = 0.32	1187352



Valve insert for valves with connection thread M 30 x 1.0 (manufactured until 1998)

Description	Item No.
For AV 6, RFV 6 and E thermostatic valves, M 30 x 1.0, DN 10 - DN 20, kv = 0.65	1017057
For AZ thermostatic valves, M 30 x 1.0, DN 10 - DN 32, kv = 1.10	1017060
For F thermostatic valves, M 30 x 1.0, kv = 0.32	1017351





## 1.2 Hydronic balancing at the radiator

<b>Radiator lockshield valves</b>	<b>94</b>
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# Combi 2 Presettable radiator lockshield valves



The Combi 2 radiator lockshield valves are suitable for the lower connection of the pipework to radiators with conventional valve connection. The fittings have a proportional

presetting and are suitable for use in central heating and cooling systems with closed circuits. The Combi 2 radiator lockshield valves are made of nickel plated brass.

Body material	Brass	Presetting	Yes
Surface	Nickel plated	Shutoff	Yes
Max. operating pressure	10 bar	Filling and draining	No
Operating temperature	2 to 120 °C	One pipe*	Yes
Medium	Water Water-glycol mixture	Two pipe*	Yes

## Combi 2 Angle



Nominal size	kvs	Radiator connection	Pipe connection	Item No.
DN 10	1.70	R 3/8	Rp 3/8	1091061
DN 15	1.70	R 1/2	Rp 1/2	1091062
DN 20	1.70	R 3/4	Rp 3/4	1091063

## Combi 2 Angle (self-sealing)



Nominal size	kvs	Radiator connection	Pipe connection	Item No.
DN 15	1.70	G 1/2 external	Rp 1/2	1091052

## Combi 2 Straight



Nominal size	kvs	Radiator connection	Pipe connection	Item No.
DN 10	1.70	R 3/8	Rp 3/8	1091161
DN 15	1.70	R 1/2	Rp 1/2	1091162
DN 20	1.70	R 3/4	Rp 3/4	1091163

**Combi 2 Straight (self-sealing)**



Nominal size	kvs	Radiator connection	Pipe connection	Item No.
DN 15	1.70	G 1/2 external	Rp 1/2	1091152

# Combi 3 Presettable radiator lockshield valves with draining facility



The Combi 3 radiator lockshield valves are suitable for the lower connection of the pipe-work to radiators with conventional valve connection. The fittings have a proportional pre-setting and are suitable for use in central heating and cooling systems with closed circuits. In

addition, the radiator can be drained and filled via the fitting with the help of a separate tool (item no. 1090551). The Combi 3 radiator lockshield valves are made of nickel plated brass or nickel plated bronze (straight version DN 10 and DN 15).

Surface	Nickel plated	Shutoff	Yes
Max. operating pressure	10 bar	Filling and draining	Yes
Operating temperature	2 to 120 °C	One pipe*	Yes
Medium	Water Water-glycol mixture	Two pipe*	Yes
Presetting	Yes		

## Combi 3 Angle



Body material Brass

Nominal size	kvs	Radiator connection	Pipe connection	Item No.
DN 10	1.70	R 3/8	Rp 3/8	1090361
DN 15	1.70	R 1/2	Rp 1/2	1090362
DN 20	1.70	R 3/4	Rp 3/4	1090363

## Combi 3 Straight



Nominal size	Body material	kvs	Radiator connection	Pipe connection	Item No.
DN 10	Bronze	1.70	R 3/8	Rp 3/8	1090461
DN 15	Bronze	1.70	R 1/2	Rp 1/2	1090462
DN 20	Brass	1.70	R 3/4	Rp 3/4	1090463

# Combi E Presettable design radiator lockshield valves



The Combi E radiator lockshield valves are suitable for the lower connection of the pipe-work to radiators with conventional valve connection. They are available as an exclusive version in various designs. The fittings have a reproducible, proportional presetting and are

suitable for use in central heating and cooling systems with closed circuits. In addition, the radiator can be drained and filled via the fitting with the help of a separate tool (item no. 1090551). The Combi E radiator lockshield valves are made of brass.

Body material	Brass	Filling and draining	Yes
Max. operating pressure	10 bar	Reproducible presetting	Yes
Operating temperature	2 to 120 °C	One pipe*	Yes
Medium	Water Water-glycol mixture	Two pipe*	Yes
Shutoff	Yes		

## Combi E Angle



Nominal size	Surface	kvs	Item No.
DN 15	Anthracite	1.05	1166032
DN 15	Chrome plated	1.05	1166052
DN 15	White powder coated	1.05	1166062
DN 15	Stainless steel design	1.05	1166082

## Combi E Straight



Nominal size	Surface	kvs	Item No.
DN 15	Anthracite	1.05	1167032
DN 15	Chrome plated	1.05	1167052
DN 15	White powder coated	1.05	1167062
DN 15	Stainless steel design	1.05	1167082



# Combi C Presettable radiator lockshield valves with chrome plated body



The Combi C radiator lockshield valves are suitable for the lower connection of the pipe-work to radiators with conventional valve connection. The fittings have a reproducible, proportional presetting and are suitable for use in central heating and cooling systems with

closed circuits. In addition, the radiator can be drained and filled via the fitting with the help of a separate tool (item no. 1090551). The Combi C radiator lockshield valves are made of chrome plated brass.

Body material	Brass	Reproducible presetting	Yes
Max. operating pressure	10 bar	Filling and draining	Yes
Operating temperature	2 to 120 °C	One pipe*	Yes
Medium	Water Water-glycol mixture	Two pipe*	Yes
Shutoff	Yes		

## Combi C Angle



Nominal size	Surface	kvs	Item No.
DN 15	Chrome plated	1.70	1164554

## Combi C Straight



Nominal size	Surface	kvs	Item No.
DN 15	Chrome plated	1.70	1165554

# Combi LR Presettable radiator lockshield valves for high flow rates



The Combi LR radiator lockshield valves are suitable for the lower connection of the pipework to radiators with conventional valve connection. The fittings have a proportional pre-setting with increased kvs value and are suitable

for use in central heating and cooling systems with closed circuits. The Combi LR radiator lockshield valves are made of nickel plated brass.

Body material	Brass	Presetting	Yes
Surface	Nickel plated	Shutoff	Yes
Max. operating pressure	10 bar	Filling and draining	No
Operating temperature	2 to 120 °C	One pipe*	Yes
Medium	Water Water-glycol mixture	Two pipe*	Yes

## Combi LR Angle



Nominal size	kvs	Radiator connection	Pipe connection	Item No.
DN 10	3.50	R 3/8	Rp 3/8	1027562
DN 15	4.50	R 1/2	Rp 1/2	1027564
DN 20	4.50	R 3/4	Rp 3/4	1027566
DN 25	4.50	R 1	Rp 1	1027568

## Combi LR Straight



Nominal size	kvs	Radiator connection	Pipe connection	Item No.
DN 10	1.80	R 3/8	Rp 3/8	1027662
DN 15	1.80	R 1/2	Rp 1/2	1027664
DN 20	2.40	R 3/4	Rp 3/4	1027666
DN 25	3.20	R 1	Rp 1	1027668





















## 1.2 Hydronic balancing at the radiator

### **Valve inserts for compact radiators** 101

Valve inserts for radiators with integrated valve set.. 104

								
		GH	GH	GH	GD	GD	GHF	GHF
Item no.		1018080	1018082	1018083	1018084	1018086	1018090	1018097
<b>Suitable for radiators of the following manufacturers</b>								
<b>Arbonia</b>	until 2002	•					•	
<b>Baufa</b>		•					•	
<b>Bemm</b>								
<b>brema</b>		•					•	
<b>Brugman</b>	until 2013		•			•		•
	from 2013			•	•			
<b>Brötje</b>	1994-2003		•			•		•
	from 2003			•	•			
<b>Buderus/Brötje</b>	1982-1986							
<b>Buderus</b>	from 2001			•	•			
<b>De Longhi</b>	until 2016		•			•		•
	from 2016			•	•			
<b>DEF</b>		•					•	
<b>DiaNorm</b>	until 2010	•					•	
<b>Dia-therm</b>		•					•	
<b>DURA</b>				•	•			
<b>Ferrol/IMA</b>				•	•			
<b>HM-Heizkörper</b>		•					•	
<b>Hoval</b>		•					•	
<b>IMAS</b>	from 2018	•					•	
<b>Korad</b>	from 2006			•	•			
<b>Korado</b>				•	•			
<b>Manaut</b>		•					•	
<b>Purmo</b>	until 2010	•					•	
<b>Radson</b>	until 2010	•					•	
<b>Rettig</b>	until 2010	•					•	
<b>Ribe</b>			•			•		•
<b>Runtal</b>		•					•	
<b>Superia</b>	from 2005			•	•			
<b>U.S. Steel</b>	until 2019			•	•			
<b>Vasco</b>				•	•			
<b>VEHA</b>			•			•		•



								
GHF	GD	GHQ	GHQ	GHQ	GDQ	GDQ	GDQ	GH
1018098	1018099	1019080	1019082	1019083	1019084	1019086	1019099	1648077
		Q-Tech	Q-Tech	Q-Tech	Q-Tech	Q-Tech	Q-Tech	
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Status: 11/2020. Subject to technical modifications by the radiator manufacturers.

# Valve inserts for radiators with integrated valve set



The valve inserts are suitable for installation in compact radiators. The valve inserts can be preset for adaptation to the system requirements and for manual or automatic hydronic balancing. The valve inserts are suitable for

various types of radiators of numerous manufacturers. Our thermostats with connection thread M 30 x 1.5, such as the Uni LH, Uni XH, Uni SH or pinox, fit the valve inserts.



## GHQ Valve insert with M 30 x 1.5

### Description

### Item No.

GHQ valve insert, Q-Tech, 10-170 l/h, G ½ external thread, M 30 x 1.5, with frontal seat sealing	1019080
GHQ valve insert, Q-Tech, 10-170 l/h, G ½ external thread, M 30 x 1.5, for seat diameter 16 H 11	1019082
GHQ valve insert, Q-Tech, 10-170 l/h, G ½ external thread, M 30 x 1.5, with internal O-ring	1019083



## GH Valve insert with M 30 x 1.5

### Description

### Item No.

GH valve insert, with 6 presetting positions, G ½ external thread, M 30 x 1.5, with frontal seat sealing, kvs = 1.05	1018080
GH valve insert, with 6 presetting positions, G ½ external thread, M 30 x 1.5, for seat diameter 16 H 11, kvs = 1.05	1018082
GH valve insert, with 6 presetting positions, G ½ external thread, M 30 x 1.5, with internal O-ring, kvs = 1.05	1018083
GH special valve insert, with 6 presetting positions, G ½ external thread, M 30 x 1.5, with frontal seat sealing, for reversed supply and return pipe, kvs = 1.00	1648077



## GHF Valve insert with M 30 x 1.5

### Description

### Item No.

GHF valve insert, with fine presetting, G ½ external thread, M 30 x 1.5, with frontal seat sealing, kvs = 0.37	1018090
GHF valve insert, with fine presetting, G ½ external thread, M 30 x 1.5, for seat diameter 16 H 11, kvs = 0.37	1018097
GHF valve insert, with fine presetting, G ½ external thread, M 30 x 1.5, with internal O-ring, kvs = 0.37	1018098



#### GDQ Valve insert with squeeze connection

Description	Item No.
GDQ valve insert, Q-Tech, 10-170 l/h, G ½ external thread, squeeze connection, with internal O-ring	1019084
GDQ valve insert, Q-Tech, 10-170 l/h, G ½ external thread, squeeze connection, for seat diameter 16 H 11	1019086
GDQ valve insert, Q-Tech, 10-170 l/h, G ½ external thread, squeeze connection, with frontal seat sealing	1019099



#### GD Valve insert with squeeze connection

Description	Item No.
GD valve insert, with 8 presetting positions, G ½ external thread, squeeze connection, with internal O-ring, kvs = 1.05	1018084
GD valve insert, with 8 presetting positions, G ½ external thread, squeeze connection, for seat diameter 16 H 11, kvs = 1.05	1018086
GD valve insert, with 8 presetting positions, G ½ external thread, squeeze connection, with frontal seat sealing, kvs = 1.05	1018099



#### Presetting key

Description	Item No.
For AF thermostatic valves and GHF valve inserts	1180791



## 1.2 Hydronic balancing at the radiator

### **H-blocks** **106**

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Multiblock T-RTL Connection fittings with thermostatic valve and return temperature limiter.....	110
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# Multiblock T Connection fittings with thermostatic valve



The Multiblock T connection fitting is a combination consisting of a thermostatic valve and a connection fitting at the radiator. Thanks to the special AV9U valve insert, the fitting is not only infinitely presettable, but supply and return are also freely selectable, as the flow is possible in either direction. Depending on the version, the connection to the radiator is either with G 3/4 union nut and insert to radiators with G 3/4 external thread (Eurocone) or with G 3/4 union nut and screw-in connection piece to radiators with G 1/2 internal thread.

The following functions are available: Presetting for hydronic balancing, shutoff as well as draining and filling. Depending on the version, the fitting can be used in two pipe or one and two pipe systems. The Multiblock T connection fitting is available in straight and angle versions and as pivoting version. The fitting is made of nickel plated brass, the centre distance is 50 mm. Design covers are available in various colours and surfaces (see chapter "H-Blocks Accessories and spare parts")

Body material	Brass	Distance between pipe centres	50 mm
Surface	Nickel plated	Max. operating pressure	10 bar
Thermostat thread	M 30 x 1.5		
Q-Tech	No		
Shutoff	Yes		
Medium	Water Water-glycol mixture		

## Multiblock T Straight



Presetting	Yes	Pipe connection	G 3/4 Eurocone
Thermostat connection	Left or right hand side	Operating temperature	2 to 120 °C
Filling and draining	Yes		

One pipe*	Two pipe*	Radiator connection	Item No.
No	Yes	G 3/4 union nut	1184013
No	Yes	G 1/2 external	1184083

## Multiblock TU Straight



Presetting	Yes	Pipe connection	G 3/4 Eurocone
Thermostat connection	Left or right hand side	Operating temperature	2 to 120 °C
Filling and draining	No		

One pipe*	Two pipe*	Radiator connection	Item No.
Yes	Yes	G 3/4 union nut	1184023
Yes	Yes	G 1/2 external	1184033



### Multiblock T Angle

Presetting	Yes	Pipe connection	G ¾ Eurocone
Thermostat connection	Left hand side	Operating temperature	2 to 120 °C
Filling and draining	Yes		

One pipe*	Two pipe*	Radiator connection	Item No.
No	Yes	G ¾ union nut	1184014
No	Yes	G ½ external	1184084



### Multiblock TU Angle

Presetting	Yes	Pipe connection	G ¾ Eurocone
Thermostat connection	Left hand side	Operating temperature	2 to 120 °C
Filling and draining	No		

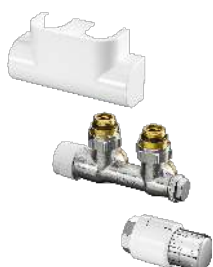
One pipe*	Two pipe*	Radiator connection	Item No.
Yes	Yes	G ¾ union nut	1184024
Yes	Yes	G ½ external	1184034



### Multiblock TFU pivoting

Thermostat connection	Left or right hand side	Kv 2 K P-deviation*	0.47
Filling and draining	Yes	Operating temperature	2 to 120 °C
Presetting	Yes	Pipe connection	G ¾ Eurocone
Kv 1 K P-deviation*	0.31		

One pipe*	Two pipe*	Radiator connection	Item No.
Yes	Yes	G ¾ external	1184025
Yes	Yes	G ½ external	1184035



### Sets with Multiblock T, angle and Uni SH

For the connection to radiators with G ½ internal thread.

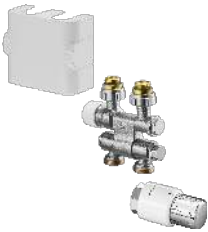
Consisting of	Type	Colour	Item No.
Multiblock T Design cover Uni SH Thermostat SH-Cap	Angle	White / Chrome	1184184
Multiblock T Design cover Uni SH Thermostat SH-Cap	Angle	Chrome	1184284
Multiblock T Design cover Uni SH Thermostat SH-Cap	Angle	Stainless steel	1184384



### Sets with Multiblock T, straight and Uni SH

For the connection to radiators with G 1/2 internal thread.

Consisting of	Type	Colour	Item No.
Multiblock T Design cover Uni SH Thermostat SH-Cap	Straight	White / Chrome	1184183
Multiblock T Design cover Uni SH Thermostat SH-Cap	Straight	Chrome	1184283
Multiblock T Design cover Uni SH Thermostat SH-Cap	Straight	Stainless steel	1184383



### Sets with Multiblock TFU and Uni SH

For the connection to radiators with G 1/2 internal thread.

Consisting of	Type	Colour	Item No.
Multiblock TFU Design cover Uni SH Thermostat SH-Cap	Pivoting	White / Chrome	1184135
Multiblock TFU Design cover Uni SH Thermostat SH-Cap	Pivoting	Chrome	1184235

# Multiblock T-RTL Connection fittings with thermostatic valve and return temperature limiter



The Multiblock T-RTL connection fitting is designed for the combined use of radiators and surface temperature regulation in two pipe systems. The fitting includes an AV 9 valve insert with infinitely adjustable presetting for automatic hydronic balancing and an RTL controller for return temperature limitation. The room temperature and return temperature are controlled separately. The fitting is soft sealing to the radiator. Depending on the version, the connection to the radiator is either with G 3/4 union nut and insert to radiators with G 3/4 external thread (Eurocone) or with G 3/4 union

nut and screw-in connection piece to radiators with G 1/2 internal thread.

The following functions are available: Presetting for automatic hydronic balancing, shut-off and return temperature limitation for surface temperature regulation. The connection fitting is available in angle version and is made of nickel plated brass, the centre distance is 50 mm. A mounting aid is included in the scope of delivery. Design covers are available in white and chrome plated (see chapter "H-Blocks Accessories and spare parts").

Body material	Brass	Medium	Water
Surface	Nickel plated		Water-glycol mixture
Thermostat thread	M 30 x 1.5		
Q-Tech	No	Distance between pipe centres	50 mm
Shutoff	Yes	Max. operating pressure	10 bar
One pipe*	No		
Two pipe*	Yes		

## Multiblock T-RTL Angle



Surface heating*	Yes	Filling and draining	No
Return temperature*	Yes	Thermostat connection	Left hand side
Presetting	Yes	Operating temperature	2 to 70 °C

### Radiator connection

G 3/4 union nut
G 1/2 external

### Pipe connection

G 3/4 Eurocone
G 3/4 Eurocone

### Item No.

1184016
1184086

## Sets with Multiblock T-RTL and Uni SH

For the connection to radiators with G 1/2 internal thread.



Consisting of	Type	Colour	Item No.
Multiblock T-RTL Design cover Uni SH Thermostat SH-Cap	Angle	White / Chrome	1184188
Multiblock T-RTL Design cover Uni SH Thermostat SH-Cap	Angle	Chrome	1184288



# Multiflex F H-blocks



The Multiflex H-blocks are designed for the connection of radiators with integrated valve set.

The fittings are soft sealing to the radiator. Depending on the version, the connection to the radiator is either with G 3/4 union nut and insert to radiators with G 3/4 external thread (Eurocone) or with G 3/4 union nut and screw-in connection piece to radiators with G 1/2 internal thread.

The following functions are available: Shutoff, draining, filling and presetting. Depending on the version, the fitting can be used in two pipe or one and two pipe systems. The Multiflex connection fitting is available in straight and angle versions and as pivoting version. The fitting is made of nickel plated brass, the centre distance is 50 mm.

Body material	Brass	Pipe connection	G 3/4 Eurocone
Surface	Nickel plated	Operating temperature	2 to 120 °C
Q-Tech	No	Distance between pipe centres	50 mm
Shutoff	Yes	Max. operating pressure	10 bar
Medium	Water Water-glycol mixture		

## Multiflex F Angle



Radiator connection	Presetting	Filling and draining	One pipe*	Two pipe*	Item No.
G 3/4 union nut	No	No	No	Yes	1015814
G 1/2 external	No	No	No	Yes	1015884
G 3/4 union nut	Yes	Yes	Yes	Yes	1015944
G 1/2 external	Yes	Yes	Yes	Yes	1015994

## Multiflex F Straight



Radiator connection	Presetting	Filling and draining	One pipe*	Two pipe*	Item No.
G 3/4 union nut	No	No	No	Yes	1015813
G 1/2 external	No	No	No	Yes	1015883
G 3/4 union nut	Yes	Yes	Yes	Yes	1015943
G 1/2 external	Yes	Yes	Yes	Yes	1015993



### Multiflex F pivoting

Presetting	No	One pipe*	No
Filling and draining	No		

Radiator connection	Two pipe*	Item No.
G 3/4 union nut	Yes	1015711
G 1/2 external	Yes	1015781

### Sets with Multiflex



Consisting of	Type	Radiator connection	Item No.
Multiflex F vindo TH thermostat	Straight	G 3/4 external	1715813
Multiflex F vindo TH thermostat	Straight	G 1/2 internal	1715883
Multiflex F vindo TH thermostat	Angle	G 3/4 external	1715814
Multiflex F vindo TH thermostat	Angle	G 1/2 internal	1715884

### Multimodul Radiator connection

For installation and commissioning of the heating system without radiators during the construction phase. Suitable for one pipe and two pipe systems. The following functions are available: shutoff, draining, filling and presetting.



Description	Item No.
For installation and commissioning of the heating system without radiators	1015651 °

# Inversion fittings



Inversion fittings are connection fittings that are designed for reversed flow and return at radiators with integrated valve set. They ensure a correct flow against the valve insert by exchanging the supply and return flow cross-wise.

The fittings are soft sealing to the radiator. Depending on the version, the connection to the radiator is either with G 3/4 union nut and insert to radiators with G 3/4 external thread

(Eurocone) or with G 3/4 union nut and screw-in connection piece to radiators with G 1/2 internal thread.

All inversion fittings feature a shutoff function. They are available in straight and angle versions and are made of nickel plated brass. The centre distance is 50 mm. Item no. 1016372 has a reduced centre distance to the pipe network (40 mm).

Body material	Brass	One pipe*	No
Surface	Nickel plated	Two pipe*	Yes
Shutoff	Yes	Filling and draining	No
Presetting	No	Operating temperature	2 to 120 °C
Medium	Water Water-glycol mixture	Max. operating pressure	10 bar

## Inversion fitting straight



Radiator connection	Pipe connection	Distance between pipe centres (mm)	Item No.
G 3/4 union nut	G 3/4 Eurocone	50	1016362
G 1/2 external	G 3/4 Eurocone	50	1016363
G 1/2 external	G 3/4 Eurocone	40	1016372

## Inversion fitting angle

Distance between pipe centres 50 mm



Radiator connection	Pipe connection	Item No.
G 3/4 union nut	G 3/4 Eurocone	1016462
G 1/2 external	G 3/4 Eurocone	1016463

# H-blocks - Accessories and spare parts

## Design cover for Multiblock T/TU/TQ, angle version



Description	Item No.
Anthracite	1184089
Stainless steel design	1184091
White	1184096
Chrome plated	1184098

## Design cover for Multiblock T/TU/TQ, straight version



Description	Item No.
Anthracite	1184088
Stainless steel design	1184090
White	1184095
Chrome plated	1184097

## Design cover for Multiblock TFU



Description	Item No.
White	1184092
Chrome plated	1184093

## Design cover for Multiblock T-RTL/TQ-RTL



Description	Item No.
Chrome plated	1184077
White	1184087



### Design cover for Multiflex F



#### Description

For item no. 1015813/14/8 $\frac{3}{4}$ 4, white

#### Item No.

1015896

### Covering rosette



#### Description

For Multiblock T-RTL and TQ-RTL, white

#### Item No.

1189087

### Commissioning block



With the commissioning block, the surface heating circuit can already be filled, vented and checked for leaks during the shell construction phase. In addition, limited operation of the surface heating is possible with the fitting.

#### Description

For Multiblock T-RTL and TQ-RTL

#### Item No.

1184094

### Mounting aid



Mounting aid for fixing the pipes of the Multiblock T-RTL connection fitting. After creating the wall slots, the mounting aid must be fixed in the exact position on the unplastered wall using screws (not included in the scope of delivery). During installation, ensure that the pipes are fed in parallel. The protruding pipes must be fixed in the installation aid with the enclosed membrane sleeves.

Then plaster the wall. Do not plaster the wall slot, as the installation of the pipes for the surface temperature regulation is only carried out after the wall plastering work. The pipes for the surface temperature regulation must then be fixed in the mounting aid according to the same principle.

#### Description

For Multiblock T-RTL and TQ-RTL

#### Item No.

1189094

### Double nipple



#### Description

G  $\frac{3}{4}$  external thread x G  $\frac{3}{4}$  external thread, conically sealing, brass, nickel plated

G  $\frac{3}{4}$  external thread x G  $\frac{3}{4}$  external thread, conically sealing, bronze

#### Item No.

1028263

1504054



### Insert

#### Description

For Cocon QTZ, Optibal W6, Multiflex F and FQ, Multiblock T, TU, TQ, TFU, T-RTL and TQ-RTL DN 15 with G 3/4 externally threaded connection. Suitable for flat sealing tailpipes. For cone according to DIN EN 16313 (Eurocone), set = 2 pieces

#### Item No.

1661100



### Coupling

Effective length: 15.5 mm

#### Description

G 3/4 union nut x Rp 1/2 internal thread, brass, nickel plated, for radiators with integrated valve set, not suitable for compression fittings

#### Item No.

1016304



### Spacer

#### Description

For Multiflex F, G 3/4 internal thread x G 3/4 external thread, nickel plated, set = 2 pieces

#### Item No.

1681650

### Covering rosette



#### Description

For Multiblock T, TU, TFU, TQ and Multiflex F, plastic, centre distance 50 mm, 15 mm perforation  
For Multiblock T, TU, TFU, TQ and Multiflex F, plastic, centre distance 50 mm, 16 mm perforation

#### Item No.

1016673

1016674



### Drain and fill tool

#### Description

For Combi 3, Combi 4, Multiblock and Multiflex

#### Item No.

1090551



### Mounting bridge

For bridging the supply and return pipes when installing radiators at a later stage.

#### Description

DN 20, G 3/4 external thread, distance between pipe centres 50 mm

#### Item No.

1016452



### Combi 3 Shutoff fitting

For presetting, shutting off, draining and filling.

Radiator connection	Pipe connection	Item No.
G 3/4 union nut	Rp 1/2	1016166
G 3/4 union nut	G 3/4 external	1016168
G 1/2 external	Rp 1/2	1016175
G 1/2 external	G 3/4 external	1016177



### Combi 3 Angle shutoff fitting

For presetting, shutting off, draining and filling.

Radiator connection	Pipe connection	Item No.
G 3/4 union nut	Rp 1/2	1016567
G 3/4 union nut	G 3/4 external	1016569
G 1/2 external	Rp 1/2	1016575
G 1/2 external	G 3/4 external	1016577



### Replacement valve insert

Description	Item No.
For reversed supply and return pipe, for A, AV 9, ADV 9, CV 9, E, AF, RF and RFV 9 thermostatic valves, Multiblock T, TU and TFU as well as Unibox, M 30 x 1.5, with presetting	1187078



### Replacement screw-in connection piece

Description	Item No.
G 1/2 self-sealing external thread x G 3/4 conically sealing external thread (Eurocone), brass, nickel plated	1028161
For Multiflex F, FQ, Multiblock T, TU, TFU, TQ, T-RTL and TQ-RTL, G 1/2 self-sealing external thread x G 3/4 flat sealing external thread, brass, unplated, set = 10 pieces	1028252
For Multiflex V, G 1/2 self-sealing external thread x G 3/4 conically sealing external thread, brass, unplated, set = 10 pieces	1028253



## 1.2 Hydronic balancing at the radiator

### **Heating circuit manifolds for radiators** **118**

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Multidis SH - Accessories.....	120



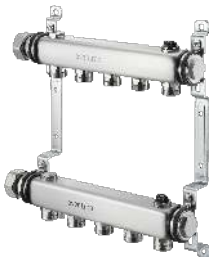
# Multidis SH Heating circuit manifolds



The **Multidis SH** heating circuit manifolds for radiator connection for 2 - 12 circuits are equipped with flat sealing union nut with G 1 internal thread. The heating circuit connections with G 3/4 external thread are suitable for Oventrop compression fittings. Wall brackets

are loosely enclosed. Sound insulation according to DIN 4109. The heating circuit manifolds for radiator connection are used for the central distribution of the heating/cooling water to the different radiators per dwelling unit.

Connection thread supply and return	G 1 internal thread	Max. operating pressure	10 bar
Connection thread heating circuits	G 3/4 external	Operating temperature	-10 up to 90 °C
Body material	Stainless steel	Ball valve	No
Heating circuits can be shut off	No	Fill and drain cock	No
		Flow rate display	No
		Wall bracket	Yes



## For radiator connection

Heating circuits	Item No.
2	1407252
3	1407253
4	1407254
5	1407255
6	1407256
7	1407257
8	1407258
9	1407259
10	1407260
11	1407261
12	1407262

## Multidis SH - Accessories



### Ball valve, flat sealing

For Multidis SH/SF/SFQ.

#### Description

For Multidis SH/SF/SFQ heating circuit manifolds, DN 20

For Multidis SH/SF/SFQ heating circuit manifolds, DN 25

#### Item No.

1406383

1406384



### Ball valve, flat sealing, with red T-handle and thermometer

For Multidis SH/SF/SFQ.

#### Description

For Multidis SH/SF/SFQ heating circuit manifolds, DN 20

For Multidis SH/SF/SFQ heating circuit manifolds, DN 25

#### Item No.

1406483

1406484



### Ball valve, flat sealing, with blue T-handle and thermometer

For Multidis SH/SF/SFQ.

#### Description

For Multidis SH/SF/SFQ heating circuit manifolds, DN 20

For Multidis SH/SF/SFQ heating circuit manifolds, DN 25

#### Item No.

1406583

1406584



### Ball valve, flat sealing, with temperature sensor connection M 10 x 1.0

For Multidis SH/SF/SFQ.

#### Description

For Multidis SH/SF/SFQ heating circuit manifolds, DN 25

#### Item No.

1406708

### Ball valve with Eurocone



#### Description

For Multidis SH/SF/SFQ heating circuit manifolds, G 3/4 external thread x G 3/4 union nut

#### Item No.

1406504

### Surface-mounted cabinet



#### Description

No. 1, W 600 x H 760-870 x D 160 mm  
No. 2, W 750 x H 760-870 x D 160 mm  
No. 3, W 1000 x H 760-870 x D 160 mm  
No. 4, W 1250 x H 760-870 x D 160 mm

#### Item No.

1401171  
1401172  
1401173  
1401174

### Flush-mounted cabinet



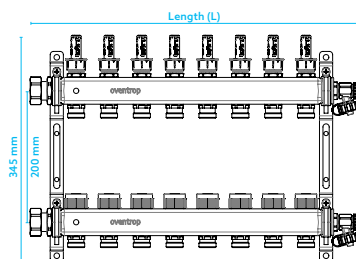
#### Description

No. 1, W 560 x H 760-885 x D 115-180 mm  
No. 2, W 700 x H 760-885 x D 115-180 mm  
No. 3, W 900 x H 760-885 x D 115-180 mm  
No. 4, W 1200 x H 760-885 x D 115-180 mm

#### Item No.

1401151  
1401152  
1401153  
1401154

When using heat meter connection sets, the sum of installation length and distributor/collector length must be taken into account



Outlets	Length (L)	Cabinet no.	Length (L) with ball valve item no.1406383	Cabinet no.
2	205 mm	1	255 mm	1
3	255 mm	1	305 mm	1
4	305 mm	1	355 mm	1
5	355 mm	1	405 mm	1
6	405 mm	1	455 mm	1
7	455 mm	1	505 mm	2
8	505 mm	2	555 mm	2
9	555 mm	2	605 mm	2
10	605 mm	2	655 mm	3
11	655 mm	3	705 mm	3
12	705 mm	3	755 mm	3

### Replacement set for flush-mounted cabinet



#### Description

For item no. 1401151, with door, frame and screed cover  
For item no. 1401152, with door, frame and screed cover  
For item no. 1401153, with door, frame and screed cover  
For item no. 1401154, with door, frame and screed cover

#### Item No.

1401193  
1401192  
1401195  
1401196

Ring spanner



Description

For mounting the compression fittings, spanner size 30/32 mm

Item No.

1401091





## 1.2 Hydronic balancing at the radiator

### **Connection technology** **123**

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# Mounting and conversion aids



## Cap with sealing washer and fastening loop

### Description

For Optiflex ball valves, DN 10, G 5/8 internal thread, without fastening loop
For Optiflex ball valves, DN 10/15, G 3/4 internal thread
For Optiflex ball valves, DN 20, G 1 internal thread
For fill and drain cocks DN 25, G 1 1/4

### Item No.

1010999
1034052
1034053
1034008



## S-connection fitting

### Description

G 3/4 external thread x G 3/4 union nut, brass, nickel plated
---------------------------------------------------------------

### Item No.

1019204
---------



## Length compensating nipple

### Description

DN 10, length: 21 mm, brass, nickel plated
DN 10, length: 75 mm, brass, nickel plated
DN 15, length: 23 mm, brass, nickel plated
DN 15, length: 75 mm, brass, nickel plated
DN 20, length: 25 mm, brass, nickel plated
DN 20, length: 70 mm, brass, nickel plated

### Item No.

1019003
1019103
1019004
1019104
1019006
1019106



## Reducer

### Description

DN 25 / DN 15, G 1 internal thread x G 1/2 external thread, brass, nickel plated
DN 25 / DN 20, G 1 internal thread x G 3/4 external thread, brass, nickel plated
DN 32 / DN 15, G 1 1/4 internal thread x G 1/2 external thread, brass, nickel plated
DN 32 / DN 20, G 1 1/4 internal thread x G 3/4 external thread, brass, nickel plated

### Item No.

1019251
1019252
1019253
1019254



## Reducing coupling

### Description

DN 10 / DN 15, brass, nickel plated
-------------------------------------

### Item No.

1019351
---------



## Reducing outlet

### Description

DN 20 / DN 15, brass, nickel plated
-------------------------------------

### Item No.

1019352
---------



### Coupling

Description	Item No.
DN 10, G 3/8 union nut x R 3/8 external thread, brass, nickel plated	1019303
DN 15, G 3/4 union nut x R 1/2 external thread, brass, nickel plated	1019304
DN 15, G 3/4 union nut x G 1/2 external thread, brass, nickel plated, self-sealing with thread seal	1019362
DN 15, G 3/4 union nut x G 1/2 external thread, brass, nickel plated, self-sealing with O-ring	1019372
DN 20, G 1 union nut x R 3/4 external thread, brass, nickel plated	1019306



### Elbow

Description	Item No.
DN 15, G 1/2 external thread x G 3/4, brass, nickel plated	1019365



### Compensation fitting

Description	Item No.
For lower connection, G 3/4 union nut x G 3/4 external thread, brass, nickel plated, centre distance compensation: 11.5 mm, length: 43 mm	1019451



### Vent plug

Description	Item No.
G 3/8 external thread, PN 10, nickel plated, water outlet rotatable, self-sealing	1101603
G 1/2 external thread, PN 10, nickel plated, water outlet rotatable, self-sealing	1101604



### Blind plug

Description	Item No.
G 3/8 external thread, PN 10, self-sealing, brass, nickel plated	1101703
G 1/2 external thread, PN 10, self-sealing, brass, nickel plated	1101704
G 3/4 external thread, PN 10, self-sealing, brass, nickel plated	1101706



### Key

Description	Item No.
Square spanner 6 mm	1103051
Square spanner 5 mm	1103151



### Drain valve

Description	Item No.
With rotatable outlet, dezincification resistant, G 1/4 external thread (set = 10 pieces)	1102002
With rotatable outlet, dezincification resistant, G 3/8 external thread (set = 10 pieces)	1102003
With rotatable outlet, dezincification resistant, G 1/2 external thread (set = 10 pieces)	1102004



## Cofit S Compression fittings



Cofit S compression fittings for G  $\frac{3}{4}$  external thread are universally applicable for multi-layer composite pipes and, with the same processing method, also for plastic pipes (PE-Xc pipes and PE-RT pipes). They are soft sealing due to an O-ring and metal to metal sealing due to

an additional sealing to the G  $\frac{3}{4}$  internal cone. The sealing to the pipe is achieved by an outlet with additional O-ring. Clamping ring and union nut are made of brass, the union nut is nickel plated. The outlet is made of bronze.

Seal	Metal to metal sealing
Suitable for	- Multi-layer composite pipes - Plastic pipes

### Cofit S for G $\frac{3}{4}$ external thread

Cofit S, 2-fold, for G  $\frac{3}{4}$  external thread according to DIN EN 16313, clamping ring and union nut made of brass, union nut nickel plated, metal to metal sealing plus O-ring.



Suitable for pipe dimension (mm)	Connection size	Quantity	Item No.
14 x 2.0	G $\frac{3}{4}$ union nut	2-fold	1507934
16 x 2.0	G $\frac{3}{4}$ union nut	2-fold	1507935
17 x 2.0	G $\frac{3}{4}$ union nut	2-fold	1507937
18 x 2.0	G $\frac{3}{4}$ union nut	2-fold	1507938
20 x 2.0	G $\frac{3}{4}$ union nut	2-fold	1507939
20 x 2.5	G $\frac{3}{4}$ union nut	2-fold	1507940



# Ofix Compression fittings



Ofix compression fittings for G  $\frac{3}{4}$  external thread and G  $\frac{3}{8}$ , G  $\frac{1}{2}$  and G  $\frac{3}{4}$  internal thread are available for various types of pipes, such as copper pipes, plastic pipes, stainless steel pipes, precision steel pipes and galvan-

ised steel pipes. Metal to metal sealing and soft sealing variants are available. No support sleeves are necessary for the soft sealing variant.



## Ofix CEP for internal thread, metal to metal sealing

Ofix CEP, 1-fold, for copper pipes according to DIN EN 1057, pressure screw nickel plated, metal to metal sealing.

Suitable for:

- Thermostatic valves (AQ, AQH, AV 9, RFV 9, CV 9, ADV 9, E, AF, AZ V)
- Manual regulating valves (HR, HRV)
- Radiator lockshield valves (Combi 2, Combi 3, Combi 4)
- Valves for return temperature limiters

Quantity 1-fold

Connection size	Item No.
G $\frac{3}{8}$ x 10 mm	1027151
G $\frac{3}{8}$ x 12 mm	1027152
G $\frac{1}{2}$ x 12 mm	1027153
G $\frac{1}{2}$ x 15 mm	1027155
G $\frac{3}{4}$ x 18 mm	1027157
G $\frac{3}{4}$ x 22 mm	1027158



## Ofix CEP for internal thread, metal to metal sealing

Ofix CEP, 1-fold, for copper pipes according to DIN EN 1057, pressure screw nickel plated, metal to metal sealing.

Suitable for:

- Thermostatic valves (AQ, AQH, AV 9, CV 9, ADV 9, E, AF, AZ V)
- Manual regulating valves (HR)
- Radiator lockshield valves (Combi 2, Combi 3, Combi 4)

Quantity 1-fold

Connection size	Item No.
G $\frac{1}{2}$ x 10 mm	1028152
G $\frac{1}{2}$ x 12 mm	1028153
G $\frac{1}{2}$ x 14 mm	1028154
G $\frac{1}{2}$ x 15 mm	1028155
G $\frac{1}{2}$ x 16 mm	1028156



#### Ofix CEP for internal thread, metal to metal sealing

Ofix CEP, 2-fold, for connecting pipe, pressure screw nickel plated, metal to metal sealing.

Suitable for:

- Thermostatic valves (AQ, AQH, AV 9, CV 9, ADV 9, E, AF, AZ V)
- Manual regulating valves (HR)
- Radiator lockshield valves (Combi 2, Combi 3, Combi 4)

Connection size	G 1/2 x 15 mm	Quantity	2-fold
			<b>Item No.</b>
			1016853



#### Ofix CEP for G 3/4 external thread according to DIN EN 16313, soft sealing

Ofix CEP, 2-fold, one-piece pre-assembled, for copper pipes according to DIN EN 1057, precision steel pipes according to DIN EN 10305-1 / 2, stainless steel pipes and galvanised steel pipes, soft sealing (no support sleeves required).

Suitable for:

- H-blocks (Multiblock T, TQ, T-RTL, TQ-RTL, Multiflex F)
- Heating circuit manifolds (Multidis SF, SFQ, SH)
- Unibox

Seal	Soft sealing
------	--------------

Connection size	Quantity	Item No.
G 3/4 union nut x 10 mm	2-fold	1016840
G 3/4 union nut x 12 mm	2-fold	1016841
G 3/4 union nut x 14 mm	2-fold	1016842
G 3/4 union nut x 15 mm	2-fold	1016843
G 3/4 union nut x 16 mm	2-fold	1016844
G 3/4 union nut x 18 mm	2-fold	1016845



#### Ofix CEP for G 3/4 external thread according to DIN EN 16313, metal to metal sealing

Ofix CEP, 2-fold, for copper pipes according to DIN EN 1057, metal to metal sealing.

Suitable for:

- H-blocks (Multiblock T, TQ, T-RTL, TQ-RTL, Multiflex F)
- Heating circuit manifolds (Multidis SF, SFQ, SH)
- Unibox

Quantity	2-fold
----------	--------

Connection size	Item No.
G 3/4 union nut x 10 mm	1016860
G 3/4 union nut x 12 mm	1016861
G 3/4 union nut x 14 mm	1016862
G 3/4 union nut x 15 mm	1016863
G 3/4 union nut x 16 mm	1016864
G 3/4 union nut x 18 mm	1016865



**Ofix K for G 3/4 external thread according to DIN EN 16313, metal to metal sealing**

Ofix K, 2-fold, for plastic pipes according to DIN EN 4726, PE-X according to DIN 16892/16893, PB according to DIN 16968 and PP according to DIN 8078 A1, metal to metal sealing plus O-ring.

Suitable for:

- H-Blocks (Multiblock T, TQ, T-RTL, TQ-RTL, Multiflex F)
- Heating circuit manifolds (Multidis SF, SFQ, SH)
- Unibox

Quantity 2-fold

Connection size	Item No.
12 x 1.1 mm	1016883
12 x 2 mm	1016870
14 x 2 mm	1016873
15 x 2.5 mm	1016885
16 x 1.5 mm	1016882
16 x 2 mm	1016874
17 x 2 mm	1016876
18 x 2 mm	1016877
20 x 2 mm	1016879

# Connection technology - Accessories and spare parts










## Brass support sleeve

For soft pipes with 1 mm wall thickness.

Description	Item No.
6 mm	2083951
8 mm	2083952
10 mm	1029651
14 mm	1029653
15 mm	1029654
16 mm	1029655
18 mm	1029656
22 mm	1029657



## Connection of pipes, fittings, radiators, distributors/collectors etc. for heating, sanitation and air conditioning with compression fitting

	Compression fittings for G 3/4 male thread according to DIN EN 16313 (Eurocone)				Compression fittings for Rp 1/2 female thread	
						
	<b>Cofit S</b>	<b>Ofix K</b>	<b>Ofix CEP</b>	<b>Ofix CEP</b>	<b>Ofix CEP</b>	<b>Cofit S</b>
	Outlet dezincification resistant brass, clamping ring brass	Outlet and clamping ring brass	Soft seal	Clamping ring brass	Clamping ring brass	Outlet dezincification resistant brass, clamping ring brass
Oventrop <b>Copipe</b> multi-layer composite pipe and multi-layer composite pipes of other manufacturers Ø 14 – Ø 20	Ø 14 – Ø 20					Ø 14 – Ø 16
<b>Plastic pipe</b> according to DIN 4726, PE-X according to DIN 16 892/16 893, PB according to DIN 16 968, PP according to DIN 80 78 A1 Ø 12 – Ø 20	Ø 14 – Ø 20 (only PE-X pipes)	Ø 12 – Ø 20				
<b>Copper pipe</b> DIN EN 1057 Ø 10 – Ø 18			Ø 10 – Ø 18	Ø 10 – Ø 22	Ø 10 – Ø 16	
<b>Precision steel pipe</b> DIN EN 10305-1 DIN EN 10305-2 Ø 10 – Ø 18			Ø 10 – Ø 18			
<b>Stainless steel pipe</b> DIN EN 10312 Ø 10 – Ø 18			Ø 10 – Ø 18			
<b>Brass support sleeves</b>						
				For pipe wall thickness = 1 mm		



## 1.2 Hydronic balancing at the radiator

### **One pipe** **132**

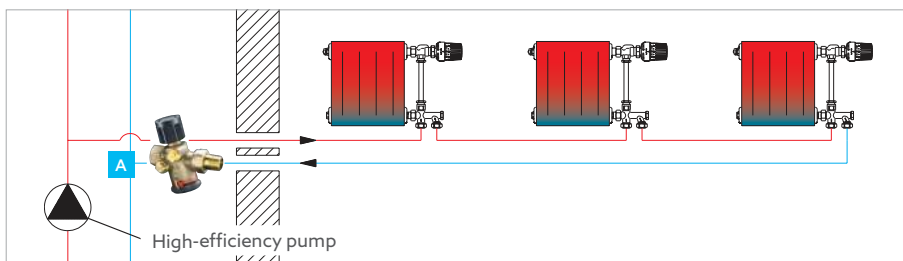
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# Unofix Refurbishment of one pipe heating systems



The Unofix system for the refurbishment of one pipe heating systems is based on the differential pressure independent control valve Cocon QTZ. It is available in different variants: As basic variant Unofix QB with pure volume flow limitation or as Unofix QT with additional actuator and room thermostat with time

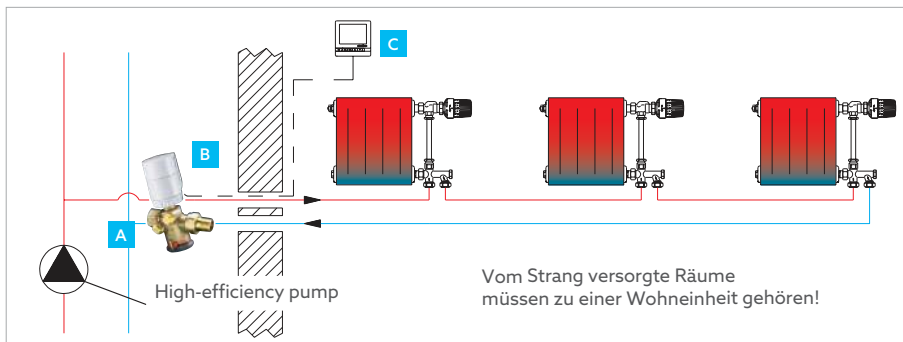
interval for e.g. night setback. The third variant Unofix QR has a return temperature limitation to maintain the temperature spread in partial load operation of the one pipe heating circuit. Two different spacers with fixed or adjustable minimum stroke are available for Unofix QR to ensure the residual volume flow.



Horizontal heating circuits with **Unofix QB**

## Unofix QB

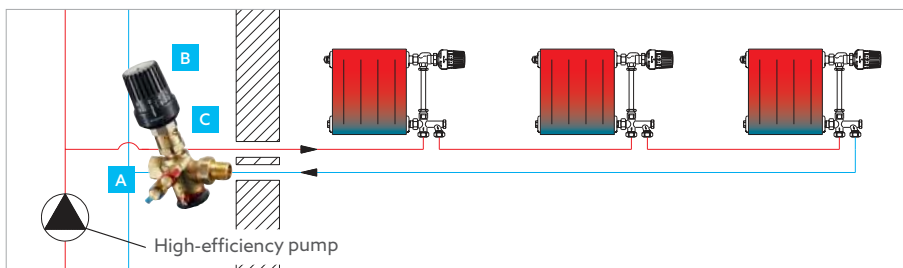
<b>A</b>	<b>Cocon QTZ</b>	11455..
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Horizontal heating circuits with **Unofix QT**

## Unofix QT

<b>A</b>	<b>Cocon QTZ</b>	11455..
<b>B</b>	<b>Aktor T 2P</b> Two point control	1012415/16
<b>C</b>	Room thermostat for two pipe applications	1155021



Horizontal heating circuits with **Unofix QR**

## Unofix QR

<b>A</b>	<b>Cocon QTZ</b>	11455..
<b>B</b>	<b>Uni RTLH</b> Thermostat	1149068
<b>C</b>	Spacer	1149090/91





#### Cocon QTZ with coupling and internal thread PN 16

Body material	DZR brass
Connection actuator	M 30 x 1.5
Shutoff	Yes
Presetting	Yes
Presetting blockable	Yes, lead sealable
Installation location	Supply or return

Main function	Pressure independent control valve
Medium	Water Water-glycol mixture
Operating temperature	-10 up to 120 °C
Measuring connection	Closed with blind plug

Nominal size	Connection size	Control range (l/h)	Item No.
DN 15	R 1/2 x Rp 1/2	30 up to 210	1145504
DN 15	R 1/2 x Rp 1/2	150 up to 1,050	1145704
DN 20	R 3/4 x Rp 3/4	150 up to 1,050	1145506



#### Cocon QTZ with external thread PN 16

Body material	DZR brass
Connection actuator	M 30 x 1.5
Shutoff	Yes
Presetting	Yes
Presetting blockable	Yes, lead sealable
Installation location	Supply or return

Main function	Pressure independent control valve
Medium	Water Water-glycol mixture
Operating temperature	-10 up to 120 °C
Measuring connection	Closed with blind plug

Nominal size	Connection size	Control range (l/h)	Item No.
DN 10	G 1/2	90 up to 450	1145663
DN 15	G 3/4	30 up to 210	1145564
DN 15	G 3/4	150 up to 1,050	1145764
DN 20	G 1	150 up to 1,050	1145566



#### Spacer

Description	Item No.
For Cocon QTZ PN 16, with fixed minimum stroke	1149090
For Cocon QTZ PN 16, with adjustable minimum stroke	1149091

#### Uni RTLH Thermostat with M 30 x 1.5



Description	Item No.
Anthracite, with zero position, limitable and blockable, 10 °C - 70 °C	1149068





**ClimaCon F 90 Room thermostat for two pipe applications, heating only/cooling only, follower**

Voltage	Control	Suitable for	Item No.
230 V AC	On/off	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1155009



**ClimaCon F 210 Room thermostat for two pipe applications, heating only/cooling only, leader**

Voltage	Control	Suitable for	Item No.
230 V AC	On/off / PWM	Electrothermal actuators (on/off), "normally closed"	1155021



**Aktor T 2P Electrothermal actuator**

Version	"Normally closed"	Valve connection	Connection thread M 30 x 1.5
Cable*	1 m		

Voltage	Item No.
230 V AC	1012415
24 V AC / DC	1012416

# One pipe valves with shutoff



The Bypass Combi Uno system is used in one pipe central heating systems with forced circulation, with ring circuits up to 8000 watts, regardless of the type of heating.

The one pipe valves and connection pieces allow for an efficient, cost-saving installation and easy dimensioning of one pipe heating systems. The infinitely presettable bypass allows for an optimal economical design of the entire heating system. The radiator fitting of the one pipe connection piece can be either a brass fitting or an insulating fitting. The insulating fitting largely prevents even small radiators from heating up due to the heat flow

through the radiator fitting when the thermostatic valve is closed. The possibility of shutting off the supply and return to the radiator means that it can also be removed while the heating system is running.

A one pipe connection piece, a connecting pipe and a reversed angle valve, a double angle valve or a straight valve with elbow, as well as a compression fitting set are required for the implementation. If the thermostat is to face forward, the double angle valve or the straight valve with elbow must be selected instead of the reversed angle valve. The thermostat must be ordered separately.

## Uno One pipe connection piece with infinitely adjustable bypass and shutoff



Type	Straight	Operating temperature	2 to 120 °C
Nominal size	DN 15	Medium	Water
Surface	Nickel plated		Water-glycol mixture
Body material	Brass	One pipe*	Yes
Max. operating pressure	10 bar	Two pipe*	No

Pipe connection	Distance between pipe centres (mm)	Suitable for reversed supply and return	Description	Item No.
G 3/4 external	50	No	With radiator insulating fitting	1013161
G 3/4 external	50	No	With brass fitting	1013162
G 3/4 external	50	Yes	With radiator insulating fitting	1013164
M 24 x 1.5 external	35	No	With brass fitting	1182151

## One pipe radiator valve with fixed bypass and shutoff



Nominal size	DN 15	Medium	Water
Thermostat thread	M 30 x 1.5		Water-glycol mixture
Surface	Nickel plated	One pipe*	Yes
Body material	Brass	Two pipe*	No
Max. operating pressure	10 bar	Suitable for reversed supply and return	No
Operating temperature	2 to 120 °C		

Type	Distance between pipe centres (mm)	Item No.
Lateral connection	50	1183561 °
Vertical connection	50	1183571

### A Thermostatic valve



Thermostat thread	M 30 x 1.5	One pipe*	Yes
Surface	Nickel plated	Two pipe*	Yes
Body material	Brass	Suitable for reversed supply and re- turn	No
Max. operating pressure	10 bar		
Operating temperature	2 to 120 °C		
Medium	Water-glycol mixture Water		

Nominal size	Type	Item No.
DN 15	Reversed angle	1181404
DN 15	Straight with elbow	1181304
DN 15	Double angle left	1181392
DN 15	Double angle right	1181393

### Connecting pipe



Description	Item No.
15 x 560 mm, steel, chrome plated	1016951
15 x 1120 mm, steel, chrome plated	1016953

### Ofix CEP Compression fitting



Description	Item No.
For connecting pipe, 2-fold for internal thread, G 1/2 external thread x 15 mm, metal to metal sealing	1016853

### Ofix CEP Compression fitting M 24 x 1.5



Description	Item No.
For copper pipes, 2-fold, 15 mm, metal to metal sealing	1016813

### Ofix K Compression fitting M 24 x 1.5



Description	Item No.
For plastic pipes, 2-fold, 14 x 2.0 mm, metal to metal sealing	1016823
For plastic pipes, 2-fold, 16 x 2.0 mm, metal to metal sealing	1016824

**Covering rosette made of plastic**



**Description**

For connecting pipe, flat, distance between pipe centres 35 mm, 14-16 mm perforation

**Item No.**

1016684



**Elbow**

**Description**

G  $\frac{3}{4}$  union nut x G  $\frac{3}{4}$  external thread

**Item No.**

1189361



# Three-way conversion valves



The three-way conversion valves are suitable for one pipe heating systems with forced circulation and are often used in housing construction in the new Federal states. The body is made of nickel plated bronze/brass. The valve insert is made of brass and the spindle and spring of stainless steel. The valve disc has a soft seal. The pipe connections are designed with flat-sealing external thread. When

the valve closes, the flow through the radiator is reduced and the flow through the bypass is increased and vice versa. The three-way conversion valves are supplied with a plastic protection cap, which serves as protection and for manual operation during the construction period. The subsequent temperature control is carried out by a thermostat. All thermostats with connection thread M 30 x 1.5 can be used.

## Left hand side connection



Body material	Brass	Max. operating pressure	16 bar
Surface	Nickel plated	One pipe*	Yes
Thermostat thread	M 30 x 1.5	Two pipe*	No
Medium	Water Water-glycol mixture	Colour protection cap	Yellow
Operating temperature	2 to 120 °C		

### Nominal size

Nominal size	Item No.
DN 15	1180584 °
DN 20	1180586 °

## Right hand side connection



Body material	Brass	Max. operating pressure	16 bar
Surface	Nickel plated	One pipe*	Yes
Thermostat thread	M 30 x 1.5	Two pipe*	No
Medium	Water Water-glycol mixture	Colour protection cap	Yellow
Operating temperature	2 to 120 °C		

### Nominal size

Nominal size	Item No.
DN 15	1180585 °
DN 20	1180587 °



## Presetting key

### Description

For three-way conversion valves

### Item No.

1010599



#### Fitting

Description	Item No.
DN 15, weldable tailpipe and union nut G ¾ internal thread, flat sealing to the pipework	1019374
DN 20, weldable tailpipe and union nut G 1 internal thread, flat sealing to the pipework	1019376
DN 15, G ½ internal thread / union nut G ⅞ internal thread, flat sealing to the bypass pipe	1019384
DN 20, G ¾ internal thread / union nut G 1 ⅛ internal thread, flat sealing to the bypass pipe	1019386
DN 15, R ½ external thread / union nut G ¾ internal thread, flat sealing to the radiator	1019394
DN 20, R ½ external thread / union nut G 1 internal thread, flat sealing to the radiator	1019396



#### Shutoff fitting

Length: 45 mm

Description	Item No.
DN 15, G ¾ external thread / union nut G ¾ internal thread, flat sealing	1016194 °
DN 20, G 1 external thread / union nut G 1 internal thread, flat sealing	1016196 °



#### Connection set

The conversion set as short-circuit section consists of a replacement set of the fittings located upstream of the radiator. These components are required in addition to three-way conversion valves and insulating fittings.

Description	Item No.
For three-way conversion valve, centre distance 552 mm, DN 15	1010558 °
For three-way conversion valve, centre distance 552 mm, DN 20	1010559 °
For three-way conversion valve, centre distance 992 mm, DN 15	1010568 °
For three-way conversion valve, centre distance 992 mm, DN 20	1010569 °



#### Insulating fitting

To reduce the heat transfer between valve/T-piece and radiator in vertical one pipe heating systems.

Description	Item No.
Insulation, compensation and shutoff set DN 15, G ¾ union nut x G ½ external thread, brass, flat sealing	1016254 °
Insulation, compensation and shutoff set DN 20, G 1 union nut x G ½ external thread, brass, flat sealing	1016256 °
Insulation loop and shutoff set DN 15, G ¾ union nut x G ¾ external thread, brass, flat sealing	1016284 °
Insulation loop and shutoff set DN 20, G 1 union nut x G 1 external thread, brass, flat sealing	1016286 °



#### S-connection fitting

The S-connection fitting is suitable for replacing radiators with prefabricated radiators with deviating centre distance up to max. 2 x 32 mm = 64 mm

Description	Item No.
DN 15, G ¾ external thread x G ¾ union nut, flat sealing	1019497 °
DN 20, G ¾ external thread x G 1 union nut, flat sealing	1019498 °

**Tailpipe set**

For S-connection fitting

Description	Item No.
Weldable tailpipe for valve DN 15, steel, 2-fold	1060592
Weldable tailpipe for valve DN 20, steel, 2-fold	1060593
Externally threaded tailpipe, R 1/2 for valve DN 15, brass, 2-fold	1061492
Externally threaded tailpipe, R 3/4 for valve DN 20, brass, 2-fold	1061493

**Replacement valve insert**

Thermostat thread	Item No.
M 30 x 1.0	1017056
-	1187056





## 1.2 Hydronic balancing at the radiator

### **Valve sets** **142**

Two pipe valves with shutoff..... 143



# Two pipe valves with shutoff



The Bypass Combi Duo system is used in two pipe central heating systems with forced circulation, regardless of the type of heating.

The two pipe valves allow for an efficient, cost-saving installation and easy dimensioning of two pipe heating systems. The possibility of shutting off the supply and return to the radiator means that it can also be removed while the heating system is running.

A two pipe connection piece, a connecting pipe and a reversed angle valve, a double angle valve or a straight valve with elbow, as well as a compression fitting set are required for the implementation. If the thermostat is to face forward, the double angle valve or the straight valve with elbow must be selected instead of the reversed angle valve. The thermostat must be ordered separately.

## Duo Two pipe connection piece with infinitely adjustable presetting and shutoff



Body material	Brass	Medium	Water
Surface	Nickel plated		Water-glycol mixture
Operating temperature	2 to 120 °C	One pipe*	No
Max. operating pressure	10 bar	Two pipe*	Yes

Nominal size	Pipe connection	Distance between pipe centres (mm)	Item No.
DN 15	M 24 x 1.5 external	35	1182651

## Duo Two pipe connection piece with shutoff



Body material	Brass	Medium	Water
Surface	Nickel plated		Water-glycol mixture
Operating temperature	2 to 120 °C	One pipe*	No
Max. operating pressure	10 bar	Two pipe*	Yes

Nominal size	Pipe connection	Distance between pipe centres (mm)	Item No.
DN 15	G 3/4 Eurocone	50	1013361



#### Valve with immersion pipe with shutoff

Body material	Brass	One pipe*	No
Surface	Nickel plated	Two pipe*	Yes
Operating temperature	2 to 120 °C	Pipe connection	G 3/4 Eurocone
Max. operating pressure	10 bar	Thermostat thread	M 30 x 1.5
Medium	Water Water-glycol mixture		

Nominal size	Type	Distance between pipe centres (mm)	Item No.
DN 15	Vertical connection	50	1183581
DN 15	Lateral connection	50	1643561



#### Two pipe connection piece

Type	Straight	One pipe*	No
Body material	Brass	Pipe connection	G 3/4 Eurocone
Surface	Nickel plated	Radiator connection	R 1/2
Operating temperature	2 to 120 °C	Two pipe*	Yes
Medium	Water-glycol mixture Water		

Nominal size	Distance between pipe centres (mm)	Item No.
DN 15	50	1028750



#### A Thermostatic valve

Body material	Brass	One pipe*	Yes
Surface	Nickel plated	Two pipe*	Yes
Operating temperature	2 to 120 °C	Pipe connection	Rp 1/2
Max. operating pressure	10 bar	Thermostat thread	M 30 x 1.5
Medium	Water-glycol mixture Water		

Nominal size	Type	Item No.
DN 15	Reversed angle	1181404
DN 15	Straight with elbow	1181304
DN 15	Double angle left	1181392
DN 15	Double angle right	1181393

#### Connecting pipe



Description	Item No.
15 x 560 mm, steel, chrome plated	1016951
15 x 1120 mm, steel, chrome plated	1016953



### Ofix CEP Compression fitting

#### Description

For connecting pipe, 2-fold for internal thread, G 1/2 external thread x 15 mm, metal to metal sealing

#### Item No.

1016853



## 1.3 Surface heating and cooling

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## 1.3 Surface heating and cooling

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# Multidis SF Heating circuit manifolds for surface heating and surface cooling



The **Multidis SF** heating circuit manifolds for surface heating and cooling for 2 - 12 heating circuits are made of stainless steel. The flow distributor is equipped with integrated regulating inserts or with integrated flow measuring and regulating devices. The return collector is equipped with valve inserts with an M 30 x 1.5 connection thread to connect optional actuators. The heating circuit manifolds are

completely pre-assembled with fill and drain cocks, vent plugs and end caps. The heating circuit connections with G 3/4 external thread are suitable for Oventrop compression fittings. Wall brackets are loosely enclosed. Sound insulation according to DIN 4109. The heating circuit manifolds are designed for use in surface heating and cooling system with forced circulation.

Body material	Stainless steel	With valve inserts	Yes
Connection thread heating circuits	G 3/4 external	Heating circuits can be shut off	Yes
Connection thread supply and return	G 1 internal thread	Ball valve	No
Fill and drain cock	Yes	Wall bracket	Yes

## Multidis SF with integrated regulating inserts in the flow distributor



Max. operating pressure	10 bar	Operating temperature	-10 up to 90 °C
-------------------------	--------	-----------------------	-----------------

	Heating circuits	Item No.
	2	1406552
	3	1406553
	4	1406554
	5	1406555
	6	1406556
	7	1406557
	8	1406558
	9	1406559
	10	1406560
	11	1406561
	12	1406562

## Hydronic balancing? Quickly done with OVplan.



You want to design systems with Multidis SF heating circuit manifolds? It's easy with our planning software OVplan.

Download now free of charge at [www.ov.de/ovplan](http://www.ov.de/ovplan)





Multidis SF with integrated flow measuring and regulating devices in the flow distributor

Max. operating pressure	6 bar	Operating temperature	-10 up to 70 °C
Setting range	0 up to 5 l/min		



	Heating circuits	Item No.
	2	1406352
	3	1406353
	4	1406354
	5	1406355
	6	1406356
	7	1406357
	8	1406358
	9	1406359
	10	1406360
	11	1406361
	12	1406362



# Multidis SFQ Heating circuit manifolds with Q-Tech



The **Multidis SFQ** heating circuit manifolds for surface heating and cooling for 2 - 12 heating circuits are made of stainless steel. The flow distributor is equipped with integrated flow rate indicators or with integrated shut-off devices. The return collector is equipped with QM valve inserts with an M 30 x 1.5 connection thread to connect optional actuators. The special QM valve insert allows for automatic hydronic balancing in central heat-

ing and cooling systems with closed circuits. The heating circuit manifolds are completely pre-assembled with fill and drain cocks, vent plugs and end caps. The heating circuit connections with G 3/4 external thread are suitable for Oventrop compression fittings. Wall brackets are loosely enclosed. Sound insulation according to DIN 4109. The heating circuit manifolds are designed for use in surface heating and cooling system with forced circulation.

Body material	Stainless steel	With valve inserts	Yes
Connection thread heating circuits	G 3/4 external	Heating circuits can be shut off	Yes
Connection thread supply and return	G 1 internal thread	Operating temperature	2 up to 60 °C
Q-Tech*	Yes	Presetting key enclosed	Yes
Flow rate display	Flow rate indicator	Ball valve	No
Fill and drain cock	Yes	Wall bracket	Yes

## Multidis SFQ with integrated flow indicators in the flow distributor



Heating circuits	Item No.
2	1404952
3	1404953
4	1404954
5	1404955
6	1404956
7	1404957
8	1404958
9	1404959
10	1404960
11	1404961
12	1404962



# Multidis SFI Manifolds for industrial surface heating / cooling and concrete core activation



The **Multidis SFI** manifolds for industrial surface heating and cooling as well as concrete core activation for 2 - 6 circuits are made of brass. The flow distributor is equipped with ball valves and the return collector with regulating valves. An extension of the circuits up to 20 is possible by connecting manifold mod-

ules. Flow distributor with G 1 external thread for Oventrop compression fittings. Return collector with integrated regulating valves with G 1 external thread. The manifolds are designed for use in industrial surface heating and cooling systems as well as for concrete core activation.

## Multidis SFI



Body material	Brass	Heating circuits can be shut off	Yes
Connection thread heating circuits	G 1 external thread	Operating temperature	2 up to 90 °C
Connection thread supply and return	G 2 union nut x G 2 external thread	Max. operating pressure	6 bar
Q-Tech*	No	Ball valve	No
Fill and drain cock	No	Extendable	Yes
With regulating valves	Yes	Wall bracket	No

	Heating circuits	Item No.
	2	1414452
	3	1414453
	4	1414454
	5	1414455
	6	1414456

## PE-Xc Copex Plastic pipe

With oxygen barrier.



Description	Item No.
20 x 2.0 mm, length per roll: 240 m	1400352
20 x 2.0 mm, length per roll: 600 m	1400354
26 x 3.0 mm, length per roll: 50 m	1400560
26 x 3.0 mm, length per roll: 200 m	1400562
26 x 3.0 mm, length per roll: 300 m	1400563
32 x 3.0 mm, length per roll: 50 m	1400660

### Cofit S Compression fitting



#### Description

20 x 2.0 mm x G 1 union nut  
26 x 3.0 mm x G 1 union nut

#### Item No.

1507969  
1507979

### Wall bracket



#### Description

For Multidis SFI for industrial surface heating/cooling and concrete core activation steel, galvanised, height and depth adjustable, 2-fold with two pipe clamps including sound insulation inserts and quick fastener

#### Item No.

1414490

### Cap



#### Description

For Multidis SFI for industrial surface heating/cooling and concrete core activation brass, G 2 internal thread, 2-fold

#### Item No.

1414493

### Ball valve



#### Description

For Multidis SFI for industrial surface heating/cooling and concrete core activation, DN 50, G 2 internal thread x G 2 external thread

#### Item No.

1406586

### Optiflex Ball valve



#### Description

For Multidis SH/SF/SFQ/SFI, for filling and venting, DN 15, G 1/2

#### Item No.

1033314

# Heat meter connection sets



Heat meter connection sets are matched for use with Multidis heating circuit manifolds for surface heating and cooling.

Commercially available heat meters with flat

Max. operating pressure 10 bar

Consisting of  
Control valve or ball valve  
Meter spacer, plastic  
Ball valve with temperature sensor connection (2x)  
Fittings and accessories

sealing housings with the following dimensions can be retrofitted in the return pipe:  
- Length 110 mm and G 3/4 external thread  
- Length 130 mm and G 1 external thread



## Heat meter connection set for Multidis SF with Hycocn VTZ

kvs 2.70

### Pipe connection

G 3/4 internal thread  
G 3/4 internal thread  
G 1 IT  
G 1 IT

### Type

Angle  
Straight  
Angle  
Straight

### Item No.

1404578  
1404579  
1404580  
1404581



## Heat meter connection set for Multidis SF with Hycocn DTZ

kvs 2.70

### Pipe connection

G 1 IT  
G 1 IT

### Type

Angle  
Straight

### Item No.

1404682  
1404683



## Heat meter connection set for Multidis SF with Cocon QDP

### Pipe connection

G 3/4 internal thread  
G 3/4 internal thread  
G 1 IT  
G 1 IT

### Type

Angle  
Straight  
Angle  
Straight

### Control range (l/h)

up to 1,350  
up to 1,350  
up to 1,350  
up to 1,350

### Item No.

1404884  
1404885  
1404886  
1404887



#### Heat meter connection set for Multidis SF with Cocon QTZ

Q-Tech\* Yes

Pipe connection	Type	Control range (l/h)	Item No.
G 1 IT	Angle	150 up to 1,050	1404880
G 1 IT	Straight	150 up to 1,050	1404881
G 1 IT	Angle	180 up to 1,300	1404882
G 1 IT	Straight	180 up to 1,300	1404883



#### Heat meter connection set for Multidis SFQ with ball valves

Pipe connection	Type	Item No.
G ¾ internal thread	Angle	1405578
G ¾ internal thread	Straight	1405579
G 1 IT	Angle	1405580
G 1 IT	Straight	1405581



# Multidis - Accessories and spare parts



## Cofit S Compression fitting for G 3/4 external thread

According to DIN EN 16313, clamping ring and union nut made of brass, union nut nickel plated, outlet made of bronze, metal to metal sealing plus O-ring.

Suitable for Copipe multi-layer composite pipes and, with the same processing method, also for plastic pipes.

Description	Item No.
14 x 2,0 mm x G 3/4 union nut, 2-fold	1507934
16 x 2.0 mm x G 3/4 union nut, 2-fold	1507935
17 x 2.0 mm x G 3/4 union nut, 2-fold	1507937
18 x 2.0 mm x G 3/4 union nut, 2-fold	1507938
20 x 2.0 mm x G 3/4 union nut, 2-fold	1507939
20 x 2.5 mm x G 3/4 union nut, 2-fold	1507940



## Ofix K for G 3/4 external thread

2-fold, for plastic pipes according to DIN EN 4726, PE-X according to DIN 16892/16893, PB according to DIN 16968 and PP according to DIN 8078 A1, metal to metal sealing plus O-ring.

Description	Item No.
12 x 1.1 mm, 2-fold	1016883
12 x 2.0 mm, 2-fold	1016870
14 x 2.0 mm, 2-fold	1016873
15 x 2.5 mm, 2-fold	1016885
16 x 1.5 mm, 2-fold	1016882
16 x 2.0 mm, 2-fold	1016874
17 x 2.0 mm, 2-fold	1016876
18 x 2.0 mm, 2-fold	1016877
20 x 2.0 mm, 2-fold	1016879



## Double fitting (2-fold)

Description	Item No.
For heat meter connection sets, G 1 external thread x G 1 union nut	1699085



## Coupling

Description	Item No.
For connecting two Multidis SF heating circuit manifolds, G 1 x G 3/4	1407206



### Surface-mounted cabinet

For Multidis SF/SFQ heating circuit distributors.  
Steel, galvanised. Frame and door white lacquered.

#### Description

Description	Item No.
No. 1, W 600 x H 760-870 x D 160 mm	1401171
No. 2, W 750 x H 760-870 x D 160 mm	1401172
No. 3, W 1000 x H 760-870 x D 160 mm	1401173
No. 4, W 1250 x H 760-870 x D 160 mm	1401174



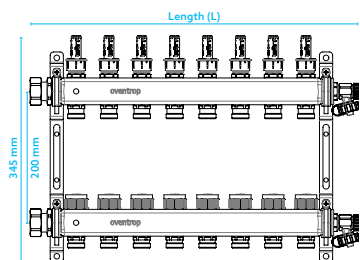
### Flush-mounted cabinet

For Multidis SF/SFQ heating circuit manifolds.  
Steel, galvanised. Frame and door white lacquered. With removable screen.

#### Description

Description	Item No.
No. 1, W 560 x H 760-885 x D 115-180 mm	1401151
No. 2, W 700 x H 760-885 x D 115-180 mm	1401152
No. 3, W 900 x H 760-885 x D 115-180 mm	1401153
No. 4, W 1200 x H 760-885 x D 115-180 mm	1401154

When using heat meter connection sets, the sum of installation length and distributor/collector length must be taken into account



Outlets	Length (L)	Cabinet no.	Length (L) with ball valve item no.1406383	Cabinet no.
2	205 mm	1	255 mm	1
3	255 mm	1	305 mm	1
4	305 mm	1	355 mm	1
5	355 mm	1	405 mm	1
6	405 mm	1	455 mm	1
7	455 mm	1	505 mm	2
8	505 mm	2	555 mm	2
9	555 mm	2	605 mm	2
10	605 mm	2	655 mm	3
11	655 mm	3	705 mm	3
12	705 mm	3	755 mm	3



### Replacement set for flush-mounted cabinet

#### Description

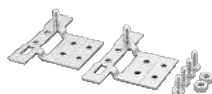
Description	Item No.
For item no. 1401151, with door, frame and screed cover	1401193
For item no. 1401152, with door, frame and screed cover	1401192
For item no. 1401153, with door, frame and screed cover	1401195
For item no. 1401154, with door, frame and screed cover	1401196

### Mounting compensation

#### Description

For mounting the Multidis heating circuit manifolds in the cabinet if the piping does not allow it to be mounted at the intended location

Item No.
1408015



### Cylinder lock



Description	Item No.
With key for surface-mounted cabinets (item no. 1401171-74)	1401190
With key for flush-mounted cabinets (item no. 1401151-54) and all Regudis W cabinets	1401191

### Angle connection set

For bottom connection to heating circuit manifolds when using surface-mounted cabinets.



Description	Item No.
For Multidis SF/SFQ heating circuit manifolds	1404780

### Ball valve, flat sealing



Description	Item No.
For Multidis SH/SF/SFQ heating circuit manifolds, DN 20	1406383
For Multidis SH/SF/SFQ heating circuit manifolds, DN 25	1406384

### Ball valve, flat sealing, with red T-handle and thermometer



Description	Item No.
For Multidis SH/SF/SFQ heating circuit manifolds, DN 20	1406483
For Multidis SH/SF/SFQ heating circuit manifolds, DN 25	1406484

### Ball valve, flat sealing, with blue T-handle and thermometer



Description	Item No.
For Multidis SH/SF/SFQ heating circuit manifolds, DN 20	1406583
For Multidis SH/SF/SFQ heating circuit manifolds, DN 25	1406584



#### Ball valve, flat sealing, with temperature sensor connection M 10 x 1.0

##### Description

For Multidis SH/SF/SFQ heating circuit manifolds, DN 25

##### Item No.

1406708



#### Ball valve with Eurocone

For shutting off the heating circuits at the manifold.

##### Description

For Multidis SH/SF/SFQ heating circuit manifolds, G 3/4 external thread x G 3/4 union nut

##### Item No.

1406504



#### Optiflex Fill and drain ball valve

Self-sealing, with lock nut, hose fitting (soft sealing) and cap.

##### Description

For Multidis SH/SF/SFQ/SFI, for filling and venting, DN 15, G 1/2

##### Item No.

1033314



#### Overflow device

For the right hand side connection to the heating circuit manifold. To avoid flow noises.

##### Description

For Multidis SF heating circuit manifolds, G 3/4 external thread

##### Item No.

1404790



#### Vent plug

##### Description

G 3/8, self-sealing, set = 10 pieces, for heating circuit manifolds (manufactured until 2021)

##### Item No.

1400392





### Cap

#### Description

G 3/4 internal thread  
G 1 internal thread

#### Item No.

1400692  
1400693



### Thermometer

#### Description

For brass heating circuit manifolds

#### Item No.

1404095



### Ring spanner

#### Description

For mounting the compression fittings, spanner size 30/32 mm

#### Item No.

1401091



### Replacement valve insert

#### Description

For Multidis SF heating circuit manifolds  
For Multidis SFQ heating circuit manifolds

#### Item No.

1404091  
1408023



### Replacement flow measuring and regulating device

#### Description

For Multidis SF heating circuit manifolds (manufactured from 2021)  
For Multidis SF heating circuit manifolds (manufactured until 2021)

#### Item No.

1408038  
1408050



### Replacement flow rate indicator

#### Description

For Multidis SFQ heating circuit manifolds (manufactured from 2021)

#### Item No.

1408040



#### Replacement fill and drain cock

##### Description

For Multidis SF/SFQ heating circuit manifolds (manufactured from 2021)

##### Item No.

1408006



#### Replacement wall bracket

##### Description

For Multidis SF/SFQ heating circuit manifolds, with two pipe clamps, including sound insulation, 1-fold

##### Item No.

1408010



#### Replacement differential pressure regulator

##### Description

For heat meter connection sets with Hycocn DTZ, DN 20, G 1 external thread, with measuring and drain valve

##### Item No.

1062166



#### Replacement electrothermal actuator, connection thread M 30 x 1.5

##### Description

On/off control, "normally closed", 24 V

##### Item No.

1012416



## 1.3 Surface heating and cooling

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# Copert Plastic pipes



The plastic pipes **Copex** (PE-Xc) and **Copert** (PE-RT) are suitable for surface heating and cooling. The **Copex** pipes comply with DIN 16892 / DIN 16893 / DIN EN ISO 15 875 / EN1264-4. The **Copert** pipes comply with

DIN 16833 / DIN 16834. Both pipes are oxygen-tight according to DIN 4726. The following dimensions are available: 12 x 2.0 mm, 14 x 2.0 mm, 16 x 2.0 mm, 17 x 2.0 mm, 20 x 2.0 mm, 26 x 3.0 mm and 32 x 3.0 mm.

Pipe colour	White	Max. operating pressure (pipe)	6 bar at 70°C 10 bar at 60°C
Oxygen-tight	Yes	Number of layers	5
Material inner layer	Plastic	Quality class	PE-RT II
Material intermediate layer	Plastic		
Material outer layer	Plastic		

## PE-RT Copert Plastic pipe



Dimension (mm)	Length of roll (m)	Item No.
14 x 2.0	240	1402052
14 x 2.0	600	1402054
16 x 2.0	240	1402152
16 x 2.0	600	1402154
17 x 2.0	240	1402252
17 x 2.0	600	1402254
20 x 2.0	240	1402352



# Copex Plastic pipes



The plastic pipes **Copex** (PE-Xc) and **Copert** (PE-RT) are suitable for surface heating and cooling. The **Copex** pipes comply with DIN 16892 / DIN 16893 / DIN EN ISO 15 875 / EN1264-4. The **Copert** pipes comply with

DIN 16833 / DIN 16834. Both pipes are oxygen-tight according to DIN 4726. The following dimensions are available: 12 x 2.0 mm, 14 x 2.0 mm, 16 x 2.0 mm, 17 x 2.0 mm, 20 x 2.0 mm, 26 x 3.0 mm and 32 x 3.0 mm.

Pipe colour	Natural	Material outer layer	Plastic
Oxygen-tight	Yes	Number of layers	5
Material inner layer	Plastic	Quality class	PE-Xc
Material intermediate layer	Plastic		

## PE-Xc Copex Plastic pipe



Dimension (mm)	Length of roll (m)	Max. operating pressure (pipe)	Item No.
14 x 2.0	120	6 bar at 90°C 10 bar at 60°C	1400051
14 x 2.0	240	6 bar at 90°C 10 bar at 60°C	1400052
14 x 2.0	600	6 bar at 90°C 10 bar at 60°C	1400054
16 x 2.0	120	6 bar at 90°C 10 bar at 60°C	1400151
16 x 2.0	240	6 bar at 90°C 10 bar at 60°C	1400152
16 x 2.0	600	6 bar at 90°C 10 bar at 60°C	1400154
17 x 2.0	120	6 bar at 90°C 10 bar at 60°C	1400251
17 x 2.0	240	6 bar at 90°C 10 bar at 60°C	1400252
17 x 2.0	600	6 bar at 90°C 10 bar at 60°C	1400254
20 x 2.0	240	6 bar at 90°C 8 bar at 70°C	1400352
20 x 2.0	600	6 bar at 90°C 8 bar at 70°C	1400354
26 x 3.0	50	6 bar at 90°C 10 bar at 60°C	1400560
26 x 3.0	200	6 bar at 90°C 10 bar at 60°C	1400562
26 x 3.0	300	6 bar at 90°C 10 bar at 60°C	1400563
32 x 3.0	50	6 bar at 90°C 10 bar at 60°C	1400660

# Copipe HSC Multi-layer composite pipes



**Copipe HSC** multi-layer composite pipes (PE-RT/AL/PE-RT) are suitable for surface heating and cooling. **Copipe** pipes consist of 5 layers (outer jacket pipe made of PE-RT, adhesive lay-

er, longitudinally welded aluminum pipe, adhesive layer and inner medium pipe made of PE-RT). The following dimensions are available: 14 x 2 mm and 16 x 2 mm.

Oxygen-tight	Yes	Max. operating pressure (pipe)	6 bar at 90°C 10 bar at 70°C
Material inner layer	Plastic	Number of layers	5
Material intermediate layer	Aluminium	Pipe colour	White
Material outer layer	Plastic		

## PE-RT/AL/PE-RT Copipe HSC Multi-layer composite pipe (manufactured from 2021)



Dimension (mm)	Length of roll (m)	Item No.
14 x 2.0	200	1541420
16 x 2.0	200	1541620
16 x 2.0	500	1541650

# Cofloor Tacker system



The **Cofloor tacker system** consists of base mat rolls or folded boards, pipes and tacker hooks. This system can be used for new construction and renovation. The base mat rolls and the folded boards made of expanded polystyrene are provided with a laminated tissue foil and have an imprinted laying grid (grid distance 5 cm).

Fastening of the Oventrop **Copex** PE-Xc, **Copert** PE-RT plastic pipes or the **Copipe HSC** multi-layer composite pipes (14 mm, 16 mm and 17 mm) is carried out by means

of tacker hooks or alternatively by means of self-adhesive clamping rails made of polypropylene. The base mat rolls and folded boards are laid out on the raw concrete or, if necessary, on the additional insulation.

The **Cofloor tacker system** enables inexpensive, quick and easy laying of the individual components. The clear picture of the laying grid facilitates a straight pipe guidance when fixing the pipe with the handy Oventrop tacker machine. Particularly suitable for standard-compliant concrete screed or liquid screed.

## Base mat roll

10.0 x 1.0 m = 10.0 m<sup>2</sup>



Grid*	50 mm	Impact sound insulation	Yes
Material	EPS	Fire behaviour	RTF-E (according to DIN EN 13501-1)
Pipe diameter*	14 up to 17 mm		

Insulation* (mm)	Impact sound* (dB(A))	Max. load (kN/m <sup>2</sup> )	Stiffness* (MN/m <sup>2</sup> )	Rd* (m <sup>2</sup> K/W)	TCG*	Item No.
20	26	5	30	0.50	040	1402515
35	29	4	15	0.78	045	1402500
30	29	4	15	0.67	045	1402505
25	28	4	20	0.56	045	1402510
30	28	5	20	0.75	040	1402507
20	28	4	20	0.44	045	1402520

## Folded board

2.0 x 1.0 m = 2.0 m<sup>2</sup>



Grid*	50 mm	Impact sound insulation	Yes
Material	EPS	Fire behaviour	RTF-E (according to DIN EN 13501-1)
Pipe diameter*	14 up to 17 mm		

Insulation* (mm)	Impact sound* (dB(A))	Max. load (kN/m <sup>2</sup> )	Stiffness* (MN/m <sup>2</sup> )	Rd* (m <sup>2</sup> K/W)	TCG*	Item No.
35	29	4	15	0.78	045	1402600
30	29	4	15	0.67	045	1402605
30	28	5	20	0.75	040	1402607
25	28	4	20	0.56	045	1402610
20	28	4	20	0.44	045	1402620

### Clamping rail

Laying rail, self-adhesive, clamp distance 5 cm



#### Description

For 14 mm pipe, length 1 m

For 16 mm pipe, length 1 m

#### Item No.

1402580

1402581



### Tacker hook

Made of plastic, for 14 - 20 mm pipes

#### Description

Thermowelded, 10 magazines (1 magazine = 30 pieces)

#### Item No.

1402594



### Tacker machine

#### Description

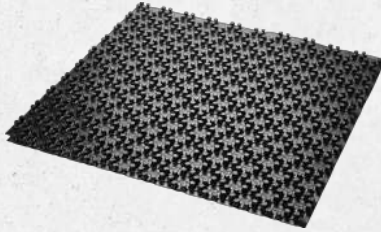
For all Oventrop tacker hooks

#### Item No.

1402596



# Cofloor Base mat system



The **Cofloor base mat system** consists of base mats and pipes. This system can be used for new construction and renovation. The base mats have a suitable thermal insulation made of PS (polystyrene) or EPS (expanded polystyrene) in various thicknesses (except for item no. 1402130: only foil), which also serves as impact sound insulation. The special geometry of the nubs (grid dimension 6 cm) allows easy installation of 14 mm, 16 mm and 17 mm **Copex** PE-Xc and **Copert** PE-RT plastic pipes and also **Copipe** HSC multi-layer composite pipes.

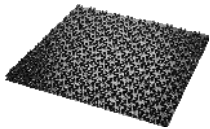
The handy base mats know practically no waste. They can be laid economically and in a user-friendly manner in both small, angled and

large-area rooms. The PE foil of the optional edge insulating strips and the overlapping of the base mats at the edge of the board create a dense surface so that cement screed or liquid screed can be applied without further sealing. This reliably prevents a sound bridge to the raw concrete.

There are four different base mats to choose from. The special geometry of the nubs increases the impact resistance of the nubs during pipe installation and ensures that the heating or cooling pipes are held securely in place. The coordinated components enable fast installation even with one-man installation. Particularly suitable for standard-compliant cement or liquid screed.

## Base mat NP

1.44 x 0.84 m = 1.20 m<sup>2</sup>



Rd*	0.00 (m <sup>2</sup> K)/W	Impact sound insulation	No
Grid*	60 mm		

Material	Pipe diameter* (mm)	Item No.
PS	14 up to 17	1402130

## Base mat NP-11

1.44 x 0.84 m = 1.20 m<sup>2</sup>



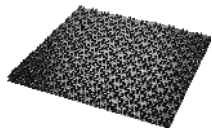
Max. load	45 kN/m <sup>2</sup>	Impact sound insulation	Yes
Rd*	0.31 (m <sup>2</sup> K)/W	Fire behaviour	RTF-E (according to DIN EN 13501-1)
Grid*	60 mm		
TCG*	035		

Insulation* (mm)	Material	Pipe diameter* (mm)	Item No.
11	EPS	14 up to 17	1402330



### Base mat NP-30

1.44 x 0.84 m = 1.20 m<sup>2</sup>



Impact sound*	28 dB(A)	TCG*	040
Max. load	5 kN/m <sup>2</sup>	Impact sound insulation	Yes
Rd*	0.75 (m <sup>2</sup> K)/W	Fire behaviour	RTF-E (according to DIN EN 13501-1)
Grid*	60 mm		

Insulation* (mm)	Material	Pipe diameter* (mm)	Item No.
30	EPS	14 up to 17	1402430

### Compensation element 11

1.00 x 1.00 m = 1.00 m<sup>2</sup>



Max. load	60 kN/m <sup>2</sup>	TCG*	035
Rd*	0.31 (m <sup>2</sup> K)/W	Impact sound insulation	No

Insulation* (mm)	Material	Pipe diameter* (mm)	Item No.
11	EPS	14 up to 17	1402390

### Compensation element 30

1.00 x 1.00 m = 1.00 m<sup>2</sup>



Max. load	5 kN/m <sup>2</sup>	Rd*	0.75 (m <sup>2</sup> K)/W
Stiffness*	20 MN/m <sup>2</sup>		

Insulation* (mm)	Material	Pipe diameter* (mm)	Item No.
30	EPS	14 up to 17	1402490

### Door and manifold element

Can be used in the doorway area and in the area in front of the manifold.



Material	Pipe diameter* (mm)	Item No.
PS	14 up to 17	1402394



Connecting element

For laying butt-jointed or butt-to-butt base mats.



Material	Pipe diameter* (mm)	Item No.
PS	14 up to 17	1402393



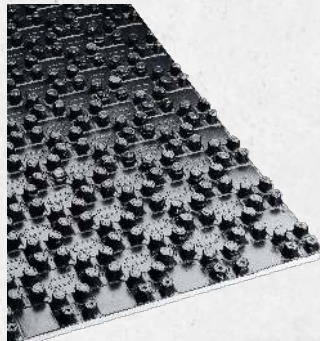
Fixing hook

Made of plastic

Description	Item No.
For base mats, for 14 and 16 mm pipes, bag = 200 pieces	1409082

Pipe diameter = Suitable for pipe diameter

# Cofloor Thin-layer system



The **Cofloor thin-layer system** consists of a base mat and pipe. This system can be used for new construction and renovation. The base mats have no thermal insulation in order to achieve the lowest possible installation height. The special geometry of the nubs makes it easy to lay 12 mm **Copert PE-RT** plastic pipes.

The handy base mats have practically no waste. They can be laid economically and user-friendly in small, angled rooms as well as in large areas. With the PE foil of the optional edge insulation strips and the overlapping of the base mats at the edge of the mats, a dense surface is obtained so that cement screed or liquid screed can be applied without further

sealing. This reliably prevents a sound bridge to the raw concrete.

The coordinated components allow for a quick installation even with a one-man installation. The suitable levelling compounds should be taken from the data sheet.

Tested minimum construction heights:

- Knauf N 430 min. 17 mm
- PCI periplan extra min. 18 mm
- Weber-Maxit weber.loor min. 18 mm
- Knauf N 440 min. 21 mm
- Mapei Novoplan-Maxi min. 18 mm
- Sopro filler FS 15 plus (FS 15 550) min. 18 mm

More on request.

## Base mat NP-R

1.00 x 1.00 m = 1.00 m<sup>2</sup>

Grid\* 50 mm Impact sound insulation No

### Material

PS

Pipe diameter\*  
(mm)

12

### Item No.

1402010

## Edge insulating strip

### Description

With self-adhesive base, height: 50 mm, thickness: 5 mm, roll length: 20 m, only suitable for base mat NP-R

### Item No.

1401990

## PE-RT Copert Plastic pipe

Oxygen-tight	Yes	Max. operating pressure (pipe)	6 bar at 70°C
Material inner layer	Plastic	Number of layers	5
Material intermediate layer	Plastic	Pipe colour	White
Material outer layer	Plastic	Quality class	PE-RT II

Dimension  
(mm)

12 x 2.0

Length of roll  
(m)

200

### Item No.

1401952



**Ofix K Compression fitting**



**Description**

12 x 2.0 mm, 2-fold

**Item No.**

1016870

# Cofloor Velcro system



The **Cofloor Velcro system** consists of a base mat with Velcro velour foil and a Velcro pipe. This system can be used for new construction and renovation. The base mat roll has an imprinted laying grid (grid distance 5 cm).

Fastening of the Oventrop **Copert** PE-RT Velcro plastic pipes or the 16 mm Velcro multi-layer composite pipes is done by simply pressing

the pipe onto the base mat roll. The base mat rolls are laid out on the raw concrete or, if necessary, on the additional insulation.

The **Cofloor system Velcro** enables inexpensive, quick and easy laying of the individual components. The clear picture of the laying grid facilitates straight pipe guidance. Particularly suitable for standard-compliant cement or liquid screed.

## Velcro base mat roll

10.0 x 1.0 m = 10.0 m<sup>2</sup>



Stiffness*	20 MN/m <sup>2</sup>	Pipe diameter*	14 up to 17 mm
Grid*	50 mm	Impact sound insulation	Yes
Material	EPS	Fire behaviour	RTF-E (according to DIN EN 13501-1)
Impact sound*	28 dB(A)		

Insulation* (mm)	Rd* ((m <sup>2</sup> K)/W)	Max. load (kN/m <sup>2</sup> )	TCG*	Item No.
25	0.55	4	045	1403510
30	0.75	5	040	1403507
20	0.44	4	045	1403520

## PE-RT Copert Velcro plastic pipe



Pipe colour	White	Max. operating pressure (pipe)	6 bar at 70°C
Oxygen-tight	Yes	Number of layers	5
Material inner layer	Plastic	Quality class	PE-RT II
Material intermediate layer	Plastic	Velcro tape	Yes
Material outer layer	Plastic		

Dimension (mm)	Length of roll (m)	Item No.
16 x 2.0	240	1402162
16 x 2.0	640	1402163



### PE-Xc Copex Velcro plastic pipe

Pipe colour	Natural	Max. operating pressure (pipe)	6 bar at 90°C 10 bar at 60°C
Oxygen-tight	Yes		
Material inner layer	Plastic	Number of layers	5
Material intermediate layer	Plastic	Quality class	PE-Xc
Material outer layer	Plastic	Velcro tape	Yes

#### Dimension (mm)

16 x 2.0

#### Length of roll (m)

240

#### Item No.

1400162



### Pipe guiding eye for coil unwinder

Adapter and pipe guiding eye with telescopic extension to be mounted on the coil unwinders item no. 1402096/98. Avoids ground contact of the Velcro pipe during laying.

#### Description

For coil undwinder

#### Item No.

1402070



### Pipe guiding eye for walls

For placement e.g. in the area of a door lintel. Avoids ground contact of the Velcro pipe during laying.

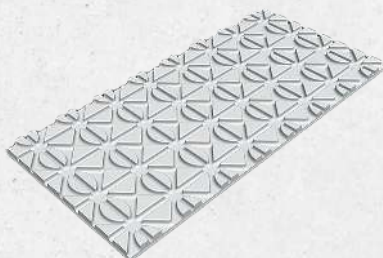
#### Description

For Velcro pipe

#### Item No.

1402071

# Cofloor Drywall system



The **Cofloor drywall system** consists of drywall elements and matching heat/cooling conducting lamellas. The drywall basic element consists of 25 mm thick foamed PS (polystyrene). It is a thermal insulation and at the same time a support element for the individual heat/cooling conducting lamellas and bends. The special arrangement of the grooves in the basic elements allows both a meandering and a bifilar (spiral) installation of the Oventrop **Copipe HSC** multi-layer composite pipe 14 x 2 mm.

We recommend the installation of the **Copipe HSC** multi-layer composite pipe due to its lower expansion coefficient during heating operation compared to the **Copex** PE-Xc and **Copert** PE-RT plastic pipes.

The heat/cooling conducting lamellas are made of 0.4 mm thick and the heat/cooling conducting bends of 0.5 mm thick galvanised sheet steel and enable optimum heat/cooling transport into the drywall elements or into the cement or liquid screed. The practicable predetermined breaking points on the heat/cooling conducting lamellas (sheet length 998 mm) enable optimal laying of the pipes in the rooms.

The installation of the **Cofloor drywall system** is without waste, the execution of the complete installation is possible by only one person. Especially suitable for standard-compliant cement or liquid screed, but also for dry screed elements (e.g. Fermacell panels).

## Drywall element

1.0 x 0.5 m = 0.5 m<sup>2</sup>, thickness = 25 mm  
Fire behaviour RTF-E according to DIN EN 13501-1.



### Description

1000 x 500 x 25 mm made of expanded polystyrene, thermal conductivity group 035, laying distance 12.5 cm

### Item No.

1402800

## Heat conducting lamella

998 x 122 mm, sheet metal thickness = 0.4 mm



### Description

Made of galvanised sheet steel

### Item No.

1402850

## Heat conducting bend

245 x 110 mm, sheet metal thickness = 0.5 mm



### Description

For Copipe HSC multi-layer composite pipe 14 x 2 mm, made of galvanised sheet steel

### Item No.

1402855



### Infill panel

1000 x 500 mm, thickness = 25 mm  
Fire behaviour RTF-E according to DIN EN 13501-1.



#### Description

Made of expanded polystyrene, thermal conductivity group 035, load 60 kN/m<sup>2</sup>

#### Item No.

1402857

### Covering foil



#### Description

Roll dimensions 25 m x 4 m, made of 0.2 mm polyethylene, for separating the drywall system and the screed

#### Item No.

1402895

### Hot cutting device



#### Description

For cutting individual pipe guides in the infill panel

#### Item No.

1402891

# Cofloor - Accessories and spare parts



## Cofit P Press coupling

Suitable for **Copipe HSC** multi-layer composite pipes and for **Copert** and **Copex** plastic pipes.  
Casing made of stainless steel.

Description	Item No.
14 x 2.0 mm x 14 x 2.0 mm, dezincification resistant brass	1512542
16 x 2.0 mm x 16 x 2.0 mm, bronze	1512543
17 x 2.0 mm x 17 x 2.0 mm, dezincification resistant brass	1512544
20 x 2.5 mm x 20 x 2.5 mm, dezincification resistant brass	1512545
20 x 2.0 mm x 20 x 2.0 mm, dezincification resistant brass	1512541



## Cofit P Press connection coupling

For the transition from copper and stainless steel press systems to **Copipe HSC** multi-layer composite pipes and for **Copert** and **Copex** plastic pipes.  
Not suitable as solder connection.

Description	Item No.
16 x 2.0 mm x 15 mm, bronze	1514043



## Replacement Cofit P Press connection with external thread

Suitable for **Copipe HSC** multi-layer composite pipes and, with the same processing method, also for plastic pipes.  
Casing made of stainless steel.

Description	Item No.
16 x 2.0 mm x R 1/2, bronze	1512043
20 x 2.5 mm x R 1/2, bronze	1512045
26 x 3.0 mm x R 3/4, dezincification resistant brass	1512048
32 x 3.0 mm x R 1, dezincification resistant brass	1512051
40 x 3.5 mm x R 1 1/4, dezincification resistant brass	1512054
50 x 4.5 mm x R 1 1/2, dezincification resistant brass	1512056
63 x 6.0 mm x R 2, dezincification resistant brass	1512057



## Double nipple

G 3/4 conically sealing according to DIN EN 16313 (Eurocone).

Description	Item No.
G 3/4 external thread x G 3/4 external thread, conically sealing, brass, nickel plated	1028263
G 3/4 external thread x G 3/4 external thread, conically sealing, bronze	1504054



### Pressure test plug with venting

Made of brass for Copipe multi-layer composite pipe  
Set = 10 pieces

Description	Item No.
16 x 2.0 mm	1506085
20 x 2.5 mm	1506087
26 x 3,0 mm	1506088
32 x 3.0 mm	1506089



### Coil unwinder

For pipes, for rolls with a length up to 600 m.

Description	Item No.
Stationary	1402096
Mobile with transport chart	1402098



### Bending spring

Description	Item No.
Bending spring for Copipe, length 600 mm, for 16 x 2.25 mm pipe	1509562
Bending spring for Copipe, length 600 mm, for 20 x 2.5 mm pipe	1509563



### Screed additive

Additive component for the production of cement screed for heated floor constructions, for homogenisation and improvement of workability, as well as for increasing the bulk density of cement screed.

Description	Item No.
10 kg canister	1409095

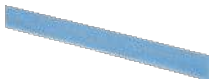


### Edge insulating strip

Description	Item No.
With self-adhesive base, height: 50 mm, thickness: 5 mm, roll length: 20 m, only suitable for base mat NP-R	1401990
With foil for sealing to the laying system, height: 150 mm, thickness: 10 mm, roll length: 25 m	1402090
With self-adhesive foil for sealing to the laying system, self-adhesive on the wall side, height: 150 mm, thickness: 10 mm, roll length: 25 m	1402191



### Expansion joint profile



#### Description

Made of polyethylene foam, height: 120 mm, thickness: 10 mm, length: 1.20 m

#### Item No.

1402091

### Protective tube

For protecting heating pipes at junctions of screed joints, as well as when entering or leaving the screed.



#### Description

Made of LDPE, 300 mm slotted, for 14, 16 and 17 mm pipes

#### Item No.

1501184

### Pipe guiding elbow

Made of plastic. For redirecting and fixing Copert and Copipe pipes at 90° bends, e.g. in front of the heating circuit manifold and in ceiling openings.



#### Description

For 14, 16 und 17 mm pipes, set = 10 pieces

For 20 mm pipe, set = 10 pieces

For 26 mm pipe, set = 10 pieces

#### Item No.

1409085

1409086

1409087

### Round profile roll

For sealing the transition between the base mat and the edge insulation strip when using cement screed.



#### Description

Made of polyethylene foam, Ø 20 mm, 150 m in a dispenser box

#### Item No.

1402092

### Marker point for measuring screed humidity

For marking locations for measuring the moisture content of the screed.



#### Description

Made of plastic, set = 5 pieces

#### Item No.

1409090



### Hand dispenser

For masking butt edges on the base mat rolls and insulation boards.



#### Description

For adhesive tape with 50 mm width

#### Item No.

1402598

### Adhesive tape

For masking butt edges on the base mat rolls and insulation boards against the penetration of screed water.



#### Description

50 mm x 66 m

#### Item No.

1402599

### Replacement press jaw type H

Suitable for use with Oventrop press machines and with press machines of the following manufacturers: Geberit type PWH75, Klauke types UAP2/UAP/3L/UP2EL, Mannesmann/Novopress types EFP2/ECO1/AFP2/ACO1, Polytherm, Rems, Roller, Rothenberger, Uponor, Velta and Viega type 2



#### Description

Type H 16 A, for 16 mm pipe

1519491

Type H 20 A, for 20 mm pipe

1519492

Type H 26 A, for 26 mm pipe

1519493

Type H 32 A, for 32 mm pipe

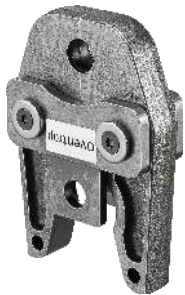
1519494

Type H 40 A, for 40 mm pipe

1519495

### Replacement press jaw type RN

Suitable for use with Oventrop press machines and with press machines of the following manufacturers: Geberit type PWH75, Klauke types UAP2/UAP/3L/UP2EL, Mannesmann/Novopress types EFP2/ECO1/AFP2/ACO1, Polytherm, Rems, Roller, Rothenberger, Uponor, Velta and Viega type 2



#### Description

Type RN 14, for 14 mm pipe

1519489

Type RN 17, for 17 mm pipe

1519488

Type RN 20, for 20 mm pipe

1519481

### Replacement Cofit P Press jaw

Suitable for use with Oventrop press machines and with press machines of the following manufacturers: Klauke types UAP2/UAP/3L and Uponor type UP75



#### Description

For 50 mm pipe

1519445

For 63 mm pipe

1519446



## 1.3 Surface heating and cooling

### **Stations for surface heating systems 180**

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# Regufloor Control stations for surface heating



The **Regufloor** control stations are used for flow temperature control for surface heating and cooling systems (**Regufloor HC**). In this way, the maximum/minimum permissible flow temperature for surface heating and cooling systems can be maintained. The flow temperature is controlled either by an electronic control in conjunction with an actuator (e.g.

weather-compensated) or by a fixed value control via a temperature controller with contact sensor (only for surface heating). Stations are available as directly operated variants as well as with system separation.

All stations are delivered pre-assembled and tested.

Connection thread heating circuits	G 3/4 external	Max. operating temperature secondary side	50 °C
High-efficiency pump	Yes	Max. operating pressure	6 bar
Max. operating temperature primary side	90 °C		

## Regufloor HW

Control station for flow temperature control, with Regtronic RH heating circuit controller, weather-compensated.

Pump type	Wilo PARA 15-130/6-43/SC-9	Pump length	130 mm
-----------	----------------------------	-------------	--------

Heating circuit controller	Max. heat output (kW)	STL*	Temperature control	Weather-compensated	Item No.
Yes	15	Yes	Electronic	Yes	1151800

## Regufloor HN

Control station for flow temperature control, fixed value control.

Pump type	Wilo Para RSB 15/6-43/SC-12H
-----------	------------------------------

Heating circuit controller	Max. heat output (kW)	STL*	Temperature control	Weather-compensated	Item No.
No	15	Yes	Thermostatic	No	1151600

## Regufloor HC

Control station for heating / cooling.

Pump type	Wilo PARA 15-130/6-43/SC-9	Pump length	130 mm
-----------	----------------------------	-------------	--------

Heating circuit controller	Max. heat output (kW)	STL*	Temperature control	Weather-compensated	Item No.
Extendable	15	No	Without	No	1152100



**Regufloor HX**

Control station with heat exchanger for system separation.

Pump type                      Wilo Para Ku 15-130/6-43/SC-3H                      Pump length                      130 mm

Heating circuit controller	STL*	Temperature control	Weather-compensated	Item No.
No	No	Thermostatic	No	1151065



# Regufloor - Accessories and spare parts



1.3

## Aktor M Electromotive actuator 24 V, connection thread M 30 x 1.5



### Description

0 - 10 V, on/off and floating control, 1.5 m cable  
0 - 10 V control, with position feedback, 1.5 m cable

### Item No.

1012725  
1012726

## Aktor M Electromotive actuator 230 V, connection thread M 30 x 1.5



### Description

On/off and floating control, 1.5 m cable

### Item No.

1012729

## Aktor T 2P Electrothermal actuator



### Description

On/off control, "normally closed", 24 V

### Item No.

1012416

## Replacement safety temperature monitor



### Description

For Wilo pump E15/1-5, with cabling

### Item No.

1151087



#### Replacement temperature controller

##### Description

With contact sensor, control range 20 °C - 50 °C

##### Item No.

1151082



#### Replacement high-efficiency pump

##### Description

For Regufloor HW/HC/H, Wilo-Yonos PARA RS 15/6, without pump cable

##### Item No.

1151088



#### Replacement high-efficiency pump Axial

##### Description

For Regufloor HN, Wilo-Yonos PARA RSB 15/6 with axial pump housing, without pump cable

##### Item No.

1151089

# Control sets for surface heating



The control sets for surface heating are used to control the flow temperature of a surface heating system, e.g. for combined radiator and surface heating systems. The desired flow temperature is set at the temperature controller. The safety temperature monitor switches off the circulation pump as soon as the set value is exceeded due to a malfunction. The bypass valve is used to regulate the volume flow of the surface heating circuit. The control set is available for floor areas up to 85 m<sup>2</sup>, 120 m<sup>2</sup>

and 200 m<sup>2</sup>. Advantages of the control set: all components from only one supplier, uniform warranty, coordinated components, simple installation, flow temperature infinitely adjustable between 20 °C - 50 °C, temperature setting can be limited and blocked as desired and connection possibility to all common surface heating pipes. The control set consists of a straight valve, a bypass valve, a temperature controller with contact sensor and a safety temperature monitor.

## Set 1 for surfaces up to 85 m<sup>2</sup>



### Consisting of

- Thermostatic valve DN 15, brass, nickel plated, straight version
- Bypass valve DN 20, brass, nickel plated, straight version
- Temperature controller with contact sensor and heat conducting base, capillary 2 m, control range 20 °C - 50 °C
- Safety temperature monitor with concealed temperature setting, control range 20 °C - 90 °C

### Item No.

1144251

## Set 2 for surfaces up to 120 m<sup>2</sup>



### Consisting of

- Thermostatic valve DN 20, brass, nickel plated, straight version
- Bypass valve DN 25, brass, nickel plated, straight version
- Temperature controller with contact sensor and heat conducting base, capillary 2 m, control range 20 °C - 50 °C
- Safety temperature monitor with concealed temperature setting, control range 20 °C - 90 °C

### Item No.

1144252

## Set 3 for surfaces up to 200 m<sup>2</sup>



### Consisting of

- Tri CTR Three-way diverting and mixing valve DN 20, bronze
- Temperature controller with contact sensor and heat conducting base, capillary 2 m, control range 20 °C - 50 °C
- Check valve DN 20, bronze, brass
- Safety temperature monitor with concealed temperature setting, control range 20 °C - 90 °C

### Item No.

1144253





## 1.3 Surface heating and cooling

### **Room thermostats** **186**

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# ClimaCon F Room thermostats for surface heating



The ClimaCon F room thermostats are used to control the temperature of surface heating and cooling systems as well as heating and cooling ceilings in detached houses or dwellings. Depending on the room thermostat, switching between heating and cooling is possible via a change-over signal, e.g. from the heat pump.

The ClimaCon F room thermostats can be

used in combination with electrothermal actuators (e.g. Aktor T 2P). Alternatively, connection to a connecting block (e.g. FloorCon) is possible. The simple surface-mounted installation and quick configuration make the product very installer-friendly.

Depending on the model, there are room thermostats with reduced display, with integrated time switch and setting options via app.



## ClimaCon F 100 for two pipe applications, heating or cooling, follower



Control	On/off / PWM	Operation	At the room thermostat
Installation	Surface mounting	Switching h / c*	Via change-over
Setback*	Via leader room thermostat		

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators (on/off), "normally closed"	1155010
24 V AC	Electrothermal actuators (on/off), "normally closed"	1155510

## ClimaCon F 310 for two pipe applications, heating or cooling, leader

Switching between time programme and manual mode possible.



Control	On/off / PWM	Switching h / c*	Via change-over
Installation	Surface mounting	Other outputs	1 x potential-free
Setback*	Via time programme (adjustable in the app) Via Eco button at the room thermostat	Communication	Bluetooth
Operation	At the room thermostat With smartphone app		

Voltage	0 - 10 V*	Temperature sensor*	Suitable for	Item No.
230 V AC	No	No	Electrothermal actuators (on/off), "normally closed"	1155031
24 V AC	Yes	Yes	Electrothermal actuators (on/off), "normally closed" Electrothermal actuators (0 - 10 V) "normally closed"	1155531



### Climacon F 90 for two pipe applications, heating only/cooling only, follower

Control	On/off	Setback*	Via leader room thermostat
Installation	Surface mounting	Operation	At the room thermostat

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1155009



### Climacon F 210 for two pipe applications, heating only/cooling only, leader

Switching between time programme and manual mode possible.

Control	On/off / PWM	Operation	At the room thermostat
Installation	Surface mounting		With smartphone app
Setback*	Via time programme (adjustable in the app) Via Eco button at the room thermostat	Communication	Bluetooth

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators (on/off), "normally closed"	1155021

	ClimaCon F 90		ClimaCon F 100		ClimaCon F 210	ClimaCon F 310	
							
	230 V		230 V	24 V	230 V	230 V	24 V
Item no.	1155009	1155010	1155510	1155021	1155031	1155531	
<b>Application</b>							
Heating only / Cooling only	●	—	—	●	—	—	
Heating or cooling (switchable)	—	●	●	—	●	●	
<b>Display</b>							
Setpoint temperature	●	●	●	●	●	●	
Actual temperature	—	—	—	●	●	●	
Status (heating / cooling)	—	—	—	●	●	●	
Mode (Auto / Eco)	—	—	—	●	●	●	
<b>Setting options</b>							
Temperature setting at the room thermostat	●	●	●	●	●	●	
Temperature setting via time profiles in the app	—	—	—	●	●	●	
Setback activation at the room thermostat	—	—	—	●	●	●	
Timed setback via app	●*	●*	●*	●	●	●	
Setback temperature	4 K	4 K	4 K	Flexible via app	Flexible via app	Flexible via app	
Temperature limitation via app	—	—	—	●	●	●	
External limiter function – automatic switch-off when reaching the max. / min. temperature set via app	—	—	—	—	—	●	

\* Leader function - only possible if leader room thermostats (ClimaCon F 210 / F 310) or a FloorCon connecting block are used.



1.3

# Room thermostats heating, flush mounting



The flush-mounted electric room thermostat is required in conjunction with the Aktor T 2P electrothermal actuators (on/off) for individual room temperature control.

Heating: Use electrothermal actuators (on/off) "normally closed". Temperature setback possible via external time switch.

Cooling: Use electrothermal acutators (on/off) "normally open".

Temperature range between 5 and 30 °C. Setpoint range can be limited by concealed locking clips.



## Room thermostat for two pipe applications, flush mounting

Setpoint range can be limited by concealed locking clips.


Control On/off Setback\* Via external time switch (follower function)

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1152071



# Room thermostats heating/cooling





Room thermostats are used in conjunction with electromotive or electrothermal actuators for individual room temperature control in heating and cooling systems. This room thermostat can also be used in three or four pipe systems and has an adjustable neutral zone between heating and cooling stage. The temperature is set at the room thermostat.

**Room thermostat for four pipe applications, surface mounting**

Neutral zone      Adjustable between 0.5 K and 7.5 K



Voltage	Control	Suitable for	Item No.
24 V AC	0 - 10 V (2x)	Electrothermal actuators (0 - 10 V) "normally closed"	1152151



# Connecting blocks



The connecting block is used for wiring individual room controls and is used for surface heating and cooling control. With the connecting block, a simple assignment of the individual rooms or heating circuits can be carried out centrally. Depending on the variant, up to 10

zones for heating and cooling systems with up to 18 actuators and 10 room thermostats can be connected to the connecting block. In addition, further components, such as a pump, a change-over signal transmitter, a temperature limiter or dew point sensor can be wired.

## Electrical connecting block for surface heating



When using item no. 1400980 / 82 with 24 V, an external power supply of 24 V must be available. Item no. 1153053 can be used as transformer.

Description	Item No.
6 control zones, heating, 24 V / 230 V	1400980
10 control zones, heating / cooling (change-over), pump control, 230 V	1400981
10 control zones, heating / cooling (change-over), pump control, 24 V	1400982
10 control zones, heating / cooling (change-over), pump and boiler control and integrated time switch, 230 V	1400983

## FloorCon Electrical connecting block with automatic hydronic balancing for surface heating and cooling



Description	Item No.
FloorCon F 200, without channel allocation, connection of 8 room thermostats / 12 actuators, 230 V	1400984
FloorCon F 300, with channel allocation, connection of 8 room thermostats / 12 actuators, 230 V	1400985

## Temperature sensor for FloorCon



The temperature sensor is required 1x for the supply of the heating circuit manifold and 1x in the return per heating circuit.

Description	Item No.
Temperature sensor for FloorCon F, 850 mm	1029094



#### Aktor T 2P electrothermal actuator for FloorCon connecting block

##### Description

On/off control, "normally closed", 230 V, 2 m cable

##### Item No.

1012452

#### Safety temperature limiter



##### Description

For max. limitation of the heating circuit temperature, 20 °C - 90 °C

##### Item No.

1344583

#### Sensor GA FD Dew point monitor

Is required in conjunction with room thermostats to protect against condensation on cooling surfaces.



##### Description

For heating/cooling applications to prevent condensation, 24 V, with change-over contact

##### Item No.

1141951

# Actuators



Electrothermal and electromotive actuators are used for heating, ventilation and air conditioning. The actuators can be used for room temperature control or as zone valves. Oventrop offers actuators in the variants "normally closed" and "normally open".

All electrothermal actuators are protected against overvoltage, a varistor is not required.

Oventrop offers electromotive actuators with and without communication interfaces.



## Aktor T 2P on/off control

Valve connection	Connection thread M 30 x 1.5	Stroke	5 mm
Installation position	Any		
Mounting	Plug-in connection with valve adapter		

Voltage	Version	Cable* (m)	Item No.
230 V AC	"Normally closed"	1	1012415
24 V AC / DC	"Normally closed"	1	1012416
230 V AC	"Normally open"	1	1012425
24 V AC / DC	"Normally open"	1	1012426
230 V AC	"Normally closed" with integrated auxiliary switch	1	1012435
24 V AC / DC	"Normally closed"	2	1012442
230 V AC	"Normally closed"	5	1012455
230 V AC	"Normally closed"	10	1012459

## Aktor T ST 0 - 10 V control

Valve connection	Connection thread M 30 x 1.5	Mounting	Plug-in connection with valve adapter
Zero point detection	Yes	Stroke	5 mm
Valve travel detection	Yes		
Installation position	Any		

Voltage	Version	Cable* (m)	Item No.
24 V AC	"Normally closed"	1	1012953



# Actuators - Accessories



**Valve adapter**

Description	Item No.
For valves with squeeze connection	1012463



# wibutler Smart Home system

The Smart Home sector includes the networking of several trades within individual dwellings or detached houses. By means of a gateway, various components can be integrated into the Smart Home system and controlled via smartphone, tablet or PC. By connecting the gateway to a commercially available router, remote access is easily possible while on the move.

The intelligent wibutler pro 2 gateway is the heart of the smart home. In addition to surface heating and radiators, other systems such as lighting and shading can also be integrated.

**Basic set - surface heating with wibutler pro 2**

	Scope of delivery		Item No.
	1 x wibutler pro 2 item no. 1150791		1150793
	1 x R-Tronic RT B wireless thermostat item no. 1150780		
	1 x R-Con eight-channel wireless receiver item no. 1150772		



	<b>wibutler pro 2 gateway (EnOcean, Zigbee, LAN, WLAN)</b>		
	The lighting, shading, heating and sanitary, air conditioning, ventilation and security systems can be interconnected with the help of the wibutler gateway.		
	Operation	With smartphone app With tablet app Via computer Amazon Alexa Google home	System requirements terminals Apple: at least iOS 9 Android: at least Android 5
	Voltage		Item No.
100 - 230 V AC			1150791

**R-Tronic Wireless thermostat (EnOcean)**

Installation	Surface mounting	Power supply	Battery operated
Communication	EnOcean		

Designation	Humidity sensor*	EEP*	Item No.
RT B (EnOcean)	No	A5-10-02	1150780
		A5-10-03	
		A5-10-04	
		A5-10-06	
		A5-10-06 + RPS	
RTF B (EnOcean)	Yes	A5-10-11	1150781
		A5-10-12	
		A5-10-22	
		A5-10-23	

**R-Con Multi-channel wireless receiver for surface heating (proprietary radio communication)**

Time programme adjustable with R-Tronic wireless thermostats. Item no. 1150770 / 72 additionally with pump and burner logic. To be installed in a cabinet, the protective housing item no. 1150776 (see "R-Con Accessories") can be used alternatively.

Voltage	230 V AC	Communication	Proprietary radio
Control	On/off / PWM	Mounting	Carrier rail (DIN EN 60715 TH35)

Number of radio channels	Logic module	Item No.
4 (max. of 4 actuators per channel)	Yes	1150770
4 (max. of 4 actuators per channel)	No	1150771
8 (max. of 4 actuators per channel)	Yes	1150772
8 (max. of 4 actuators per channel)	No	1150773

**R-Con T 2P Four-channel extension module (proprietary radio communication)**

For R-Con multi-channel wireless receiver.

Voltage	230 V AC	Communication	Proprietary radio
Control	On/off / PWM	Mounting	Carrier rail (DIN EN 60715 TH35)

Number of radio channels	Item No.
4 (max. of 4 actuators per channel)	1150775

**R-Con HC Extension module heating/cooling (proprietary radio communication)**

For R-Con multi-channel radio receiver. For switching between heating and cooling mode via a change-over input. The change-over signal is provided e.g. by a reversible heat pump.

Voltage	230 V AC	Mounting	Carrier rail (DIN EN 60715 TH35)
Communication	Proprietary radio		

Inputs	Item No.
Dew point monitoring, cooling mode is interrupted if the dew point is exceeded	1150774



**mote 420 Wireless actuator (EnOcean)**

Only functions in combination with communication centres / gateways (e.g. with the wibutler gateway) and room thermostats supporting this EnOcean Equipment Profile.

Communication	EnOcean	Battery lifespan	About 2 years
Power supply	Battery operated		

Valve connection	EEP*	Item No.
Connection thread M 30 x 1.5	A5-20-01	1150766



**FK-C F Wireless window contact (EnOcean)**

With EnOcean radio technology. Transmits a radio signal when opening or closing a window. Compatible with R-Tronic wireless thermostats (mains operated), wireless room module (DynaTemp CR-BSX) and wibutler gateway.

Power supply	EEP*	Colour	Item No.
Solar powered	D5-00-01	White	1153070





# R-Tronic System for individual room temperature control



The R-Tronic wireless thermostats with closed radio communication (proprietary) are used in stand-alone operation in connection with wireless actuators to control radiators or in connection with a multi-channel wireless receiver to control surface heating systems.

The temperature setting as well as the storage of time programmes is carried out at the wireless thermostat. Depending on the model, an additional measurement of the relative humidity in % is possible.

ity in % is possible.

Power is supplied by batteries or a power supply unit (100 - 240 V). For the battery-operated models, power supply via the mains is possible as an alternative.

In battery operation, up to 3 participants can be taught in, in mains operation, up to 8 participants can be taught in. In mains operation it is also possible to teach in window contacts.

## R-Tronic Wireless thermostat (proprietary radio communication)



Installation	Surface mounting	Power supply	Battery operated
Communication	Proprietary radio		

Designation	Humidity sensor*	Item No.
RT B	No	1150680
RTF B	Yes	1150681

## mote 320 Wireless actuator (proprietary radio communication)

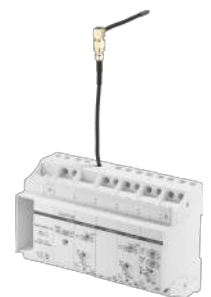


Power supply	Battery operated	Communication	Proprietary radio
Battery lifespan	About 2 years	Valve connection	Connection thread M 30 x 1.5

Item No.
1150665

## R-Con Multi-channel wireless receiver for surface heating (proprietary radio communication)

Time programme adjustable with R-Tronic wireless thermostats. Item no. 1150770 / 72 additionally with pump and burner logic. To be installed in a cabinet, the protective housing item no. 1150776 (see "R-Con Accessories") can be used alternatively.



Voltage	230 V AC	Communication	Proprietary radio
Control	On/off / PWM	Mounting	Carrier rail (DIN EN 60715 TH35)

Number of radio channels	Logic module	Item No.
4 (max. of 4 actuators per channel)	Yes	1150770
4 (max. of 4 actuators per channel)	No	1150771
8 (max. of 4 actuators per channel)	Yes	1150772
8 (max. of 4 actuators per channel)	No	1150773





### R-Con T 2P Four-channel extension module (proprietary radio communication)

For R-Con multi-channel wireless receiver

Voltage	230 V AC	Communication	Proprietary radio
Control	On/off / PWM	Mounting	Carrier rail (DIN EN 60715 TH35)

#### Number of radio channels

4 (max. of 4 actuators per channel)

#### Item No.

1150775



### R-Con HC Extension module heating/cooling (proprietary radio communication)

For R-Con multi-channel radio receiver. For switching between heating and cooling mode via a change-over input. The change-over signal is provided e.g. by a reversible heat pump.

Voltage	230 V AC	Mounting	Carrier rail (DIN EN 60715 TH35)
Communication	Proprietary radio		

#### Inputs

Dew point monitoring, cooling mode is interrupted if the dew point is exceeded

#### Item No.

1150774



### Aktor T 2P Electrothermal actuator, on/off control

Installation position	Any
Mounting	Plug-in connection with valve adapter

Voltage	Version	Valve connection	Cable* (m)	Item No.
230 V AC	"Normally closed"	Connection thread M 30 x 1.5	1	1012415
24 V AC / DC	"Normally closed"	Connection thread M 30 x 1.5	1	1012416

# R-Tronic - Accessories



## Flush-mounted power supply unit with wall bracket



### Description

For the conversion of battery operated R-Tronic wireless thermostats to an external power supply  
100 - 240 V AC, 50 - 60 Hz

### Item No.

1150692

## Plug-in power supply unit with table stand



### Description

For the conversion of battery operated R-Tronic wireless thermostats to an external power supply  
100 - 240 V AC, 50 - 60 Hz

### Item No.

1150694

## Cover frame



### Description

For covering flush-mounted box ( milled hole up to Ø 83 mm, e.g. Switzerland),  
cover 88 x 88 mm, traffic white (RAL 9016)

### Item No.

1150693

## Wireless repeater (EnOcean)



### Description

For amplification of EnOcean radio telegrams to increase the radio range, 230 V AC, 50 Hz,  
flush mounting

### Item No.

1153060



#### Protective housing with carrier rail

##### Description

As alternative to installation in the cabinet, 230 V, surface mounting

##### Item No.

1150776



#### Antenna extension

##### Description

With SMA screw terminal, antenna length 1 m, surface mounting, white glossy (RAL 9003)

##### Item No.

1150777





## 1.3 Surface heating and cooling

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High-quality  
design  
in genuine glass



# Feel-good guarantee in the bathroom? **Stylish room temperature control.**

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[unibox.orientrop.com](http://unibox.orientrop.com)



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# Unibox Return temperature control



The **Unibox** return temperature control is used for surface temperature regulation of rooms with a size of up to 20 m<sup>2</sup>, such as the bathroom. The Uniboxes are particularly suitable for retrofitting a surface temperature regulation in heating systems in combined use with radiators. The **Unibox** consists of a wall mounting box with thermostatic valve, an integrated return temperature limiter, a vent

and flush valve and a cover with integrated handwheel. The cover of the Unibox E RTL is closed. The setpoint range is adjustable between 10 °C and 50 °C for the **Unibox RTL** and between 20 °C and 40 °C for the **Unibox E-RTL**. The cover with the integrated handwheel enables angle and depth compensation of the flush-mounted box installed in the wall.

Return temperature control	Yes	Pipe connection	G 3/4
Cover	Yes	Venting	Yes
Room temperature control	No	Presetting	No

## Unibox RTL plastic white



Operation	Handwheel	Cover colour	White
Cover*	Plastic	Operating element colour	White

Item No.

1022735

## Unibox RTL genuine glass white



Operation	Handwheel	Cover colour	White
Cover*	Genuine glass	Operating element colour	Chrome

Item No.

1022750

## Unibox RTL genuine glass black



Operation	Handwheel	Cover colour	Black
Cover*	Genuine glass	Operating element colour	Dark chrome

Item No.

1022751



1.3

### Unibox E-RTL

Operation Internal



Cover*	Cover colour	Item No.
Plastic	White	1022731
Genuine glass	White	1022760
Genuine glass	Black	1022761



# Unibox Room temperature control and return temperature control



The **Unibox** room and return temperature control is used for surface temperature regulation of rooms with a size of up to 20 m<sup>2</sup>, such as the bathroom. The Uniboxes are particularly suitable for retrofitting a surface temperature regulation in heating systems in combined use with radiators. The **Unibox** is also used for individual room temperature control. The **Unibox** consists of a wall mounting box with presettable thermostatic valve, an integrated

return temperature limiter, a vent and flush valve, a valve insulation and a cover with integrated thermostat. The cover of the Unibox T-RTL R-Tronic and TQ-RTL R-Tronic is closed. The setpoint range is adjustable between 20 °C and 40 °C (return temperature) and between 7 °C and 28 °C (room temperature). The cover with the integrated thermostat enables angle and depth compensation of the flush-mounted box installed in the wall.



2021



2019

Return temperature control	Yes	Venting	Yes
Room temperature control	Yes	Presetting	Yes
Pipe connection	G 3/4		

## Unibox T-RTL plastic white



Cover	Yes	Cover colour	White
Operation	Thermostat	Operating element colour	White
Cover*	Plastic	Q-Tech	No

Item No.

1022733

## Unibox T-RTL genuine glass white



Cover	Yes	Cover colour	White
Operation	Thermostat	Operating element colour	Chrome
Cover*	Genuine glass	Q-Tech	No

Item No.

1022770

## Unibox T-RTL genuine glass black



Cover	Yes	Cover colour	Black
Operation	Thermostat	Operating element colour	Dark chrome
Cover*	Genuine glass	Q-Tech	No

Item No.

1022771

### Unibox T-RTL R-Tronic

Suitable for radio control with an R-Tronic wireless thermostat (not compatible with wibutler).



Cover	Operation	Cover*	Cover colour	Item No.
Yes	Radio	Plastic	White	1022737
Yes	Radio	Genuine glass	White	1022772

### Unibox T-RTL vario (basic model)

Cover must be ordered separately (accessory).



Cover	No	Cover*	No cover
Operation	Internal		

Item No.  
1022734

### Unibox TQ-RTL



Cover	Yes	Q-Tech	Yes
Operation	Thermostat		

Cover*	Cover colour	Operating element colour	Item No.
Plastic	White	White	1022739
Genuine glass	White	Chrome	1022780
Genuine glass	Black	Dark chrome	1022781

### Unibox TQ-RTL R-Tronic

Suitable for radio control with an R-Tronic wireless thermostat (not compatible with wibutler).



Cover	Yes	Cover colour	White
Operation	Radio	Q-Tech	Yes

Cover*	Item No.
Plastic	1022738
Genuine glass	1022782

### Unibox TQ-RTL vario (basic model)

Cover must be ordered separately (accessory).



Cover	No	Cover*	No cover
Operation	Internal	Q-Tech	Yes

Item No.  
1022736

# Unibox - Accessories and spare parts



## R-Tronic R-TB Wireless thermostat (EnOcean) for Unibox T-RTL R-Tronic and Unibox TQ-RTL R-Tronic

In conjunction with the Unibox not compatible with wibutler.

### Description

For the connection to Smart Home gateways (e.g. wibutler), with EnOcean radio technology, surface mounting, battery operated

For the connection to Smart Home gateways (e.g. wibutler), with EnOcean radio technology, surface mounting, battery operated, with humidity sensor

### Item No.

1150780

1150781



## ClimaCon F 90 Room thermostat for two pipe applications, heating only/cooling only, follower

For Unibox T vario, TQ vario, T-RTL vario, TQ-RTL vario and E BV vario.

Operation At the room thermostat

### Voltage

230 V AC

### Control

On/off

### Suitable for

Electrothermal actuators "normally closed" (heating)  
Electrothermal actuators "normally open" (cooling)

### Item No.

1155009



## ClimaCon F 210 Room thermostat for two pipe applications, heating only/cooling only, leader

For Unibox T vario, TQ vario, T-RTL vario, TQ-RTL vario and E BV vario.

Operation At the room thermostat  
With smartphone app

### Voltage

230 V AC

### Control

On/off / PWM

### Suitable for

Electrothermal actuators (on/off), "normally closed"

### Item No.

1155021



## Aktor T 2P Electrothermal actuator

For Unibox T vario, TQ vario, T-RTL vario, TQ-RTL vario and E BV vario.

### Description

On/off control, "normally closed", 230 V

On/off control, "normally closed", 230 V, 2 m cable

### Item No.

1012415

1012452

### Uni FHU Thermostat with remote control



Description	Item No.
White, 2 m capillary tube	1012595
White, 5 m capillary tube	1012596
White, 10 m capillary tube	1012597

### Cover



Cover*	Cover colour	Item No.
Plastic	White	1022776
Genuine glass	White	1022774
Genuine glass	Black	1022775

### Duo connection piece



Description	Item No.
For the connection of two heating circuits, 1 x G 3/4 union nut, 2 x G 3/4 external thread	1022655

### Extension



Description	Item No.
For thermostatic valves and Uniboxes (manufactured until 2019), 20 mm	1022698

### Extension



Description	Item No.
For Unibox RTL, for RTLH valves, 20 mm	1022699

### Valve insert



Description	Item No.
For reversed supply and return pipe, for Unibox and RTL valves	1026970
For Unibox and RTLH valves, M 30 x 1.5	1026981
For AV 9, CV 9, RFV 9, and E thermostatic valves, Multiblock T-RTL and Unibox, M 30 x 1.5, DN 10 - DN 20, kv = 0.67	1187047
For AQ, RFQ and EQ thermostatic valves, Multiblock TQ and TQ-RTL, Multiflex FQ as well as Unibox TQ and TQ vario, 10 - 170 l/h, M 30 x 1.5	1187065
For reversed supply and return pipe, for A, AV 9, ADV 9, CV 9, E, AF, RF and RFV 9 thermostatic valves, Multiblock T, TU and TFU as well as Unibox, M 30 x 1.5, with presetting	1187078



### Press connection coupling

For the transition from copper and stainless steel press systems to Copipe multi-layer composite pipes.  
Not suitable as solder connection.



#### Description

16 x 2.0 mm x 15 mm, bronze

#### Item No.

1514043

### Replacement thermostat for Unibox RTL



#### Description

For Unibox RTL

#### Item No.

1027635

### Replacement cover for Unibox E-RTL and Unibox RLA vario



#### Cover\*

Plastic

Genuine glass

Genuine glass

#### Cover colour

White

White

Black

#### Item No.

1022766

1022764

1022765

### Replacement cover for Unibox RTL

With integrated handwheel.



#### Cover\*

Plastic

Genuine glass

Genuine glass

#### Cover colour

White

White

Black

#### Item No.

1022789

1022787

1022788

### Replacement cover for Unibox T, T-RTL, TQ-RTL and E BV

With integrated thermostat.



#### Cover\*

Plastic

Genuine glass

Genuine glass

#### Cover colour

White

White

Black

#### Item No.

1022779

1022777

1022778



#### Replacement cover for Unibox (manufactured until 2019)

Cover\* Plastic

Cover colour	Item No.
White	1022693
Chrome plated	1022694



#### Replacement cover for Unibox (manufactured until 2000)

Description	Item No.
For Unibox RTL, T and plus, plastic, white, depth 110 mm	1022691



#### Replacement valve insulation for Uniboxes with thermostatic control

Description	Item No.
For Unibox T, T-RTL, E BV and T-RTL vario	1022792
For Unibox TQ, TQ-RTL and TQ-RTL vario	1022794



## 1.3 Surface heating and cooling

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# Unidis Connection without manifold for surface heating



**Unidis** is a surface heating system with decentralised distribution. The supply and return pipes are laid directly on the bare floor, so that no manifold is required. Surface heating systems have long been standard in new housing construction. They offer a high level of comfort and increased living quality. At the same time, surface heating systems save energy and costs. An essential component of the **Unidis** surface heating system is the **Unibox E BV** featuring a patented integrated bypass that can be individually adjusted for each room.

Advantages of the system are:

- no laying bottlenecks due to the supply pipes from the central distributor to the individual rooms
- no uncontrolled heat dissipation due to supply and return pipes
- hallways larger than 6 m<sup>2</sup> have their own thermostatically controlled heating circuit
- increased sound insulation
- savings potential of up to 9% in combination with the **Unibox E BV**

## Floorbox UH horizontal riser connection



### Consisting of

Supply:  
Ball valve with temperature sensor connection  
Return:  
Hycocn VTZ Double regulating and commissioning valve  
Meter spacer  
Ball valve with coupling  
Vent / flush valve  
Flat seals

### Item No.

1022668

## Floorbox UV vertical riser connection



### Consisting of

Supply:  
Ball valve with temperature sensor connection  
Return:  
Hycocn VTZ Double regulating and commissioning valve  
Meter spacer  
Ball valve with coupling  
Vent / flush valve  
Flat seals

### Item No.

1022669

## Unibox E BV Room temperature control with bypass



Presetting	Yes	Room temperature control	Yes
Operation	Thermostat	Return temperature control	No
Cover	Yes	Venting	Yes

Cover*	Cover colour	Operating element colour	Item No.
Plastic	White	White	1022724





#### Unibox E BV vario (basic model) Room temperature control with bypass

Presetting	Yes	Room temperature control	Yes
Operation	Without	Return temperature control	No
Cover	No	Venting	Yes

##### Cover\*

No cover

##### Item No.

1022725



#### Unibox RLA vario (basic model) Flush-mounted box for return shutoff

Presetting	Yes	Cover	No
Operation	Without	Venting	Yes

##### Cover\*

No cover

##### Item No.

1022726



#### Unibox T Room temperature control

Pipe connection	G 3/4	Room temperature control	Yes
Presetting	Yes	Return temperature control	No
Operation	Thermostat	Venting	Yes
Cover	Yes		

##### Cover\*

Plastic

##### Cover colour

White

##### Operating element colour

White

##### Item No.

1022722



#### Unibox T vario (basic model) Room temperature control

Pipe connection	G 3/4	Room temperature control	Yes
Presetting	Yes	Return temperature control	No
Operation	Without	Venting	Yes
Cover	No		

##### Cover\*

No cover

##### Item No.

1022723



#### Unibox TQ vario (basic model) Room temperature control with Q-Tech

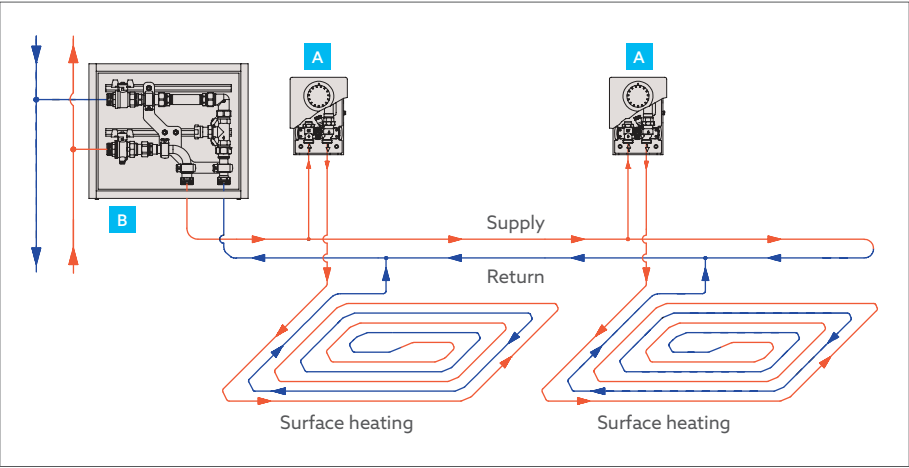
Pipe connection	G 3/4	Q-Tech	Yes
Presetting	Yes	Room temperature control	Yes
Operation	Without	Return temperature control	No
Cover	No	Venting	Yes

##### Cover\*

No cover

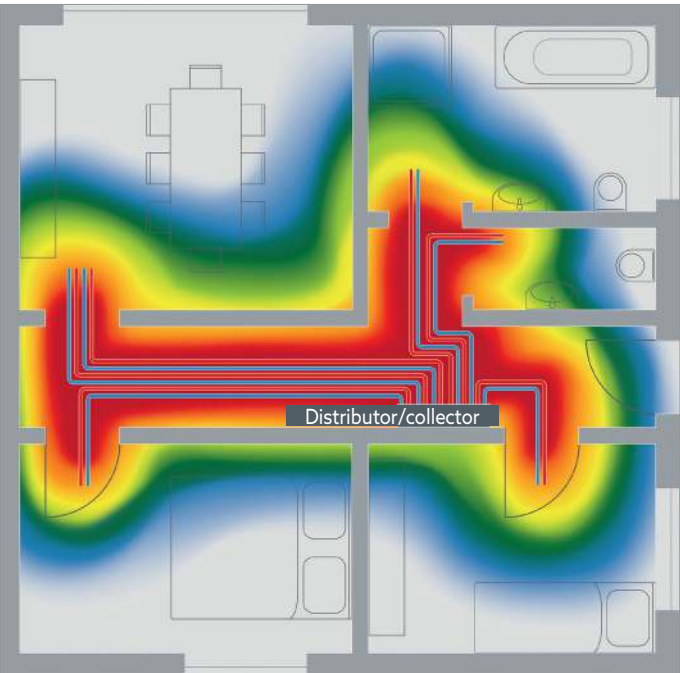
##### Item No.

1022729

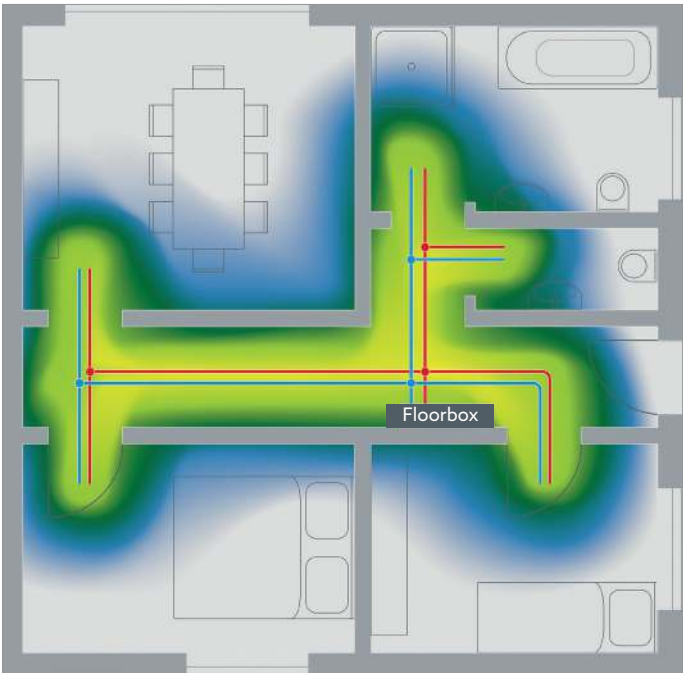


Installation example  
Unidis Surface heating system

A	Unibox E BV Room temperature control	1022724/25
B	Floorbox UV / UH for the connection of surface heating systems without distributor/collector	1022668/69



Conventional installation with heating circuit distributor/collector



Unidis surface heating system with decentralised distribution

# Unidis - Accessories and spare parts



1.3



## Mounting channel

### Description

For Unibox, made of galvanised sheet steel, with cover made of gypsum board, H: 275-350 mm, W: 130 mm

For Unibox, with return shutoff, with cover and thermostat with remote control

For Unibox, made of galvanised sheet steel, H: 440-490 mm, W: 160 mm

### Item No.

1022652

1022654

1022653



## Extended cover, closed, genuine glass, white

### Description

For Unibox in combination with the mounting channel

### Item No.

1022755



## Cofit S Compression fitting for G 3/4 external thread

Cofit S, 2-fold, for G 3/4 external thread according to DIN EN 16313, clamping ring and union nut made of brass, union nut nickel plated, metal to metal sealing plus O-ring.

Seal Metal to metal sealing

Suitable for - Multi-layer composite pipes  
- Plastic pipes

### Suitable for pipe dimension (mm)

14 x 2.0

16 x 2.0

17 x 2.0

18 x 2.0

20 x 2.0

20 x 2.5

### Connection size

G 3/4 union nut

G 3/4 union nut

G 3/4 union nut

G 3/4 union nut

G 3/4 union nut

G 3/4 union nut

### Quantity

2-fold

2-fold

2-fold

2-fold

2-fold

2-fold

### Item No.

1507934

1507935

1507937

1507938

1507939

1507940



#### Ofix CEP for G 3/4 external thread according to DIN EN 16313, soft sealing

Ofix CEP, 2-fold, one-piece pre-assembled, for copper pipes according to DIN EN 1057, precision steel pipes according to DIN EN 10305-1 / 2, stainless steel pipes and galvanised steel pipes, soft sealing (no support sleeves required).

Suitable for

- Copper pipes
- Precision steel pipes
- Stainless steel pipe
- Galvanised steel pipes

Suitable for pipe dimension (mm)	Connection size	Seal	Quantity	Item No.
14 x 2.0	G 3/4 union nut x 10 mm	Soft sealing	2-fold	1016840
16 x 2.0	G 3/4 union nut x 12 mm	Soft sealing	2-fold	1016841
18 x 2.0	G 3/4 union nut x 14 mm	Soft sealing	2-fold	1016842
20 x 2.5	G 3/4 union nut x 15 mm	Soft sealing	2-fold	1016843
20 x 2.0	G 3/4 union nut x 16 mm	Soft sealing	2-fold	1016844
22 x 2.0	G 3/4 union nut x 18 mm	Soft sealing	2-fold	1016845



#### Pipe connection press elbow

Description	Item No.
For Unibox, for pipe connection through the mounting channel, 16 x 2.0 mm	1515353
For Unibox, for pipe connection through the mounting channel, 20 x 2.5 mm	1515356



#### ClimaCon F 90 Room thermostat for two pipe applications, heating only/cooling only, follower

For Unibox T vario, TQ vario, T-RTL vario, TQ-RTL vario and E BV vario.

Voltage	Control	Suitable for	Item No.
230 V AC	On/off	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1155009



#### ClimaCon F 210 Room thermostat for two pipe applications, heating only/cooling only, leader

For Unibox T vario, TQ vario, T-RTL vario, TQ-RTL vario and E BV vario.

Voltage	Control	Suitable for	Item No.
230 V AC	On/off / PWM	Electrothermal actuators (on/off), "normally closed"	1155021





#### Aktor T 2P Electrothermal actuator

For Unibox T vario, TQ vario, T-RTL vario, TQ-RTL vario and E BV vario.

##### Description

On/off control, "normally closed", 230 V

##### Item No.

1012415



#### Uni FHU Thermostat with remote control

##### Description

White, 2 m capillary tube  
White, 5 m capillary tube  
White, 10 m capillary tube

##### Item No.

1012595  
1012596  
1012597



#### Replacement cover for Unibox T, T-RTL, TQ-RTL and E BV

##### Description

Plastic white  
Genuine glass white  
Genuine glass black

##### Item No.

1022779  
1022777  
1022778



## 1.3 Surface heating and cooling

### **Return temperature limiters** **220**

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# Valves for return temperature limitation



Return temperature limiters are used in combined radiator and surface heating systems with closed circuits. The valves are available in reversed angle for return and straight for return versions. The integrated valve insert has a double cone that prevents unintentional over-

heating. In addition, the valve has a frost protection function. The **Uni RTLH** thermostats with connection thread M 30 x 1.5 and the **Uni RTL** thermostats with connection thread M 30 x 1.0 are suitable for the valves (see chapter "Return temperature limiter Accessories").

Body material	Brass	Protection cap	Yes
Max. operating pressure	10 bar	Zero position	No
Thermostat thread	M 30 x 1.5		

## Reversed angle for return



Type	Reversed angle
------	----------------

### Radiator connection

R 3/8

R 1/2

### Pipe connection

Rp 3/8

Rp 1/2

### Item No.

1024363

1024364

## Straight for return



Type	Straight
------	----------

### Radiator connection

R 3/8

R 1/2

### Pipe connection

Rp 3/8

Rp 1/2

### Item No.

1024463

1024464





# Return temperature limiter sets



The return temperature limiter sets consist of the valve for return temperature limitation and the matching **Uni RTLH** thermostat. The sets are available in reversed angle for return and straight for return versions, each with a white thermostat.

Setting range	10 up to 40 °C	Radiator connection	R ½
Colour protection cap	Black	Pipe connection	Rp ½
Type	Straight	Thermostat thread	M 30 x 1.5
Body material	Brass	Protection cap	Yes
Max. operating pressure	10 bar	Zero position	Yes

## Reversed angle for return



Item No.  
1028364

## Straight for return



Item No.  
1028464



# Return temperature limiters - Accessories

## Uni RTLH Thermostat with M 30 x 1.5



Thermostat thread M 30 x 1.5

### Description

White, 10 °C - 40 °C

Chrome plated, 10 °C - 40 °C

Anthracite, with zero position, limitable and blockable, 10 °C - 70 °C

### Item No.

1027165

1027172

1149068

## Uni RTL Thermostat with M 30 x 1.5



Thermostat thread M 30 x 1.5

### Description

White, 10 °C - 50 °C, M 30 x 1.0

### Item No.

1027100

## Extension



### Description

For Unibox RTL, for RTLH valves, 20 mm

### Item No.

1022699

## Replacement valve insert



### Description

For Unibox and RTLH valves, M 30 x 1.5

### Item No.

1026981

## Replacement stuffing gland screw



### Description

For all RTLH valves, set = 5 pieces

### Item No.

1026986





**Hydronics**

**2**



## 2 Hydronics

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- + Regudis W dwelling station design
- + Surface heating design
- + Output of valve presetting values, pipe dimensioning, pump delivery heads, material lists and much more

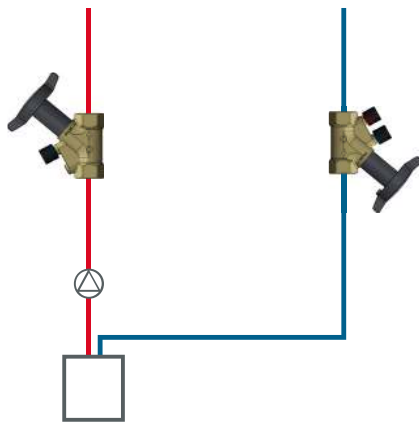
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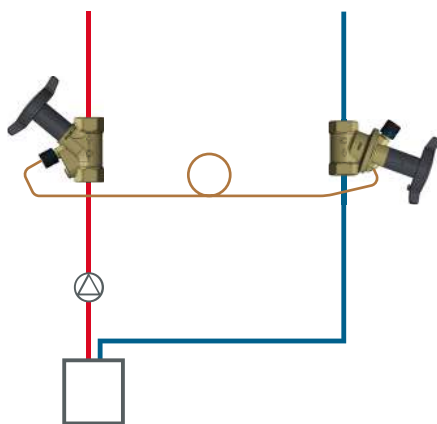
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## Typical applications in a riser



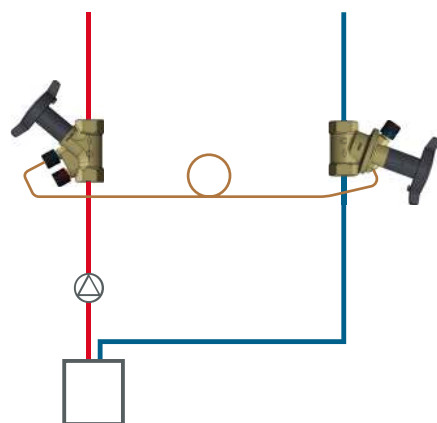
### Standard installation

For example, consisting of **HydroControl V** double regulating and commissioning valve and **HydroControl A** shut-off valve for systems in which hydronic balancing of the individual supply risers is required.



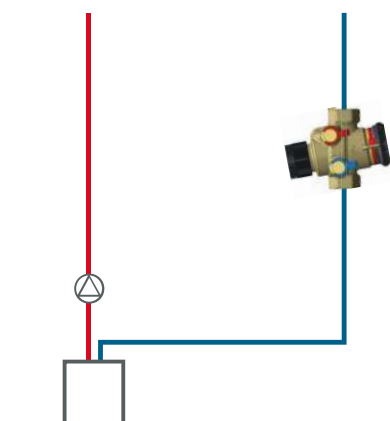
### Differential pressure control

For example, consisting of **HydroControl D** differential pressure regulator and **HydroControl A** shut-off valve for systems with presettable thermostatic valves.



### Differential pressure control with flow limitation

For example, consisting of **HydroControl D** differential pressure regulator and **HydroControl V** double regulating and commissioning valve for systems with thermostatic valves or radiator lockshield valves without presetting in which the flow rate is to be limited to the calculated value.



### Flow control

For example with the **Cocon Q** pressure independent control valve for systems in which the mass flow of the individual supply risers is to be kept constant. For this function, the Cocon Q does not need to be equipped with an actuator.



## Hydronic balancing of risers

Chapter		Hydronic balancing of risers													
Product family		HydroControl										HydroCom		Hycoflow	
		V	VFC, VFN	VFR	VGC	M	MFC	STR	D	DFC	A	AFC	V	A	VTB
Characteristics															
Nominal pressure		PN25/PN16	PN16/PN6/ PN25	PN16	PN25	PN25	PN16	PN25	PN25/PN16	PN16	PN25	PN16	PN16	PN16	PN10
Medium temperature		-20...150°C	-10...150°C	-20...150°C	-10...150°C	-20...150°C	-10...150°C	-20...200°C	-20...120°C	-10...120°C	-20...150°C	-10...150°C	-10...120°C	-10...120°C	max. 100°C
Body		DZR brass	Cast iron, nodular cast iron	Bronze	Cast iron	DZR brass	Cast iron	Bronze	DZR brass	Cast iron	DZR brass	Cast iron	DZR brass	DZR brass	Brass
Valve type															
Double regulating and commissioning valve		•	•	•	•	•	•	•					•		•
Double regulating and commissioning valve with measuring orifice						•	•	•							
Differential pressure regulator									•	•					
Shut-off valve											•	•		•	
Diverting/mixing valve															
Control valve															
Pressure independent control valve															
Volume flow regulator															
Connection set															
Control functions															
Presetting/fix throttle		•	•	•	•	•	•	•					•		•
Differential pressure control									•	•					
Volume flow control															
Further functions															
Shut-off		•	•	•	•	•	•	•	•	•	•	•	•	•	•
Draining/Filling		•				•				•	•		•	•	
Impulse line connection		•				•			•	•	•		•	•	
Measuring (flow rate)		•	•	•	•	•	•	•	○				•		•
Via fix orifice						•	•	•							
Measuring (Δp)		•	•	•	•	•	•	•					•		
Actuator connection															
Design															
Angle seat valve		•	•	•	•	•	•	•	•	•	•	•	•	•	
Straight seat valve															•
Multi-way valve															
Connection															
Female thread		PN25				PN25			PN25		PN25		PN16	PN16	PN10
Male thread		PN16							PN16						
with union nuts															
Coupling/female thread															
Flange acc. to EN1092-2			PN16/PN6/ PN25	PN16			PN16			PN16		PN16			
Groove					PN25										
Others								Clamping ring							F/M
kvs value/control range		kvs	kvs	kvs	kvs	kvs	kvs	kvs	kPa	kPa	kvs	kvs	kvs	kvs	kvs
DN10 LF															
DN10															
DN15 ULF						0.19									
DN15 LF						0.4									
DN15		3.9				0.9					4.1		2.0	2.0	
DN15 HF						2.2									
DN20 LF								1.0	5...30 oder 25...70						
DN20		6.9	4.8			4.3		2.6			7.8		3.7	3.7	3.0
DN20 HF															
DN25		11.0	8.4			8.6					14.1		5.9	5.9	8.3
DN32		20.8	17.1			15.9					24.8		13.0	13.0	13.7
DN40		28.7	26.9			23.4					32.4				
DN50		42.9	36.0	36.0		35.0					49.8				
DN65		50.0	98	98	98		87					98			
DN80			122	122	122		102			20...100 oder 40...180		122			
DN100			201	201	201		198					201			
DN125			293	293	293		271					293			
DN150			404	404	404		400					404			
DN200			815	815	815		750								
DN250			1,200		1,200		1,090								
DN300			1,600		1,600		1,500								
DN350			2,250												
DN400			3,750												

■ kvs value ■ Control range volume flow ■ Control range differential pressure

● Included as standard ○ Depending on variant or with corresponding accessories



Hydronic balancing with pressure independent control valves				Connection of heating/cooling devices						Chapter
Cocon				Optibal W6	Flypass 4TZ	2-/3-way valves		Hycoco control valves		Product family
QTZ	QTR	QFC/QGC	QDP			Tri-CTR	2+3WV	ETZ	HTZ	Characteristics
PN25/PN16	PN25/PN16	PN25/PN16	PN25	PN16	PN16	PN16	PN16	PN16	PN16	Nominal pressure
-10...120	-10...120	-10...120	-10...120	0...90	-10...120	-10...120	-10...120	-10...120	-10...120	Medium temperature
DZR brass	Bronze	Cast iron, nodular cast iron	DZR brass	DZR brass	DZR brass	Bronze	Bronze	DZR brass	DZR brass	Body
										<b>Valve type</b>
										Double regulating and commissioning valve
										Double regulating and commissioning valve with measuring orifice
			•							Differential pressure regulator
				•		•	•	•	•	Shut-off valve
				•			•			Diverting/mixing valve
•	•	•	•							Control valve
•	•	•	•							Pressure independent control valve
					•					Volume flow regulator
										Connection set
				•				•	•	<b>Control functions</b>
			•							Presetting/fix throttle
•	•	•	•							Differential pressure control
										Volume flow control
•	•	•	•	•	•			•	•	<b>Further functions</b>
					•			•	•	Shut-off
			•					•	•	Draining/Filling
○								•	•	Impulse line connection
○										Measuring (flow rate)
○	•	•			○					Via fix orifice
M30 x 1.5	•	•	M30 x 1.5	•		M30 x 1.5	•	M30 x 1.5	M30 x 1.5	Measuring (Δp)
										Actuator connection
								•	•	<b>Design</b>
										Angle seat valve
2W	2W	2W	2W	6W	4W	3W	2W/3W	2W	2W	Straight seat valve
										Multi-way valve
PN25/PN16	PN25							PN16	PN16	<b>Connection</b>
PN25/PN16	PN16		PN25	PN16		PN16		PN16	PN16	Female thread
						•		•	•	Male thread
PN25/PN16										with union nuts
		PN25/PN16					PN16			Coupling/female thread
		PN25								Flange acc. to EN1092-2
					F/union nut					Groove
										Others
<b>l/h</b>	<b>m³/h</b>	<b>m³/h</b>		<b>kvs</b>	<b>kvs</b>	<b>kvs</b>	<b>kvs</b>	<b>kvs</b>	<b>kvs</b>	<b>kvs value/control range</b>
30...210										DN10 LF
90...450										DN10
										DN15 ULF
30...210							1			DN15 LF
150...1,050				3.2	22.0	2.5	1.6	1.0	1.7	DN15
200...1,300							2.5			DN15 HF
							4			DN20 LF
150...1,050				3.2	34.0	4.4	6.3	1.2	2.7	DN20
250...1,800									5.0	DN20 HF
400...2,500						5.7	10.0	1.2	3.6	DN25
600...4,800						7.2	16.0		6.8	DN32
	1.5...7.5	1.5...7.5				8.5	25.0		10.0	DN40
	3.5...14	2...8				10.0	35.0			DN50
		5...20					63			DN65
		7.5...30					100			DN80
		12.5...50					160			DN100
		27...108					220			DN125
		36...150					320			DN150
		55...190								DN200
										DN250
										DN300
										DN350
										DN400

# HydroControl V Double regulating and commissioning valves DN 15 to DN 400



For hydronic balancing of distribution pipes in central heating and cooling systems with closed circuits. Determination of the flow rate by measuring the differential pressure with the help of the measuring system OV-DMC 3 tak-

ing the preset values into consideration.

Y-pattern valve with secured, at any time controllable, infinitely adjustable fine presetting. All functions accessible from the top. Supplied with two auxiliary valves.

Presetting	Yes	Installation location	Supply or return
Shutoff	Yes		

## HydroControl V with internal thread PN 25



Medium	Water	Impulse tube connection	Yes, via HydroPort
	Water-glycol mixture	Body material	DZR brass
Operating temperature	-20 up to 150 °C	Thermal insulation shell	Available as accessory
Measuring connection	Yes		
Draining	With HydroPort adapter		

Nominal size	Connection size	kvs	Item No.
DN 15	Rp 1/2	3.90	1062404
DN 20	Rp 3/4	6.90	1062406
DN 25	Rp 1	11.00	1062408
DN 32	Rp 1 1/4	20.80	1062410
DN 40	Rp 1 1/2	28.70	1062412
DN 50	Rp 2	42.90	1062416

## HydroControl V with external thread PN 16

Flat sealing, without union nuts and sealing rings.



Medium	Water	Impulse tube connection	Yes, via HydroPort
	Water-glycol mixture	Body material	DZR brass
Operating temperature	-20 up to 150 °C	Thermal insulation shell	Available as accessory
Measuring connection	Yes		
Draining	With HydroPort adapter		

Nominal size	Connection size	kvs	Item No.
DN 15	G 3/4	3.90	1062604
DN 20	G 1	6.90	1062606
DN 25	G 1 1/4	11.00	1062608
DN 32	G 1 1/2	20.80	1062610
DN 40	G 1 3/4	28.70	1062612
DN 50	G 2 3/8	42.90	1062616

### HydroControl VTR with internal thread PN 16



Medium	Water	Impulse tube connection	Extendable (only depressurised)
	Water-glycol mixture	Body material	Bronze
Operating temperature	-20 up to 150 °C	Thermal insulation shell	No
Measuring connection	Closed with blind plug	Certification	WaterMark
Draining	Extendable (only depressurised)		

Nominal size	Connection size	kvs	Item No.
DN 65	G 2 1/2	50.00	1060120

### HydroControl VFC with flanges according to EN 1092-2 PN 16



Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-10 up to 150 °C		
Measuring connection	Yes		

Nominal size	kvs	Body material	Thermal insulation shell	Item No.
DN 20	4.80	Cast iron	Available as accessory	1062646
DN 25	8.40	Cast iron	Available as accessory	1062647
DN 32	17.10	Cast iron	Available as accessory	1062648
DN 40	26.90	Cast iron	Available as accessory	1062649
DN 50	36.00	Cast iron	Available as accessory	1062650
DN 65	98.00	Cast iron	Available as accessory	1062651
DN 80	122.00	Cast iron	Available as accessory	1062652
DN 100	201.00	Cast iron	Available as accessory	1062653
DN 125	293.00	Cast iron	Available as accessory	1062654
DN 150	404.00	Cast iron	Available as accessory	1062655
DN 200	815.00	Cast iron	No	1062656
DN 250	1,200.00	Cast iron	No	1062657
DN 300	1,600.00	Cast iron	No	1062658
DN 350	2,250.00	Nodular cast iron	No	1062659
DN 400	3,750.00	Nodular cast iron	No	1062660

### HydroControl VFN with flanges according to EN 1092-2 PN 25



Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-20 up to 150 °C	Body material	Nodular cast iron
Measuring connection	Yes		

Nominal size	kvs	Thermal insulation shell	Item No.
DN 65	98.00	Available as accessory	1062451
DN 80	122.00	Available as accessory	1062452
DN 100	201.00	Available as accessory	1062453
DN 125	293.00	Available as accessory	1062454
DN 150	404.00	Available as accessory	1062455
DN 200	815.00	No	1062456
DN 250	1,200.00	No	1062457
DN 300	1,600.00	No	1062458

### HydroControl VFC with flanges according to EN 1092-2 PN 6



Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-10 up to 150 °C	Body material	Cast iron
Measuring connection	Yes		

Nominal size	kvs	Thermal insulation shell	Item No.
DN 20	4.80	Available as accessory	1062676
DN 25	8.40	Available as accessory	1062677
DN 32	17.10	Available as accessory	1062678
DN 40	26.90	Available as accessory	1062679
DN 50	36.00	Available as accessory	1062680
DN 65	98.00	Available as accessory	1062681
DN 80	122.00	Available as accessory	1062682
DN 100	201.00	Available as accessory	1062683
DN 125	293.00	Available as accessory	1062684
DN 150	404.00	Available as accessory	1062685
DN 200	815.00	No	1062686

### HydroControl VFC with flanges PN 16 with hole circles according to ANSI class 150



Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-10 up to 150 °C		
Measuring connection	Yes		

Nominal size	kvs	Body material	Thermal insulation shell	Item No.
DN 20 - ¾	4.80	Cast iron	Available as accessory	1062946
DN 25 - 1	8.40	Cast iron	Available as accessory	1062947
DN 32 - 1¼	17.10	Cast iron	Available as accessory	1062948
DN 40 - 1½	26.90	Cast iron	Available as accessory	1062949
DN 50 - 2	36.00	Cast iron	Available as accessory	1062950
DN 65 - 2½	98.00	Cast iron	Available as accessory	1062951
DN 80 - 3	122.00	Cast iron	Available as accessory	1062952
DN100 - 4	201.00	Cast iron	Available as accessory	1062953
DN125 - 5	293.00	Cast iron	Available as accessory	1062954
DN150 - 6	404.00	Cast iron	Available as accessory	1062955
DN 200 - 8	815.00	Cast iron	No	1062956
DN 250 - 10	1,200.00	Cast iron	No	1062957
DN 300 - 12	1,600.00	Cast iron	No	1062958
DN 350 - 14	2,250.00	Nodular cast iron	No	1062959
DN 400 - 16	3,750.00	Nodular cast iron	No	1062960



### HydroControl VGC with roll grooves PN 25

Suitable for couplings of the Victaulic, Grinnell, or similar systems.



Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-10 up to 150 °C	Body material	Cast iron
Measuring connection	Yes		

Nominal size	Connection size	kvs	Thermal insulation shell	Item No.
DN 65	73.0	98.00	Available as accessory	1063051
DN 65	76.1	98.00	Available as accessory	1064051
DN 80	88.9	122.00	Available as accessory	1063052
DN 100	114.3	201.00	Available as accessory	1063053
DN 125	141.3	293.00	Available as accessory	1063054
DN 125	139.7	293.00	Available as accessory	1064054
DN 150	168.3	404.00	Available as accessory	1063055
DN 150	165.1	404.00	Available as accessory	1064055
DN 200	219.1	815.00	No	1063056
DN 250	273.0	1,200.00	No	1063057
DN 300	323.9	1,600.00	No	1063058

### HydroControl VFR with flanges according to EN 1092-2 PN 16, body made of bronze



Medium	Water	Measuring connection	Yes
	Water-glycol mixture	Draining	Extendable (only depressurised)
	Service water	Impulse tube connection	Extendable (only depressurised)
	Salt water (max. 38 °C)	Body material	Bronze
Operating temperature	-20 up to 150 °C		

Nominal size	kvs	Thermal insulation shell	Item No.
DN 50	36.00	Available as accessory	1062350
DN 65	98.00	Available as accessory	1062351
DN 80	122.00	Available as accessory	1062352
DN 100	201.00	Available as accessory	1062353
DN 125	293.00	Available as accessory	1062354
DN 150	404.00	Available as accessory	1062355
DN 200	815.00	No	1062356

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# HydroControl M Double regulating and commissioning valves with mixed measuring orifice DN 15 to DN 300



For hydronic balancing of distribution pipes in central heating and cooling systems with closed circuits. The integrated measuring orifice enables easy balancing: modification of the flow rate values via the handwheel can be read off directly with the help of the OV-DMC 3 measuring system, irrespective of the preset

values. Y-pattern valve with fixed measuring orifice and secured, at any time controllable, infinitely adjustable fine presetting. All functions accessible from the top. Supplied with two auxiliary valves.

Medium	Water	Measuring connection	Yes
	Water-glycol mixture	Installation location	Supply or return
Presetting	Yes		
Shutoff	Yes		

## HydroControl M with internal thread PN 25



Operating temperature	-20 up to 150 °C	Body material	DZR brass
Draining	Yes	Thermal insulation shell	Available as accessory
Impulse tube connection	Yes, via HydroPort		

Nominal size	Connection size	kvs	Item No.
DN 15 LF	Rp 1/2	0.19	1065844
DN 15 LF	Rp 1/2	0.40	1065834
DN 15 MF	Rp 1/2	0.90	1065824
DN 15 HF	Rp 1/2	2.20	1065804
DN 20	Rp 3/4	4.30	1065806
DN 25	Rp 1	8.60	1065808
DN 32	Rp 1 1/4	15.90	1065810
DN 40	Rp 1 1/2	23.40	1065812
DN 50	Rp 2	35.00	1065816

**HydroControl MFC with flanges according to EN 1092-2 PN 16**



Operating temperature	-10 up to 150 °C	Body material	Cast iron
Draining	Extendable (only depressurised)	Thermal insulation shell	No
Impulse tube connection	Extendable (only depressurised)		

Nominal size	kvs	Item No.
DN 65	86.70	1065851
DN 80	102.00	1065852
DN 100	198.00	1065853
DN 125	271.00	1065854
DN 150	400.00	1065855
DN 200	750.00	1065856
DN 250	1,090.00	1065857
DN 300	1,500.00	1065858

# HydroControl D Differential pressure regulators DN 15 to DN 200



For automatic hydronic balancing of distribution pipes in central heating and cooling systems with closed circuits. The differential pressure control ensures hydronic balancing even at partial load and prevents high differential pressures in the controlled system section, e.g. at the radiator valve. When using a HydroControl V as partner valve, the water quantity

in the riser can also be measured with the help of the OV-DMC 3 measuring system with the impulse tube connected.

Y-pattern valve with secured, at any time controllable, infinitely adjustable presetting of the desired nominal differential pressure value. All functions accessible from the top.

Medium	Water	Shutoff	Yes
	Water-glycol mixture	Installation location	Return
Presetting	Yes		

## HydroControl D with internal thread PN 25



Operating temperature	-20 up to 120 °C	Body material	DZR brass
Measuring connection	Yes, with HydroControl V	Thermal insulation shell	Available as accessory
Draining	No		

Nominal size	Connection size	Nominal value differential pressure (mbar)	Item No.
DN 15	Rp 1/2	50 up to 300	1064524
DN 20	Rp 3/4	50 up to 300	1064526
DN 25	Rp 1	50 up to 300	1064528
DN 32	Rp 1 1/4	50 up to 300	1064530
DN 40	Rp 1 1/2	50 up to 300	1064532
DN 50	Rp 2	50 up to 300	1064536
DN 15	Rp 1/2	50 up to 300	1064724
DN 20	Rp 3/4	250 up to 700	1064726
DN 25	Rp 1	250 up to 700	1064728
DN 32	Rp 1 1/4	250 up to 700	1064730
DN 40	Rp 1 1/2	250 up to 700	1064732
DN 50	Rp 2	250 up to 700	1064736

## HydroControl D with external thread PN 16



Operating temperature	-20 up to 120 °C	Body material	DZR brass
Measuring connection	Yes, with HydroControl V	Thermal insulation shell	Available as accessory
Draining	No		

Nominal size	Connection size	Nominal value differential pressure (mbar)	Item No.
DN 15	G 3/4	50 up to 300	1064624
DN 20	G 1	50 up to 300	1064626
DN 25	G 1 1/4	50 up to 300	1064628
DN 32	G 1 1/2	50 up to 300	1064630
DN 40	G 1 3/4	50 up to 300	1064632
DN 50	G 2 3/8	50 up to 300	1064636



**Hydromat DFC with flanges according to EN 1092-2 PN 16**



Operating temperature	-10 up to 120 °C	Body material	Cast iron
Measuring connection	No	Thermal insulation shell	No
Draining	Yes		

Nominal size	Nominal value differential pressure (mbar)	kvs	Item No.
DN 65	200 up to 1,000	52.00	1064651
DN 80	200 up to 1,000	75.00	1064652
DN 100	200 up to 1,000	110.00	1064653
DN 125	200 up to 1,000	145.00	1064654
DN 150	200 up to 1,000	170.00	1064655
DN 65	400 up to 1,800	52.00	1064751
DN 80	400 up to 1,800	75.00	1064752
DN 100	400 up to 1,800	110.00	1064753
DN 125	400 up to 1,800	145.00	1064754
DN 150	400 up to 1,800	170.00	1064755
DN 200	400 up to 1,800	420.00	1064756

# HydroControl A Shutoff valves DN 15 to DN 150



For shutting off distribution pipes in central heating and cooling systems with closed circuits.  
Y-pattern valve without presetting. The Hydro-

Control A is supplied with one HydroPort auxiliary valve which can also be used to connect the impulse tube of a HydroControl D differential pressure regulator under system pressure.

Medium	Water	Measuring connection	No
	Water-glycol mixture	Thermal insulation shell	Available as accessory
Presetting	No	Installation location	Supply or return
Shutoff	Yes		

## HydroControl A with internal thread PN 25



Operating temperature	-20 up to 150 °C	Impulse tube connection	Yes
Draining	With HydroPort adapter	Body material	DZR brass

Nominal size	Connection size	kvs	Item No.
DN 15	Rp 1/2	4.10	1067524
DN 20	Rp 3/4	7.80	1067526
DN 25	Rp 1	14.10	1067528
DN 32	Rp 1 1/4	24.80	1067530
DN 40	Rp 1 1/2	32.40	1067532
DN 50	Rp 2	49.80	1067536

## HydroControl A with external thread PN 16

Flat sealing, without union nuts and sealing rings.



Operating temperature	-20 up to 150 °C	Impulse tube connection	Yes
Draining	With HydroPort adapter	Body material	DZR brass

Nominal size	Connection size	kvs	Item No.
DN 15	G 3/4	4.10	1067624
DN 20	G 1	7.80	1067626
DN 25	G 1 1/4	14.10	1067628
DN 32	G 1 1/2	24.80	1067630
DN 40	G 1 3/4	32.40	1067632
DN 50	G 2 3/8	49.80	1067636



HydroControl AFC with flanges according to EN 1092-2 PN 16

Operating temperature	-10 up to 150 °C	Impulse tube connection	Extendable (only depressurised)
Draining	Extendable (only depressurised)	Body material	Cast iron

Nominal size	kvs	Item No.
DN 65	98.00	1062051
DN 80	122.00	1062052
DN 100	201.00	1062053
DN 125	293.00	1062054
DN 150	404.00	1062055



# HydroControl VTR, VFC Double regulating and commissioning valves for shipbuilding DN 10 to DN 50



For hydronic balancing of distribution pipes in central heating and cooling systems with closed circuits. Determination of the flow rate by measuring the differential pressure with the help of the OV-DMC 3 measuring system taking the preset values into consideration.

Y-pattern valve with secured, at any time controllable, infinitely adjustable fine presetting. All functions accessible from the top. Supplied with two Classic measuring valves. With type approval for shipbuilding, issued by Det Norske Veritas / German Lloyd.

Medium	Water	Impulse tube connection	Extendable (only depressurised)
	Water-glycol mixture		
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		
Draining	Extendable (only depressurised)		

## HydroControl VTR Double regulating and commissioning valve with internal thread PN 25

Nominal sizes DN 10 to DN 20 suitable for compression fittings item no. 10271..

Operating temperature	-20 up to 150 °C	Body material	Bronze
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Nominal size	Connection size	kvs	Item No.
DN 300	Rp 3/8	2.88	1688703
DN 15	Rp 1/2	3.88	1688704
DN 20	Rp 3/4	5.71	1688706
DN 25	Rp 1	8.89	1688708
DN 32	Rp 1 1/4	19.45	1688710
DN 40	Rp 1 1/2	27.51	1688712
DN 50	Rp 2	38.78	1688716

## HydroControl VFC with flanges according to EN 1092-2 PN 16

Operating temperature	-10 up to 150 °C	Body material	Cast iron
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Nominal size	kvs	Item No.
DN 20	4.80	1688746
DN 25	8.40	1688747
DN 32	17.10	1688748
DN 40	26.90	1688749
DN 50	36.00	1688750



# HydroControl STR Double regulating and commissioning valves for solar



Especially for the hydronic balancing of collector fields in solar plants with closed circuits. No shutoff facility to ensure a minimum flow rate. Flow rate determination by differential pressure measurement via the integrated, fixed measuring orifice.  
Y-pattern valve with fixed measuring orifice

and secured, at any time controllable, infinitely adjustable fine presetting. All functions accessible from the top. Clamping ring connection for Regusol compression fittings on both sides. Plug-in couplings for connection of a measuring device.

Medium	Water	Draining	No
	Water-glycol mixture	Impulse tube connection	No
Operating temperature	-20 up to 200 °C	Body material	Bronze
Presetting	Yes	Thermal insulation shell	No
Shutoff	No	Installation location	Supply or return
Measuring connection	Yes		

## HydroControl STR with clamping ring connection PN 25



Nominal size	Connection size	kvs	Item No.
DN 20 LF	G 1	1.04	1369050
DN 20 MF	G 1	2.60	1369055

# Hydrocontrol - Accessories and spare parts



## Connection set with externally threaded tailpipes

Consisting of two tailpipes, union nuts and sealing rings.

Suitable for HydroControl V, D and A with external threads.

Nominal size	Connection size	Item No.
DN 10	R 3/8	1140791
DN 15	R 1/2	1140792
DN 20	R 3/4	1140793
DN 25	R 1	1140794
DN 32	R 1 1/4	1140795
DN 50	R 2	1140797



## HydroPort Adapter

For filling, venting and draining via HydroPort auxiliary valves. For permanent connection of a Hydromat impulse tube to HydroPort auxiliary valves.

Item No.
1069601



## Thermal insulation shell

Only for heating systems. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG).

Suitable for HydroControl V, M and A.

Operating temperature -10 up to 120 °C

Nominal size	Item No.
DN 15	1069610
DN 20	1069611
DN 25	1069612
DN 32	1069613
DN 40	1069614
DN 50	1069615



#### Thermal insulation shell

Only for heating systems. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG).

Suitable for HydroControl D.

Operating temperature -10 up to 120 °C

Nominal size	Item No.
DN 15	1069620
DN 20	1069621
DN 25	1069622
DN 32	1069623
DN 40	1069624
DN 50	1069625



#### Thermal insulation shell

Made of polyurethane rigid foam with polystyrene shell. For heating and cooling systems. Building material class B2 according to DIN 4102. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG). Cold insulation: Min. medium temperature 6 °C, thermal insulation shells have to be bonded hermetically. Restricted diffusion tightness at low medium temperature and at high ambient temperature and/or air humidity.

Suitable for HydroControl VFC, VFN, VFR, VGC und AFC.

Operating temperature -10 up to 130 °C

Nominal size	Item No.
DN 20	1062581
DN 25	1062582
DN 32	1062583
DN 40	1062584
DN 50	1062585
DN 65	1062586
DN 80	1062587
DN 100	1062588
DN 125	1062589
DN 150	1062590



#### Spindle extension

Length 35 mm.

For valve insulation with commercially available insulation material for HydroControl VTR, VFC, VFN, VFR, VGC, MTR, MFC and AFC. Not to be used in combination with Oventrop thermal insulation shells.

Description	Item No.
For DN 10 to DN 50	1688296
For DN 65 to DN 150	1688297



**Wire seal kit**

Suitable for HydroControl V, M, D and A.



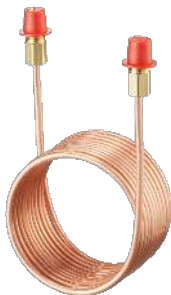
Description	Item No.
10-fold, consisting of seal and sealing wire	1089091



**Insert**

Suitable for HydroControl V, M and A.

Nominal size	Item No.
DN 15	1069020
DN 20	1069021
DN 25	1069022
DN 32	1069023
DN 40	1069024
DN 50	1069025



**Replacement impulse tube**

Description	Item No.
Replacement impulse tube for HydroControl D	1069090





## 2.1 Hydronic balancing of risers in heating and cooling systems

### **HydroCom Double regulating and commissioning valves** 251

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# HydroCom V Double regulating and commissioning valves



For automatic hydronic balancing of distribution pipes in central heating and cooling systems with closed circuits.  
Y-pattern valve with infinitely adjustable pre-

setting. All functions accessible from the top. Supplied with two HydroPort auxiliary valves. Maintenance-free spindle sealing.

Medium	Water	Impulse tube connection	Yes, via HydroPort
	Water-glycol mixture		
Operating temperature	-20 up to 120 °C	Body material	DZR brass
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		
Draining	With HydroPort adapter		

## HydroCom V with internal thread PN 16



Nominal size	Connection size	kvs	Item No.
DN 15	Rp 1/2	2.00	1062704
DN 20	Rp 3/4	3.70	1062706
DN 25	Rp 1	5.90	1062708
DN 32	Rp 1 1/4	13.00	1062710



# HydroCom A Shutoff valves



For shutting off distribution pipes in central heating and cooling systems with closed circuits. Y-pattern valve without presetting. Supplied with one HydroPort auxiliary valve for measuring, draining and filling on the downstream side for the connection of the impulse tube of a differential pressure regulator. Maintenance-free spindle sealing.

Medium	Water	Impulse tube connection	Yes, via HydroPort
	Water-glycol mixture		
Operating temperature	-20 up to 120 °C	Body material	DZR brass
Shutoff	Yes	Thermal insulation shell	Available as accessory
Draining	With HydroPort adapter	Installation location	Supply or return



## HydroCom A with internal thread PN 16



Nominal size	Connection size	kvs	Item No.
DN 15	Rp 1/2	2.00	1062724
DN 20	Rp 3/4	3.70	1062726
DN 25	Rp 1	5.90	1062728
DN 32	Rp 1 1/4	13.00	1062730

# HydroCom - Accessories



### HydroPort Adapter

For filling, venting and draining via HydroPort auxiliary valves. For permanent connection of a Hydromat impulse tube to HydroPort auxiliary valves.

Item No.
1069601



### Thermal insulation shell

Only for heating systems. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG).

Suitable for HydroCom V and A.

Nominal size	Item No.
DN 15	1069660
DN 20	1069661
DN 25	1069662
DN 32	1069663





## 2.1 Hydronic balancing of risers in heating and cooling systems

### **Other balancing and pipeline valves 255**

Hycoflow VTB Balancing valves.....	256
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# Hycoflow VTB Balancing valves



For hydronic balancing of distribution pipes in central heating and cooling systems with closed circuits. The integrated flow rate display allows for easy balancing by directly reading the water quantity.

play allows for easy balancing by directly reading the water quantity.

Medium	Water	Measuring connection	No
	Water-glycol mixture	Body material	Brass
Operating temperature	up to 100 °C	Thermal insulation shell	No
Presetting	Yes	Installation location	Supply or return
Shutoff	Yes		



**Hycoflow VTB with external thread PN 10**

Nominal size	Connection size	Control range (l/h)	kvs	Item No.
DN 20	G 3/4	240 up to 1,020	3.00	1060906
DN 25	G 1	600 up to 2,400	8.30	1060908
DN 32	G 1 1/4	1,200 up to 4,200	13.70	1060910



**Hycoflow VTB with union nut / external thread PN 10**

Nominal size	Connection size	Control range (l/h)	kvs	Item No.
DN 25	G 1	300 up to 2,400	5.50	1060925



# Differential pressure overflow valves



For pump hot water heating systems PN 10.  
With visual indicator to ensure a minimum  
flow rate or to reduce flow noises.

Medium	Water	Draining	No
Operating temperature	up to 120 °C	Body material	Bronze/Brass
Shutoff	No	Thermal insulation shell	No
Measuring connection	No		



Differential pressure overflow valve with internal thread PN 10

Nominal size	Connection size	Nominal value differential pressure (mbar)	Item No.
DN 20	Rp 3/4	50 up to 500	1085206
DN 25	Rp 1	50 up to 500	1085208
DN 32	Rp 1 1/4	50 up to 500	1085210



## 2.1 Hydronic balancing of risers in heating and cooling systems

### **Balancing and pipeline valves - 258** **end of production 2023**

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# Hydrocontrol Double regulating and commissioning valves - end of production 2023



## HydroControl VTR Double regulating and commissioning valve with internal thread PN 25, with mounted Classic measuring valve and fill and drain ball valve

Nominal sizes DN 10 to DN 20 suitable for compression fittings item no. 10271..

Medium	Water	Draining	Yes
	Water-glycol mixture	Impulse tube connection	Yes
Operating temperature	-20 up to 150 °C	Body material	Bronze
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		

Nominal size	Connection size	kvs	Item No.
DN 10	Rp 3/8	2.88	1060303
DN 15	Rp 1/2	3.88	1060304
DN 20	Rp 3/4	5.71	1060306
DN 25	Rp 1	8.89	1060308
DN 32	Rp 1 1/4	19.45	1060310
DN 40	Rp 1 1/2	27.51	1060312
DN 50	Rp 2	38.78	1060316



## HydroControl VTR Double regulating and commissioning valve with internal thread PN 25, with two mounted Classic measuring valves

Nominal sizes DN 10 to DN 20 suitable for compression fittings item no. 10271..

Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-20 up to 150 °C	Body material	Bronze
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		

Nominal size	Connection size	kvs	Certification	Item No.
DN 10	Rp 3/8	2.88		1060203
DN 15	Rp 1/2	3.88	WaterMark	1060204
DN 20	Rp 3/4	5.71	WaterMark	1060206
DN 25	Rp 1	8.89	WaterMark	1060208
DN 32	Rp 1 1/4	19.45	WaterMark	1060210
DN 40	Rp 1 1/2	27.51	WaterMark	1060212
DN 50	Rp 2	38.78	WaterMark	1060216



### HydroControl VTR Double regulating and commissioning valve with internal thread PN 25

Nominal sizes DN 10 to DN 20 suitable for compression fittings item no. 10271..

Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-20 up to 150 °C	Body material	Bronze
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Closed with blind plug		

Nominal size	Connection size	kvs	Certification	Item No.
DN 10	Rp 3/8	2.88	WRAS	1060103
DN 15	Rp 1/2	3.88	WRAS, WaterMark	1060104
DN 20	Rp 3/4	5.71	WRAS, WaterMark	1060106
DN 25	Rp 1	8.89	WRAS, WaterMark	1060108
DN 32	Rp 1 1/4	19.45	WRAS, WaterMark	1060110
DN 40	Rp 1 1/2	27.51	WRAS, WaterMark, ACS	1060112
DN 50	Rp 2	38.78	WRAS, WaterMark, ACS	1060116



### HydroControl VTR Double regulating and commissioning valve with external thread PN 16

Flat sealing, with union nuts and sealing rings.

Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-20 up to 150 °C	Body material	Bronze
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Closed with blind plug		

Nominal size	Connection size	kvs	Item No.
DN 10	G 5/8	2.88	1060503
DN 15	G 3/4	3.88	1060504
DN 20	G 1	5.71	1060506
DN 25	G 1 1/4	8.89	1060508
DN 32	G 1 1/2	19.45	1060510
DN 40	G 1 3/4	27.51	1060512
DN 50	G 2 3/8	38.78	1060516



#### HydroControl MTR Double regulating and commissioning valve with measuring orifice and internal thread PN 25

Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-20 up to 150 °C	Body material	Bronze
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		

Nominal size	Connection size	kvs	Item No.
DN 15 LF	Rp 1/2	0.55	1060464
DN 15 MF	Rp 1/2	1.15	1060434
DN 15 HF	Rp 1/2	2.10	1060404
DN 20	Rp 3/4	3.70	1060406
DN 25	Rp 1	6.10	1060408
DN 32	Rp 1 1/4	12.50	1060410
DN 40	Rp 1 1/2	18.10	1060412
DN 50	Rp 2	30.50	1060416



#### HydroControl ATR Shutoff valve with internal thread PN 25

Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-20 up to 150 °C	Body material	Bronze
Presetting	No	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	No		

Nominal size	Connection size	kvs	Item No.
DN 10	Rp 3/8	2.88	1067503
DN 15	Rp 1/2	3.88	1067504
DN 20	Rp 3/4	5.71	1067506
DN 25	Rp 1	8.89	1067508
DN 32	Rp 1 1/4	19.45	1067510
DN 40	Rp 1 1/2	27.51	1067512
DN 50	Rp 2	38.78	1067516



#### HydroControl ATR Shutoff valve with internal thread PN 16

Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-20 up to 150 °C	Body material	Bronze
Presetting	No	Thermal insulation shell	No
Shutoff	Yes	Installation location	Supply or return
Measuring connection	No		

Nominal size	Connection size	kvs	Item No.
DN 65	G 2 1/2	50.00	1067520



### HydroControl ATR Shutoff valve with external thread PN 16

Flat sealing, with union nuts and sealing rings.

Medium	Water	Draining	Extendable (only depressurised)
	Water-glycol mixture	Impulse tube connection	Extendable (only depressurised)
Operating temperature	-20 up to 150 °C	Body material	Bronze
Presetting	No	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	No		

Nominal size	Connection size	kvs	Item No.
DN 10	G 5/8	2.88	1067603
DN 15	G 3/4	3.88	1067604
DN 20	G 1	5.71	1067606
DN 25	G 1 1/4	8.89	1067608
DN 32	G 1 1/2	19.45	1067610
DN 40	G 1 3/4	27.51	1067612
DN 50	G 2 3/8	38.78	1067616



# HydroControl - Accessories and spare parts (in the programme beyond 2023)



## Ofix Compression fitting

Ofix CEP, 1-fold, for copper pipes according to DIN EN 1057, pressure screw nickel plated, metal to metal sealing.

Suitable for HydroControl VTR, MTR and ATR with internal thread.



Nominal size	Connection size	Item No.
DN 10	G 3/8 x 10 mm	1027151
DN 10	G 3/8 x 12 mm	1027152
DN 15	G 1/2 x 12 mm	1027153
DN 15	G 1/2 x 15 mm	1027155
DN 20	G 3/4 x 18 mm	1027157
DN 20	G 3/4 x 22 mm	1027158

## Flat sealing externally threaded tailpipe, 2-fold

Consisting of two tailpipes. Without union nuts and sealing rings.

Suitable for valves with flat sealing external thread which are supplied with union nuts and sealings rings.

Operating temperature -20 up to 150 °C



Nominal size	Connection size	Item No.
DN 10	R 3/8	1061491
DN 15	R 1/2	1061492
DN 20	R 3/4	1061493
DN 25	R 1	1061494
DN 32	R 1 1/4	1061495
DN 40	R 1 1/2	1061496
DN 50	R 2	1061497

## Flat sealing weldable tailpipe, 2-fold

Consisting of two tailpipes. Without union nuts and sealing rings.

Suitable for valves with flat sealing external thread which are supplied with union nuts and sealings rings.

Operating temperature -20 up to 150 °C



Nominal size	Item No.
DN 10	1060591
DN 15	1060592
DN 20	1060593
DN 25	1060594
DN 32	1060595
DN 40	1060596
DN 50	1060597



#### Thermal insulation shell

Made of polyethylene flexible foam. Only for heating systems. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG). Building material class B1 according to DIN 4102.

Suitable for HydroControl VTR and ATR.

Max. operating temperature 100 °C

Nominal size	Item No.
DN 10 and DN 15	1060481
DN 20	1060482
DN 25	1060483
DN 32	1060484
DN 40	1060485
DN 50	1060486



#### Thermal insulation shell for higher temperatures

Made of polyurethane rigid foam with multiple clip connection. Operating temperature: for short periods up to 150 °C. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG). Building material class B2 according to DIN 4102.

Suitable for HydroControl VTR und ATR.

Max. operating temperature 130 °C

Nominal size	Item No.
DN 10 and DN 15	1060081
DN 20	1060082
DN 25	1060083
DN 32	1060084
DN 40	1060085
DN 50	1060086



#### Blocking set

Suitable for HydroControl VTR, VFC, VFN, VFR, VGC, MTR and ATR up to DN 50.

Description	Item No.
1-fold, consisting of blocking cap, seal and sealing wire	1060180



#### Identification ring

Can be clipped onto the handwheel for riser identification.

Suitable for HydroControl VTR, VFC, VFR and MTR up to DN 50.

Description	Item No.
10-fold, blue	1069650
10-fold, red	1069651
10-fold, violet	1069652
10-fold, green	1069653



#### Replacement insert

Suitable for HydroControl VTR, VFC, VFN, VFR, VGC, MTR and ATR up to DN 50.

Nominal size	Item No.
DN 10	1069003
DN 15	1069004
DN 20	1069006
DN 25	1069008
DN 32	1069010
DN 40	1069012
DN 50	1069016



#### Ball valve

Description	Item No.
Fill and drain ball valve with G 1/4 external thread	1060191

#### 2 measuring valves G 1/4 with extension



Description	Item No.
Measuring valve extension L = 80 mm, system draining is required for mounting	1060295
Measuring valve extension L = 40 mm, system draining is required for mounting	1688295

# Hydromat differential pressure regulators - end of production 2023



## Hydromat DTR with internal thread PN 16

Nominal sizes DN 15 and DN 20 suitable for compression fittings item no. 10271..

Medium	Water	Draining	Yes
	Water-glycol mixture	Impulse tube connection	Yes
Operating temperature	-10 up to 120 °C	Body material	Bronze
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Return
Measuring connection	No		

Nominal size	Connection size	Nominal value differential pressure (mbar)	kvs	Item No.
DN 15	Rp 1/2	50 up to 300	2.50	1064504
DN 20	Rp 3/4	50 up to 300	5.00	1064506
DN 25	Rp 1	50 up to 300	7.50	1064508
DN 32	Rp 1 1/4	50 up to 300	10.00	1064510
DN 40	Rp 1 1/2	50 up to 300	15.00	1064512
DN 50	Rp 2	50 up to 300	34.00	1064516
DN 15	Rp 1/2	250 up to 700	2.50	1064704
DN 20	Rp 3/4	250 up to 700	5.00	1064706
DN 25	Rp 1	250 up to 700	7.50	1064708
DN 32	Rp 1 1/4	250 up to 700	10.00	1064710
DN 40	Rp 1 1/2	250 up to 700	15.00	1064712
DN 50	Rp 2	250 up to 700	34.00	1064716





### Hydromat DTR with external thread PN 16

Flat sealing, with union nuts and sealing rings.

Medium	Water	Draining	Yes
	Water-glycol mixture	Impulse tube connection	Yes
Operating temperature	-10 up to 120 °C	Body material	Bronze
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Return
Measuring connection	No		

Nominal size	Connection size	Nominal value differential pressure (mbar)	kvs	Item No.
DN 15	G 3/4	50 up to 300	2.50	1064604
DN 20	G 1	50 up to 300	5.00	1064606
DN 25	G 1 1/4	50 up to 300	7.50	1064608
DN 32	G 1 1/2	50 up to 300	10.00	1064610
DN 40	G 1 3/4	50 up to 300	15.00	1064612
DN 50	G 2 3/8	50 up to 300	34.00	1064616
DN 15	G 3/4	250 up to 700	2.50	1064804
DN 20	G 1	250 up to 700	5.00	1064806
DN 25	G 1 1/4	250 up to 700	7.50	1064808
DN 32	G 1 1/2	250 up to 700	10.00	1064810
DN 40	G 1 3/4	250 up to 700	15.00	1064812
DN 50	G 2 3/8	250 up to 700	34.00	1064816

# Hydromat - Accessories and spare parts (in the programme beyond 2023)



## Ofix Compression fitting

Ofix CEP, 1-fold, for copper pipes according to EN 1057. Pressure screw nickel plated, metal to metal sealing.

Suitable for Hydromat DTR with internal threads.



Nominal size	Connection size	Item No.
DN 15	G 1/2 x 12 mm	1027153
DN 15	G 1/2 x 15 mm	1027155
DN 20	G 3/4 x 18 mm	1027157
DN 20	G 3/4 x 22 mm	1027158

## Flat sealing externally threaded tailpipe, 2-fold

Consisting of two tailpipes. Without union nuts and sealing rings.

Suitable for valves with flat sealing external thread which are supplied with union nuts and sealings rings.

Operating temperature -20 up to 150 °C



Nominal size	Connection size	Item No.
DN 15	R 1/2	1061492
DN 20	R 3/4	1061493
DN 25	R 1	1061494
DN 32	R 1 1/4	1061495
DN 40	R 1 1/2	1061496
DN 50	R 2	1061497

## Flat sealing weldable tailpipe, 2-fold

Consisting of two tailpipes. Without union nuts and sealing rings.

Suitable for valves with flat sealing external thread which are supplied with union nuts and sealings rings.

Operating temperature -20 up to 150 °C



Nominal size	Item No.
DN 15	1060592
DN 20	1060593
DN 25	1060594
DN 32	1060595
DN 40	1060596
DN 50	1060597



#### Thermal insulation shell made of polyethylene flexible foam

Only for heating systems. Operating temperature: up to 100 °C. Complies with the German Energy Saving Ordinance (EnEV) according to appendix 5, table 1, line 5. Building material class B1 according to DIN 4102.

Max. operating temperature 100 °C

Nominal size	Item No.
DN 10 and DN 15	1060481
DN 20	1060482
DN 25	1060483
DN 32	1060484
DN 40	1060485
DN 50	1060486



#### Thermal insulation shell made polyurethane rigid foam

With multiple clip connection. Operating temperature: up to 130 °C, for short periods up to 150 °C. Complies with the German Energy Saving Ordinance (EnEV) according to appendix 5, table 1, line 5. Building material class B2 according to DIN 4102.

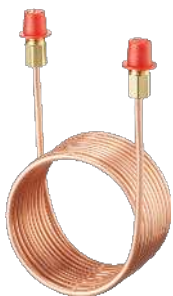
Max. operating temperature 130 °C

Nominal size	Item No.
DN 10 and DN 15	1060081
DN 20	1060082
DN 25	1060083
DN 32	1060084
DN 40	1060085
DN 50	1060086



#### Replacement diaphragm actuator

Nominal size	Nominal value differential pressure (mbar)	Item No.
DN 15	50 up to 300	1064592
DN 20	50 up to 300	1064593
DN 25	50 up to 300	1064594
DN 32	50 up to 300	1064595
DN 40	50 up to 300	1064596
DN 50	50 up to 300	1064597
DN 15	250 up to 700	1064792
DN 20	250 up to 700	1064793
DN 25	250 up to 700	1064794
DN 32	250 up to 700	1064795
DN 40	250 up to 700	1064796
DN 50	250 up to 700	1064797



**Replacement impulse tube**

**Item No.**

1062095





# Hycocon double regulating and commissioning valves - end of production 2023



## Hycocon VTZ Double regulating and commissioning valve with internal thread PN 16

Nominal sizes DN 15 and DN 20 suitable for compression fittings item no. 10271..



Medium	Water	Draining	Extendable
	Water-glycol mixture	Impulse tube connection	Yes
Operating temperature	-10 up to 120 °C	Body material	DZR brass
Presetting	Yes	Thermal insulation shell	Included in the scope of delivery
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		

Nominal size	Connection size	kvs	Item No.
DN 15	Rp 1/2	1.70	1061704
DN 20	Rp 3/4	2.70	1061706
DN 25	Rp 1	3.60	1061708
DN 32	Rp 1 1/4	6.80	1061710
DN 40	Rp 1 1/2	10.00	1061712
DN 50	Rp 2	18.00	1061716

## Hycocon VTZ Double regulating and commissioning valves with external thread PN 16

Flat sealing, with union nuts and sealing rings.



Medium	Water	Draining	Extendable
	Water-glycol mixture	Impulse tube connection	Yes
Operating temperature	-10 up to 120 °C	Body material	DZR brass
Presetting	Yes	Thermal insulation shell	Included in the scope of delivery
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		

Nominal size	Connection size	kvs	Item No.
DN 15	G 3/4	1.70	1061804
DN 20	G 1	2.70	1061806
DN 25	G 1 1/4	3.60	1061808
DN 32	G 1 1/2	6.80	1061810
DN 40	G 1 3/4	10.00	1061812
DN 50	G 2 3/8	18.00	1061816



#### Hycocon DTZ Differential pressure regulator with internal thread PN 16

Nominal sizes DN 15 and DN 20 suitable for compression fittings item no. 10271..

Medium	Water	Draining	Extendable
	Water-glycol mixture	Impulse tube connection	Yes
Operating temperature	-10 up to 120 °C	Body material	DZR brass
Presetting	Yes	Thermal insulation shell	Included in the scope of delivery
Shutoff	Yes	Installation location	Return
Measuring connection	Yes		

Nominal size	Connection size	Nominal value differential pressure (mbar)	kvs	Item No.
DN 15	Rp 1/2	50 up to 300	1.70	1062004
DN 20	Rp 3/4	50 up to 300	2.70	1062006
DN 25	Rp 1	50 up to 300	3.60	1062008
DN 32	Rp 1 1/4	50 up to 300	6.80	1062010
DN 40	Rp 1 1/2	50 up to 300	10.00	1062012
DN 50	Rp 2	50 up to 300	18.00	1062016
DN 15	Rp 1/2	250 up to 600	1.70	1062204
DN 20	Rp 3/4	250 up to 600	2.70	1062206
DN 25	Rp 1	250 up to 600	3.60	1062208
DN 32	Rp 1 1/4	250 up to 600	6.80	1062210
DN 40	Rp 1 1/2	250 up to 600	10.00	1062212
DN 50	Rp 2	250 up to 600	23.00	1062216

#### Hycocon DTZ Differential pressure regulator with external thread PN 16

Flat sealing, with union nuts and sealing rings.



Medium	Water	Draining	Extendable
	Water-glycol mixture	Impulse tube connection	Yes
Operating temperature	-10 up to 120 °C	Body material	DZR brass
Presetting	Yes	Thermal insulation shell	Included in the scope of delivery
Shutoff	Yes	Installation location	Return
Measuring connection	Yes		

Nominal size	Connection size	Nominal value differential pressure (mbar)	kvs	Item No.
DN 15	G 3/4	50 up to 300	1.70	1062104
DN 20	G 1	50 up to 300	2.70	1062106
DN 25	G 1 1/4	50 up to 300	3.60	1062108
DN 32	G 1 1/2	50 up to 300	6.80	1062110
DN 40	G 1 3/4	50 up to 300	10.00	1062112
DN 50	G 2 3/8	50 up to 300	23.00	1062116
DN 15	G 3/4	250 up to 600	1.70	1062304
DN 20	G 1	250 up to 600	2.70	1062306
DN 25	G 1 1/4	250 up to 600	3.60	1062308
DN 32	G 1 1/2	250 up to 600	6.80	1062310
DN 40	G 1 3/4	250 up to 600	10.00	1062312
DN 50	G 2 3/8	250 up to 600	23.00	1062316

### Hycocn ATZ Shutoff valve with internal thread PN 16

Nominal sizes DN 15 and DN 20 suitable for compression fittings item no. 10271..



Medium	Water Water-glycol mixture	Draining	Yes
Operating temperature	-10 up to 120 °C	Impulse tube connection	Yes
Presetting	No	Body material	DZR brass
Shutoff	Yes	Thermal insulation shell	Included in the scope of delivery
Measuring connection	Yes	Installation location	Supply or return

Nominal size	Connection size	kvs	Item No.
DN 15	Rp 1/2	1.70	1067304
DN 20	Rp 3/4	2.70	1067306
DN 25	Rp 1	3.60	1067308
DN 32	Rp 1 1/4	6.80	1067310
DN 40	Rp 1 1/2	10.00	1067312
DN 50	Rp 2	18.00	1067316

### Hycocn ATZ Shutoff valve with external thread PN 16

Flat sealing, with union nuts and sealing rings.



Medium	Water Water-glycol mixture	Draining	Yes
Operating temperature	-10 up to 120 °C	Impulse tube connection	Yes
Presetting	No	Body material	DZR brass
Shutoff	Yes	Thermal insulation shell	Included in the scope of delivery
Measuring connection	Yes	Installation location	Supply or return

Nominal size	Connection size	kvs	Item No.
DN 15	G 3/4	1.70	1067404
DN 20	G 1	2.70	1067406
DN 25	G 1 1/4	3.60	1067408
DN 32	G 1 1/2	6.80	1067410
DN 40	G 1 3/4	10.00	1067412
DN 50	G 2 3/8	18.00	1067416

# Hycococon - Accessories and spare parts (in the programme beyond 2023)



## Ofix Compression fittings

Ofix CEP, 1-fold, for copper pipes according to DIN EN 1057, pressure screw nickel plated, metal to metal sealing.

Suitable for Hycococon VTZ, DTZ and ATZ with internal thread.



Nominal size	Connection size	Item No.
DN 15	G 1/2 x 12 mm	1027153
DN 15	G 1/2 x 15 mm	1027155
DN 20	G 3/4 x 18 mm	1027157
DN 20	G 3/4 x 22 mm	1027158

## Flat sealing externally threaded tailpipe, 2-fold

Consisting of two tailpipes. Without union nuts and sealing rings.

Suitable for valves with flat sealing external thread which are supplied with union nuts and sealings rings.

Operating temperature -20 up to 150 °C



Nominal size	Connection size	Item No.
DN 15	R 1/2	1061492
DN 20	R 3/4	1061493
DN 25	R 1	1061494
DN 32	R 1 1/4	1061495
DN 40	R 1 1/2	1061496
DN 50	R 2	1061497

## Flat sealing weldable tailpipe, 2-fold

Consisting of two tailpipes. Without union nuts and sealing rings.

Suitable for valves with flat sealing external thread which are supplied with union nuts and sealings rings.

Operating temperature -20 up to 150 °C



Nominal size	Item No.
DN 15	1060592
DN 20	1060593
DN 25	1060594
DN 32	1060595
DN 40	1060596
DN 50	1060597





#### Conversion valve insert for Hycocon DN 15 to DN 25

Hycocon VTZ, ATZ, ETZ and HTZ DN 15 to DN 25 can be retrofitted with the valve inserts listed below. This can be done with the Oventrop Demo-Bloc special tool under system pressure.

Depending on the valve insert used, further accessories are necessary, for example an actuator or thermostat.

Description	Item No.
For Unibox and RTLH valves, M 30 x 1.5	1026981
For KTB valves, opens when the sensor temperature rises	1147169
For PTB valves and Cocon 2TZ, DN 15, kvs = 0.45	1186052
For PTB valves and Cocon 2TZ, DN 15, kvs = 1.00	1186053
For Cocon 2TZ, DN 15, kvs = 1.80	1186054
For A thermostatic valves (especially for steam systems), M 30 x 1.5	1186200
For reversed supply and return pipe, for A, AV 9, ADV 9, CV 9, E, AF, RF and RFV 9 thermostatic valves as well as Hycocon ATZ and VTZ, M 30 x 1.5, without presetting	1187070
For Combi LR with cap for Hycocon valves	1187071
For AF thermostatic valves, M 30 x 1.5, kv = 0.32	1187352



#### Thermal insulation shell for higher temperatures

Thermal insulation consisting of two shells. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG). Not suitable for Hycocon DTZ differential pressure regulators.

Operating temperature up to 120 °C

Nominal size	Item No.
DN 15	1061771
DN 20	1061772
DN 25	1061773
DN 32	1061774
DN 40	1061775



#### Additional shell for cooling systems

Additionally required for cooling systems in combination with the thermal insulation shells item no. 106177. Cold insulation: Min. medium temperature 6 °C, thermal insulation shells have to be bonded hermetically. Restricted diffusion tightness at low medium temperature and at high ambient temperature and/or air humidity.

Operating temperature -10 up to 120 °C

Nominal size	Item No.
DN 15	1061781
DN 20	1061782
DN 25	1061783
DN 32	1061784
DN 40	1061785



#### Replacement valve insert for Hycocon

Description	Item No.
For Hycocon ATZ, APZ, VTZ and VPZ, DN 15 to DN 25	1067065
For Hycocon HTZ, DTZ, VTZ and VPZ, DN 32	1067066
For Hycocon HTZ, DTZ, VTZ and VPZ, DN 40	1067067
For Hycocon HTZ and DTZ, DN 15 to DN 25	1067085



#### Handwheel with presetting

For the conversion of Hycocon ATZ shutoff valves to Hycocon VTZ double regulating and commissioning valves.

Nominal size	Item No.
DN 15	1061793
DN 20	1061794
DN 25	1061795
DN 32	1061796
DN 40	1061797



#### Diaphragm actuator

For the conversion of a Hycocon ATZ shutoff valve or a Hycocon VTZ double regulating and commissioning valve to a Hycocon DTZ differential pressure regulator. Note that the impulse tube supplied requires a connection in the supply pipe (or the return pipe if the valve to be converted is installed in the supply pipe). DN 15 to DN 25: the valve insert must be replaced for the conversion (enclosed). This can be done with the Oventrop Demo-Bloc special tool under system pressure.

Description	Item No.
For DN 15 to DN 25, nominal value 50-300 mbar	1062082
For DN 32 and DN 40, nominal value 50-300 mbar	1062085
For DN 15 to DN 25, nominal value 250-600 mbar	1062282
For DN 32 and DN 40, nominal value 250-600 mbar	1062285



#### Adapter for impulse tube connection

Description	Item No.
Adapter for connecting the impulse tube to a G 3/4 external thread	1062090
Adapter for connecting the impulse tube to a G 1/4 internal thread	1609302



#### Blocking pin with sealing wire

For blocking the set nominal values.

Description	Item No.
For Hycocon VTZ and Aquastrom T plus	1061792
For Hycocon DTZ differential pressure regulator	1062092



#### Eco Measuring technique

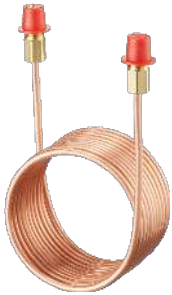
Description	Item No.
Measuring adapter with HydroPort plug-in coupling and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks	1060297
Drain and fill tool for Hycocon double regulating and commissioning valves	1061791



### Demo-Bloc

Special tool for the replacement of Hycocn valve inserts DN 15 to DN 25 under system pressure - except for Hycocn DTZ differential pressure regulators.

Description	Item No.
Including coupling set for thermostatic valves M 30 x 1.5 and AQ/AQH thermostatic valves	1188051
Spindle for differential pressure measurement at the thermostatic valve	1188093
Cleaning head for all valves	1188400



### Replacement impulse tube

Item No.
1062095

### Replacement measuring and drain unit



Description	Item No.
Measuring and drain unit for valves with Eco measuring technique	1061790
Plug for valves with Eco measuring technique	1061798



## 2.2 Hydronic balancing with pressure independent control valves



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## 2.2 Hydronic balancing with pressure independent control valves

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# Cocon QTZ Pressure independent control valves DN 10 to DN 32



Pressure independent control valve for dynamic hydronic balancing of heat exchangers, for example fan coils or cooling ceilings and distribution pipes in heating and cooling systems with closed circuits. The valve combination consists of an automatically operating flow controller and a control valve and can be equipped with an actuator or a manual regulating head.

Two-way valve, with secured, lead sealable, infinitely adjustable flow limitation. Direct setting in litres per hour. Readability of the set value possible from the outside, independent of the handwheel position, even with the ac-

tuator mounted. Valves with blind plugs can be retrofitted with Classic measuring valves. All DN 15 and DN 20 valves with internal thread are suitable for copper pipe with compression fittings.

Valve body and parts coming into contact with the medium made of dezincification resistant brass, plastic, stainless steel, EPDM or PTFE. Maintenance-free spindle sealing.

Cocon QTZ are characterised by easy adjustability, compact dimensions and best control quality.

Medium	Water	Body material	DZR brass
	Water-glycol mixture	Connection actuator	M 30 x 1.5
Operating temperature	-10 up to 120 °C	Thermal insulation shell	Available as accessory
Presetting	Yes	Installation location	Supply or return
Shutoff	Yes		

## Cocon QTZ with coupling and internal thread



Connection size	kvs	Nominal size	Control range (l/h)	Pressure rating	Item No.
R 1/2 x Rp 1/2	0.50	DN 15	30 up to 210	PN 16	1145504
R 1/2 x Rp 1/2	1.80	DN 15	150 up to 1,050	PN 16	1145704
R 1/2 x Rp 1/2	2.10	DN 15	200 up to 1,300	PN 25	1143704
R 3/4 x Rp 3/4	1.80	DN 20	150 up to 1,050	PN 16	1145506
R 3/4 x Rp 3/4	3.10	DN 20	250 up to 1,800	PN 25	1143606
R 1 x Rp 1	4.10	DN 25	400 up to 2,500	PN 25	1143608
R 1 1/4 x Rp 1 1/4	8.40	DN 32	600 up to 4,800	PN 25	1143610

## Cocon QTZ with coupling and internal thread, with two mounted Classic measuring valves



Connection size	kvs	Nominal size	Control range (l/h)	Pressure rating	Item No.
R 1/2 x Rp 1/2	0.50	DN 15	30 up to 210	PN 16	1146004
R 1/2 x Rp 1/2	1.80	DN 15	150 up to 1,050	PN 16	1146204
R 1/2 x Rp 1/2	2.10	DN 15	200 up to 1,300	PN 25	1143304
R 3/4 x Rp 3/4	1.80	DN 20	150 up to 1,050	PN 16	1146006
R 3/4 x Rp 3/4	3.10	DN 20	250 up to 1,800	PN 25	1143206
R 1 x Rp 1	4.10	DN 25	400 up to 2,500	PN 25	1143208
R 1 1/4 x Rp 1 1/4	8.40	DN 32	600 up to 4,800	PN 25	1143210





### Cocon QTZ with external thread

Nominal sizes DN 10, DN 25 and DN 32 flat sealing. Nominal sizes DN 15 and DN 20 conically sealing, with insert 1661100 (for DN 15) or 1650793 (for DN 20) flat sealing.

Connection size	kvs	Nominal size	Control range (l/h)	Pressure rating	Item No.
G 1/2	0.50	DN 10	30 up to 210	PN 16	1145563
G 1/2	1.10	DN 10	90 up to 450	PN 16	1145663
G 1/2	1.70	DN 10	150 up to 700	PN 25	1143663
G 3/4	0.50	DN 15	30 up to 210	PN 16	1145564
G 3/4	1.80	DN 15	150 up to 1,050	PN 16	1145764
G 3/4	2.10	DN 15	200 up to 1,300	PN 25	1143764
G 1	1.80	DN 20	150 up to 1,050	PN 16	1145566
G 1	3.10	DN 20	250 up to 1,800	PN 25	1143666
G 1 1/4	4.10	DN 25	400 up to 2,500	PN 25	1143668
G 1 3/4	8.40	DN 32	600 up to 4,800	PN 25	1143670



### Cocon QTZ with external thread, with two mounted Classic measuring valves

Nominal sizes DN 10, DN 25 and DN 32 flat sealing. Nominal sizes DN 15 and DN 20 conically sealing, with insert 1661100 (for DN 15) or 1650793 (for DN 20) flat sealing.

Connection size	kvs	Nominal size	Control range (l/h)	Pressure rating	Item No.
G 1/2	0.50	DN 10	30 up to 210	PN 16	1146063
G 1/2	1.10	DN 10	90 up to 450	PN 16	1146163
G 1/2	1.70	DN 10	150 up to 700	PN 25	1143263
G 3/4	0.50	DN 15	30 up to 210	PN 16	1146064
G 3/4	1.80	DN 15	150 up to 1,050	PN 16	1146264
G 3/4	2.10	DN 15	200 up to 1,300	PN 25	1143364
G 1	1.80	DN 20	150 up to 1,050	PN 16	1146066
G 1	3.10	DN 20	250 up to 1,800	PN 25	1143266
G 1 1/4	4.10	DN 25	400 up to 2,500	PN 25	1143268
G 1 3/4	8.40	DN 32	600 up to 4,800	PN 25	1143270



### Cocon QTZ with internal thread

Connection size	kvs	Nominal size	Control range (l/h)	Pressure rating	Item No.
Rp 1/2	0.50	DN 15	30 up to 210	PN 16	1147504
Rp 1/2	1.80	DN 15	150 up to 1,050	PN 16	1147704
Rp 1/2	2.10	DN 15	200 up to 1,300	PN 25	1147404
Rp 3/4	1.80	DN 20	150 up to 1,050	PN 16	1147506
Rp 3/4	3.10	DN 20	250 up to 1,800	PN 25	1147306
Rp 1	4.10	DN 25	400 up to 2,500	PN 25	1147308
Rp 1 1/4	8.40	DN 32	600 up to 4,800	PN 25	1147310



Cocon QTZ with internal thread, DN 15...32, with two mounted Classic measuring valves

Connection size	kvs	Nominal size	Control range (l/h)	Pressure rating	Item No.
Rp 1/2	0.50	DN 15	30 up to 210	PN 16	1148504
Rp 1/2	1.80	DN 15	150 up to 1,050	PN 16	1148704
Rp 1/2	2.10	DN 15	200 up to 1,300	PN 25	1149404
Rp 3/4	1.80	DN 20	150 up to 1,050	PN 16	1148506
Rp 3/4	3.10	DN 20	250 up to 1,800	PN 25	1149306
Rp 1	4.10	DN 25	400 up to 2,500	PN 25	1149308
Rp 1 1/4	8.40	DN 32	600 up to 4,800	PN 25	1149310



Cocon QTZ with external thread, with two mounted Classic measuring valves and mounted measuring orifice

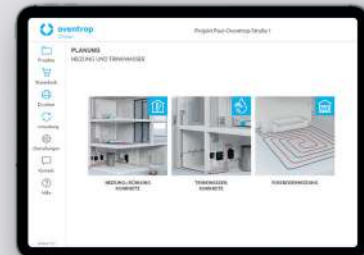
Connection size	kvs	Nominal size	Control range (l/h)	Pressure rating	Item No.
G 3/4	0.50	DN 15	30 up to 210	PN 16	1144564
G 3/4	1.80	DN 15	150 up to 1,050	PN 16	1144764
G 3/4	2.10	DN 15	200 up to 1,300	PN 25	1145064
G 1	1.80	DN 20	150 up to 1,050	PN 16	1144566
G 1	3.10	DN 20	250 up to 1,800	PN 25	1144966

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# Cocon QTR Pressure independent control valves

## DN 40 and DN 50



Pressure independent control valve for dynamic hydronic balancing of heat exchangers, for example fan coils or air conditioning units and distribution pipes in heating and cooling systems with closed circuits. The valve combination consists of an automatically operating flow controller and a control valve and can be equipped with an actuator.

Two-way valve, with secured, lead sealable, infinitely adjustable flow limitation. Direct set-

ting in m<sup>3</sup> per hour. Readability of the set value independent of the handwheel position.

Valve body and parts coming into contact with the medium made of bronze, dezincification resistant brass, stainless steel, EPDM or PTFE. Maintenance-free spindle sealing. Supplied with two Classic measuring valves.

Cocon QTR are characterised by easy adjustability, compact dimensions and best control quality.

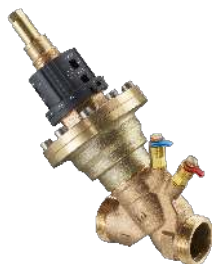
Medium	Water	Connection actuator	Yes
	Water-glycol mixture	Thermal insulation shell	No
Operating temperature	-10 up to 120 °C	Installation location	Supply or return
Presetting	Yes	Measuring connection	Yes
Shutoff	Yes	Measuring valve	Classic
Body material	Bronze		



2.2

### Cocon QTR with external thread PN 16

Flat sealing, without union nuts and sealing rings.



Nominal size	Connection size	Control range (l/h)	kvs	Control range (m <sup>3</sup> /h)	Item No.
DN 40	G 1 3/4	1,500 up to 7,500	11.50	1.5 up to 7.5	1146172
DN 50	G 2 3/8	2,500 up to 10,000	15.00	2.5 up to 10	1146174

### Cocon QTR with internal thread PN 25



Nominal size	Connection size	Control range (l/h)	kvs	Control range (m <sup>3</sup> /h)	Item No.
DN 40	Rp 1 1/2	1,500 up to 7,500	11.50	1.5 up to 7.5	1146112
DN 50	Rp 2	3,500 up to 14,000	18.50	3.5 up to 14	1143116

# Cocon Q Pressure independent control valves DN 40 to DN 200



Pressure independent control valve for dynamic hydronic balancing of heat exchangers, for example air conditioning units and distribution pipes in heating and cooling systems with closed circuits. The valve combination consists of an automatically operating flow controller and a control valve and can be equipped with an actuator.

Two-way valve, with secured, lead sealable, infinitely adjustable flow limitation. Direct setting in m<sup>3</sup> per hour. Readability of the set value

independent of the handwheel position.

Valve body made of cast iron or nodular cast iron, parts coming into contact with the medium made of cast iron, nodular cast iron, bronze, dezincification resistant brass, stainless steel, EPDM or PTFE. Maintenance-free spindle sealing. Supplied with two Classic measuring valves.

Cocon QFC and QGC are characterised by easy adjustability, compact dimensions and best control quality.

Medium	Water	Thermal insulation shell	No
	Water-glycol mixture	Installation location	Supply or return
Operating temperature	-10 up to 120 °C	Measuring connection	Yes
Presetting	Yes	Measuring valve	Classic
Shutoff	Yes		
Connection actuator	Yes		

## Cocon QFC with flanges according to EN 1092-2 PN 16

Body material Cast iron



Nominal size	Control range (l/h)	kvs	Control range (m <sup>3</sup> /h)	Item No.
DN 40	1,500 up to 7,500	11.50	1.5 up to 7.5	1146149
DN 50	2,000 up to 8,000	12.00	2 up to 8	1146150
DN 65	5,000 up to 20,000	36.00	5 up to 20	1146151
DN 80	7,500 up to 30,000	56.00	7.5 up to 30	1146152
DN 100	12,500 up to 50,000	80.00	12.5 up to 50	1146153
DN 125	27,000 up to 108,000	150.00	27 up to 108	1146154
DN 150	36,000 up to 150,000	220.00	36 up to 150	1146155
DN 200	55,000 up to 190,000	270.00	55 up to 190	1146156

## Cocon QFC with flanges according to EN 1092-2 PN 25



Nominal size	Control range (l/h)	kvs	Body material	Control range (m <sup>3</sup> /h)	Item No.
DN 40	1,500 up to 7,500	11.50	Cast iron	1.5 up to 7.5	1146649
DN 50	2,000 up to 8,000	12.00	Cast iron	2 up to 8	1146650
DN 65	5,000 up to 20,000	36.00	Nodular cast iron	5 up to 20	1146651
DN 80	7,500 up to 30,000	56.00	Nodular cast iron	7.5 up to 30	1146652
DN 100	12,500 up to 50,000	80.00	Nodular cast iron	12.5 up to 50	1146653
DN 125	27,000 up to 108,000	150.00	Nodular cast iron	27 up to 108	1146654
DN 150	36,000 up to 150,000	220.00	Nodular cast iron	36 up to 150	1146655
DN 200	55,000 up to 190,000	270.00	Nodular cast iron	55 up to 190	1146656



**Cocon QGC with roll grooves PN 25**

Body material Cast iron

Nominal size	Control range (l/h)	kvs	Control range (m³/h)	Connection size	Item No.
DN 65	5,000 up to 20,000	36.00	5 up to 20	73.0	1676351
DN 80	7,500 up to 30,000	56.00	7.5 up to 30	88.9	1676352
DN 100	12,500 up to 50,000	56.00	12.5 up to 50	114.3	1676353



# Cocon QDP Control valves with differential pressure regulator DN 15 to DN 32



Differential pressure regulator with flow limitation and zone control for installation in heating and cooling systems.

The valve combination can be equipped with an actuator or a manual regulating head. In addition, the maximum differential pressure is limited via the control zone.

Two-way valve, with secured, lead sealable,

infinitely adjustable flow limitation. Direct setting of the flow rate in litres per hour. Readability of the set value independent of the handwheel position. The nominal differential pressure value is fixed at the factory.

Valve body and parts coming into contact with the medium made of dezincification resistant brass. Maintenance-free spindle sealing.

Medium	Water	Impulse tube connection	Yes
	Water-glycol mixture	Body material	DZR brass
Operating temperature	-10 up to 120 °C	Connection actuator	M 30 x 1.5
Presetting	Yes	Installation location	Return
Shutoff	Yes		



Cocon QDP with external thread PN 25

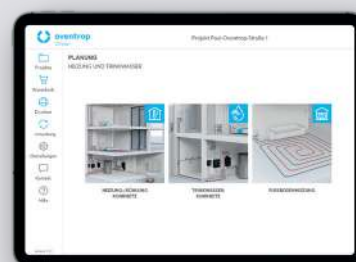
Nominal size	Connection size	Item No.
DN 15	G 3/4	1144604
DN 20	G 1	1144606
DN 25	G 1 1/4	1144608
DN 32	G 1 3/4	1144610

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# Cocon - Accessories



## Connection set with externally threaded tailpipes



Consisting of two tailpipes with O-rings and union nuts.

In conjunction with Cocon QTZ PN 25 suitable for operating pressure up to a maximum of 25 bar. Also suitable for Cocon QTZ PN 16 with operating pressure up to a maximum of 16 bar.

Nominal size	Connection size	Item No.
DN 10	R 3/8	1140281
DN 15	R 1/2	1140282
DN 20	R 3/4	1140284
DN 25	R 1	1140285
DN 32	R 1 1/4	1140286

## Thermal insulation shell



Thermal insulation consisting of two shells. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG). Cold insulation: Min. medium temperature 6 °C, thermal insulation shells have to be bonded hermetically. Restricted diffusion tightness at low medium temperature and at high ambient temperature and/or air humidity.

Operating temperature -10 up to 120 °C

Nominal size	Pressure rating	Item No.
DN 15 and DN 20	PN 16	1149104
DN 10 and DN 15	PN 25	1149120
DN 20 and DN 25	PN 25	1149121
DN 32	PN 25	1149122

## Spindle extension



Is required if Cocon QTZ valves are to be equipped with thermal insulation shells and actuators.

Description	Item No.
Spindle extension 25 mm	1149190

## Adapter for rotary actuator.



For Cocon QTZ. For converting a rotary movement into a stroke lift.

Description	Item No.
Adapter rotary movement	1149095
















## 2.2 Hydronic balancing with pressure independent control valves

### **Actuators** **288**

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Actuators for small control valves





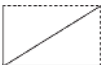

Product family	Hycocan			Cocon Small valves up to DN 32			Control valves
							
	ETZ	HTZ	QTZ PN16	QTZ PN25	QDP	Tri CTR	
DN	15...25	15... 25 32 40	10... 20 25... 20 32	10,15 LF 10... 32	20...25	15...50	
Item no.	106836. 106846.	10685.. 10686..	1145., 1146., 11475., 1148.	1143., 1147., 1149.	1144606 1144608	11312..	
PN	16	16	16	25	25	16	
Connection	M30×1.5	M30×1.5	M30×1.5	M30×1.5	M30×1.5	M30×1.5	
Closing force [mm]	11.8	11.8	11.8	11.8	11.8	—	
Δp max [bar]	1	5 3 2	4	6	4	—	
Valve stroke [mm]	2.2	3 4 4	2.8 3.5 4	2,8 4	4	2.8	
Upper stroke position [mm]	≥14.0	≥15.8	≥14.6 — ≥15.8	≥14.6 ≥15.8	≥15.8	≥14.6	
Lower stroke position [mm]	≤11.3	≤11.3	≤11.3	≤11.3	≤11.3	≤11.3	
Closing force [N] min...max	90...150	90...150	90...150	90...150	90...150	90...150	
Valve characteristic line							




Item	Item no.	Model						
<b>Electrothermal actuators with M30 x 1.5 connection</b>								
	Aktor T 2P H NC	1012415	NC, 230V AC, two point	—	With adapter 1012462	●	●	●
		1012452	With 2 m connecting cable	—	With adapter 1012462	●	●	●
		1012455	With 5 m connecting cable	—	With adapter 1012462	●	●	●
		1012459	With 10 m connecting cable	—	With adapter 1012462	●	●	●
		1012435	With auxiliary switch	—	With adapter 1012462	●	●	●
	Aktor T 2P H NO	1012425	NO, 230V AC, two point	With adapter 1012462	With adapter 1012462	●	●	●
	Aktor T 2P L NC	1012416	NC, 24V AC, two point	—	With adapter 1012462	●	●	●
		1012442	With 2 m connecting cable	—	With adapter 1012462	●	●	●
	Aktor T 2P L NO	1012426	NO, 24V AC, two point	—	With Adapter 1012462	●	●	●
	Aktor T 2P M NC	1012420	NC, 120V AC, two point	—	With adapter 1012462	●	●	●
	Aktor T ST L NC	1012953	NC, 24V AC, steady 0...10V	O*	O*	●*	●*	O*
<b>Electromotive actuators with M30 x 1.5 connection</b>								
	Aktor M 2P H	1012710	High-speed, 230V AC, 2 point	●	●	○	○	○
		1012711	High-speed, 24V AC, 2 point	●	●	○	○	○
	Aktor M 3P H	1012729	230 VAC, 3 point	○	○	●	●	○
	Aktor M ST L	1012725	24V AC/DC, steady 0...10V, 2/3 point	○	○	●	●	○
		1012726	24V AC/DC, steady 0...10V, with position feedback	○	○	●	●	○
		1012717	24V AC/DC, steady 0...10V, with position feedback	○	○	●	●	○
	Aktor M ST L	1012745	24V AC/DC, Modbus	○	○	●	●	○
	Aktor M KNX	1012746	21...23V DC SELV, KNX	●	●	●	●	●

● fits mechanically, is recommended in terms of control technology  
○ fits mechanically, is not recommended in terms of control technology

\*Control stroke ≥ effective valve stroke

Actuators for large and flanged control valves

Product family	Cocon Large and flanged valves from DN 40					Control valves	
							
	<b>QTR</b>	<b>QFC</b>			<b>QGC</b>	<b>2/3-way valves</b>	
<b>DN</b>	<b>40, 50</b>	<b>40, 50</b>	<b>65...100</b>	<b>125...200</b>	<b>65...100</b>	<b>15...50</b>	<b>65...150</b>
Item no.	11461.. 1143116	11461.. 11466..	114615. 114665.	114615. 114665.	167635.	11308.. 16708..	11308.. 16708..
PN	16/25	16/25	16/25	16/25	25	16	16
Connection	Squeeze	Squeeze	Squeeze	Squeeze	Squeeze	Squeeze	Squeeze
$\Delta p$ max [bar]	4/6	4	4	4	4	0.7...12.1	0.7...12.1
Valve stroke [mm]	10	10	20	36/40	20	10	30/40
Closing force [N]	500/ 800/ 1.000	500/ 800/ 1.000	800/ 1.000/ 1.200	800/ 1.000/ 1.200	800/ 1.000	500	2.000
Valve characteristic line							

Item	Item no.	Model							
 Aktor M ST L	1158011	24V AC, steady 0...10V, 2/3 point without adapter, for control valves 2/3-way valves	—	—	—	—	—	●	—
	1158012	24V AC, steady 0...10V, 2/3 point with adapter for Cocon QTR DN40 and 50	●	●	—	—	—	—	—
	1158013	24V AC, steady 0...10V, 2 point with adapter for Cocon QTR DN40 and 50 with emergency control function	●	●	—	—	—	—	—
	1158014	24V AC, Modbus, with adapter for Cocon QTR DN40 and 50	●	●	—	—	—	—	—
 Aktor M ST L	1158020	24V AC, steady 0...10V, 2/3 point	●	●	●	—	●	—	—
	1158021	Additionally with spring return, valve opens	●	●	●	—	●	—	—
	1158022	Additionally with spring return, valve closes	●	●	●	—	●	—	—
 Aktor M ST L	1158030	24V AC, steady 0...10V, 2/3 point	—	—	—	●	—	—	●
	1158031	Additionally with spring return, valve opens	—	—	—	●	—	—	●
	1158032	Additionally with spring return, valve closes	—	—	—	●	—	—	●



# Aktor T Electrothermal actuators



Electrothermal actuators are used for heating, ventilation and air conditioning. The actuators can be used for room temperature control or as zone valves. They can be used, for example, with conventional radiators, radiators with integrated valve sets, heating circuit manifolds, radiant heating ceilings, cooling ceilings and induction units in conjunction with on/off room thermostats.

All electrothermal actuators are protected against overvoltage, a varistor is not required.

Oventrop offers actuators in the variants "normally closed" and "normally open". The model with auxiliary switch can switch e.g. a pump directly via the integrated, potential-free contact.

Valve connection	Connection thread M 30 x 1.5	Mounting	Plug-in connection with valve adapter
Installation position	Any	Stroke	5 mm



## Aktor T 2P on/off control

Voltage	Version	Cable* (m)	Item No.
230 V AC	"Normally closed"	1	1012415
24 V AC / DC	"Normally closed"	1	1012416
230 V AC	"Normally open"	1	1012425
24 V AC / DC	"Normally open"	1	1012426
230 V AC	"Normally closed" with integrated auxiliary switch	1	1012435
24 V AC / DC	"Normally closed"	2	1012442
230 V AC	"Normally closed"	2	1012452
230 V AC	"Normally closed"	5	1012455
230 V AC	"Normally closed"	10	1012459



## Aktor T ST 0 - 10 V control

Voltage	Version	Cable* (m)	Item No.
24 V AC	"Normally closed"	1	1012953

# Aktor T - Accessories



## Valve adapter

### Description

Connection thread M 30 x 1.5

Connection thread M 30 x 1.5, high model (11 mm), necessary when using the actuators item no. 10124.. and 1012953 with Hycocn ETZ/HTZ or Multiblock T/TU/TFU/TQ and the design cover

For Oventrop valves with connection thread M 30 x 1.0 (manufactured until 1998)

For valves with squeeze connection

### Item No.

1012461

1012462

1012890

1012463



## Reinforcing cap

### Description

For electrothermal actuators, including special valve adapter with connection thread M 30 x 1.5 for installation

### Item No.

1012450

# Aktor M Electromotive actuators



Electromotive actuators are used for heating, ventilation and air conditioning. Amongst others, the actuators can be used for room temperature control. They can be used, for example, with conventional radiators, radiators with integrated valve sets, heating circuit manifolds

(except for item no. 1012710 / 11), radiant heating ceilings, cooling ceilings and induction units.

Oventrop offers electromotive actuators with and without communication interfaces.



## Aktor M modulating with 0 - 10 V



With the electrical emergency control function, the actuator moves to a predefined stroke position in the event of a supply voltage failure. Various characteristic lines can be set for Cocon QTZ (item no. 1012717, PN 25 only).

Valve connection	Connection thread	Stroke	4 mm
	M 30 x 1.5	Cable*	1.5 m
Modulating proportional actuator	Yes	Installation position	Any
Automatic valve blocking protection function	Yes	Zero point detection	Yes
Direction of action adjustable	Yes		

Voltage	Electrical emergency control function	Additional on/off / floating control	Position feedback	Item No.
24 V AC / DC	Yes	No	Yes	1012717
24 V AC / DC	No	Yes	No	1012725
24 V AC / DC	No	No	Yes	1012726

## Aktor M on/off and floating control



Valve connection	Connection thread M	Cable*	1.5 m
	30 x 1.5	Installation position	Vertical to horizontal, except for vertical downward installation
Automatic valve blocking protection function	No	Zero point detection	Yes
Direction of action adjustable	No		
Stroke	4 mm		

Voltage	Item No.
230 V AC	1012729



#### Aktor M on/off control, with short running time (3 s)

Valve connection	Connection thread M	Cable*	1.5 m
	30 x 1.5	Installation position	Vertical to horizontal, except for vertical downward installation
Automatic valve blocking protection function	No		
Stroke	6.5 mm		
Contact open - drive tappet retracts	Yes		

Voltage	Item No.
230 V AC	1012710
24 V AC / DC	1012711



#### Aktor M modulating with 0 - 10 V or on/off control

For Cocon QTR / QFC DN 40 / 50, including adapter.

Automatic valve blocking protection function	Yes	Cable*	1.5 m
Stroke	10 mm		

Voltage	Note	Installation position	Item No.
24 V AC / DC	Additionally also for floating control	-	1158012
24 V AC / DC	Additionally with emergency control function (failsafe)	Vertical to horizontal, except for vertical downward installation	1158013



#### Aktor M modulating with 0 - 10 V or on/off / floating control

For two-way valve item no. 11308.. and 16708.. DN 15 to DN 50.

Automatic valve blocking protection function	Yes	Stroke	10 mm
Position feedback	0 - 10 V	Cable*	1.2 m
Characteristic line	Adjustable (linear and equal percentage)	Installation position	Vertical to horizontal, except for vertical downward installation

Voltage	Item No.
24 V AC / DC	1158011



#### Aktor M modulating with 0(2) - 10 V or 0(4) - 20 mA or on/off / floating control

For Cocon QTR / QFC DN 40 to DN 100.

Position feedback	0 - 10 V	Installation position	Vertical to horizontal, except for vertical downward installation
Stroke	20 mm		

Voltage	Characteristic line	Included accessory	Item No.
24 V AC	Linear	Adapter	1158020 °
24 V AC	Adjustable	Adapter	1158023 ☐





#### Aktor M modulating with 0(2) - 10 V resp. 0(4) - 20 mA or on/off / floating control

For Cocon QTR / QFC DN 40 to DN 100.

Position feedback	0 - 10 V	Stroke	20 mm
Characteristic line	Linear		

Voltage	Included accessory	Version	Installation position	Item No.
24 V AC	Spring return Adapter	Electromotive, normally opening	-	1158021
24 V AC	Spring return Adapter	Electromotive, normally closing	Vertical to horizontal, except for vertical downward installation	1158022



#### Aktor M modulating with 0 - 10 V, 4 - 20 mA or on/off / floating control

For Cocon QFC DN 125 to DN 200 and two-way valves DN 65 to DN 150.

Position feedback	0 - 10 V	Stroke	40 mm
Characteristic line	Adjustable (linear, square-law and equal percentage)	Installation position	Vertical to horizontal, except for vertical downward installation

Voltage	Included accessory	Version	Item No.
24 V AC / DC	Adapter	Electromotive	1158030
24 V AC / DC	Spring return Adapter	Electromotive, normally opening	1158031
24 V AC / DC	Spring return Adapter	Electromotive, normally closing	1158032



#### Aktor M with KNX interface

Power consumption extremely low, no external power supply necessary. With integrated binary input (e.g. for window contact, dew point sensor, motion detector).

Valve connection	Connection thread M 30 x 1.5	Stroke	4 mm
------------------	------------------------------	--------	------

Voltage	Item No.
21 - 32 V DC (from KNX bus)	1012746



#### Aktor M with Modbus RTU interface

Various parameters can be configured and/or read out via Modbus RTU (e.g. volume flow, valve characteristic line, sensor type, operating hours, operating and fault messages). Two universal inputs/outputs enable the connection of temperature sensors, window contacts and humidity sensors, as well as the control of 0 - 10 V rotary actuators.

Valve connection	Connection thread M 30 x 1.5	Position feedback	0 - 100 %
Automatic valve blocking protection function	Yes	Cable*	1.5 m
		Zero point detection	Yes

Voltage	Suitable for	Stroke (mm)	Item No.
24 V AC / DC	Cocon QTZ	9	1012745
24 V AC / DC	Cocon QTR/QFC DN 40/50	14	1158014



## Aktor M - Accessories



### Connection module 230 V

For Aktor M 24 V (item no. 1158030 / 31 / 32).

#### Description

For connection to the supply voltage (230 V), pluggable module

#### Item No.

1158033



## 2.3 Connection and control of heating and cooling devices



### **Optibal W6 Control ball valve** **299**

Optibal W6 Six-way ball valves.....	301
Optibal W6 - Accessories.....	302

### **Flypass Connection sets** **303**

Flypass 4TZ Connection fitting.....	305
Flypass - Accessories.....	307

### **Two- and three-way valves** **308**

Tri CTR Three-way diverting and mixing valves.....	309
Temperature controllers.....	310
Two-/three-way valves with flanges.....	311

### **Hycoco Control valves** **312**

Hycoco Two-way valves.....	313
Hycoco Two-way valves - Accessories.....	314





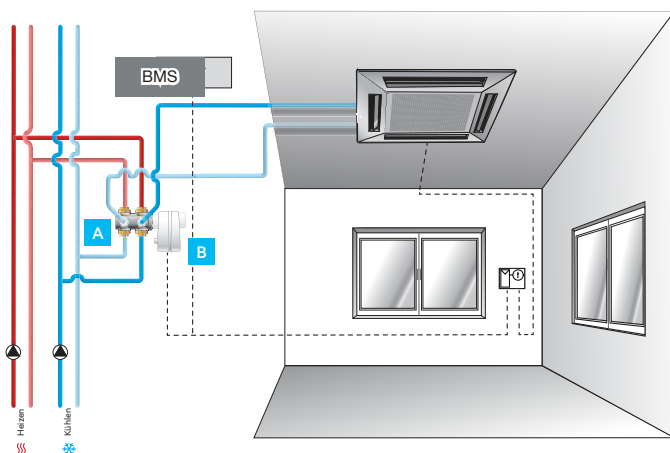


## 2.3 Connection and control of heating and cooling devices

### **Optibal W6 Control ball valve** **299**

Optibal W6 Six-way ball valves.....	301
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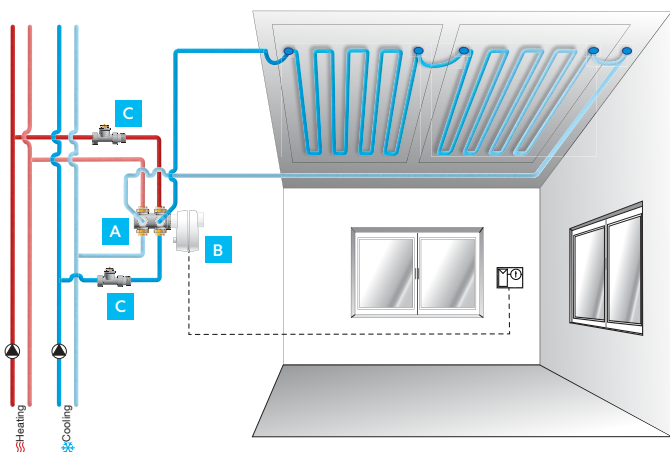
## Optibal W6 Application examples



### Control of a four pipe system with Optibal W6

**Optibal W6** as change-over and control ball valve with Kvs orifices. Can also be integrated into the building management system (BMS).

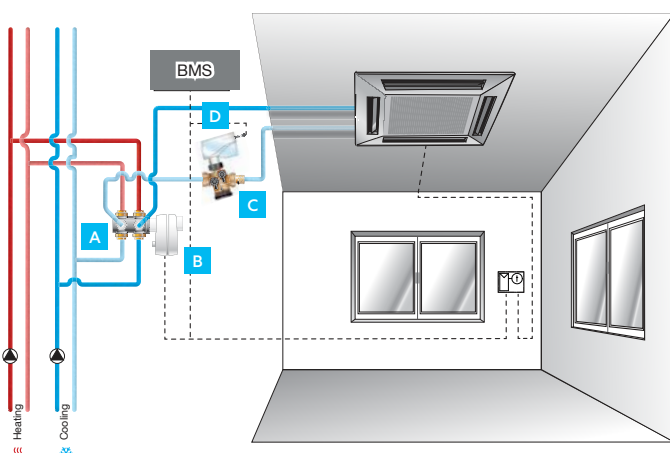
- A** Optibal W6 Six-way ball valve
- B** Aktor R ST L Rotary actuator



### Four pipe system with Optibal W6 and automatic flow limitation with AQ valves

The **AQ** has a combined control and regulation function. This allows for automatic hydronic balancing in heating and cooling mode in any position of the six-way ball valve. This means that the volume flow in the consumer is kept constant, regardless of pressure fluctuations in the system. The presetting at the **AQ** valves, which are installed in the supply of the heating and cooling circuit, allows the volume flow to be set and regulated to a maximum value.

- A** Optibal W6 Six-way ball valve
- B** Aktor R ST L Rotary actuator
- C** AQ Valve (one each for heating and cooling)



### Four pipe system with Optibal W6 and pressure independent control valve Cocon QTZ

For larger volume flows, **Cocon QTZ** control valves can also be used instead of **AQ** valves. The **Cocon QTZ** is installed in the return of the consumer for automatic hydronic balancing. In this application, the room temperature is controlled via the actuator on the **Cocon QTZ**. The actuator on the **Optibal W6** the only works as change-over valve and the kvs orifices are not required.

- A** Optibal W6 Six-way ball valve
- B** Aktor R ST L Rotary actuator
- C** Cocon QTZ Pressure independent control valve
- D** Aktor M ST L Electromotive actuator

# Optibal W6 Six-way ball valves



## Optibal W6 with external thread with internal cone PN 16

Six-way ball valve for switching between cooling and heating in a four pipe system by means of the Aktor R ST L electromotive rotary actuator. The six-way ball valve can be used to control the flow rates via the angle of rotation. In conjunction with kvs orifices, cooling and heating circuits can be limited independently of each other.

Body made of dezincification resistant brass. Pipe connection DN 15 external thread with Eurocone according to EN 16313, DN 20 external thread with internal cone.

Kvs orifices 0.25 / 0.4 / 0.63 / 1 / 1.6 and 2.5 available as accessories.

Medium	Water	Body material	DZR brass
	Water-glycol mixture	kvs	3.20
Operating temperature	0 up to 90 °C		

Nominal size	Connection size	Item No.
DN 15	G 3/4	1132004
DN 20	G 1	1132006



2.3

## Aktor R ST L

Rotary actuator for Optibal W6 six-way ball valve. 24 V, proportional control with 0 - 10 V or on/off control via 24 V forced control. With position feedback signal 0 - 10 V. Torque: 5 Nm. Angle of rotation: 90°. With manual adjustment.

Description	Item No.
For DN 15 and DN 20	1132030





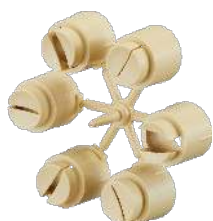
## Optibal W6 - Accessories



### Connection set with externally threaded tailpipes

Consisting of two tailpipes with O-rings and union nuts.

Nominal size	Connection size	Item No.
DN 15	R 1/2	1140282
DN 20	R 3/4	1140284



### Kvs orifice set

Orifices made of high quality plastic for flow limitation. The orifices feature a control contour which allows for a linear up to equal percentage linear flow control via the rotary actuator.  
Kvs values: 0.25 / 0.4 / 0.63 / 1.0 / 1.6 and 2.5

Description	Item No.
Kvs orifice set (2 x)	1132020





## 2.3 Connection and control of heating and cooling devices

### **Flypass Connection sets** **303**

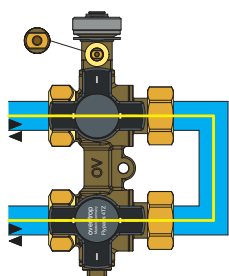
Flypass 4TZ Connection fitting.....	305
Flypass - Accessories.....	307



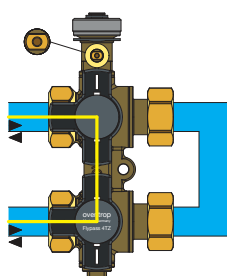
### Flypass 4TZ Application example

Flypass set consisting of **Flypass 4TZ** basic fitting,  
**Cocon QTZ** pressure independent control valve with  
**Aktor M** actuator and strainer

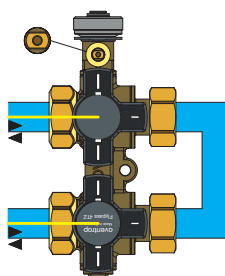
### Flypass 4TZ Functions



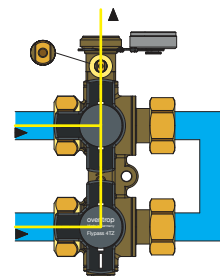
Normal mode



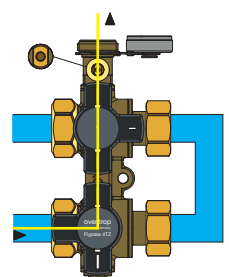
Bypass mode



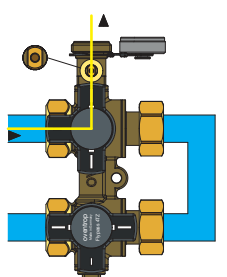
Shutting-off



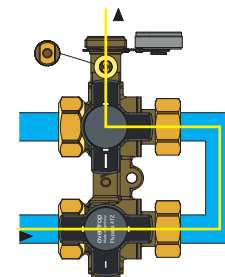
Filling and venting of the system side



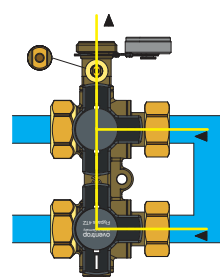
Draining of the system and  
appliance side,  
venting and flushing of the  
system side



Draining, venting and  
flushing of the system side

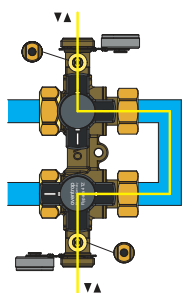


Filling and flushing of the  
appliance side

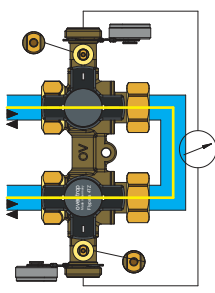


Shutting off and draining  
of the appliance side

### Functions with accessories



Re-filling, venting and flushing  
of the appliance side with sec-  
ond fill and drain ball valve



Differential pressure  
measurement e.g. with  
**OV-DMC 3**

# Flypass 4TZ Connection fitting



## Flypass 4TZ with internal thread and union nut with sealing ring, flat sealing PN 16

Connection fitting for shutting off, flushing, draining and venting the upstream supply and return pipes or the downstream system components, for example fan coil units or cooling ceiling modules. Convertible to bypass mode. The flow paths can be read off by the shape of the handle.

For combination with other control and function fittings. Basically, all flat-sealing Oventrop valves of the corresponding nominal sizes with G 3/4 external thread (DN 15) or G 1 external thread (DN 20) can be combined with the Flypass 4TZ. The adapter item no. 1149075 (DN 15) or 1149076 (DN 20) is required for mounting valves with internal thread.

Medium	Water	Body material	DZR brass
	Water-glycol mixture	Thermal insulation shell	Available as accessory
Operating temperature	-10 up to 120 °C	Consisting of	Flat seals
Shutoff	Yes		
Draining	Yes		

Nominal size	kvs	Item No.
DN 15	22.00	1149504
DN 20	34.00	1149506



## Flypass set with Hydrocontrol double regulating and commissioning valve PN 16

Flypass set consisting of a Flypass 4TZ connection fitting with strainer and a HydroControl double regulating and commissioning valve. The set is delivered completely pre-assembled, function and pressure tested.

Nominal size	Consisting of	Item No.
DN 15	Tailpipe set Strainers Hydrocontrol MTR Double regulating and commissioning valve with measuring orifice Internally threaded tailpipe set (2 pieces) LF model (low flow)	1149562 °
DN 15	Tailpipe set Strainers Hydrocontrol MTR Double regulating and commissioning valve with measuring orifice Internally threaded tailpipe set (2 pieces) HF model (high flow)	1149563 °
DN 20	Tailpipe set Strainers Hydrocontrol MTR Double regulating and commissioning valve with measuring orifice Internally threaded tailpipe set (2 pieces)	1149564 °



### Flypass set with Cocon QTZ pressure independent control valve

Flypass set consisting of a Flypass 4TZ connection fitting with strainer and a Cocon QTZ pressure independent control valve. The set is delivered completely pre-assembled, function and pressure tested.

Nominal size	Control range (l/h)	Thermal insulation shell	Consisting of	Item No.
DN 15	30 up to 210	Available as accessory	Flypass 4TZ Connection fitting Strainers Cocon QTZ Pressure independant control valve Set of inserts (2 pieces)	1149450
DN 15	90 up to 450	Available as accessory	Flypass 4TZ Connection fitting Strainers Cocon QTZ Pressure independant control valve Set of inserts (2 pieces)	1149550
DN 15	150 up to 1,050	Available as accessory	Flypass 4TZ Connection fitting Strainers Cocon QTZ Pressure independant control valve Set of inserts (2 pieces)	1149650
DN 20	150 up to 1,050	Available as accessory	Flypass 4TZ Connection fitting Strainers Cocon QTZ Pressure independant control valve Set of inserts (2 pieces)	1149551
DN 20	250 up to 1,800	No	Flypass 4TZ Connection fitting Strainers Cocon QTZ Pressure independant control valve Set of inserts (2 pieces)	1149556 ::
DN 25	400 up to 2,500	Available as accessory	Flypass 4TZ Connection fitting Strainers Cocon QTZ Pressure independant control valve	1149557 ::
DN 32	600 up to 4,800	No	Strainers Cocon QTZ Pressure independant control valve Ball valves	1149558 ::



# Flypass - Accessories

## Inserts

Inserts allow for the use of flat sealing tailpipes or connection sets with conically sealing valves.



### Description

For Cocon QTZ and Optibal W6 DN 20 with G 1 externally threaded connection. Suitable for flat sealing tailpipes.

For Cocon QTZ, Optibal W6, Multiflex F and FQ, Multiblock T, TU, TQ, TFU, T-RTL and TQ-RTL DN 15 with G 3/4 externally threaded connection. Suitable for flat sealing tailpipes. For cone according to DIN EN 16313 (Eurocone), set = 2 pieces

### Item No.

1650793

1661100



## Double nipple

Both sides flat sealing external thread. For connecting flat sealing pipes or valves with union nut directly to the Flypass 4TZ.



### Nominal size

DN 15

DN 20

### Item No.

1149070

1149071

## Thermal insulation shell

For Flypass 4TZ and Flypass sets item no. 1149450, 1149550, 1149551 and 1149650.



Consisting of two shells, for heating and cooling systems. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG). Building material class B2 according to DIN 4102. Cold insulation: Min. medium temperature 6 °C, thermal insulation shells have to be bonded hermetically. Restricted diffusion tightness at low medium temperature and at high ambient temperature and/or air humidity.

Operating temperature -10 up to 120 °C

### Nominal size

DN 15 and DN 20

### Item No.

1149581

## Thermal insulation shell

1149580 suitable for Flypass 4TZ and Flypass sets item no. 1149450, 1149550, 1149551 und 1149650. 1149582 suitable for Flypass set item no. 1149557.



For heating systems. Not diffusion-tight.

Max. operating temperature 110 °C

### Nominal size

DN 15 and DN 20

DN 25

### Item No.

1149580

1149582



## 2.3 Connection and control of heating and cooling devices

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# Tri CTR Three-way diverting and mixing valves



## Tri CTR with external thread PN 16

Can be used as a diverting or mixing valve. For use as a diverting valve, the Tri CTR has one inlet (AB) and two outlets (A and B). The medium flowing through is diverted from one outlet to the other depending on the position of the valve insert. For use with actuators or temperature controllers.

For use as a mixing valve, the Tri CTR has two inlets (A and B) and one outlet (AB). The medium flowing through is mixed depending on the position of the valve insert. Tri CTR valves can be used for high differential pressures.

Valve body made of bronze, all parts coming into contact with the medium made of brass, stainless steel or plastic. Union nuts and sealing rings are included in the scope of delivery.

Medium	Water	Body material	Bronze
	Water-glycol mixture	Connection actuator	M 30 x 1.5
Operating temperature	-10 up to 120 °C		

Nominal size	Connection size	kvs	Item No.
DN 15	G 3/4	2.50	1131204
DN 20	G 1	4.40	1131206
DN 25	G 1 1/4	5.70	1131208
DN 32	G 1 1/2	7.20	1131210
DN 40	G 2	8.50	1131212
DN 50	G 2 3/8	10.00	1131216



## Threaded tailpipe set for Tri CTR (3-fold)

Nominal size	Connection size	Item No.
DN 15	R 1/2	1130291
DN 20	R 1/2	1130292
DN 20	R 3/4	1130293
DN 25	R 1	1130294
DN 32	R 1 1/4	1130299
DN 40	R 1 1/4	1130295
DN 40	R 1 1/2	1130296
DN 50	R 2	1130298

# Temperature controllers



## Temperature controller with immersion sensor and immersion sleeve G 1/2

Connection thread M 30 x 1.5. Application: Water, maximum sensor temperature 30 K above the set value. For industrial systems, water heaters, air heaters, heating cabinets, dishwashers, surface heating, etc. The setting range can be limited and blocked.

For flow temperature limitation in surface heating systems, a Combi LR throttle valve is additionally required (see section "Room climate").

Selection Combi LR:

- up to 85 m<sup>2</sup>: DN 15 three-way valve and DN 20 Combi LR
- up to 115 m<sup>2</sup>: DN 20 three-way valve and DN 25 Combi LR

Setting range (°C)	Capillary tube length* (mm)	Item No.
20 up to 50	2,000	1140561
40 up to 70	2,000	1140562
50 up to 80	2,000	1140563
70 up to 100	2,000	1140564
20 up to 50	5,000	1140571
40 up to 70	5,000	1140572
70 up to 100	5,000	1140574

## Immersion sleeve



Description	Item No.
Immersion sleeve, loose, connection G 1/2, brass	1141091

## Temperature controller with contact sensor and heat conducting base



Setting range (°C)	Capillary tube length* (mm)	Item No.
20 up to 50	2,000	1142861
30 up to 60	2,000	1142862
40 up to 70	2,000	1142863
50 up to 80	2,000	1142864



# Two-/three-way valves with flanges



## Two/three-way valve with flanges according to EN 1092-2 PN 16

Two-way valve for use in central heating and cooling systems with closed circuits.

DN 15 to DN 50: metal to metal seal between cone and seat, DN 65 to DN 150: soft sealing with EPDM seal between cone and seat. The centre spigot is closed with a blind flange. The valve can be used as a three-way valve (mixing and diverting) when the blind flange is removed.

Medium	Water	Connection actuator	Squeeze connection
	Water-glycol mixture	Installation location	Supply or return
Operating temperature	0 up to 130 °C		
Body material	Cast iron		

Nominal size	kvs	Item No.
DN 15	1.00	1130875
DN 15	1.60	1130865
DN 15	2.50	1130845
DN 20	4.00	1130866
DN 20	6.30	1130846
DN 25	10.00	1130847
DN 32	16.00	1130848
DN 40	25.00	1130849
DN 50	35.00	1130850
DN 65	63.00	1130851
DN 80	100.00	1130852
DN 100	160.00	1130853
DN 125	220.00	1130854
DN 150	320.00	1130855



## 2.3 Connection and control of heating and cooling devices



### **Hycocoon Control valves** **312**

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# Hycocon Two-way valves



## Hycocon ETZ with internal thread PN 16

Nominal sizes DN 15 and DN 20 suitable for compression fittings item no. 10271..

Medium	Water	Impulse tube connection	No
	Water-glycol mixture	Body material	DZR brass
Operating temperature	-10 up to 120 °C	Connection actuator	M 30 x 1.5
Presetting	Yes	Thermal insulation shell	Available as accessory
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		
Draining	Extendable		

Nominal size	Connection size	kvs	Item No.
DN 15	Rp 1/2	1.00	1068364
DN 20	Rp 3/4	1.20	1068366
DN 25	R 1	1.20	1068368



## Hycocon HTZ with internal thread PN 16, with high flow rate

Nominal sizes DN 15 and DN 20 suitable for compression fittings item no. 10271..

Medium	Water	Draining	Extendable
	Water-glycol mixture	Impulse tube connection	No
Operating temperature	-10 up to 120 °C	Body material	DZR brass
Presetting	Yes	Connection actuator	M 30 x 1.5
Shutoff	Yes	Installation location	Supply or return
Measuring connection	Yes		

Nominal size	Connection size	Thermal insulation shell	kvs	Item No.
DN 15	Rp 1/2	Available as accessory	1.70	1068564
DN 20	Rp 3/4	Available as accessory	2.70	1068566
DN 25	Rp 1	Available as accessory	3.60	1068568
DN 32	Rp 1 1/4	No	6.80	1068570
DN 40	Rp 1 1/2	No	10.00	1068572



# Hycococon Two-way valves - Accessories

## Ofix Compression fittings

Ofix CEP, 1-fold, for copper pipes according to DIN EN 1057, pressure screw nickel plated, metal to metal sealing.



Nominal size	Connection size	Item No.
DN 15	G 1/2 x 12 mm	1027153
DN 15	G 1/2 x 15 mm	1027155
DN 20	G 3/4 x 18 mm	1027157
DN 20	G 3/4 x 22 mm	1027158

## Conversion valve insert for Hycococon DN 15 to DN 25

Hycococon VTZ, ATZ, ETZ and HTZ DN 15 to DN 25 can be retrofitted with the valve inserts listed below. This can be done with the Oventrop Demo-Bloc special tool under system pressure.

Depending on the valve insert used, further accessories are necessary, for example an actuator or thermostat.



Description	Item No.
For Unibox and RTLH valves, M 30 x 1.5	1026981
For KTB valves, opens when the sensor temperature rises	1147169
For PTB valves and Cocon 2TZ, DN 15, kvs = 0.45	1186052
For PTB valves and Cocon 2TZ, DN 15, kvs = 1.00	1186053
For Cocon 2TZ, DN 15, kvs = 1.80	1186054
For A thermostatic valves (especially for steam systems), M 30 x 1.5	1186200
For Combi LR with cap for Hycococon valves	1187071
For AF thermostatic valves, M 30 x 1.5, kv = 0.32	1187352

## Replacement valve insert for Hycococon



Description	Item No.
For Hycococon HTZ, DTZ, VTZ and VPZ, DN 32	1067066
For Hycococon HTZ, DTZ, VTZ and VPZ, DN 40	1067067
For Hycococon HTZ and DTZ, DN 15 to DN 25	1067085

## Hycococon HTZ Presetting set



Description	Item No.
Presetting set for Hycococon HTZ	1068585





## 2.4 Differential pressure measurement and verification of water quantities

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## 2.4 Differential pressure measurement and verification of water quantities

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2.4

## OV-DMC 3 Measuring system



System for flow measurement at valves and for regulation of heating and cooling systems. For use with all Oventrop products equipped with Classic or Eco measuring valves or HydroPort auxiliary valves: HydroControl, HydroCom, Cocon, Hycoco and measuring orifices. With interfaces for communication with commercially available smartphones and tablets using the Oventrop app for convenient measuring and logging. The data determined with the OVplan and OVselect calculation programmes can be accessed.

After entering the valve data and the desired flow rate, a calculation of the presetting for Oventrop double regulating and commissioning valves is possible. The permanent recording of differential pressure and flow rate is also possible. The optional connection of two temperature sensors, for example for supply and return, enables direct performance calculation. The OV-DMC 3 is supplied in a sturdy case with all necessary adapters for connection to Oventrop valves. Smartphone or tablet are not included in the scope of delivery.

Operating temperature -20 up to 120 °C



### OV-DMC 3 Measuring device

Measuring device, complete, consisting of:

- Sensor unit with fastening chain and measuring hoses, marked red and blue
- Two PT 1000 temperature sensors with matching plugs for connection to the sensor unit
- Adapters for connecting the measuring hoses to all Oventrop balancing and control valves with measuring valves
- Needle adapters for connecting the measuring hoses to insertion measuring valves
- Adapters for connection of the measuring hoses to connecting pieces with G 3/4 external thread (hose thread)
- 3 mm and 4 mm Allen key with T-handle
- Data cable
- Power supply unit with Euro plug
- Hard shell carrying case suitable for the construction site with matching foam inlay
- Replacement fine screens made of sintered bronze for the sensor unit (2-fold)

Item No.

1069278

### The perfect couple: OV-DMC 3 and OVapp.

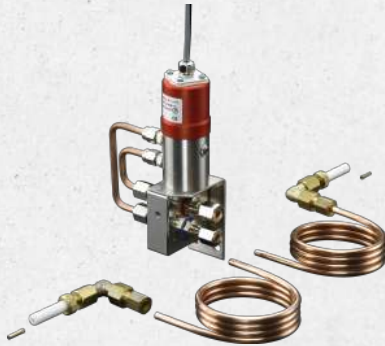


From differential pressure measurement to water volume testing – our OVapp makes *measuring and reporting* with the OV-DMC 3 particularly convenient. [Download now free of charge!](#)





# OV-Connect Differential pressure sensor



Differential pressure transducer for permanent differential pressure monitoring at Oventrop products with Classic measuring technique in heating and cooling systems operated with water or water-glycol mixtures. The differential pressure is taken via the measuring needles and the copper pipes at the measuring valves of the product to be measured. In operation, the differential pressure transducer pro-

vides an output signal (0 to 10 V) proportional to the measured differential pressure. This signal can be used by a higher-level electronic control and monitoring unit of a building management system (BMS) or by individual devices (e.g. pressure indicators). For central heating and cooling systems as well as potable water installations (circulation pipes) up to PN 25. Installation in the supply or the return pipe.

Operating temperature	-15 up to 80 °C	Max. operating pressure	25 bar
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## OV-Connect Differential pressure transducer

Differential pressure transducer, consisting of:

- Sensor unit / pressure transducer
- Two rolls of copper pipe
- Two measuring needles for connection to Oventrop valves with Classic measuring technique



Item No.

1069180

# OV Measuring system - Accessories and spare parts



## Measuring hose

Suitable for OV-DMC 3, OV-DMC 2 and OV-DMPC.

### Description

2 measuring hoses, length 0.5 m, red and blue

2 measuring hoses, length 2 m, red and blue

### Item No.

1069178

1069179



## Measuring valve

Suitable for OV-DMC 3, OV-DMC 2 and OV-DMPC.



### Description

2 measuring valves G  $\frac{3}{8}$  with plug-in coupling technology, with screen

### Item No.

1069186

## Screen insert

### Description

Fine screen made of sintered bronze for sensor OV-DMC 3 and OV-DMC 2

### Item No.

9010290

## Accessories - HydroPort measuring technique



### Description

Measuring adapter with HydroPort plug-in coupling and G  $\frac{3}{4}$  internal thread, for the connection to drain and fill tools and fill and drain cocks

### Item No.

1060297

## Classic measuring technique - Accessories



### Description

2 measuring needles with plug-in connection

### Item No.

1069199

### Classic measuring technique - Accessories



Description	Item No.
2 measuring adapters for differential pressure measurement at Hydromat DTR / DFC	1060299

### Eco measuring technique - Accessories



Description	Item No.
2 measuring needles for Hycocon double regulating and commissioning valves, for the connection of the OV-DMC 3, OV-DMC 2 and OV-DMPC measuring devices	1061799



### Eco measuring technique - Accessories



Description	Item No.
Drain and fill tool for Hycocon double regulating and commissioning valves	1061791

### General accessories

Description	Item No.
Original case with foam insert for OV-DMC 3	1069280
USB data cable for OV-DMC 3	1069281
USB power supply unit with Euro plug for OV-DMC 3	1069282
Set of 3 mm and 4 mm Allen keys for OV-DMC 3	1069284
Fastening chain for OV-DMC 3	1069285

### Thermometer



Description	Item No.
Contact thermometer for OV-DMC 2 and OV-DMPC	1069197
Temperature sensor PT 1000 with connection for OV-DMC 3	1069283

# Classic measuring technique - Accessories

## Measuring valve



### Description

2 measuring valves with G 1/4 external thread

### Item No.

1060281

## Measuring valve with extension



### Description

2 measuring valves G 1/4 with extension L = 100 mm, system draining not required for mounting

### Item No.

1060282



## Measuring adapter with Classic measuring technique and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks

### Description

Measuring adapter with Classic measuring technique and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks

### Item No.

1060298

## Measuring valve



### Description

Measuring valve with Classic measuring technique and fill and drain ball valve. With external thread G 1/4.

### Item No.

1060381



### Measuring needle



#### Description

2 measuring needles with plug-in connection

#### Item No.

1069199

### 2 measuring valves G 1/4 with extension



#### Description

Measuring valve extension L = 80 mm, with T-piece connection. For differential pressure measurement and simultaneous connection of the impulse tube of the differential pressure regulator

#### Item No.

1688290



### 2 measuring valves G 1/4 with extension



#### Description

2 measuring valve extensions L = 80 mm, for measuring orifices item no. 1060771-78

#### Item No.

1688291

## Eco measuring technique - Accessories



### Draining

#### Description

Drain and fill tool for Hycocn double regulating and commissioning valves

#### Item No.

1061791



### Measuring needle

#### Description

2 measuring needles for Hycocn double regulating and commissioning valves, for the connection of the OV-DMC 3, OV-DMC 2 and OV-DMPC measuring devices

#### Item No.

1061799

# Plug-in coupling technology - Accessories



**Measuring adapter with Classic measuring technique and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks**

## Description

Measuring adapter with HydroPort plug-in coupling and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks

## Item No.

1060297

## Measuring valve

Suitable for HydroControl VTR, MTR and ATR. Not suitable for the new HydroControl V, M, D and A.



## Description

Measuring valve with HydroPort plug-in coupling and fill and drain ball valve. With external thread G 1/4.

## Item No.

1060391



2.4



## 2.4 Differential pressure measurement and verification of water quantities



### **Measuring orifices** **326**

Measuring orifices..... 327



# Measuring orifices



Measuring orifices PN 16 / PN 25 with threads or for installation between flanges. Supplied with Classic measuring valves. For flow determination in central heating and cooling systems. The flow rate is determined by measuring the differential pressure across the measuring orifice. Modification of the flow values

can be read directly independently of the preset values of the upstream or downstream valve by means of the OV-DMC 3 measuring system.

The measuring orifices for installation between flanges can be combined with all valves with flanges according to EN 1092.

Medium	Water	Installation location	Supply or return
	Water-glycol mixture		
Measuring connection	Yes		



## Measuring orifice with internal thread / external thread PN 25



Operating temperature	-20 up to 150 °C	Body material	DZR brass
-----------------------	------------------	---------------	-----------

Nominal size	Connection size	kvs	Item No.
DN 15	R 1/2 x Rp 1/2	0.55	1060644
DN 15	R 1/2 x Rp 1/2	1.20	1060634
DN 15	R 1/2 x Rp 1/2	2.20	1060604
DN 20	R 3/4 x Rp 3/4	4.25	1060606
DN 25	R 1 x Rp 1	8.60	1060608
DN 32	R 1 1/4 x Rp 1 1/4	15.90	1060610
DN 40	R 1 1/2 x Rp 1 1/2	23.70	1060612
DN 50	R 2 x Rp 2	48.00	1060616

## Measuring orifice for flanges according to EN 1092 PN 16



Operating temperature	-10 up to 150 °C	Body material	Stainless steel
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Nominal size	kvs	Item No.
DN 65	102.00	1060751
DN 80	120.00	1060752
DN 100	234.00	1060753
DN 125	335.00	1060754
DN 150	522.00	1060755
DN 200	780.00	1060756
DN 250	1,197.00	1060757
DN 300	1,810.00	1060758
DN 350	2,050.00	1060759
DN 400	2,650.00	1060760
DN 450	3,400.00	1060761
DN 500	4,200.00	1060762
DN 600	6,250.00	1060763
DN 700, gear operated, EPDM liner	10,690.00	1060764
DN 800, gear operated, EPDM liner	14,000.00	1060765

Measuring orifice for flanges according to EN 1092 PN 16



Operating temperature                      -10 up to 120 °C    Body material                                      Cast iron

Nominal size	kvs	Item No.
DN 65	93.00	1060771
DN 80	126.00	1060772
DN 100	244.00	1060773
DN 125	415.00	1060774
DN 150	540.00	1060775
DN 200	1,010.00	1060776
DN 250	1,450.00	1060777
DN 300	2,400.00	1060778



## 2.5 Shutoff valves and other pipeline valves

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## 2.5 Shutoff valves and other pipeline valves

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# Optibal Ball valves with plastic handle



Ball surface hard chrome plated. Anthracite extended plastic handle for easy insulation. With

red replaceable cover plug for riser identification.

Medium

Water  
Water-glycol mixture  
Other media according to  
Product Data sheet

Operating temperature

-10 up to 100 °C

Body material

Brass

Type of construction

Full flow

Surface

Nickel plated



## Optibal with internal thread PN 16

Thermal insulation shell

Available as accessory

Nominal size	kvs	Connection size	Item No.
DN 10	8.80	G 3/8	1077103
DN 15	22.00	G 1/2	1077104
DN 20	43.00	G 3/4	1077106
DN 25	67.00	G 1	1077108
DN 32	99.00	G 1 1/4	1077110
DN 40	143.00	G 1 1/2	1077112
DN 50	254.00	G 2	1077116



## Optibal with internal thread PN 16, with thermometer

Thermal insulation shell

Available as accessory

Nominal size	kvs	Connection size	Item No.
DN 10	8.80	G 3/8	1078003
DN 15	22.00	G 1/2	1078004
DN 20	43.00	G 3/4	1078006
DN 25	67.00	G 1	1078008
DN 32	99.00	G 1 1/4	1078010
DN 40	143.00	G 1 1/2	1078012
DN 50	254.00	G 2	1078016



#### Optibal with external thread and internal thread PN 16

Thermal insulation shell Available as accessory

Nominal size	kvs	Connection size	Item No.
DN 10	8.80	G 3/8	1077303
DN 15	22.00	G 1/2	1077304
DN 20	43.00	G 3/4	1077306
DN 25	67.00	G 1	1077308
DN 32	99.00	G 1 1/4	1077310
DN 40	143.00	G 1 1/2	1077312
DN 50	254.00	G 2	1077316



#### Optibal with internal thread PN 16, with drain valve

Thermal insulation shell Available as accessory

Nominal size	kvs	Connection size	Item No.
DN 15	22.00	G 1/2	1077804
DN 20	43.00	G 3/4	1077806
DN 25	67.00	G 1	1077808
DN 32	99.00	G 1 1/4	1077810



#### Optibal with internal thread PN 16, with drain ball valve

Nominal size	kvs	Connection size	Item No.
DN 15	22.00	G 1/2	1697804
DN 20	43.00	G 3/4	1697806
DN 25	67.00	G 1	1697808
DN 32	99.00	G 1 1/4	1697810



#### Optibal with press connection PN 16

For direct connection of copper pipe according to DIN EN 1057 / DVGW GW 392, stainless steel pipe according to DIN EN 10088 / DVGW GW 451 and thin-walled C-steel pipe (material no. E195/1.0034) according to DIN EN 10305-3.

Pressing must be carried out to tighten the connection. Only use press jaws with original contours SANHA (SA), Geberit-Mapress (MM) or Viega (Profipress) in the appropriate size for pressing. Processing must be carried out according to the installation instructions.

Thermal insulation shell Available as accessory

Nominal size	kvs	Connection size	Item No.
DN 15	22.00	15 mm	1077162
DN 15	22.00	18 mm	1077163
DN 20	43.00	22 mm	1077164
DN 25	67.00	28 mm	1077165
DN 32	99.00	35 mm	1077166





#### Optibal with internal thread and press connection PN 16

For direct connection of copper pipe according to DIN EN 1057 / DVGW GW 392, stainless steel pipe according to DIN EN 10088 / DVGW GW 451 and thin-walled C-steel pipe (material no. E195/1.0034) according to DIN EN 10305-3.

Pressing must be carried out to tighten the connection. Only use press jaws with original contours SANHA (SA), Geberit-Mapress (MM) or Viega (Profipress) in the appropriate size for pressing. Processing must be carried out according to the installation instructions.

Thermal insulation shell Available as accessory

Nominal size	kvs	Connection size	Item No.
DN 15	22.00	G ½ x 15 mm	1077152
DN 15	22.00	G ½ x 18 mm	1077153
DN 20	43.00	G ¾ x 22 mm	1077154
DN 25	67.00	G 1 x 28 mm	1077155
DN 32	99.00	G 1 ¼ x 35 mm	1077156



#### Optibal with coupling and internal thread PN 16

Thermal insulation shell Available as accessory



Nominal size	kvs	Connection size	Item No.
DN 15	22.00	R ½ x G ½	1075704
DN 20	43.00	R ¾ x G ¾	1075706
DN 25	67.00	R 1 x G 1	1075708
DN 32	99.00	R 1 ¼ x G 1 ¼	1075710



# Optibal Ball valves with lever



Ball surface hard chrome plated. Lever made of galvanised steel with plastic coating.

Medium

Water  
Water-glycol mixture  
Other media according to  
Product Data sheet

-10 up to 100 °C

Operating temperature

Body material

Brass

Type of construction

Full flow

Surface

Nickel plated

## Optibal with internal thread PN 16



Nominal size	kvs	Connection size	Item No.
DN 8	5.60	G 1/4	1076002
DN 10	8.80	G 3/8	1076003
DN 15	22.00	G 1/2	1076004
DN 20	43.00	G 3/4	1076006
DN 25	67.00	G 1	1076008
DN 32	99.00	G 1 1/4	1076010
DN 40	143.00	G 1 1/2	1076012
DN 50	254.00	G 2	1076016
DN 65	470.00	G 2 1/2	1076020
DN 80	720.00	G 3	1076024
DN 100	1,120.00	G 4	1076032

## Optibal with external thread and internal thread PN 16



Nominal size	kvs	Connection size	Item No.
DN 10	8.80	G 3/8	1076203
DN 15	22.00	G 1/2	1076204
DN 20	43.00	G 3/4	1076206
DN 25	67.00	G 1	1076208
DN 32	99.00	G 1 1/4	1076210

# Optibal Ball valves with T-handle



Ball surface hard chrome plated. T-handle made of metal.

Medium

Water  
Water-glycol mixture  
Other media according to  
Product Data sheet

Operating temperature

-10 up to 100 °C

Body material

Brass

Type of construction

Full flow

Surface

Nickel plated



## Optibal with internal thread PN 16



Nominal size	kvs	Connection size	Item No.
DN 10	8.80	G 3/8	1076103
DN 15	22.00	G 1/2	1076104
DN 20	43.00	G 3/4	1076106
DN 25	67.00	G 1	1076108
DN 32	99.00	G 1 1/4	1076110

## Optibal with external thread and internal thread PN 16



Nominal size	kvs	Connection size	Item No.
DN 10	8.80	G 3/8	1076303
DN 15	22.00	G 1/2	1076304
DN 20	43.00	G 3/4	1076306
DN 25	67.00	G 1	1076308
DN 32	99.00	G 1 1/4	1076310

## Optibal with coupling and internal thread PN 16



Nominal size	kvs	Connection size	Item No.
DN 15	22.00	R 1/2 x G 1/2	1075804
DN 20	43.00	R 3/4 x G 3/4	1075806
DN 25	67.00	R 1 x G 1	1075808
DN 32	99.00	R 1 1/4 x G 1 1/4	1075810

# Optibal P Pump ball valves



Ball surface hard chrome plated. Anthracite extended plastic handle for easy insulation. With

red replaceable cover plug for riser identification.

Medium	Water	Surface	Nickel plated
	Water-glycol mixture	Thermal insulation shell	Available as accessory
Operating temperature	up to 120 °C		
Body material	Brass		



## Optibal P with internal thread and pump flange PN 10, with check valve

To prevent gravity circulation in various heating systems when the pump is switched off. For direct connection to the circulation pump. Opening pressure 20 mbar.

Nominal size	kvs	Connection size	Item No.
DN 25	8.50	Rp 1 x G 1 1/2	1078171
DN 32	13.00	Rp 1 1/4 X G 2	1078172
DN 32	8.50	Rp 1 1/4 x G 1 1/2	1078173



## Optibal P with internal thread and pump flange, without check valve

Nominal size	kvs	Connection size	Item No.
DN 25	17.00	Rp 1 x G 1 1/2	1078371
DN 32	33.00	Rp 1 1/4 X G 2	1078372
DN 32	30.00	Rp 1 1/4 x G 1 1/2	1078373

## Optibal PK Shutoff set



Supply: Pump ball valve with check valve and pump ball valve with thermometer (red) Ø 63 as well as union nuts and seals for the pump flanges.

Return: Ball valve with internal thread on both sides and thermometer (blue) Ø 63.

Suitable insulations:

DN 25: 2 x 1078194 and 1 x 1078094

DN 32: 2 x 1078195 and 1 x 1078095

Nominal size	kvs	Connection size	Item No.
DN 25	6.90	G 1 1/2	1353583
DN 32	11.40	G 2	1353584



# Optibal HT High temperature ball valves



Ball surface hard chrome plated. Anthracite extended plastic handle for easy insulation. With red replaceable cover plug for riser identifica-

tion. The maximum operating temperature is only permissible for a short time.

Medium	Water	Body material	Brass
	Water-glycol mixture	Type of construction	Reduced flow
Operating temperature	-10 up to 150 °C	Surface	Nickel plated
Max. operating temperature	180 °C	Thermal insulation shell	Available as accessory



Optibal HT with internal thread PN 16

Nominal size	kvs	Connection size	Item No.
DN 20	9.50	Rp 3/4	1078706
DN 25	17.00	Rp 1	1078708
DN 32	35.00	Rp 1 1/4	1078710



# Optibal High pressure ball valves PN 40



Medium	Water	Type of construction	Full flow
	Water-glycol mixture	Surface	Untreated
Body material	Bronze		



## Optibal with weldable tailpipe, external thread and cap

Extended plastic handle.

Operating temperature	2 up to 120 °C	Thermal insulation shell	Available as accessory
-----------------------	----------------	--------------------------	------------------------



Nominal size	Connection size	Item No.
DN 15	20.5 mm x G 3/4	1066604 °
DN 20	26 mm x G 1	1066606 °
DN 25	33 mm x G 1 1/4	1066608 °
DN 32	42.5 mm x G 1 3/4	1066610 °

## Optibal with weldable tailpipe, external thread and cap

Lever made of aluminium.

Operating temperature	2 up to 150 °C
-----------------------	----------------



Nominal size	Connection size	Item No.
DN 15	20.5 mm x G 3/4	1066504 °
DN 20	26 mm x G 1	1066506 °
DN 25	33 mm x G 1 1/4	1066508 °
DN 32	42.5 mm x G 1 3/4	1066510 °

## Optibal with weldable tailpipes

Extended plastic handle.

Operating temperature	2 up to 120 °C	Thermal insulation shell	Available as accessory
-----------------------	----------------	--------------------------	------------------------



Nominal size	Connection size	Item No.
DN 15	20.5 mm	1065604 °
DN 20	26 mm	1065606 °
DN 25	33 mm	1065608 °
DN 32	42.5 mm	1065610 °

Optibal with weldable tailpipes

Lever made of aluminium.

Operating temperature 2 up to 150 °C



Nominal size	Connection size	Item No.
DN 15	20.5 mm	1065504 °
DN 20	26 mm	1065506 °
DN 25	33 mm	1065508 °
DN 32	42.5 mm	1065510 °



# DZR Brass ball valves



Medium	Water	Type of construction	Full flow
	Water-glycol mixture	Surface	Untreated
Operating temperature	-10 up to 120 °C		
Body material	DZR brass		



## DZR brass ball valve with internal thread PN 30

Lever made of galvanised steel with plastic coating.



Nominal size	kvs	Connection size	Item No.
DN 15	22.00	G ½	1079004
DN 20	43.00	G ¾	1079006
DN 25	67.00	G 1	1079008
DN 32	99.00	G 1 ¼	1079010
DN 40	143.00	G 1 ½	1079012
DN 50	254.00	G 2	1079016

## DZR brass ball valve with internal thread PN 30

T-handle made of aluminium.



Nominal size	kvs	Connection size	Item No.
DN 15	22.00	G ½	1079404
DN 20	43.00	G ¾	1079406

## DZR brass ball valve with internal thread PN 30

Extended plastic handle.

Thermal insulation shell Available as accessory



Nominal size	kvs	Connection size	Item No.
DN 15	22.00	G ½	1079104
DN 20	43.00	G ¾	1079106
DN 25	67.00	G 1	1079108
DN 32	99.00	G 1 ¼	1079110
DN 40	143.00	G 1 ½	1079112
DN 50	254.00	G 2	1079116

## Other ball valves



### Angle ball valve

Medium	Water	Surface	Untreated
Operating temperature	-10 up to 100 °C	Thermal insulation shell	No
Body material	Brass		

#### Nominal size

DN 20

#### Connection size

G 1

#### Item No.

1351705



### Ball valve with internal thread and hose fitting

PN 16, DN 15 to DN 25, one side internal thread, one side hose fitting and cap with fastening loop. Full flow, with double FKM O-ring seal, ball hard chrome plated, PTFE seats

Medium	Water	Surface	Nickel plated
	Water-glycol mixture	Thermal insulation shell	No
Operating temperature	-20 up to 120 °C		
Body material	Brass		

#### Nominal size

DN 15

DN 20

DN 25

#### kvs

5.30

10.40

19.00

#### Connection size

Rp 1/2

Rp 3/4

Rp 1

#### Item No.

1036154

1036156

1036158



# Optibal - Accessories



## Thermal insulation shell

For Optibal ball valves with extended plastic handle item no. 10771.., 10780.., 10787.. and 10791.. With spindle extension also suitable for other handles. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG).

Operating temperature up to 100 °C

Nominal size	Item No.
DN 10 and DN 15	1078092
DN 20	1078093
DN 25	1078094
DN 32	1078095
DN 40	1078096
DN 50	1078097



## Thermal insulation shell

For Optibal P pump ball valves. Meets the requirements of Appendix 8 to Sections 69 and 71(1), line ee) of the German Building Energy Act (GEG).

Nominal size	Item No.
DN 25	1078194
DN 32	1078195



## Conversion set plastic handle

With red cover plug for riser identification. For subsequent conversion of Optibal ball valves with lever or metal T-handle to plastic handle (except for item no. 10787..). This handle allows the ball valves to be insulated.

Nominal size	Item No.
Up to DN 15	1076071
DN 20 and DN 25	1076072
DN 32 to DN 50	1076073



#### Spindle extension

Made of brass, with rotatable plastic sleeve. For retrofitting of Optibal brass ball valves, except for item no. 10787.. By sealing the rotatable plastic sleeve against the insulation in cooling systems, moisture cannot reach the pipework via the spindle extension. Only one extension can be used at a time.  
To avoid condensation on the handle, the handle of ball valves with T-handle or lever must also be insulated, e.g. by covering the shaft and handle with elastic pipe insulation.

Description	Item No.
For Optibal with lever or T-handle, up to DN 15	1076081
For Optibal with lever or T-handle, DN 20 and DN 25	1076082
For Optibal with lever or T-handle, DN 32 to DN 50	1076083
For Optibal with lever or T-handle, DN 65 to DN 100	1076084
For Optibal with extended plastic handle, up to DN 15	1696081
For Optibal with extended plastic handle, DN 20 and DN 25	1696082
For Optibal with extended plastic handle, DN 32 to DN 50	1696083



#### Cover plug, blue

For Optibal ball valves with extended plastic handle. For riser identification by replacing the existing red cover plug.

Description	Item No.
DN 10 and DN 15, set = 10 pieces	1077171
DN 20 and DN 25, set = 10 pieces	1077172
DN 32 to DN 50, set = 5 pieces	1077173



#### Thermometer conversion set

Anthracite. For item no. 10757.., 10771.., 10773.. and 10778..

Description	Item No.
DN 10 and DN 15	1077181
DN 20 and DN 25	1077182
DN 32 to DN 50	1077183
For Optibal P, DN 25 and DN 32 and Optibal TW, DN 20 and DN 25	1078382

#### Thermometer conversion set, red and blue

For item no. 10757.., 10771.., 10773.. and 10778..



Nominal size	Item No.
DN 25 and DN 32	1078182



#### Blocking cap made of brass

For ball valves DZR. The blocking cap can be fitted instead of the lever, T-handle or handle. It locks the ball valve in open and closed position and prevents unintentional actuation.

Nominal size	Item No.
DN 15	1079254
DN 20 and DN 25	1079255
DN 32 to DN 50	1079256



Cap with sealing washer and chain

For item no. 10655.., 10656.., 10665.. and 10666..

Nominal size	Connection size	Item No.
DN 15	G 3/4	1066904
DN 20	G 1	1066906
DN 25	G 1 1/4	1066908
DN 32	G 1 3/4	1066910





## 2.5 Shutoff valves and other pipeline valves

### **Fill and drain cocks** **346**

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# Optiflex Fill and drain ball valves



For filling and draining of heating and cooling systems, boilers, radiators and pipework.

With cap. Handle with stop. Hose fittings, if included, with soft seal.

Shutoff Yes



## Optiflex with external thread PN 16 and plastic hose fitting



Self-sealing with lock nut.

Medium	Water	Body material	Brass
	Water-glycol mixture	Operating temperature	0 up to 120 °C
Installation location	Supply or return		

Nominal size	Connection size	Surface	Item No.
DN 10	G 3/8	Untreated	1033313
DN 15	G 1/2	Untreated	1033314
DN 10	G 3/8	Nickel plated	1033351
DN 15	G 1/2	Nickel plated	1033352

## Optiflex with external thread PN 16 and plastic hose fitting, without individual packaging



Self-sealing with lock nut.

Medium	Water	Body material	Brass
	Water-glycol mixture	Installation location	Supply or return
Operating temperature	0 up to 120 °C		

Nominal size	Connection size	Surface	Item No.
DN 15	G 1/2	Untreated	1033315
DN 15	G 1/2	Nickel plated	1033354



#### Optiflex with external thread PN 16 and brass hose fitting

Self-sealing with lock nut.

Medium	Water	Installation location	Supply or return
	Water-glycol mixture	Surface	Untreated
Operating temperature	0 up to 120 °C		
Body material	Brass		

Nominal size	Connection size	Item No.
DN 20	G 3/4	1033316
DN 25	G 1	1033308
DN 15	G 1/2	1034315



#### Optiflex with external thread PN 16, without hose fitting

Self-sealing with lock nut.

Medium	Water	Installation location	Supply or return
	Water-glycol mixture	Surface	Untreated
Operating temperature	0 up to 120 °C		
Body material	Brass		

Nominal size	Connection size	Item No.
DN 10	G 3/8	1033413
DN 15	G 1/2	1033414



#### Optiflex with internal thread PN 16, with plastic hose fitting

Medium	Water	Installation location	Supply or return
	Water-glycol mixture	Surface	Untreated
Operating temperature	0 up to 120 °C		
Body material	Brass		

Nominal size	Connection size	Item No.
DN 15	Rp 1/2	1033814



#### Optiflex with external thread PN 16, made of bronze, with brass hose fitting

Medium	Water	Installation location	Supply or return
	Water-glycol mixture	Surface	Untreated
Operating temperature	0 up to 150 °C		
Body material	Bronze		

Nominal size	Connection size	Item No.
DN 10	G 3/8	1032403 °
DN 15	G 1/2	1032404 °

**Optiflex with external thread PN 16, with plastic hose fitting, for solar**

For the solar sector. Can be used up to 180 °C for short periods. Suitable for connecting plastic or copper pipes.

Medium	Water	Installation location	Supply or return
	Water-glycol mixture	Surface	Nickel plated
Operating temperature	0 up to 150 °C		
Body material	Brass		

Nominal size	Connection size	Type	Item No.
DN 15	G 1/2	Straight	1033372
DN 15	G 1/2	Angle	1033672

**Optiflex with external thread PN 10, without hose fitting, for potable water**

For the potable water sector. Max. water temperature 90 °C.

Medium	Water	Surface	Untreated
Operating temperature	0 up to 90 °C	Certification	DVGW
Body material	Brass		

Nominal size	Connection size	Item No.
DN 15	G 1/2	1033152

# Other fill and drain cocks



### Heavy model with external thread PN 16

Based on DIN 3848. For liquids, steam and treated heating water, e.g. district heating. Can be used up to 180 °C for short periods.

Readjustment of the fill and drain ball valves to maintain tightness during operation may be necessary, e.g. during operation in the low-temperature range, extreme temperature changes or use of penetrating additives in heat transfer liquids.

Medium	Water	Draining	Yes
	Water-glycol mixture	Body material	Bronze
Operating temperature	0 up to 150 °C	Thermal insulation shell	No
Shutoff	Yes	Installation location	Supply or return
Measuring connection	No		

Nominal size	Connection size	Item No.
DN 10	R 3/8	1032003 °
DN 15	R 1/2	1032004
DN 20	R 3/4	1032006
DN 25	R 1	1032008



# Fill and drain cocks - Accessories and spare parts

**Cap with sealing washer and fastening loop for fill and drain cock, heavy model**

Item no. 1034052 also suitable for Optiflex DN 10.

Nominal size	Connection size	Item No.
DN 15	G 3/4	1034052
DN 10	G 1/2	1034003
DN 20	G 1	1034053

**Square spanner for fill and drain ball valve, heavy pattern**

Description	Item No.
DN 10 and DN 15, spanner size 12 mm	1035004
DN 20 and DN 25, spanner size 14 mm	1035006



2.5



## 2.5 Shutoff valves and other pipeline valves

### **Shutoff valves** **352**

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# Hygate Gate valves



## Hygate ATB with internal thread PN 25

Medium	Water	Shutoff	Yes
	Water-glycol mixture	Body material	Brass
	Other media according to Product Data sheet	Installation location	Supply or return
Operating temperature	-10 up to 120 °C		

Nominal size	Connection size	kvs	Item No.
DN 10	G 3/8	10.00	1040003
DN 15	G 1/2	11.00	1040004
DN 20	G 3/4	34.00	1040006
DN 25	G 1	46.00	1040008
DN 32	G 1 1/4	60.00	1040010
DN 40	G 1 1/2	105.00	1040012
DN 50	G 2	170.00	1040016
DN 65	G 2 1/2	280.00	1040020
DN 80	G 3	420.00	1040024
DN 100	G 4	650.00	1040032



## Hygate AFC with flanges according to EN 1092-2 PN 16

Medium	Water	Body material	Cast iron
	Water-glycol mixture	Installation location	Supply or return
Operating temperature	-10 up to 120 °C		
Shutoff	Yes		

Nominal size	kvs	Item No.
DN 40	107.00	1045049
DN 50	250.00	1045050
DN 65	430.00	1045051
DN 80	790.00	1045052
DN 100	1,250.00	1045053
DN 125	1,960.00	1045054
DN 150	2,790.00	1045055
DN 200	2,880.00	1045056
DN 250	4,306.00	1045057
DN 300	6,380.00	1045058



# Shutoff valves

## Shutoff valve with weldable tailpipes PN 25



Medium	Water	Body material	Bronze
	Water-glycol mixture	Installation location	Supply or return
Operating temperature	0 up to 150 °C		
Shutoff	Yes		

Nominal size	Connection size	Item No.
DN 15	20.5 mm	1065004 °
DN 20	26 mm	1065006 °
DN 25	33 mm	1065008 °
DN 32	42.5 mm	1065010 °

## Drain valve with weldable tailpipe and external thread with cap PN 25



Medium	Water	Body material	Bronze
	Water-glycol mixture	Installation location	Supply or return
Operating temperature	0 up to 150 °C		
Shutoff	Yes		

Nominal size	Connection size	Item No.
DN 15	20.5 mm x G 3/4	1066004 °
DN 20	26 mm x G 1	1066006 °
DN 25	33 mm x G 1 1/4	1066008 °
DN 32	42.5 mm x G 1 3/4	1066010 °



# Pressure gauge cocks



## Pressure gauge cock with internal thread and stuffing box

Medium	Water	Draining	No
Operating temperature	-10 up to 120 °C	Body material	Brass
Shutoff	Yes	Thermal insulation shell	No
Measuring connection	Yes		

Nominal size	Connection size	Pressure rating	Item No.
DN 15	G 1/2	PN 10	1110104
DN 15	G 1/2	PN 25	1110174



2.5



## Pressure gauge cock with internal thread and test flange 25 x 60 mm

Medium	Water	Draining	No
Operating temperature	-10 up to 120 °C	Body material	Brass
Shutoff	Yes	Thermal insulation shell	No
Measuring connection	Yes		

Nominal size	Connection size	Pressure rating	Item No.
DN 15	G 1/2	PN 25	1110204



## Pressure gauge cock, push button type with internal thread

Brass, nickel-plated. Outlet also corresponds to pressure gauge screw-in hole according to DIN EN 837-1. The pressure is only measured when the push button is pressed down, after releasing it, the system disconnection takes place automatically. The pressure gauge is depressurised in the disconnected position.  
Water: PN 25, 0 °C to 90 °C

Shutoff	Yes	Body material	Brass
Measuring connection	Yes	Thermal insulation shell	No
Draining	No		

Nominal size	Connection size	Pressure rating	Item No.
DN 15	G 1/2	PN 25	1110504

# Pressure gauge shutoff valves



**Pressure gauge shutoff valve with clamping sleeve and spigot, PN 250**

For connecting pressure measuring devices and pressure gauges to systems. Application: Liquids, gases and vapours to which the materials of the valves are resistant.  
Body, clamping sleeve, union nut and, if applicable, test spigot or flange made of brass. Spindle and vent screw made of stainless steel, seal packing made of PTFE, handwheel made of plastic.

Thermal insulation shell No

Description	Item No.
DIN 16270-A-20 Ms, brass / stainless steel, without test connection	1115004
DIN 16271-A-20 Ms, brass / stainless steel, with test spigot M 20 x 1.5	1115104



**Pressure gauge shutoff valve with clamping sleeve and spigot, PN 250**

For connecting pressure measuring devices and pressure gauges to systems. Application: Liquids, gases and vapours to which the materials of the valves are resistant.  
Body, clamping sleeve, union nut and, if applicable, test spigot or flange made of steel. Spindle and vent screw made of stainless steel, seal packing made of graphite, handwheel made of plastic.

Thermal insulation shell No

Description	Item No.
DIN 16270-A-10 St, steel / stainless steel, without test connection	1116004



# Accessories and spare parts



## Vent valve PN 25

### Nominal size

DN 15

### Item No.

1067004

## Pressure gauge cocks - Accessories



### Description

Transition piece DN 15 made of brass with rotatable union nut, with graphited sealing washer for differential pressure gauge, suitable for pressure gauge cocks item no. 11101.. to 11105..

### Item No.

1111904

Graphited sealing washer for pressure gauge cocks

1905551



2.5

## Pressure gauge shutoff valves - Accessories



### Description

Cu sealing ring DIN 16528 for pressure gauge shutoff valves

### Item No.

1905552

## Replacement handwheel for gate valves Hygate ATB and ATR



### Nominal size

DN 10 and DN 15

DN 20 and DN 25

DN 32 and DN 40

DN 50

DN 65

DN 80 and DN 100

### Item No.

1900051

1900052

1900053

1900054

1900055

1900056

## Replacement lockshield spindle

For item no. 1065008 and 1066008.



### Nominal size

DN 25

### Item No.

1069294

Replacement cap with sealing washer and chain

For item no. 10650.., 10656.., 10660.., 10665.. and 10666..



Nominal size	Connection size	Item No.
DN 15	G 3/4	1066904
DN 20	G 1	1066906
DN 25	G 1 1/4	1066908
DN 32	G 1 3/4	1066910





## 2.5 Shutoff valves and other pipeline valves

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# Butterfly valves



The lugged and wafer butterfly valves are designed for installation between two flanges according to EN 1092-2. The neck is extended for insulation purposes. Higher nominal sizes are available on request.  
For central heating and cooling systems with

closed circuits. For operation with non-aggressive, harmless media, e.g. water or water-glycol mixtures according to VDI 2035 / ÖNORM 5195.

Body made of nodular cast iron, spindle and disc made of stainless steel.

Medium	Water	Body material	Nodular cast iron
	Water-glycol mixture	Installation location	Supply or return
Operating temperature	-10 up to 120 °C		
Shutoff	Yes		



## Lugged butterfly valve PN 16

For flanges according to EN 1092-2 PN 16 (up to DN 150 also PN 10).



Nominal size	kvs	Item No.
DN 50	147.00	1048450
DN 65	290.00	1048451
DN 80	450.00	1048452
DN 100	730.00	1048453
DN 125	1,260.00	1048454
DN 150	1,990.00	1048455
DN 200	4,390.00	1048456

## Lugged butterfly valve PN 16, gear operated

For flanges according to EN 1092-2 PN 16 (up to DN 150 also PN 10).



Nominal size	kvs	Item No.
DN 100	730.00	1049253
DN 125	1,260.00	1049254
DN 150	1,990.00	1049255
DN 200	4,390.00	1049256
DN 250	4,500.00	1049257
DN 300	6,800.00	1049258
DN 350	8,900.00	1049259
DN 400	11,500.00	1049260
DN 450	15,000.00	1049261
DN 500	18,800.00	1049262
DN 600	27,600.00	1049263

**Wafer butterfly valve PN 16**

For flanges according to EN 1092-2 PN 16, PN 10 or PN 6.

Nominal size	kvs	Item No.
DN 50	147.00	1046450
DN 65	290.00	1046451
DN 80	450.00	1046452
DN 100	730.00	1046453
DN 125	1,260.00	1046454
DN 150	1,990.00	1046455
DN 200	4,390.00	1046456

**Wafer butterfly valve PN 16, gear operated**

For flanges according to EN 1092-2 PN 16, PN 10 or PN 6.

Nominal size	kvs	Item No.
DN 100	730.00	1047253
DN 125	1,260.00	1047254
DN 150	1,990.00	1047255
DN 200	4,390.00	1047256
DN 250	4,500.00	1047257
DN 300	6,800.00	1047258



# Spare parts for butterfly valves

**Lever**

For item no. 10484.. and 10464..



Description	Item No.
DN 50 to DN 80	1048491
DN 100 to DN 150	1048492
DN 200	1048493



**Gear operator with handwheel**

For item no. 10464.., 10472.., 10484.. and 10492..



Description	Item No.
DN 50 to DN 100	1049850
DN 125 to DN 200	1049853



# Check valves



Check valve for closed heating and cooling systems. Item no. 10721.. with WRAS approval also for potable water systems. Consisting of a Y-pattern body and valve insert

with spring-loaded plug. Nominal sizes DN 10 to DN 20 suitable for compression fittings, see accessories.

Medium	Water	Installation location	Supply or return
	Water-glycol mixture	Installation position	Any
Opening pressure	40 mbar		
Body material	Bronze		

WRAS

2.5

## Check valve with internal thread PN 25, FKM seal



Operating temperature	0 up to 100 °C
Material resistance	Mineral, heating and hydraulic oils Fuels Air Not suitable for gaseous fluids group 1 according to directive 2014/68/EU

Nominal size	Connection size	kvs	Item No.
DN 10	Rp 3/8	3.40	1072003
DN 15	Rp 1/2	5.50	1072004
DN 20	Rp 3/4	10.30	1072006
DN 25	G 1	17.50	1072008
DN 32	G 1 1/4	33.00	1072010
DN 40	G 1 1/2	44.00	1072012
DN 50	G 2	68.00	1072016

## Check valve with internal thread PN 25, EPDM seal

Also for systems with open circuits that are operated with water. Materials suitable for potable water.

Operating temperature	-10 up to 150 °C	Certification	WRAS
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Nominal size	Connection size	kvs	Item No.
DN 10	Rp 3/8	3.40	1072103
DN 15	Rp 1/2	5.50	1072104
DN 20	Rp 3/4	10.30	1072106
DN 25	G 1	17.50	1072108
DN 32	G 1 1/4	33.00	1072110
DN 40	G 1 1/2	44.00	1072112
DN 50	G 2	68.00	1072116

# Swing check valves



Backflow preventers for horizontal and vertical installation in risers, flap opening upwards. For central heating and cooling systems with closed circuits. For operation with non-aggressive, harmless media, e.g. water or water-glycol mixtures according to VDI 2035 / ÖNORM 5195.

sive, harmless media, e.g. water or water-glycol mixtures according to VDI 2035 / ÖNORM 5195.

Medium

Water  
Water-glycol mixture

Installation location

Supply or return



2.5

## Swing check valve with internal thread PN 16

Metal to metal sealing. Body made of brass, inner parts made of brass.

Operating temperature

-10 up to 80 °C

Body material

Bronze



Nominal size	Connection size	kvs	Item No.
DN 15	G 1/2	5.50	1075004
DN 20	G 3/4	10.20	1075006
DN 25	G 1	20.20	1075008
DN 32	G 1 1/4	34.70	1075010
DN 40	G 1 1/2	44.90	1075012
DN 50	G 2	104.00	1075016
DN 65	G 2 1/2	175.00	1075020

## Swing check valve with flanges according to EN 1092-2 PN 16

Body, cover and stuffing box assembly made of cast iron, valve seat made of brass, asbestos-free seals.

Operating temperature

-10 up to 120 °C

Body material

Cast iron



Nominal size	kvs	Item No.
DN 40	85.00	1073049
DN 50	132.00	1073050
DN 65	326.00	1073051
DN 80	490.00	1073052
DN 100	770.00	1073053
DN 125	1,020.00	1073054
DN 150	1,700.00	1073055
DN 200	2,410.00	1073056
DN 250	3,870.00	1073057
DN 300	5,670.00	1073058

**Swing check valve (wafer model) PN 16**

Body and flap made of galvanised steel with EPDM seal. Suitable for 3 m/s flow velocity.

Operating temperature -10 up to 120 °C Body material Steel

Nominal size	kvs	Item No.
DN 40	22.20	1072549
DN 50	54.00	1072550
DN 65	75.00	1072551
DN 80	112.00	1072552
DN 100	172.00	1072553
DN 125	342.00	1072554
DN 150	490.00	1072555
DN 200	1,128.00	1072556
DN 250	1,500.00	1072557
DN 300	1,850.00	1072558
DN 350	2,700.00	1072559
DN 400	3,500.00	1072560
DN 500	5,200.00	1072561

**Double swing check valve (wafer model) PN 16**

Body made of cast iron, flaps made of stainless steel with EPDM seat seal.

Operating temperature 0 up to 120 °C Body material Cast iron

Nominal size	kvs	Item No.
DN 50	55.00	1072650
DN 65	82.00	1072651
DN 80	115.00	1072652
DN 100	236.00	1072653
DN 125	500.00	1072654
DN 150	700.00	1072655
DN 200	1,100.00	1072656
DN 250	2,000.00	1072657
DN 300	3,300.00	1072658
DN 350	3,950.00	1072659
DN 400	5,000.00	1072660
DN 450	6,550.00	1072661
DN 500	8,250.00	1072662
DN 600	12,600.00	1072663



# Strainers



For central heating and cooling systems with closed circuits. For operation with non-aggressive, harmless media, e.g. water or water-gly-

col mixtures according to VDI 2035 / ÖNORM 5195.

Medium

Water  
Water-glycol mixture

Installation location

Return

WRAS



## Strainer with internal thread PN 25, mesh size 600 µm

Screen insert made of stainless chromium nickel steel. DN 8 - DN 50: Body made of bronze, cover made of brass, DN 65 and DN 80: Body and cover made of brass.



Operating temperature -10 up to 150 °C

Material resistance Mineral, heating and hydraulic oils  
Fuels  
Water vapour  
Air  
Harmless, non-aggressive gases  
Not suitable for gaseous fluids group 1 according to directive 2014/68/EU

Nominal size	Connection size	kvs	Certification	Item No.
DN 8	G 1/4	1.50	WRAS	1120002
DN 10	Rp 3/8	1.70	WRAS	1120003
DN 15	Rp 1/2	3.80	WRAS	1120004
DN 20	Rp 3/4	7.80	WRAS	1120006
DN 25	G 1	13.40	WRAS	1120008
DN 32	G 1 1/4	23.90	WRAS	1120010
DN 40	G 1 1/2	32.50	WRAS	1120012
DN 50	G 2	56.20	WRAS	1120016
DN 65	G 2 1/2	101.30	WRAS	1120020 °
DN 80	G 3	133.60	WRAS	1120024 °



**Strainer with weldable tailpipes PN 25, mesh size 600 µm**

Screen insert made of stainless chromium nickel steel. Body made of bronze, cover made of brass, weldable tailpipes made of steel.



Operating temperature	0 up to 150 °C
Material resistance	Mineral, heating and hydraulic oils Fuels Water vapour Air Harmless, non-aggressive gases Not suitable for gaseous fluids group 1 according to directive 2014/68/EU

Nominal size	Connection size	Item No.
DN 15	20.5 mm	1068004 °
DN 20	26 mm	1068006 °
DN 25	33 mm	1068008 °
DN 32	42.5 mm	1068010 °

**Strainer with internal thread PN 25, mesh size 250 µm**

Screen insert made of stainless chromium nickel steel. DN 8 - DN 50: Body made of bronze, cover made of brass, DN 65 and DN 80: Body and cover made of brass.



Operating temperature	-10 up to 150 °C
Material resistance	Mineral, heating and hydraulic oils Fuels Water vapour Air Harmless, non-aggressive gases Not suitable for gaseous fluids group 1 according to directive 2014/68/EU

Nominal size	Connection size	kvs	Item No.
DN 8	G 1/4	1.40	1121002
DN 10	Rp 3/8	1.60	1121003
DN 15	Rp 1/2	3.40	1121004
DN 20	Rp 3/4	6.90	1121006
DN 25	G 1	10.90	1121008
DN 32	G 1 1/4	20.70	1121010
DN 40	G 1 1/2	27.40	1121012
DN 50	G 2	47.30	1121016
DN 65	G 1 1/2	82.10	1121020 °
DN 80	G 3	102.00	1121024 °

**Strainer with external thread PN 25, mesh size 250 µm**

Screen insert made of stainless chromium nickel steel. Body made of bronze, cover made of brass. Flat sealing, without union nuts and seals.



Operating temperature	-10 up to 120 °C
-----------------------	------------------

Nominal size	Connection size	kvs	Item No.
DN 15	G 3/4	2.70	1141004
DN 20	G 1	4.80	1141006



**Strainer with flanges according to EN 1092-2 PN 16, mesh size 1 to 3 mm**

Body and cover: DN 15 to DN 300 made of cast iron, DN 350 to DN 600 made of nodular cast iron. Screen insert made of stainless steel, asbestos free seal.

Screen aperture width:

- DN 15 to DN 32: 1.0 mm
- DN 40 to DN 150: 1.5 mm
- DN 200 to DN 300: 2.0 mm
- DN 350 to DN 600: 3.0 mm

Operating temperature 0 up to 120 °C

Nominal size	kvs	Item No.
DN 15	7.00	1122045
DN 20	10.00	1122046
DN 25	15.00	1122047
DN 32	21.00	1122048
DN 40	39.00	1122049
DN 50	60.00	1122050
DN 65	105.00	1122051
DN 80	140.00	1122052
DN 100	225.00	1122053
DN 125	340.00	1122054
DN 150	405.00	1122055
DN 200	715.00	1122056
DN 250	1,355.00	1122057
DN 300	1,890.00	1122058
DN 350	2,970.00	1122059
DN 400	4,150.00	1122060
DN 450	5,540.00	1122061
DN 500	6,850.00	1122062
DN 600	9,280.00	1122063



# Strainers - Spare parts

## Screen insert, mesh size 600 µm

For strainers item no. 11200.., mesh size 0.6 mm, 100 meshes / cm<sup>2</sup>.



Nominal size	Item No.
DN 8 and DN 10	1123003
DN 15	1123004
DN 20	1123006
DN 25	1123008
DN 32	1123010
DN 40	1123012
DN 50	1123016
DN 65	1123020
DN 80	1123024



## Screen insert, mesh size 600 µm

For item no. 10680.., mesh size 0.6 mm, 100 meshes/ cm<sup>2</sup>.



Nominal size	Item No.
DN 15	1068804
DN 20	1068806
DN 25	1068808
DN 32	1068810

## Double screen insert, mesh size 250 µm

For strainers item no. 11210.. and 11410.., mesh size 0.25 mm, 600 Maschen / cm<sup>2</sup>.

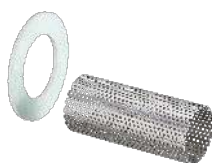


Nominal size	Item No.
DN 8 and DN 10	1123103
DN 15	1123104
DN 20	1123106
DN 25	1123108
DN 32	1123110
DN 40	1123112
DN 50	1123116
DN 65	1123120
DN 80	1123124

### Screen insert with cover flange sealing ring

For strainers item no. 11220.. Screen aperture width:

- DN 15 to DN 32: 1.0 mm
- DN 40 to DN 150: 1.5mm
- DN 200 to DN 300: 2.0 mm
- DN 350 to DN 600: 3.0 mm



Nominal size	Item No.
DN 15 and DN 20	1122085
DN 25	1122087
DN 32	1122088
DN 40	1122089
DN 50	1122090
DN 65	1122091
DN 80	1122092
DN 100	1122093
DN 125	1122094
DN 150	1122095
DN 200	1122096
DN 250	1122097
DN 300	1122098
DN 350	1122159
DN 400	1122160
DN 450	1122161
DN 500	1122162
DN 600	1122163



# Sludge separators



Sludge separators continuously remove smallest dirt particles without significantly increasing the flow resistance. A strong magnet retains magnetite. When the magnet is pulled out, the magnetic particles fall into the sump and can be rinsed out via a ball valve without

interrupting operation.

For central heating and cooling systems with closed circuits. For operation with non-aggressive, harmless fluids, e.g. water or water-glycol mixtures according to VDI 2035 / ÖNORM 5195.

Medium	Water	Draining	Yes
	Water-glycol mixture	Installation location	Return
Operating temperature	-10 up to 110 °C		



## Sludge separator with internal thread PN 16, for horizontal installation

Body material	Brass	Thermal insulation shell	Available as accessory
---------------	-------	--------------------------	------------------------

Nominal size	Connection size	kvs	Item No.
DN 20	Rp 3/4	10.70	1124006
DN 25	Rp 1	17.20	1124008
DN 32	Rp 1 1/4	31.80	1124010
DN 40	Rp 1 1/2	40.00	1124012



## Sludge separator with internal thread PN 16, for vertical installation

Body material	Brass	Thermal insulation shell	Available as accessory
---------------	-------	--------------------------	------------------------

Nominal size	Connection size	kvs	Item No.
DN 20	Rp 3/4	10.70	1124106
DN 25	Rp 1	17.20	1124108



**Sludge separator with flanges according to EN 1092-1 PN 16**

Body material Steel

Nominal size	kvs	Item No.
DN 50	72.00	1124550
DN 65	121.00	1124551
DN 80	158.00	1124552
DN 100	244.00	1124553
DN 125	351.00	1124554
DN 150	487.00	1124555
DN 200	780.00	1124556
DN 250	1,185.00	1124557
DN 300	1,696.00	1124558



# Sludge separators - Accessories



## Thermal insulation shell

Description	Item No.
DN 20 and DN 25, horizontal installation position	1124091
DN 32 and DN 40, horizontal installation position	1124092
DN 20 and DN 25, vertical installation position	1124191

# Air vents



## Air vent PN 10, with automatic shutoff device

For central heating and cooling systems with closed circuits. For operation with non-aggressive, harmless media, e.g. water or water-glycol mixtures with a max. glycol content of 30% according to VDI 2035 / ÖNORM 5195.

Medium	Water	Body material	Brass
	Water-glycol mixture		
Operating temperature	0 up to 110 °C		

Nominal size	Connection size	Item No.
DN 10	G 3/8	1088303
DN 15	G 1/2	1088304
DN 20	G 3/4	1088306



## Air vent with angle connection PN 10, nickel plated, without automatic shutoff device

Medium	Water	Body material	Brass
	Water-glycol mixture		
Operating temperature	0 up to 110 °C		

Nominal size	Connection size	Item No.
DN 15	G 1/2	1088404



## Precision air vent PN 10, with automatic shutoff device

With air admission barrier in the vent valve.

Medium	Water	Body material	Brass
	Water-glycol mixture		
Operating temperature	0 up to 110 °C		

Nominal size	Connection size	Item No.
DN 10	G 3/8	1088203









**Stations**  
**Storage cylinders**

**3**



## 3 Stations, Storage cylinders

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### 3.1 Stations for heating circuit and cooling circuit connection

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## Regumat S Stations for unmixed heating circuits



For the connection of an unmixed heating circuit. The stations include all components which are necessary for the connection of heat generators, pumps and pipework. The stations enable the heating circuit to be shut off on the supply and return sides. The check valve in the return pipe prevents incorrect circulation. Flow and return can be changed individually on site.

The stations consist of a shutoff device with two ball valves to shut off the heating circuit, two thermometers integrated in the handles to display the flow and return temperatures, a check valve to prevent incorrect circulation and a thermal insulation. Depending on the model, a pump ball valve is also included for easy pump replacement without draining system parts.

The Regumat stations are characterised by a time and space saving installation of the boilers to the pipework systems. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials. The stations can be modularly extended with various accessories.

Version	Unmixed heating circuit	Three-way mixing valve	No
Supply pipe	Right	Actuator	No
Optional supply pipe change	Yes	Safety temperature monitor	No
Thermal insulation	Yes	Max. operating temperature	95 °C
Shutoff	Yes	Max. operating pressure	10 bar
Check valve	Yes	Leak tested	Yes

### Regumat S-130 DN 20

With universal thermal insulation of modular construction. Commercially available pumps (DN 20, length 130 mm, G 1 external thread) can be installed.



Nominal size	DN 20	Centre distance	100 mm
Connection heating circuit	G 1 external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 1 external thread flat sealing	Wall bracket	Yes
Pump length	130 mm	Pump ball valve	No
Length	190 mm	Pump ball valve with drain/flush valve	No
Width	230 mm	Overflow insert	No
Height	360 mm	kvs	5.80
Length product assembly	315 mm		

Pump type	Item No.
without pump	1355051
Grundfos ALPHA 2.1 15-60	1355057
Wilo-Stratos PICO 15/1-6	1355059



### Regumat S-130 DN 25



With thermal insulation.

Commercially available pumps (DN 25, length 130 mm, G 1 1/2 external thread) can be installed.

Nominal size	DN 25	Centre distance	125 mm
Connection heating circuit	G 1 1/2 external thread flat sealing	Universal thermal insulation	No
Connection heat generator	G 1 1/2 external thread flat sealing	Wall bracket	No
Pump length	130 mm	Pump ball valve	No
Length	197 mm	Pump ball valve with drain/ flush valve	No
Width	248 mm	Overflow insert	Extendable
Height	364 mm	kvs	7.40
Length product assembly	311 mm		

#### Pump type

without pump

#### Item No.

1355071

### Regumat S-180 DN 25 with pump ball valve



With universal thermal insulation of modular construction.

Suitable for the installation of the following high-efficiency pumps:

Wilo-Yonos PARA  
Wilo-Stratos PICO 25/1-4/6  
Wilo-Stratos PICO plus  
Grundfos ALPHA 2.1 25-40/60  
Laing Ecocirc  
Biral AX 13-1

Nominal size	DN 25	Centre distance	125 mm
Connection heating circuit	G 1 1/2 external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 1 1/2 external thread flat sealing	Wall bracket	Yes
Pump length	180 mm	Pump ball valve	Yes
Length	213 mm	Pump ball valve with drain/ flush valve	No
Width	248 mm	Overflow insert	No
Height	465 mm	kvs	7.00
Length product assembly	411 mm		

#### Pump type

without pump

Wilo PARA 25-180/6-43/SC-6

Grundfos ALPHA 2.1 25-60

#### Item No.

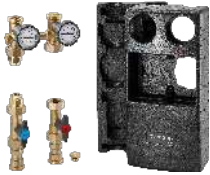
1357070

1357072

1357073

### Regumat S-180 DN 25 for heat meters with pump ball valve

With universal thermal insulation of modular construction. Suitable for the installation of a heat meter.



Nominal size	DN 25	Centre distance	125 mm
Connection heating circuit	G 1 ½ external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 1 ½ external thread flat sealing	Wall bracket	No
Pump length	180 mm	Pump ball valve	Yes
Length	200 mm	Pump ball valve with drain/ flush valve	No
Width	248 mm	Overflow insert	No
Height	513 mm	kvs	7.40
Length product assembly	460 mm		

#### Pump type

without pump

#### Item No.

1356050

### Regumat S-180 DN 25 with pump ball valve - compact design

With universal thermal insulation of modular construction.

Suitable for the installation of the following high-efficiency pumps:

Wilo-Yonos PARA  
Wilo-Stratos PICO 25/1-4/6  
Wilo-Stratos PICO plus  
Grundfos ALPHA 2.1 25-40/60  
Laing Ecocirc  
Biral AX 13-1



Nominal size	DN 25	Centre distance	125 mm
Connection heating circuit	G 1 ½ external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 1 ½ external thread flat sealing	Wall bracket	Yes
Pump length	180 mm	Pump ball valve	Yes
Length	213 mm	Pump ball valve with drain/ flush valve	No
Width	248 mm	Overflow insert	No
Height	393 mm	kvs	7.00
Length product assembly	339 mm		

#### Pump type

without pump

Grundfos ALPHA 2.1 25-60

Wilo-Stratos PICO 25/1-6

#### Item No.

1357020

1357027

1357029

**Regumat S-180 DN 32 with pump ball valve**

With universal thermal insulation of modular construction.

Commercially available pumps (DN 32, length 180 mm, G 2 external thread) can be installed.



Nominal size	DN 32	Centre distance	125 mm
Connection heating circuit	G 2 external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 2 external thread flat sealing	Wall bracket	Yes
Pump length	180 mm	Pump ball valve	Yes
Length	221 mm	Pump ball valve with drain/flush valve	No
Width	350 mm	Overflow insert	No
Height	530 mm	kvs	9.80
Length product assembly	445 mm		

**Pump type****Item No.**

without pump	1355075
Grundfos ALPHA 2.1 32-60	1355076
Wilo-Stratos PICO plus 30/1-6	1355079

**Regumat S-180 plus DN 32 with pump ball valve**

With universal thermal insulation of modular construction. Suitable for higher performance ranges.

Commercially available pumps (DN 32, length 180 mm, G 2 external thread) can be installed.



Nominal size	DN 32	Centre distance	125 mm
Connection heating circuit	G 2 external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 2 external thread flat sealing	Wall bracket	Yes
Pump length	180 mm	Pump ball valve	Yes
Length	221 mm	Pump ball valve with drain/flush valve	No
Width	428 mm	Overflow insert	No
Height	626 mm	kvs	25.00
Length product assembly	540.5 mm		

**Pump type****Item No.**

without pump	1355070
Grundfos MAGNA3 32-100	1355080
Wilo Stratos 30 1-10	1355081

### Regumat S-220 DN 40 with pump ball valve



With universal thermal insulation of modular construction.

Commercially available pumps (DN 40, length 220 mm, flanged connection PN 10) can be installed.

Nominal size	DN 40	Centre distance	180 mm
Connection heating circuit	G 2 internal thread	Universal thermal insulation	Yes
Connection heat generator	G 2 external thread flat sealing	Wall bracket	No
Pump length	220 mm	Pump ball valve	Yes
Length	340 mm	Pump ball valve with drain/flush valve	Yes
Width	428 mm	Overflow insert	No
Height	850 mm	kvs	29.30
Length product assembly	797 mm		

#### Pump type

#### Item No.

without pump	1358240
Wilo Stratos Maxo 40/0.5-8	1358251
Grundfos MAGNA3 40-100F	1358252

### Regumat S-280 DN 50 with pump ball valve



With universal thermal insulation of modular construction.

Suitable for the installation of the following high-efficiency pumps:

Wilo Stratos Maxo 50/0.5-12

Grundfos MAGNA3 50-120F

Nominal size	DN 50	Centre distance	180 mm
Connection heating circuit	G 2 internal thread	Universal thermal insulation	Yes
Connection heat generator	G 2 external thread flat sealing	Wall bracket	No
Pump length	280 mm	Pump ball valve	Yes
Length	340 mm	Pump ball valve with drain/flush valve	Yes
Width	428 mm	Overflow insert	No
Height	850 mm	kvs	29.30
Length product assembly	797 mm		

#### Pump type

#### Item No.

without pump	1358540
Wilo Stratos Maxo 50/0.5-12	1358551
Grundfos MAGNA3 50-120F	1358552



# Regumat M3 Stations for mixed heating circuits



For the connection of a mixed heating circuit. The stations include all components which are necessary for the connection of heat generators, pumps and pipework. The stations enable the heating circuit to be shut off on the supply and return sides. The check valve in the return pipe prevents incorrect circulation. Flow and return can be changed individually on site.

The stations consist of a shutoff device with two ball valves to shut off the heating circuit, two thermometers integrated in the handles to display the flow and return temperatures,

a check valve to prevent incorrect circulation, a three-way mixing valve with actuator and a thermal insulation. Depending on the model, a pump ball valve is also included for easy pump replacement without draining system parts.

The Regumat stations are characterised by a time and space saving installation of the boilers to the pipework systems. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials. The stations can be modularly extended with various accessories.

Version	Mixed heating circuit	Three-way mixing valve	Yes
Supply pipe	Right	Temperature control	Electronic
Optional supply pipe change	Yes	Safety temperature monitor	No
Thermal insulation	Yes	Max. operating temperature	95 °C
Shutoff	Yes	Max. operating pressure	10 bar
Check valve	Yes	Leak tested	Yes

## Regumat M3-130 DN 20

With universal thermal insulation of modular construction.

Commercially available pumps (DN 20, length 130 mm, G 1 external thread) can be installed.



Nominal size	DN 20	Centre distance	100 mm
Connection heating circuit	G 1 external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 1 external thread flat sealing	Wall bracket	Yes
Pump length	130 mm	Pump ball valve	No
Length	190 mm	Pump ball valve with drain/flush valve	No
Width	230 mm	Overflow insert	No
Height	360 mm	Actuator	Yes
Length product assembly	315 mm	kvs	5.10

### Pump type

Pump type	Item No.
without pump	1355251
Grundfos ALPHA 2.1 15-60	1355257
Wilo-Stratos PICO 15/1-6	1355259

### Regumat M3-130 DN 25



With thermal insulation.

Commercially available pumps (DN 25, length 130 mm, G 1 ½ external thread) can be installed.

Nominal size	DN 25	Centre distance	125 mm
Connection heating circuit	G 1 ½ external thread flat sealing	Universal thermal insulation	No
Connection heat generator	G 1 ½ external thread flat sealing	Wall bracket	No
Pump length	130 mm	Pump ball valve	No
Length	197 mm	Pump ball valve with drain/ flush valve	No
Width	248 mm	Overflow insert	Extendable
Height	364 mm	Actuator	Yes
Length product assembly	311 mm	kvs	4.30

#### Pump type

without pump

#### Item No.

1355271

### Regumat M3-180 DN 25 with pump ball valve



With universal thermal insulation of modular construction.

Suitable for the installation of the following high-efficiency pumps:

Wilo-Yonos PARA  
Wilo-Stratos PICO 25/1-4/6  
Wilo-Stratos PICO plus  
Grundfos ALPHA 2.1 25-40/60  
Laing Ecocirc  
Biral AX 13-1

Nominal size	DN 25	Centre distance	125 mm
Connection heating circuit	G 1 ½ external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 1 ½ external thread flat sealing	Wall bracket	Yes
Pump length	180 mm	Pump ball valve	Yes
Length	213 mm	Pump ball valve with drain/ flush valve	No
Width	248 mm	Overflow insert	No
Height	465 mm	kvs	5.50
Length product assembly	411 mm		

#### Pump type

without pump

without pump

Wilo PARA 25-180/6-43/SC-6

Grundfos ALPHA 2.1 25-60

#### Actuator

No

Yes

Yes

Yes

#### Item No.

1357265

1357270

1357272

1357273

**Regumat M3-180 DN 25 for heat meters with pump ball valve**

With universal thermal insulation of modular construction. Suitable for the installation of a heat meter.



Nominal size	DN 25	Centre distance	125 mm
Connection heating circuit	G 1 ½ external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 1 ½ external thread flat sealing	Wall bracket	No
Pump length	180 mm	Pump ball valve	Yes
Length	200 mm	Pump ball valve with drain/ flush valve	No
Width	248 mm	Overflow insert	No
Height	513 mm	Actuator	Yes
Length product assembly	460 mm	kvs	4.30

**Pump type**

without pump

**Item No.**

1356250

**Regumat M3-180 DN 25 - compact design**

With universal thermal insulation of modular construction.

Suitable for the installation of the following high-efficiency pumps:

Wilo-Yonos PARA  
Wilo-Stratos PICO 25/1-4/6  
Wilo-Stratos PICO plus  
Grundfos ALPHA 2.1 25-40/60  
Laing Ecocirc  
Biral AX 13-1



Nominal size	DN 25	Centre distance	125 mm
Connection heating circuit	G 1 ½ external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 1 ½ external thread flat sealing	Wall bracket	Yes
Pump length	180 mm	Pump ball valve	No
Length	213 mm	Pump ball valve with drain/ flush valve	No
Width	248 mm	Overflow insert	No
Height	393 mm	Actuator	Yes
Length product assembly	339 mm	kvs	5.50

**Pump type**

without pump

Grundfos ALPHA 2.1 25-60

Wilo-Stratos PICO 25/1-6

**Item No.**

1357220

1357227

1357229

### Regumat M3-180 DN 32 with pump ball valve

With universal thermal insulation of modular construction.  
 Commercially available pumps (DN 32, length 180 mm, G 2 external thread) can be installed.



Nominal size	DN 32	Centre distance	125 mm
Connection heating circuit	G 2 external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 2 external thread flat sealing	Wall bracket	Yes
Pump length	180 mm	Pump ball valve	Yes
Length	221 mm	Pump ball valve with drain/flush valve	No
Width	350 mm	Overflow insert	No
Height	530 mm	Actuator	Yes
Length product assembly	445 mm	kvs	8.10

#### Pump type

#### Item No.

without pump	1355275
Grundfos ALPHA 2.1 32-60	1355276
Wilo-Stratos PICO plus 30/1-6	1355279

### Regumat M3-180 plus DN 32 with pump ball valve

With universal thermal insulation of modular construction. Suitable for higher performance ranges.  
 Commercially available pumps (DN 32, length 180 mm, G 2 external thread) can be installed.



Nominal size	DN 32	Centre distance	125 mm
Connection heating circuit	G 2 external thread flat sealing	Universal thermal insulation	Yes
Connection heat generator	G 2 external thread flat sealing	Wall bracket	Yes
Pump length	180 mm	Pump ball valve	Yes
Length	221 mm	Pump ball valve with drain/flush valve	No
Width	428 mm	Overflow insert	No
Height	626 mm	Actuator	Yes
Length product assembly	540.5 mm	kvs	15.00

#### Pump type

#### Item No.

without pump	1355270
Grundfos MAGNA3 32-100	1355280
Wilo Stratos 30 1-10	1355281



**Regumat M3-220 DN 40 with pump ball valve**

With universal thermal insulation of modular construction.

Commercially available pumps (DN 40, length 220 mm, flanged connection PN 10) can be installed.

Nominal size	DN 40	Centre distance	180 mm
Connection heating circuit	G 2 internal thread	Universal thermal insulation	Yes
Connection heat generator	G 2 external thread flat sealing	Wall bracket	No
Pump length	220 mm	Pump ball valve	Yes
Length	340 mm	Pump ball valve with drain/flush valve	Yes
Width	428 mm	Overflow insert	No
Height	850 mm	Actuator	Yes
Length product assembly	797 mm	kvs	24.80

**Pump type****Item No.**

without pump	1358340
Wilo Stratos Maxo 40/0.5-8	1358351
Grundfos MAGNA3 40-100F	1358352

**Regumat M3-280 DN 50 with pump ball valve**

With universal thermal insulation of modular construction.

Suitable for the installation of the following high-efficiency pumps:

Wilo Stratos Maxo 50/0.5-12

Grundfos MAGNA3 50-120F

Nominal size	DN 50	Centre distance	180 mm
Connection heating circuit	G 2 internal thread	Universal thermal insulation	Yes
Connection heat generator	G 2 external thread flat sealing	Wall bracket	No
Pump length	280 mm	Pump ball valve	Yes
Length	340 mm	Pump ball valve with drain/flush valve	Yes
Width	428 mm	Overflow insert	No
Height	850 mm	Actuator	Yes
Length product assembly	797 mm	kvs	24.80

**Pump type****Item No.**

without pump	1358640
Wilo Stratos Maxo 50/0.5-12	1358651
Grundfos MAGNA3 50-120F	1358652

# Regumat S/M3 - Accessories and spare parts

## Wall bracket



### Description

- For Regumat DN 25 (manufactured from 2015), with fixing parts
- For Regumat DN 25 (manufactured until 2015), with fixing parts
- For Regumat DN 40/50, with fixing parts

### Item No.

- 1357097
- 1352096
- 1352098

## Heat meter installation set



### Description

- For Regumat S/M3-180 DN 25 with pump ball valve (manufactured from 2015)
- For Regumat S-180 DN 25 with pump ball valve (manufactured until 2015)
- For Regumat M3/M4-180 DN 25 with pump ball valve (manufactured until 2015)

### Item No.

- 1352250
- 1350443
- 1350444

## Plug



### Description

- For heat meter installation set (manufactured until 2015), M 10 x 1.0

### Item No.

- 1350490

## Adapter



### Description

- For heat meter installation set, M 10 x 1 external thread x M 10 x 1 internal thread x Ø 5.6
- For heat meter installation set, M 10 x 1 external thread x M 12 x 1.5 external thread x Ø 6.2

### Item No.

- 1352258
- 1352259

## Spacer



### Description

- For Regumat-180 DN 25 - compact design
- For Regumat S (manufactured from 2015), with union nuts and seals

### Item No.

- 1357085
- 1357086

### Check valve



#### Description

For Regumat S (manufactured since 2015), with union nuts and seals

#### Item No.

1357087

### Earthing clamp

For electrical connection of metallic pipework to the equipotential bonding.



#### Description

DN 20 - DN 32

DN 40 - DN 50

#### Item No.

1359995

1359996

### Heating circuit controller extension set



#### Description

For Regumat-180 DN 25 (manufactured from 2015), with Regtronic RH and controller bracket

#### Item No.

1357290

### Installation relay



#### Description

For the connection of high-performance pumps (> 1 A)

#### Item No.

1152089

### Replacement thermal insulation

With one-piece front insulation shell.



#### Description

For Regumat-130 DN 25

For Regumat-180 DN 25 with pump ball valve

For Regumat-180 DN 32

#### Item No.

1355090

1355091

1355092



#### Replacement universal thermal insulation

Description	Item No.
For Regumat-180 DN 25 with pump ball valve (manufactured from 2015), with expanded metal	1357096
For Regumat-180 DN 25 with pump ball valve (manufactured until 2015)	1356097
For Regumat-180 DN 25 without pump ball valve (manufactured until 2015)	1356098

#### Replacement shutoff device



Description	Item No.
For Regumat DN 25 (manufactured until 2015)	1353181

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#### Replacement ball valve

Nominal size	Item No.
DN 20	1351703
DN 25	1357090

#### Replacement overflow insert



Description	Item No.
For Regumat DN 25 (manufactured until 2015), preset to 200 mbar	1353390

#### Replacement thermometer



Description	Item No.
For Regumat and Regusol stations DN 20, blue	1351701
For Regumat and Regusol stations DN 20, red	1351702
For Regumat-130 DN 25 and Regumat DN 32/40/50, blue	1355093
For Regumat-130 DN 25 and Regumat DN 32/40/50, red	1355094
For Regumat-180 DN 25 (manufactured until 2015), blue	1356293
For Regumat-180 DN 25 (manufactured until 2015), red	1356294
For Regumat DN 25 (manufactured from 2015), DN 32 (manufactured from 2013) and DN 32 plus, blue	1357098
For Regumat DN 25 (manufactured from 2015), DN 32 (manufactured from 2013) and DN 32 plus, red	1357099



**Replacement flanged pipe**

With check valve.

Description	Item No.
For Regumat-180 DN 25 with pump ball valve (manufactured from 2015)	1357091
For Regumat-180 DN 25 with pump ball valve, length 279 mm	1352272
For Regumat-130 DN 25, length 212 mm	1352296
For Regumat-180 DN 25, length 180 mm	1352273

**Replacement pump ball valve**

Description	Item No.
For Regumat DN 25 with pump ball valve (manufactured from 2015)	1357089

**Replacement power supply cable**

Description	Item No.
For Grundfos ALPHA high-efficiency pump, with right-angle plug	1358150
For Wilo-Stratos PICO high-efficiency pump, with right-angle plug	1358170
For Wilo-Yonos PARA high-efficiency pump, with right-angle plug	1358171
For Wilo PARA high-efficiency pump, with right-angle plug	1358172

**Replacement three-way mixing valve**

Description	Item No.
For Regumat M3 DN 20	1351704
For Regumat M3 DN 25 (manufactured from 2015)	1357092
For Regumat M3 DN 25 (manufactured until 2015), without manually adjustable bypass	1350271
For Regumat M3 DN 25 (manufactured until 2015), with manually adjustable bypass	1350281
For Regumat M3 DN 32 (manufactured from 2013)	1355299

**Replacement setting group**

Description	Item No.
For manual adjustment of the three- and four-way mixing valve	1651500



#### Replacement sealing plug

##### Description

For three-way mixing valve with manually adjustable bypass, for closing the bypass channel

##### Item No.

1350292



#### Replacement regulating insert

##### Description

For three-way mixing valve DN 25 (manufactured from 2015)

##### Item No.

1357095

For three-way mixing valve DN 25 (manufactured until 2015), with seal set

1350285

For four-way mixing valve DN 25, for Lineg actuators (without adapter), with seal set

1350294

For four-way mixing valve DN 25, for ESBE actuators (without adapter), with seal set

1350295

#### Replacement seal set

##### Description

For three-way mixing valve DN 25 (manufactured from 2015)

##### Item No.

1357094

For three-way mixing valve DN 25 (manufactured until 2015)

1350289

For four-way mixing valve DN 25

1350299



#### Replacement adapter

##### Description

For Oventrop actuators (manufactured from 2015), black

##### Item No.

1357088

For Oventrop actuators (manufactured until 2015), black

1350296

For Oventrop actuators (manufactured until 2005), transparent

1350297

#### Replacement actuator



##### Description

For Regumat M3 DN 20/25/32, 24 V (0-10 V), running time 140 s, torque 5 Nm

##### Item No.

1350951

For Regumat M3 DN 20/25/32, 24 V (floating), running time 140 s, torque 5 Nm

1350952

For Regumat M3 DN 20/25/32, 230 V (floating), running time 140 s, torque 5 Nm

1350953

For Regumat M3 DN 20/25/32, 230 V (floating), running time 35 s, torque 5 Nm

1361098

For Regumat M3 DN 25 (manufactured from 2015), 230 V (floating), running time 140 s, torque 5 Nm, with mounting plate and adapter

1357093

For Regumat MF DN 25 and Regumat M3 DN 20/25/32, 230 V, running time 140 s, torque 5 Nm, with fixed flow temperature value control

1351055

For Regumat M3 DN 32 plus/40/50, 230 V (floating), running time 140 s, torque 15 Nm

1350956

For Regumat M3 DN 32 plus/40/50, 24 V (0-10 V), running time 140 s, torque 10 Nm

1350958



**Replacement mounting set**

For subsequent installation of the actuators in the Regumat DN 25 stations with pump ball valve and Regumat DN 25 - compact design.

Description	Item No.
For actuators without mounting plate, for installation in Regumat M3 DN 25 (manufactured from 2015)	1350290

## Regumat F Stations for fixed value control



For the connection of a thermally controlled heating circuit. The stations are used for flow temperature control and limitation in combined radiator/surface heating systems. They include all components which are necessary for the connection of heat generators, pumps and pipework. The stations enable the heating circuit to be shut off on the supply and return sides. The check valve in the return pipe prevents incorrect circulation.

The stations consist of a shutoff device with two ball valves to shut off the heating circuit, two thermometers integrated in the handles to display the flow and return temperatures, a

check valve to prevent incorrect circulation, a three-way mixing valve with temperature controller and a thermal insulation. Depending on the model, a pump ball valve is also included for easy pump replacement without draining system parts.

The Regumat stations are characterised by a time and space saving installation of the boilers to the pipework systems. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials. The stations can be modularly extended with various accessories.

Version	Fixed value control	Shutoff	Yes
Nominal size	DN 25	Pump ball valve with drain/flush valve	No
Connection heating circuit	G 1 1/2 external thread flat sealing	Overflow insert	No
Connection heat generator	G 1 1/2 external thread flat sealing	Check valve	Yes
Supply pipe	Right	Three-way mixing valve	Yes
Width	248 mm	Safety temperature monitor	Yes
Centre distance	125 mm	Max. operating pressure	10 bar
Thermal insulation	Yes	Leak tested	Yes

### Regumat F-130 DN 25

With thermal insulation.



Pump length	130 mm	Wall bracket	No
Optional supply pipe change	No	Pump ball valve	No
Length	197 mm	Temperature control	Thermostatic
Height	364 mm	Setting range	20 up to 50 °C
Length product assembly	312 mm	kvs	2.20
Actuator	No	Max. operating temperature	85 °C
Universal thermal insulation	No		

#### Pump type

without pump

#### Item No.

1354171



### Regumat F-180 DN 25 with pump ball valve

With universal thermal insulation of modular construction.



Pump length	180 mm	Wall bracket	No
Optional supply pipe change	No	Pump ball valve	Yes
Length	200 mm	Temperature control	Thermostatic
Height	512 mm	Setting range	20 up to 50 °C
Length product assembly	460 mm	kvs	2.20
Actuator	No	Max. operating temperature	95 °C
Universal thermal insulation	Yes		

#### Pump type

#### Item No.

without pump	1354270
Grundfos ALPHA 2.1 25-60	1354274
Wilo-Stratos PICO 25/1-6	1354276

### Regumat F-180 DN 25 with pump ball valve and without temperature controller

With universal thermal insulation of modular construction.



Pump length	180 mm	Universal thermal insulation	Yes
Optional supply pipe change	No	Wall bracket	No
Length	200 mm	Pump ball valve	Yes
Height	512 mm	Temperature control	Without
Length product assembly	460 mm	kvs	2.20
Actuator	No	Max. operating temperature	95 °C

#### Pump type

#### Item No.

without pump	1354272
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### Regumat F-180 DN 25

With universal thermal insulation of modular construction.



Pump length	180 mm	Wall bracket	No
Optional supply pipe change	No	Pump ball valve	No
Length	200 mm	Temperature control	Thermostatic
Height	512 mm	Setting range	20 up to 50 °C
Length product assembly	361 mm	kvs	2.20
Actuator	No	Max. operating temperature	95 °C
Universal thermal insulation	Yes		

#### Pump type

#### Item No.

without pump	1354070
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### Regumat FR-180 DN 25



With universal thermal insulation of modular construction.  
 Suitable for open vented surface heating systems.

Pump length	180 mm	Wall bracket	No
Optional supply pipe change	No	Pump ball valve	No
Length	200 mm	Temperature control	Thermostatic
Height	414 mm	Setting range	20 up to 50 °C
Length product assembly	361 mm	kvs	2.20
Actuator	No	Max. operating temperature	95 °C
Universal thermal insulation	Yes		

#### Pump type

#### Item No.

Grundfos ALPHA 2.1 25-60N	1354087
Wilo-Stratos PICO plus 25/1-6 N	1354097

### Regumat MF-180 DN 25 with pump ball valve and electronic fixed flow temperature value control



With universal thermal insulation of modular construction.  
 Suitable for the installation of the following high-efficiency pumps:

Wilo-Yonos PARA  
 Wilo-Stratos PICO 25/1-4/6  
 Wilo-Stratos PICO plus  
 Grundfos ALPHA 2.1 25-40/60  
 Laing Ecocirc  
 Biral AX 13-1

Pump length	180 mm	Wall bracket	Yes
Optional supply pipe change	Yes	Pump ball valve	Yes
Length	213 mm	Temperature control	Electronic
Height	465 mm	Setting range	0 up to 95 °C
Length product assembly	411 mm	kvs	5.50
Actuator	Yes	Max. operating temperature	95 °C
Universal thermal insulation	Yes		

#### Pump type

#### Item No.

without pump	1354260
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# Regumat F - Accessories and spare parts

## Wall bracket



### Description

For Regumat DN 25 (manufactured until 2015), with fixing parts

### Item No.

1352096

## Earthing clamp

For electrical connection of metallic pipework to the equipotential bonding.



### Description

DN 20 - DN 32

### Item No.

1359995



## Replacement thermal insulation

With one-piece front insulation shell.



### Description

For Regumat-130 DN 25

For Regumat-180 DN 25 with pump ball valve

### Item No.

1355090

1355091

## Replacement universal thermal insulation



### Description

For Regumat-180 DN 25 with pump ball valve (manufactured until 2015)

For Regumat-180 DN 25 without pump ball valve (manufactured until 2015)

### Item No.

1356097

1356098

#### Replacement shutoff device



Description	Item No.
For Regumat DN 25 (manufactured until 2015)	1353181

#### Replacement thermometer



Description	Item No.
For Regumat-130 DN 25 and Regumat DN 32/40/50, blue	1355093
For Regumat-130 DN 25 and Regumat DN 32/40/50, red	1355094
For Regumat-180 DN 25 (manufactured until 2015), blue	1356293
For Regumat-180 DN 25 (manufactured until 2015), red	1356294

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#### Replacement flanged pipe

With check valve.

Description	Item No.
For Regumat-180 DN 25 with pump ball valve, length 279 mm	1352272
For Regumat-180 DN 25, length 180 mm	1352273

#### Replacement power supply cable



Description	Item No.
For Grundfos ALPHA high-efficiency pump, with right-angle plug	1358150
For Wilo-Stratos PICO high-efficiency pump, with right-angle plug	1358170
For Wilo PARA high-efficiency pump, with right-angle plug	1358172

#### Replacement three-way mixing valve



Description	Item No.
For Regumat F, without temperature controller	4723050



### Replacement temperature controller

With contact sensor and heat conducting base.



Description	Item No.
Capillary tube length 2 m, control range 20 - 50 °C	1142861
Capillary tube length 2 m, control range 30 - 60 °C	1142862
Capillary tube length 2 m, control range 40 - 70 °C	1142863
Capillary tube length 2 m, control range 50 - 80 °C	1142864

### Replacement actuator



Description	Item No.
For Regumat MF DN 25 and Regumat M3 DN 20/25/32, 230 V, running time 140 s, torque 5 Nm, with fixed flow temperature value control	1351055



### 3.1 Stations for heating circuit and cooling circuit connection

#### **Regumat Stations for solid fuel boilers** **404**

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# Regumat RTA Stations for return temperature increase



For the connection of a solid fuel boiler. The return temperature to the solid fuel boiler is at least approx. 55 °C and thus above the dew point. It prevents condensate tar formation. During start-up mode the boiler circuit is short circuited. Hot supply water is fed to the return flow via the bypass. When the return temperature of 55 °C is reached, the mixing valve opens.

The stations consist of a shutoff device with two ball valves, two thermometers integrated in the handles to display the flow and return

temperatures, a check valve to prevent incorrect circulation, a three-way mixing valve with temperature controller and a thermal insulation.

The Regumat stations are characterised by a time and space saving installation of the boilers to the pipework systems. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials. The stations can be modularly extended with various accessories.

Version	Return temperature increase	Overflow insert	No
Optional supply pipe change	No	Check valve	Yes
Width	248 mm	Three-way mixing valve	Yes
Centre distance	125 mm	Safety temperature monitor	No
Thermal insulation	Yes	Max. operating pressure	10 bar
Shutoff	Yes	Leak tested	Yes
Pump ball valve with drain/flush valve	No		

## Regumat RTA-130 VR DN 25 with supply on the right hand side

With thermal insulation.



Nominal size	DN 25	Universal thermal insulation	No
Connection heating circuit	G 1 ½ external thread flat sealing	Wall bracket	No
Connection heat generator	G 1 ½ external thread flat sealing	Pump ball valve	No
Pump length	130 mm	Actuator	No
Supply pipe	Right	Temperature control	Thermostatic
Length	364 mm	Setting range	40 up to 70 °C
Height	197 mm	kvs	3.90
Length product assembly	321 mm	Max. operating temperature	85 °C

### Pump type

Wilo PARA 25-130/6-43/SC-9

### Item No.

1354795



### Regumat RTA-130 VL DN 25 with supply on the left hand side

With thermal insulation.



Nominal size	DN 25	Universal thermal insulation	No
Connection heating circuit	G 1 1/2 external thread flat sealing	Wall bracket	No
Connection heat generator	G 1 1/2 external thread flat sealing	Pump ball valve	No
Pump length	130 mm	Actuator	No
Supply pipe	Left	Temperature control	Thermostatic
Length	197 mm	Setting range	40 up to 70 °C
Height	364 mm	kvs	3.90
Length product assembly	321 mm	Max. operating temperature	85 °C

#### Pump type

Wilco PARA 25-130/6-43/SC-3

#### Item No.

1354798

### Regumat RTA-130 TOP DN 25 with connection from the top

With thermal insulation.



Nominal size	DN 25	Universal thermal insulation	No
Connection heating circuit	G 1 1/2 external thread flat sealing	Wall bracket	No
Connection heat generator	G 1 1/2 external thread flat sealing	Pump ball valve	No
Pump length	130 mm	Actuator	No
Supply pipe	Right	Temperature control	Thermostatic
Length	197 mm	Setting range	40 up to 70 °C
Height	364 mm	kvs	3.90
Length product assembly	321 mm	Max. operating temperature	85 °C

#### Pump type

Wilco PARA 25-130/6-43/SC-3

#### Item No.

1354783

### Regumat RTA-180 DN 25

With thermal insulation.



Nominal size	DN 25	Universal thermal insulation	No
Connection heating circuit	G 1 1/2 external thread flat sealing	Wall bracket	No
Connection heat generator	G 1 1/2 external thread flat sealing	Pump ball valve	No
Pump length	180 mm	Actuator	No
Supply pipe	Right	Temperature control	Thermostatic
Length	211 mm	Setting range	40 up to 70 °C
Height	513 mm	kvs	3.90
Length product assembly	460 mm	Max. operating temperature	85 °C

#### Pump type

without pump

Wilco PARA 25-180/6-43/SC-6

#### Item No.

1354692

1354691



**Regumat RTA-180 DN 25**

With universal thermal insulation of modular construction.



Nominal size	DN 25	Universal thermal insulation	Yes
Connection heating circuit	G 1 1/2 external thread flat sealing	Wall bracket	No
Connection heat generator	G 1 1/2 external thread flat sealing	Pump ball valve	No
Pump length	180 mm	Actuator	No
Supply pipe	Right	Temperature control	Thermostatic
Length	200 mm	Setting range	40 up to 70 °C
Height	414 mm	kvs	3.90
Length product assembly	371 mm	Max. operating temperature	95 °C

**Pump type****Item No.**

without pump

1354580

Wilo PARA 25-180/6-43/SC-6

1354587

**Regumat RTAF-180 DN 25 with pump ball valve and electronic RTA fixed value control (return temperature increase)**

With universal thermal insulation of modular construction.



Nominal size	DN 25	Universal thermal insulation	Yes
Connection heating circuit	G 1 1/2 external thread flat sealing	Wall bracket	Yes
Connection heat generator	G 1 1/2 external thread flat sealing	Pump ball valve	Yes
Pump length	180 mm	Actuator	Yes
Supply pipe	Right	Temperature control	Electronic
Length	465 mm	Setting range	0 up to 95 °C
Height	213 mm	kvs	5.50
Length product assembly	411 mm	Max. operating temperature	95 °C

**Pump type****Item No.**

without pump

1354560

**Regumat RTA-180 DN 32**

With thermal insulation.



Nominal size	DN 32	Universal thermal insulation	No
Connection heating circuit	G 2 external thread flat sealing	Wall bracket	No
Connection heat generator	G 2 external thread flat sealing	Pump ball valve	No
Pump length	180 mm	Actuator	No
Supply pipe	Right	Temperature control	Thermostatic
Length	207 mm	Setting range	40 up to 70 °C
Height	471 mm	kvs	5.30
Length product assembly	419 mm	Max. operating temperature	85 °C

**Pump type****Item No.**

Wilo PARA 30-180/6-43/SC-9

1354571

# Regumat RTA Accessories and spare parts

## Wall bracket



### Description

For Regumat DN 25 (manufactured until 2015), with fixing parts

### Item No.

1352096

## Earthing clamp

For electrical connection of metallic pipework to the equipotential bonding.



### Description

DN 20 - DN 32

### Item No.

1359995

## Thermal drain safety device



### Description

For temperature protection of solid fuel boilers, DN 20

### Item No.

1354699

## Replacement mixing valve group



### Description

For Regumat RTA DN 25

### Item No.

1350260

### Replacement thermometer



Description	Item No.
For Regumat-130 DN 25 and Regumat DN 32/40/50, blue	1355093
For Regumat-130 DN 25 and Regumat DN 32/40/50, red	1355094
For Regumat-180 DN 25 (manufactured until 2015), blue	1356293
For Regumat-180 DN 25 (manufactured until 2015), red	1356294

### Replacement power supply cable



Description	Item No.
For Grundfos ALPHA high-efficiency pump, with right-angle plug	1358150
For Wilo PARA high-efficiency pump, with right-angle plug	1358172



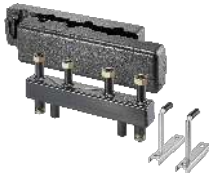
### 3.1 Stations for heating circuit and cooling circuit connection

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# Regumat Distributors



## Distributor for Regumat DN 20

Connection heating circuit	G 1 union nut, flat sealing	Wall bracket	Yes
Connection heat generator	G 1 external thread flat sealing	Material wall bracket	Steel, galvanised
Centre distance	100 mm	Max. flow rate	2.5 m³/h
Body material	Steel	Recommended range of application (ΔT = 20 K)	60 kW
Thermal insulation	Yes	Max. operating temperature	110 °C
Material thermal insulation	Expanded polypropylene (EPP)	Max. operating pressure	4 bar

	Heating circuits	Item No.
	2	1351482
	3	1351483



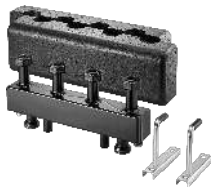
## Distributor for Regumat DN 25

Wall bracket available as accessory.

Connection heating circuit	G 1 ½ union nut, flat sealing	Wall bracket	No
Connection heat generator	G 1 ½ external thread flat sealing	Max. flow rate	4 m³/h
Centre distance	125 mm	Recommended range of application (ΔT = 20 K)	95 kW
Body material	Bronze	Max. operating temperature	110 °C
Thermal insulation	Yes	Max. operating pressure	4 bar
Material thermal insulation	Expanded polypropylene (EPP)		

	Heating circuits	Item No.
	2	1351571 °

### Distributor for Regumat DN 25



Connection heating circuit	G 1 ½ union nut, flat sealing
Connection heat generator	G 1 ½ external thread flat sealing
Centre distance	125 mm
Body material	Steel
Thermal insulation	Yes
Material thermal insulation	Expanded polypropylene (EPP)

Wall bracket	Yes
Material wall bracket	Steel, galvanised
Max. flow rate	4 m³/h
Recommended range of application (ΔT = 20 K)	95 kW
Max. operating temperature	110 °C
Max. operating pressure	4 bar

Heating circuits	Item No.
2	1351582
3	1351583
4	1351584
5	1351585
6	1351586
7	1351587
8	1351588

### Compact distributor for Regumat DN 25



Connection heating circuit	G 1 ½ union nut, flat sealing
Connection heat generator	G 1 ½ external thread flat sealing
Centre distance	125 mm
Body material	Steel
Thermal insulation	Yes
Material thermal insulation	Expanded polypropylene (EPP)

Wall bracket	Yes
Material wall bracket	Steel, galvanised
Max. flow rate	4 m³/h
Recommended range of application (ΔT = 20 K)	95 kW
Max. operating temperature	110 °C
Max. operating pressure	4 bar

Heating circuits	Item No.
3	1351783
5	1351785

**Modular distributor for Regumat DN 25**

Modular heating distribution system.  
Extendable to up to six heating circuits by means of the extension module.  
Wall bracket available as accessory.



Connection heating circuit	G 1 1/2 union nut, flat sealing	Wall bracket	No
Connection heat generator	G 1 1/2 external thread flat sealing	Max. flow rate	4 m³/h
Centre distance	125 mm	Recommended range of application (ΔT = 20 K)	95 kW
Body material	Brass	Max. operating temperature	110 °C
Thermal insulation	Yes	Max. operating pressure	4 bar
Material thermal insulation	Expanded polypropylene (EPP)		

Heating circuits	Item No.
2	1351471
3	1351472

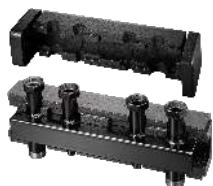
**Extension module for Regumat DN 25**

In combination with the modular distributor for Regumat DN 25 for extension to up to six heating circuits.  
Wall bracket available as accessory.



Connection heating circuit	G 1 1/2 union nut, flat sealing	Wall bracket	No
Connection heat generator	G 1 1/2 external thread flat sealing	Max. flow rate	4 m³/h
Centre distance	125 mm	Recommended range of application (ΔT = 20 K)	95 kW
Body material	Brass	Max. operating temperature	110 °C
Thermal insulation	Yes	Max. operating pressure	4 bar
Material thermal insulation	Expanded polypropylene (EPP)		

Heating circuits	Item No.
1	1351470

**Distributor for Regumat DN 32 with pump ball valve**

Connection heating circuit	G 2 union nut, flat sealing	Wall bracket	Yes
Connection heat generator	G 2 external thread flat sealing	Material wall bracket	Steel, galvanised
Centre distance	125 mm	Max. operating temperature	110 °C
Body material	Steel	Max. operating pressure	4 bar
Thermal insulation	Yes		

Heating circuits	Material thermal insulation	Max. flow rate (m³/h)	Recommended range of application (ΔT = 20 K) (kW)	Item No.
2	Expanded polypropylene (EPP)	9	210	1351672
3	Expanded polypropylene (EPP)	9	210	1351673
4	PU rigid foam	12	280	1351674
5	PU rigid foam	12	280	1351675

### Distributor for Regumat plus DN 32 with pump ball valve



Connection heating circuit	G 2 union nut, flat sealing
Connection heat generator	G 2 external thread flat sealing
Centre distance	125 mm
Body material	Steel
Thermal insulation	Yes

Material thermal insulation	PU rigid foam
Wall bracket	No
Max. operating temperature	110 °C
Max. operating pressure	4 bar

Heating circuits	Max. flow rate (m³/h)	Recommended range of application (ΔT = 20 K) (kW)	Item No.
2	12	280	1351662
3	12	280	1351663
4	26	600	1351664
5	26	600	1351665

### Distributor for Regumat DN 40/50



Connection heating circuit	G 2 union nut, flat sealing
Connection heat generator	Flanged connection DN 80
Centre distance	180 mm
Body material	Steel
Thermal insulation	Yes
Material thermal insulation	PU rigid foam

Wall bracket	No
Max. flow rate	26 m³/h
Recommended range of application (ΔT = 20 K)	600 kW
Max. operating temperature	110 °C
Max. operating pressure	6 bar

Heating circuits	Item No.
2	1351692
3	1351693
4	1351694



# HydroFixx Hydraulic separator / distributor combination

## HydroFixx for Regumat DN 20



Connection heating circuit	G 1 union nut, flat sealing	Wall bracket	Yes
Connection heat generator	G 1 external thread flat sealing	Material wall bracket	Steel, galvanised
Centre distance	100 mm	Max. flow rate	2.5 m³/h
Body material	Steel	Recommended range of application (ΔT = 20 K)	60 kW
Thermal insulation	Yes	Max. operating temperature	110 °C
Material thermal insulation	PU rigid foam	Max. operating pressure	4 bar

Heating circuits	Item No.
2	1351568
3	1351569

## HydroFixx for Regumat DN 25



Connection heating circuit	G 1 ½ union nut, flat sealing	Wall bracket	Yes
Connection heat generator	G 1 ½ external thread flat sealing	Material wall bracket	Steel, galvanised
Centre distance	125 mm	Max. flow rate	4 m³/h
Body material	Steel	Recommended range of application (ΔT = 20 K)	95 kW
Thermal insulation	Yes	Max. operating temperature	110 °C
Material thermal insulation	PU rigid foam	Max. operating pressure	4 bar

Heating circuits	Item No.
2	1351698
3	1351699

## MonoFixx for Regumat DN 25



Connection heating circuit	G 1 ½ union nut, flat sealing	Wall bracket	Yes
Connection heat generator	G 1 ½ external thread flat sealing	Material wall bracket	Steel, galvanised
Centre distance	125 mm	Max. flow rate	4 m³/h
Body material	Steel	Recommended range of application (ΔT = 20 K)	95 kW
Thermal insulation	Yes	Max. operating temperature	110 °C
Material thermal insulation	Expanded polypropylene (EPP)	Max. operating pressure	4 bar

Heating circuits	Item No.
1	1351589

### Hydraulic separator DN 25



Connection heating circuit	G 1 1/2 external thread flat sealing
Connection heat generator	G 1 1/2 external thread flat sealing
Centre distance	280 mm
Body material	Steel
Thermal insulation	Yes
Material thermal insulation	Expanded polypropylene (EPP)

Wall bracket	Yes
Material wall bracket	Steel, galvanised
Max. flow rate	4 m³/h
Recommended range of application (ΔT = 20 K)	95 kW
Max. operating temperature	110 °C
Max. operating pressure	4 bar

#### Heating circuits Item No.

1	1351590
---	---------

### HydroFixx for Regumat DN 32 with pump ball valve



Connection heating circuit	G 2 union nut, flat sealing
Connection heat generator	G 2 external thread flat sealing
Centre distance	125 mm
Body material	Steel
Thermal insulation	Yes
Material thermal insulation	PU rigid foam

Wall bracket	Yes
Material wall bracket	Steel, galvanised
Max. flow rate	9 m³/h
Recommended range of application (ΔT = 20 K)	210 kW
Max. operating temperature	110 °C
Max. operating pressure	4 bar

#### Heating circuits Item No.

2	1351758
---	---------

3	1351759
---	---------

### HydroFixx for Regumat plus DN 32 with pump ball valve



Connection heating circuit	G 2 union nut, flat sealing
Connection heat generator	G 2 external thread flat sealing
Centre distance	125 mm
Body material	Steel
Thermal insulation	Yes

Material thermal insulation	PU rigid foam
Wall bracket	No
Max. operating temperature	110 °C
Max. operating pressure	4 bar

Heating circuits	Max. flow rate (m³/h)	Recommended range of application (ΔT = 20 K) (kW)	Item No.
2	12	280	1351678
3	26	600	1351679

### Hydraulic separator DN 32



Connection heating circuit	G 2 external thread flat sealing	Wall bracket	Yes
Connection heat generator	G 2 external thread flat sealing	Material wall bracket	Steel, galvanised
Centre distance	550 mm	Max. flow rate	8 m³/h
Body material	Steel	Recommended range of application (ΔT = 20 K)	190 kW
Thermal insulation	Yes	Max. operating temperature	110 °C
Material thermal insulation	Expanded polypropylene (EPP)	Max. operating pressure	4 bar

Heating circuits	Item No.
1	1351591

### HydroFixx for Regumat DN 40 / 50



Connection heating circuit	G 2 union nut, flat sealing	Wall bracket	No
Connection heat generator	Flanged connection DN 80	Max. flow rate	26 m³/h
Centre distance	180 mm	Recommended range of application (ΔT = 20 K)	600 kW
Body material	Steel	Max. operating temperature	110 °C
Thermal insulation	Yes	Max. operating pressure	6 bar
Material thermal insulation	PU rigid foam		

Heating circuits	Item No.
2	1351778
3	1351779

# Distributors / Hydraulic separators Accessories and spare parts

## Wall bracket



### Description

For distributor for Regumat DN 25, bronze, with fixing material

### Item No.

1351592

For modular distributor for Regumat DN 25, brass, with fixing material

1351593

## Stand bracket



### Description

For distributors/HydroFixx DN 32 plus/40/50, with fixing material

### Item No.

1351697

## Wall bracket



### Description

For distributors/HydroFixx DN 32 plus/40/50, with fixing material

### Item No.

1351695

## Sealing plug set



### Description

For closing a pair of heating circuits, 2-fold, DN 25

### Item No.

1351770

For closing a pair of heating circuits, 2-fold, DN 32

1351771



### Connection fitting



Description	Item No.
For Regumat RTA below the distributor, 2 x G 1½ internal thread, 2-fold	1351655

### Transition piece



Description	Item No.
From distributor DN 25 to Regumat DN 20, 2-fold	1351654
From distributor DN 25 to Regumat DN 32 without pump ball valve	1351651
From distributor DN 32 to Regumat DN 25	1351652
From distributor DN 40/50 to Regumat DN 25, 2-fold	1351657
From distributor DN 40/50 to Regumat DN 32, 2-fold	1351658

# Regumat Heat exchanger

## Regumat Heat exchanger with connection fitting



Modular extension for Regumat DN 25.

For extending existing heating circuits by a heat exchanger and e.g. a fixed value control station, for open vented surface heating systems.

Description	Item No.
14 plates up to 14 kW (primary circuit 70/50°C, secondary circuit 40/50°C)	1351596
30 plates up to 28 kW (primary circuit 70/50°C, secondary circuit 40/50°C)	1351696

## Safety group set



Description	Item No.
For Regumat heat exchanger, for the protection of pressurised systems	1351598

## Connection piece set



Description	Item No.
For Regumat heat exchanger, for connecting a Regumat station to the primary side	1351597



## Regumat Heat exchanger without connection fitting

Description	Item No.
20 plates up to 40 kW (primary circuit 80/60°C, secondary circuit 50/70°C)	1351790
30 plates up to 55 kW (primary circuit 80/60°C, secondary circuit 50/70°C)	1351791
40 plates up to 70 kW (primary circuit 80/60°C, secondary circuit 50/70°C)	1351792
50 plates up to 85 kW (primary circuit 80/60°C, secondary circuit 50/70°C)	1351793

## Thermal insulation



## Description

For Regumat heat exchanger item no. 1351790/1351791, made of expanded polypropylene

For Regumat heat exchanger item no. 1351792/1351793, made of expanded polypropylene

## Item No.

1359591

1359592



## Example 1

## Item no.

**A Regumat FR-180 DN 25**with pump Grundfos  
ALPHA 2.1 25-60 N

1354087

with pump Wilo-Stratos  
PICO 25/1-6 RG

1354097

**B Regumat Heat exchanger**  
with 14 plates up to 14 kW

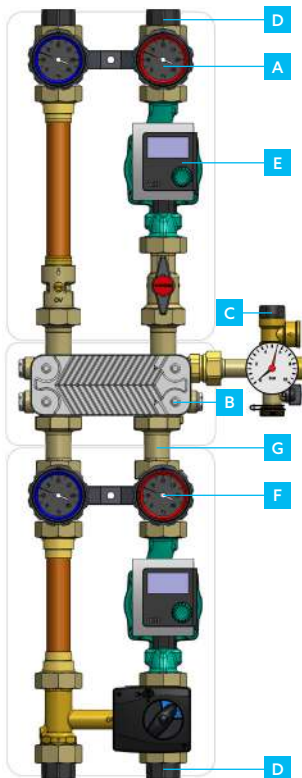
1351596

**C Safety group set**

1351598

**D Tailpipe set**

13504..

For extending existing heating  
circuits by a heat exchanger and  
a fixed value control station, for  
open vented heating systems.**Installation dimensions:**  
H = 640 mm, W = 250 mm

## Example 2

## Item no.

**A Regumat S-180 DN 25**with pump Wilo-Stratos  
PICO 25/1-6 RG

1357029

**B Regumat Heat exchanger**  
with 30 plates up to 28 kW

1351696

**C Safety group set**

1351598

**D Tailpipe set**

13504..

**E High-efficiency pump with**  
stainless steel / bronze housing  
180 mm Wilo-Stratos PICO 25/1-6  
RG

1357160

**F Regumat M3-180 DN 25**with pump Wilo-Stratos  
PICO 25/1-6 RG

1357229

**G Connection piece set**

1351597

**Please note:**When swapping the supply,  
both pumps must always be  
changed.Delivered with supply on the  
right hand side.**Installation dimensions:**  
H = 960 mm, W = 250 mm

# Regumat Tailpipe sets

## Regumat Tailpipe set DN 25

For connection to Regumat DN 25.



### Description

Threaded tailpipe set Rp 1, G 1 1/2 union nut, 2-fold

Union nut G 1 1/2, 2-fold

### Item No.

1350457

1350450

## Regumat Tailpipe set DN 32

For connection to Regumat DN 32.



### Description

Threaded tailpipe set Rp 1 1/4, G 2 union nut, 2-fold

Union nut G 2, 2-fold

Coupling G 2 union nut (2 x), for connection to Regumat DN 32

### Item No.

1350476

1350470

1352088

## Regumat Tailpipe set DN 40/50

For connection to Regumat DN 40/50.



### Description

Coupling R 2 external thread x G 2 union nut (1 x), for connection to Regumat DN 40 / 50

### Item No.

1352089



# Regtronic Electronic controllers



## Regtronic RH Weather-compensated heating circuit controller for mixed/unmixed heating circuit

Compatible with data logger CS-BS-1 as well as Regtronic KM-TCP communication module. Extendable by a maximum of 5 extension modules.

Application	Heating circuit control	Solid-state relays	3
	Heat generator activation	Electromechanical relays	2
	Solid fuel boiler	Potential-free relays	1
	Service water heating	PWM*	2
Operating voltage	230 V AC	PWM switchable 0 - 10 V*	Yes
Sensor inputs	8	Heat meter	5
Further inputs	Pulse inputs V40	Product compatible to	Regtronic EM
	Grundfos Direct Sensor		

### Scope of delivery

	Item No.
1 x Remote control incl. room temperature sensor	
1 x Outdoor sensor	
1 x Pipe contact sensor	1152080
1 x Storage cylinder sensor	
1 x Outdoor sensor	
1 x Pipe contact sensor	
2 x Storage cylinder sensor	1152083

### ErP classification Regtronic RH heating circuit controller

Item no.	Controller	Required accessories	Boiler control			
			Modulating (0-10 V)	On/Off	ErP %	Class
1152083	Regtronic RH	Adapter cable 1152086	●		2.0	II
1152083		—		●	1.5	III
1152080	Regtronic RH incl. remote control with room temperature sensor	Adapter cable 1152086	●		4.0	VI
1152080		—		●	3.5	VII
1152080		2x Room temperature sensor 1152095 Adapter cable 1152086	●		5.0	VIII



## Adapter cable

### Description

For signal transmission from the heating circuit controller to a modulating heat generator with 0 - 10 V interface

### Item No.

1152086

Heating circuit controller extension set



Description	Item No.
For Regumat-180 DN 25 (manufactured from 2015), with Regtronic RH and controller bracket	1357290

Regtronic EM Extension module for the control of further mixed/ unmixed heating circuits



For extending the Regtronic controller by 6 sensor inputs and 5 relay outputs.			
Operating voltage	230 V AC	Product compatible to	Regtronic RH
Sensor inputs	6		Regtronic RM
Solid-state relays	4		Regtronic RS
Potential-free relays	1		

Scope of delivery	Item No.
1 x Pipe contact sensor	1152098



3.1



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- 3.1



**Regtronic RM Multifunction controller for the control of weather-compensated mixed/unmixed heating circuits as well as solar plants**

Compatible with data logger CS-BS-1.

Application	Heating circuit control	Solid-state relays	13
	Heat generator activation	Potential-free relays	1
	Solid fuel boiler, solar	PWM*	4
	Service water heating	PWM switchable 0 - 10 V*	Yes
	Storage cylinder management	Heat meter	7
Operating voltage	230 V AC	Product compatible to	Regtronic EM
Sensor inputs	12		
Further inputs	Pulse inputs V40 Grundfos Direct Sensor FlowRotor		

**Scope of delivery**

**Item No.**

6 x Storage cylinder sensor  
2 x Collector sensor

1369555

**ErP classification Regtronic RM**

Item no.	Controller	Required accessories	Boiler control		ErP %	Class
			Modulating (0-10 V)	On/Off		
1369555	Regtronic RM	1 x Outside temperature sensor 1152099	●		2.0	II
		1 x Outside temperature sensor 1152099		●	1.5	III
		1 x Room temperature sensor 1152095	●		4.0	VI
		1 x Outside temperature sensor 1152099				
		1 x Room temperature sensor 1152095		●	3.5	VII
		1 x Outside temperature sensor 1152099				
		3x Room temperature sensor 1152095	●		5.0	VIII

**Regtronic KM-IP Communication module BACnet IP or Modbus TCP**

For integration of a controller into a building automation system via Modbus TCP.



**Description**

**Item No.**

Wall mounting

1159094



**Installation relay**

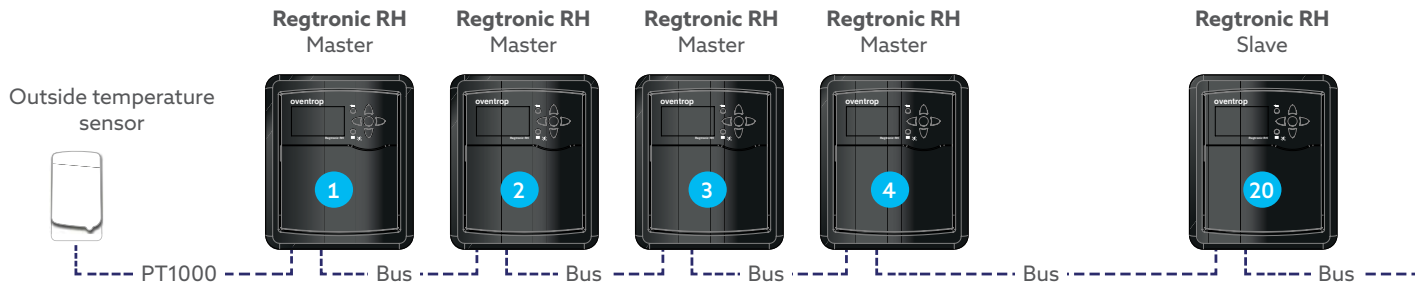


Description	Item No.
For the connection of high-performance pumps (> 1 A)	1152089

**Outside temperature sensor**



Description	Item No.
For outside temperature measurement, PT 1000 sensor element, splash-proof housing, surface mounting	1152099



Example: Distribution of a temperature sensor (outside temperature sensor item no. 1152099) to up to 20 **Regtronic RH** heating circuit controllers (item no. 1152080/1152083)

**Room temperature sensor**



Description	Item No.
For room temperature measurement, PT 1000 sensor element, surface mounting	1152095

**Remote control with room temperature sensor**



Description	Item No.
For heating curve and function setting (Party, Heating circuit off), control from the living room, PT 1000 sensor element, surface mounting	1152096



#### Room control unit

##### Description

For operating mode setting (Auto, Night, Summer, Off), for heating curve and function setting (Party, Heating off), control from the living room, PT 1000 sensor element, surface mounting

##### Item No.

1152087



#### Sensor LW TH Temperature sensor

Suitable for all Oventrop controllers.

##### Description

For temperature measurement and detection in immersion sleeves and storage cylinders, PT 1000 sensor element, continuous temperature range up to 105 °C, length 3 m

##### Item No.

1369093

For temperature measurement and detection at collectors, PT 1000 sensor element, continuous temperature range up to 180 °C, length 2 m

1369094

For temperature measurement and detection at the pipework, with fastening clip Ø 25 - 40 mm and heat conducting paste, PT 1000 sensor element, continuous temperature range up to 180 °C, length 1.5 m

1369095

3.1



#### ClimaCon F 90 Room thermostat for two pipe applications, heating only/cooling only, follower

##### Voltage

230 V AC

##### Control

On/off

##### Suitable for

Electrothermal actuators "normally closed" (heating)  
Electrothermal actuators "normally open" (cooling)

##### Item No.

1155009



#### ClimaCon F 210 Room thermostat for two pipe applications, heating only/cooling only, leader

##### Voltage

230 V AC

##### Control

On/off / PWM

##### Suitable for

Electrothermal actuators (on/off), "normally closed"

##### Item No.

1155021

# Connection of the boiler and storage cylinder to the pipework

## Connection elbow



Description	Item No.
2 x G 1 union nut, 88 x 35 mm	1359042
G 1 1/4 union nut x R 1 1/4 external thread, 40 x 49 mm	1359043
G 1 external thread x G 1 union nut, 37 x 35 mm	1359062
G 1 union nut x G 1 union nut, 37 x 35 mm	1359063
G 1 union nut x G 1 external thread x G 3/8 internal thread, 37 x 35 mm	1359064
G 1 union nut x G 1 union nut x G 3/8 internal thread, 37 x 35 mm	1359065
2 x G 1 union nut, 88 x 35 mm, with Optiflex fill and drain ball valve	1359073

## Double fitting



Description	Item No.
2 x G 1 union nut, 30 mm	1359085
G 3/4 internal thread x G 3/4 union nut, 19.5 mm	1359086



## Check valve



Description	Item No.
G 1 external thread x G 1 1/2 pump flange, 31 mm	1359070

## T-piece



Description	Item No.
G 1 x G 1 x G 1 union nut	1359080
G 1 x G 1 union nut x G 1	1359081

### Pump connection piece



#### Description

G 1 1/2 internal thread x G 1 external thread, 32 mm
G 1 1/2 internal thread x G 1 union nut, 32 mm

#### Item No.

1359090
1359091

### Double nipple



#### Description

R 1 x G 1 external thread, 33 mm
----------------------------------

#### Item No.

1359094
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3.1



# Expa-Con Cap valves



## Expa-Con Cap valve

Required according to DIN EN 12828.

For control, maintenance and possible replacement of diaphragm expansion tanks.

Description	Item No.
DN 20, Rp ¾ internal thread, PN 10, brass, with lead sealing device	1089006
DN 20, Rp 1 internal thread, PN 10, brass, with lead sealing device	1089008
DN 25, Rp 1 internal thread, PN 10, brass, with lead sealing device	1089052
DN 32, Rp 1¼ internal thread, PN 10, brass, with lead sealing device	1089010
DN 40, Rp 1½ internal thread, PN 10, brass, with lead sealing device	1089012

## Wire seal kit



Description	Item No.
10-fold, consisting of seal and sealing wire	1089091



## Quick coupling for diaphragm expansion tank

For automatic separation of the expansion tank from the system.



Description	Item No.
DN 20, G ¾ internal thread x G ¾ external thread	1088806

# Pump check valves



## Pump check valve SVE

To prevent gravity circulation in various heating systems when the pump is switched off.  
For installation behind the pump. Opening pressure 20 mbar.

Description	Item No.
DN 20, G 1¼ external thread, PN 10, brass	1070006
DN 25, G 1½ external thread, PN 10, brass	1070008
DN 32, G 2 external thread, PN 10, brass	1070010



## Pump check valve SVE with automatic venting

To prevent gravity circulation in various heating systems when the pump is switched off.  
For installation behind the pump. Opening pressure 20 mbar.

Description	Item No.
DN 25, G 1½ external thread, G 1½ internal thread, PN 10, brass	1070308
DN 32, G 2 external thread, G 2 internal thread, PN 10, brass	1070310



## Pump check valve SVA

To prevent gravity circulation in various heating systems when the pump is switched off.  
For direct connection to the circulation pump. Opening pressure 20 mbar.

Description	Item No.
DN 25, G 1 external thread, G 1½ internal thread union nut, PN 10, brass	1070108
DN 32, G 1¼ external thread, G 2 internal thread union nut, PN 10, brass	1070110



## Pump check valve SVI

To prevent gravity circulation in various heating systems when the pump is switched off.  
For direct connection to the circulation pump. Opening pressure 20 mbar.

Description	Item No.
DN 25, G 1 internal thread, G 1½ internal thread union nut, PN 10, brass	1070208
DN 32, G 1¼ internal thread, G 2 internal thread union nut, PN 10, brass	1070210

**Pump check valve SVU**

To prevent gravity circulation in various heating systems when the pump is switched off.

Universal model made of bronze for vertical installation as angle, straight or three-way valve. Opening pressure 20 mbar.

Description	Item No.
DN 25, 3 x G 1 internal thread, PN 10, bronze	1071008 °
DN 32, 3 x G 1¼ internal thread, PN 10, bronze	1071010 °
DN 40, 3 x G 1½ internal thread, PN 10, bronze	1071012 °
DN 50, 3 x G 2 internal thread, PN 10, bronze	1071016 °

## Heating refill stations



### Heating refill station

Consisting of strainer, pressure reducer, system separator type BA and sewage connection.  
Can be completely shut off for maintenance purposes.  
Brass body, system separator and pressure reducer cartridge made of plastic.

Medium temperature (continuous operation) up to 30 °C on the inlet side, up to 65 °C on the outlet side.  
Outlet pressure 1-5 bar adjustable.

According to DIN EN 1717, all installations must be intrinsically safe and designed as permanent connections.  
This means that the heating system must be filled via a system separator type BA or BC.

Description	Item No.
DN 15 with couplings with G 3/4 external thread, PN 10	1055004 °



3.1



# Heating refill stations - Accessories and spare parts



## Replacement system separator cartridge

### Description

For heating refill station, DN 15

### Item No.

1055095 °



## Replacement pressure reducer cartridge

### Description

For heating refill station, DN 15

### Item No.

1055096 °



## 3.2 Stations for solar thermal energy

### **Regusol Stations** **437**

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## 3.2 Stations for solar thermal energy

### **Regusol Stations** **437**

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# Regusol PH Pump circuits



For the connection of a solar circuit. The pump circuits enable the solar circuit to be shut off on the return side and prevent self-circulation via an integrated check valve when the pump is switched off.

The pump circuits consist of a high-efficiency pump, a ball valve with integrated check valve and thermometer in the return, a safety group with safety valve, pressure gauge, fill and drain

cock and connection possibility of an expansion tank, a flow measuring and regulating device with shutoff and fill and drain cock, a wall mounting device and a thermal insulation.

The Regusol pump circuits are characterised by a time and space saving installation. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials.

Version	One pipe	Safety valve	Yes
Nominal size	DN 25	Pressure gauge	Yes
Connection solar circuit	G 1 external thread for Regusol compression fittings	Venting	No
Connection storage cylinder circuit	G 1 external thread for Regusol compression fittings	Volume flow sensor	No
Connection expansion tank	G 3/4 external thread flat sealing	Flow rate display	Yes
Length	188 mm	Measuring range*	2 up to 15 l/min
Width	150 mm	Fill and drain cock	Yes
Thermal insulation	Yes	Electronic controller	No
Wall bracket	Yes	Retrofitting controller insertion block	No
Dial thermometer	Yes	Max. operating temperature	120 °C
Check valve	Yes	Short-term starting temperature	160 °C
		Max. operating pressure	6 bar

## Regusol PH-130 DN 25



Pump length	130 mm	Height	375 mm
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### Pump type

Wilo PARA ST 25-130/7-50/iPWM

### Item No.

1362063

## Regusol PH-180 DN 25



Pump length	180 mm	Height	425 mm
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### Pump type

Grundfos UPM3 W3 Solar 25-75 PWM

### Item No.

1368163



# Regusol SH Stations



For the connection of a solar circuit. The stations enable the solar circuit to be shut off on the supply and return side and prevent self-circulation via integrated check valves when the pump is switched off.

The stations consist of a high-efficiency pump, ball valves with integrated check valves and thermometers in the supply and return, a safety group with safety valve, pressure gauge, fill and drain cock and connection possibility of

an expansion tank, a flow measuring and regulating device with shutoff and fill and drain cock, a wall mounting device and a thermal insulation.

The Regusol stations are characterised by a time and space saving installation. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials.

Connection expansion tank	G 3/4 external thread flat sealing	Venting	No
Thermal insulation	Yes	Volume flow sensor	No
Wall bracket	Yes	Flow rate display	Yes
Dial thermometer	Yes	Electronic controller	No
Check valve	Yes	Max. operating temperature	120 °C
Safety valve	Yes	Short-term starting temperature	160 °C
Pressure gauge	Yes	Max. operating pressure	6 bar

## Regusol SH-130 DN 20



Version	One pipe	Width	200 mm
Nominal size	DN 20	Height	365 mm
Connection solar circuit	external thread with Eurocone	Centre distance	100 mm
Connection storage cylinder	G external thread with Eurocone	Measuring range*	2 up to 14 l/min
Pump length	130 mm	Fill and drain cock	Yes
Length	145 mm	Retrofitting controller insertion block	No

### Pump type

Grundfos UPM3 Solar 15-75 PWM

### Item No.

1360033

## Regusol SH-130 DN 25



Version	Two pipe	Width	250 mm
Nominal size	DN 25	Height	375 mm
Connection solar circuit	G 1 external thread for Regusol compression fittings	Centre distance	100 mm
Connection storage cylinder	G 1 external thread for Regusol compression fittings	Measuring range*	2 up to 15 l/min
Pump length	130 mm	Fill and drain cock	Yes
Length	195 mm	Retrofitting controller insertion block	Yes

### Pump type

Grundfos UPM3 W3 Solar 25-75 PWM

### Item No.

1360063

### Regusol SH-180 DN 25



Version	Two pipe	Width	250 mm
Nominal size	DN 25	Height	425 mm
Connection solar circuit	G 1 external thread for Regusol compression fittings	Centre distance	100 mm
Connection storage cylinder	G 1 external thread for Regusol compression fittings	Measuring range*	2 up to 15 l/min
Pump length	180 mm	Fill and drain cock	Yes
Length	195 mm	Retrofitting controller insertion block	Yes

#### Pump type

Grundfos UPM3 W3 Solar 25-75 PWM

#### Item No.

1368064

### Regusol SH-180 DN 32



Version	Two pipe	Width	350 mm
Nominal size	DN 32	Height	530 mm
Connection solar circuit	G 2 external thread, flat sealing	Centre distance	125 mm
Connection storage cylinder	G 2 external thread, flat sealing	Measuring range*	10 up to 40 l/min
Pump length	180 mm	Fill and drain cock	No
Length	221 mm	Retrofitting controller insertion block	No

#### Pump type

Wilo PARA 30-180/9-87/iPWM

#### Item No.

1368251

# Regusol LH Stations with vent pot



For the connection of a solar circuit. The stations enable the solar circuit to be shut off on the supply and return side and prevent self-circulation via integrated check valves when the pump is switched off. A vent pot enables the degassing of the heat transfer medium in the supply pipe.

The stations consist of a high-efficiency pump, ball valves with integrated check valves and thermometers in the supply and return, a safety group with safety valve, pressure gauge, fill

and drain cock and connection possibility of an expansion tank, a flow measuring and regulating device with shutoff and fill and drain cock, a vent pot, a wall mounting device and a thermal insulation.

The Regusol stations are characterised by a time and space saving installation. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials.

Version	Two pipe	Pressure gauge	Yes
Connection expansion tank	G 3/4 external thread flat sealing	Venting	Yes
Centre distance	100 mm	Volume flow sensor	No
Thermal insulation	Yes	Flow rate display	Yes
Wall bracket	Yes	Fill and drain cock	Yes
Dial thermometer	Yes	Electronic controller	No
Check valve	Yes	Max. operating temperature	120 °C
Safety valve	Yes	Short-term starting temperature	160 °C

## Regusol LH-130 DN 20



Nominal size	DN 20	Width	200 mm
Connection solar circuit	external thread with Eurocone	Height	365 mm
Connection storage cylinder	G external thread with Eurocone	Measuring range*	2 up to 14 l/min
Pump length	130 mm	Retrofitting controller insertion block	No
Length	145 mm	Max. operating pressure	6 bar

### Pump type

Grundfos UPM3 Solar 15-75 PWM

### Item No.

1360573

### Regusol LH-130 DN 25



Nominal size	DN 25	Width	250 mm
Connection solar circuit	G 1 external thread for Regusol compression fittings	Height	375 mm
Connection storage cylinder	G 1 external thread for Regusol compression fittings	Retrofitting controller insertion block	Yes
Pump length	130 mm	Max. operating pressure	6 bar
Length	195 mm		

#### Pump type

	Measuring range* (l/min)	Item No.
Grundfos UPM3 W3 Solar 25-75 PWM	2 up to 15	1360556
Wilo PARA ST 25-130/7-50/iPWM	2 up to 15	1360557
Wilo PARA ST 25-130/8-75/iPWM	7 up to 30	1360558

### Regusol LH-180 DN 25



Nominal size	DN 25	Length	195 mm
Connection solar circuit	G 1 external thread for Regusol compression fittings	Width	250 mm
Connection storage cylinder	G 1 external thread for Regusol compression fittings	Height	425 mm
Pump length	180 mm	Retrofitting controller insertion block	Yes

#### Pump type

	Measuring range* (l/min)	Max. operating pressure (bar)	Item No.
without pump	2 up to 15	6	1360850
Wilo PARA ST 25-180/7-50/iPWM	2 up to 15	6	1360851
Wilo PARA ST 25-180/8-75/iPWM	7 up to 30	6	1360852
Grundfos UPM3 W3 Solar 25-75 PWM	2 up to 15	6	1360853
Wilo PARA ST 25-180/7-50/iPWM	2 up to 15	10	1360854



# Regusol ELH Stations with electronic controller



For the connection of a solar circuit. The stations enable the solar circuit to be shut off on the supply and return side and prevent self-circulation via integrated check valves when the pump is switched off. A vent pot enables the degassing of the heat transfer medium in the supply pipe. The integrated electronic controller takes over the control and monitoring of the solar thermal system.

The stations consist of a high-efficiency pump, ball valves with integrated check valves and thermometers in the supply and return, a safety

group with safety valve, pressure gauge, fill and drain cock and connection possibility of an expansion tank, a flow measuring and regulating device with shutoff and fill and drain cock, a vent pot, an electronic controller, a wall mounting device and a thermal insulation.

The Regusol stations are characterised by a time and space saving installation. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials.

Version	Two pipe	Wall bracket	Yes
Nominal size	DN 25	Dial thermometer	Yes
Connection solar circuit	G 1 external thread for Regusol compression fittings	Check valve	Yes
Connection storage cylinder circuit	G 1 external thread for Regusol compression fittings	Safety valve	Yes
Connection expansion tank	G 3/4 external thread flat sealing	Pressure gauge	Yes
Length	195 mm	Venting	Yes
Width	250 mm	Fill and drain cock	Yes
Centre distance	100 mm	Electronic controller	Yes
Thermal insulation	Yes	Max. operating temperature	120 °C
		Short-term starting temperature	160 °C

## Regusol ELH-130-RC DN 25

With Regtronic RC electronic controller.



Pump length	130 mm	Flow rate display	Yes
Height	375 mm	Measuring range*	2 up to 15 l/min
Volume flow sensor	No	Max. operating pressure	6 bar

### Pump type

Wilo PARA ST 25-130/7-50/iPWM

### Item No.

1366597

## Regusol ELH-130-RC-P DN 25

With Regtronic RC-P electronic controller.



Pump length	130 mm	Flow rate display	No
Height	375 mm	Measuring range*	2 up to 40 l/min
Volume flow sensor	Vortex	Max. operating pressure	6 bar

### Pump type

Wilo PARA ST 25-130/7-50/iPWM

### Item No.

1360394



**Regusol ELH-180-RC DN 25**

With Regtronic RC electronic controller.

Pump length	180 mm	Flow rate display	Yes
Height	425 mm	Measuring range*	2 up to 15 l/min
Volume flow sensor	No		

Pump type	Max. operating pressure (bar)	Item No.
Wilo PARA ST 25-180/7-50/iPWM	6	1360862
Wilo PARA ST 25-180/7-50/iPWM	10	1360864

# Regusol X Stations with heat exchanger



The Regusol X stations with heat exchanger enable a controlled transfer of thermal energy from a solar circuit (primary circuit) to a storage cylinder circuit (secondary circuit). The stations enable the solar circuit to be shut off on the supply and return side and prevent self-circulation via integrated check valves when the pump is switched off. The integrated electronic controller takes over the control and monitoring of the solar thermal system.

The primary circuit consists of a high-efficiency pump, ball valves with integrated check valves and thermometers in the supply and return, a safety group with safety valve, pressure gauge, fill and drain cock and connection possibility of an expansion tank, connections for filling, flushing and draining and an electronic volume flow sensor. The secondary side

consists of a high-efficiency pump, ball valves with integrated thermometers in the supply and return, a check valve, a safety valve, a vent valve and a connection for filling, flushing and draining. Depending on the version, a change-over valve is also included, e.g. for stratified storage cylinders or two separate storage cylinders. The circuits are separated by a plate heat exchanger. The station has an integrated electronic controller, a wall mounting device and a thermal insulation.

The Regusol X stations are ideal for buffer storage cylinders without direct solar connection. They are characterised by a time and space saving installation. A high degree of functional reliability is ensured by maintenance-free components and high-quality materials.

Heat exchanger	Copper brazed	Dial thermometer	Yes
Nominal size	DN 25	Check valve	Yes
Connection solar circuit	G 1 external thread for Regusol compression fittings	Safety valve	Yes
Connection storage cylinder circuit	G 1 external thread, flat sealing	Pressure gauge	Yes
Connection expansion tank	G 3/4 external thread, flat sealing	Venting	Yes
Pump length	130 mm	Volume flow sensor	Vortex
Length	265 mm	Flow rate display	No
Width	500 mm	Fill and drain cock	Yes
Height	860 mm	Electronic controller	Yes
Thermal insulation	Yes	Max. operating temperature	120 °C
Wall bracket	Yes	Short-term starting temperature	160 °C



## Regusol X-Uno 25 with one storage cylinder circuit connection

### Pump type

Wilo PARA ST 15-130/7-50/iPWM2-6 (collector circuit)  
Wilo PARA 15-130/7-50/iPWM2-6 (storage cylinder circuit)

### Item No.

1361060



## Regusol X-Duo with two storage cylinder circuit connections

### Pump type

Wilo PARA ST 15-130/7-50/iPWM2-6 (collector circuit)  
Wilo PARA 15-130/7-50/iPWM2-6 (storage cylinder circuit)

### Item No.

1361050



# Regusol - Accessories and spare parts



## Regusol X Supplementary set

For the extension of a Regusol X station to enable different collector fields (e.g. east-west) to be interconnected and controlled.

Description	Item No.
For Regusol X, with high-efficiency pump Wilo PARA ST 15-130/7-50/iPWM2-6	1361092



## Hydrocontrol STR Double regulating and commissioning valve

For hydronic balancing of collector fields.  
No shutoff option and thus minimum flow rate guaranteed.

Description	Item No.
DN 20, G 1 external thread for Regusol compression fittings, LF, PN 25	1369050
DN 20, G 1 external thread for Regusol compression fittings, MF, PN 25	1369055



## Regusol Compression fitting

For connecting the solar circuit to Regusol components and Regusol stations DN 20.

Description	Item No.
For copper and precision steel pipe, DN 20, G 3/4 union nut, 15 mm, 4-fold	1367395
For copper and precision steel pipe, DN 20, G 3/4 union nut, 18 mm, 4-fold	1367397



## Regusol Compression fitting with support sleeve

For connecting the solar circuit to Regusol components and Regusol stations DN 25.

Description	Item No.
For copper and precision steel pipe, DN 25, G 1 union nut, 15 mm, 2-fold	1367585
For copper and precision steel pipe, DN 25, G 1 union nut, 18 mm, 2-fold	1367587
For copper and precision steel pipe, DN 25, G 1 union nut, 22 mm, 2-fold	1367589



**Brass support sleeve**

For laying of soft pipes with 1 mm wall thickness.  
Dimension refer to outer pipe diameter.



Description	Item No.
12 mm	1029652
15 mm	1029654
16 mm	1029655
18 mm	1029656
22 mm	1029657

**Tailpipe set DN 32**

For connection to Regusol SH-180 DN 32.



Description	Item No.
Threaded tailpipe set Rp 1¼, G 2 union nut, 2-fold	1350476

**Regusol Connection nipple**

Description	Item No.
For the connection of collector pipes, 2 x G 1 with cone	1369089

**Locking bracket**

Description	Item No.
For Regusol stations in connection with flexible pipe	1369090

**Regusol Connection set**

Description	Item No.
For Regusol stations DN 15 in connection with flexible pipe, DN 25 G 1 union nut and tailpipe G ¾ external thread	1369085

### Flat sealing insert

For changing a conical connection into a flat sealing connection.



#### Description

For Regusol stations DN 20

For Regusol stations DN 25

#### Item No.

1369086

1659990

### Quick coupling for diaphragm expansion tank



#### Description

DN 20, G 3/4 internal thread x G 3/4 external thread

#### Item No.

1088806



### Check valve

To prevent gravity circulation when the pump is switched off.

Opening pressure 20 bar, continuous operating temperature 120 °C, short-term starting temperature 160 °C.

#### Description

G 1 x G 1 union nut

#### Item No.

1364199



### Regusol Vent pot

For separate connection to the collector supply.

#### Description

Both sides G 1 for Regusol compression fittings

#### Item No.

1364260

### Regusol Fill and flush device



#### Description

With lateral connection for filling and flushing pipes G 3/4, G 1 external thread x G 1 external thread

#### Item No.

1363051

### Regusol Refill pump

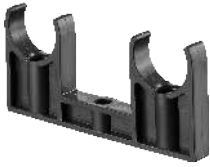


#### Description

With hose connection and ball valves on the suction and pressure side

#### Item No.

1364250

**Replacement wall bracket**

Description	Item No.
For Regusol-130/180 stations	1369080
For Regusol PH stations	1369081

**Replacement Regusol SG Safety group**

Description	Item No.
For Regusol stations (manufactured from 2015), with safety valve 6 bar	1364192
For Regusol stations (manufactured until 2015), with safety valve 10 bar	1364247

**Replacement flow measuring and regulating device**

Description	Item No.
For Regusol stations, 2-15 l/min, G 1 1/2 union nut x G 1 for Regusol compression fittings	1364161
For Regusol stations, 7-30 l/min, G 1 1/2 union nut x G 1 for Regusol compression fittings	1364162
For Regusol stations, 2-14 l/min, G 1 union nut x G 3/4 for Regusol compression fittings	1364163

**Replacement volume flow sensor VFS**

Description	Item No.
For Regusol ELH-RC-P stations, with connecting cable, 2-40 l/min	1364170

**Replacement volume flow sensor VFD**

Description	Item No.
For Regusol X stations with Regtronic RX, with connecting cable, 2-40 l/min	1369092



#### Replacement Regusol Vent pipe

With ball valve with integrated check valve, thermometer and vent pot.

Description	Item No.
For Regusol-130 stations DN 25 (manufactured from 2015)	1364193
For Regusol-180 stations DN 25 (manufactured from 2015)	1364194
For Regusol-130 stations DN 25 (manufactured until 2015)	1364190



#### Replacement Regusol Pump ball valve

With check valve 20 mbar opening pressure and connection option for Regusol safety group.

Description	Item No.
For Regusol stations DN 25 (manufactured from 2015)	1364187
For Regusol stations DN 25 (manufactured until 2015)	1364198



#### Replacement thermometer

Description	Item No.
For Regumat and Regusol stations DN 20, blue	1351701
For Regumat and Regusol stations DN 20, red	1351702
For Regusol stations (manufactured from 2015), red	1364188
For Regusol stations (manufactured from 2015), blue	1364189
For Regusol stations (manufactured until 2015)	1364195



#### Replacement pressure gauge

Description	Item No.
For Regusol stations, display range 0 - 10 bar	1364196



#### Replacement high-efficiency pump 130 mm with connection thread G 1

Description	Item No.
For Regusol X primary circuit, Wilo PARA ST 15-130/7-50/iPWM2-6	1369010
For Regumat X-30/XZ-30 primary circuit and Regusol X secondary circuit, Wilo PARA 15-130/7-50/iPWM2-6	1389010



**Replacement high-efficiency pump 130 mm with connection thread G 1 1/2**

Description	Item No.
For Regusol-130 stations DN 25, Grundfos UPM3 W3 Solar 25-75 PWM C 130	1360589
For Regusol-130 stations DN 25, Wilo PARA ST 25-130/7-50/iPWM2-9	1360590

**Replacement high-efficiency pump with connection thread G 1 1/2**

Description	Item No.
For Regusol-180 stations DN 25, Grundfos UPM3 W3 Solar 25-75 PWM C 180	1367259
For Regusol-180 stations DN 25, Wilo PARA ST 25-180/7-50/iPWM2-9	1367260

**Replacement power supply cable**

Description	Item No.
For Grundfos UPM 3 high-efficiency pump, cable length 2 m	1358149
For Wilo-Yonos PARA high-efficiency pump, with right-angle plug	1358171
For Wilo PARA high-efficiency pump, with right-angle plug	1358172

**Replacement signal connecting cable**

Description	Item No.
For Grundfos UPM 3 and Wilo-Yonos PARA	1358180

**Replacement OKP Vacuum tube**

Description	Item No.
For OKP tube collectors	1361290



## 3.2 Stations for solar thermal energy

### **Regtronic Electronic controllers** 452

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# Regtronic Electronic controllers



Oventrop electronic controllers ensure an efficient use of energy in the heating and cooling supply. They enable the control, combination and monitoring of different functions from the areas of generation, distribution and transfer

to an intelligent system. The controllers can coordinate different heat generators (including gas boilers, solid fuel boilers or solar thermal systems) to ensure economical operation.



## Regtronic RC Simple solar controller for controlling a solar plant

Compatible with data logger CS-BS-1.

Application	Solar	Potential-free relays	1
Operating voltage	230 V AC	PWM*	2
Sensor inputs		Further inputs	Pulse inputs V40
Solid-state relays	2		

### Scope of delivery

### Item No.

1 x Collector sensor	
3 x Storage cylinder sensor	1369549



## Regtronic RC-P Flexible solar controller for more complex solar thermal systems, hot potable water preparation and additional functions

Compatible with data logger CS-BS-1.

Application	Solar	Potential-free relays	1
	Storage cylinder management	PWM*	2
	Service water heating	Further inputs	Pulse inputs V40
Operating voltage	230 V AC		FlowRotor
Sensor inputs			Grundfos Direct Sensor
Solid-state relays	3	Heat meter	2

### Scope of delivery

### Item No.

1 x Collector sensor	
3 x Storage cylinder sensor	1369551





**Regtronic RM Multifunction controller for the control of weather-compensated mixed/unmixed heating circuits as well as solar plants**

Compatible with data logger CS-BS-1.

Application	Heating circuit control	PWM*	4
	Heat generator activation	Further inputs	Pulse inputs V40
	Solid fuel boiler, solar		Grundfos Direct Sensor
	Service water heating		FlowRotor
	Storage cylinder management	PWM switchable 0 - 10 V*	Yes
Operating voltage	230 V AC	Heat meter	7
Sensor inputs	12	Product compatible to	Regtronic EM
Solid-state relays	13		
Potential-free relays	1		

**Scope of delivery**

**Item No.**

6 x Storage cylinder sensor  
2 x Collector sensor

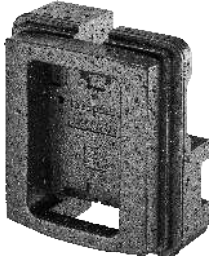
1369555

**ErP classification Regtronic RM**

Item no.	Controller	Required accessories	Boiler control		ErP %	Class
			Modulating (0-10 V)	On/Off		
1369555	Regtronic RM	1 x Outside temperature sensor 1152099	●		2.0	II
		1 x Outside temperature sensor 1152099		●	1.5	III
		1 x Room temperature sensor 1152095	●		4.0	VI
		1 x Outside temperature sensor 1152099				
		1 x Room temperature sensor 1152095		●	3.5	VII
		1 x Outside temperature sensor 1152099				
		3x Room temperature sensor 1152095	●		5.0	VIII



# Regtronic - Accessories and spare parts



## Controller insertion block

### Description

For Regusol SH/LH DN 25 (manufactured from 2015), for retrofitting a Regtronic RC/RC-P controller

### Item No.

1369553



## Regtronic S-bus

### Description

For speed control of high-efficiency pumps (PWM / 0 - 10 V) in combination with conventional solar controllers

### Item No.

1369531



## Regtronic PSW Signal converter (PWM/0-10 V)

### Description

For the conversion of an asynchronous signal into a high-efficiency pump control signal (PWM / 0 - 10 V)

### Item No.

1369532



## Outside temperature sensor

### Description

For outside temperature measurement, PT 1000 sensor element, splash-proof housing, surface mounting

### Item No.

1152099



#### Room temperature sensor

##### Description

For room temperature measurement, PT 1000 sensor element, surface mounting

##### Item No.

1152095



#### Remote control with room temperature sensor

##### Description

For heating curve and function setting (Party, Heating circuit off), control from the living room, PT 1000 sensor element, surface mounting

##### Item No.

1152096



#### Room control unit

##### Description

For operating mode setting (Auto, Night, Summer, Off), for heating curve and function setting (Party, Heating off), control from the living room, PT 1000 sensor element, surface mounting

##### Item No.

1152087



#### Sensor LW TH Temperature sensor

Suitable for all Oventrop controllers.

##### Description

For temperature measurement and detection in immersion sleeves and storage cylinders, PT 1000 sensor element, continuous temperature range up to 105 °C, length 3 m

##### Item No.

1369093

For temperature measurement and detection at collectors, PT 1000 sensor element, continuous temperature range up to 180 °C, length 2 m

1369094



#### Sensor connection box

##### Description

For protection of the collector sensor against externally induced overvoltage and local lightning strikes, splash-proof, IP 65

##### Item No.

1369591



## 3.3 Stations for local and district heating

### **Regudis H Transmission stations for local and district heating networks**

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### 3.3 Stations for local and district heating

#### **Regudis H Transmission stations for local and district heating networks**

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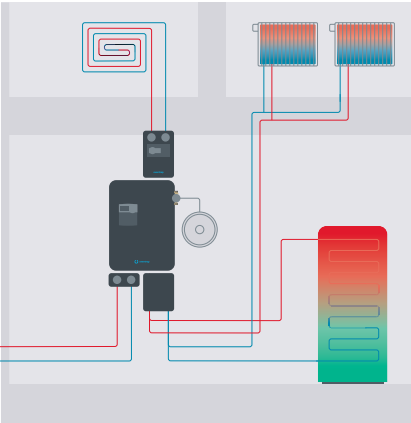
## Regudis H Transmission stations

Compact and efficient control



### READY-TO-INSTALL STATIONS WITH MODULES FOR DETACHED AND SEMI-DETACHED HOUSES

Regudis	Size	Item no.
Regudis H-MHT	DN 20	1393027
	DN 25	1393037
Regudis H-MT	DN 20	1392027
	DN 25	1392037
Regudis H-HT	DN 20	1391027
	DN 25	1391037

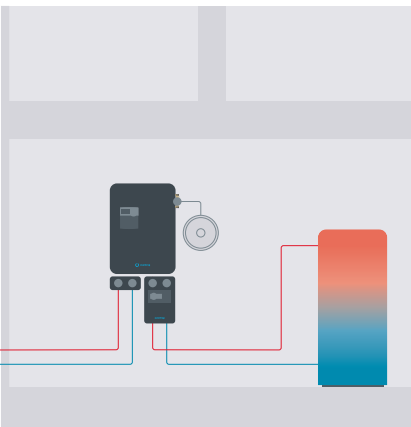


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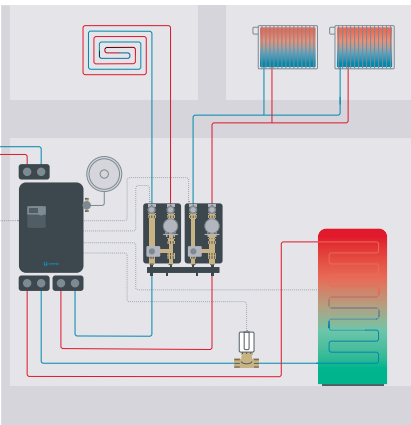
### COMPACT STATION WITH MODULE FOR BUFFER STORAGE CYLINDER LOADING

Regudis	Size	Item no.
Regudis H-H	DN 20	1391021
	DN 25	1391031



### STATION WITHOUT MODULES FOR OBJECT-SPECIFIC SYSTEM INSTALLATION ON SITE

Regudis	Size	Item no.
Regudis H	DN 20	1391026
	DN 25	1391036





# Regudis H Transmission stations



Regudis H transmission stations with plate heat exchanger for direct and indirect heat transmission from a local or district heating network to the potable water and heating system of detached and semi-detached houses. The stations are equipped with an electronic controller for the weather-compensated control of the flow temperature of the heating system and simultaneous limitation of the return temperature to the heat network.

The stations consist of a plate heat exchanger, an electronic controller, a pressure independent

control valve with actuator, strainers with fill and drain cock, spacers for heat meters, a safety group with pressure gauge, ball valves and a thermal insulation.

The compact stations are available in two performance classes and different connection configurations. They are characterised by a simple hydronic connection to the local and district heating network. The station is delivered with factory-mounted function modules, completely parameterized and tested.

Heat exchanger	Copper brazed	Ball valve	Yes
Thermal insulation	Yes	Pressure independent control valve	Yes
Pressure gauge	Yes	Actuator	Yes
Safety valve	Yes	Venting	Yes
Safety group	Yes	Temperature sensor	PT 1000
Spacer for heat meter	Yes	Max. operating temperature	95 °C
Strainer	Yes	Min. operating pressure	1 bar
Draining	Yes	Max. operating pressure	10 bar
Electronic controller	Yes		



3.3



## Regudis H DN 20

With Regudis H transmission station and ball valve connection set.

Length	295 mm	Connection heating network	G 1 external thread
Width	545 mm	Max. primary volume flow	1,300 l/h
Height	775 mm	Max. primary differential pressure	4 bar
Connection heating circuit	G 3/4 external thread		

### Nominal size

DN 20

### Item No.

1391026



## Regudis H DN 25

With Regudis H transmission station and ball valve connection set.

Length	330 mm	Connection heating network	G 1 1/2 external thread
Width	630 mm	Max. primary volume flow	4,800 l/h
Height	940 mm	Max. primary differential pressure	6 bar
Connection heating circuit	G 1 1/4 external thread		

### Nominal size

DN 25

### Item No.

1391036



### Regudis H-HT DN 20

For the connection of an unmixed heating circuit and a potable water storage cylinder.  
With Regudis H transmission station, ball valve connection set and HT switching module.

Length	295 mm	Connection HT switching module	G 1 ½ external thread
Width	545 mm	Connection heating network	G 1 external thread
Height	1074 mm	Max. primary volume flow	1,300 l/h
Connection heating circuit	G ¾ external thread	Max. primary differential pressure	4 bar

#### Nominal size

DN 20

#### Item No.

1391027



### Regudis H-HT DN 25

For the connection of an unmixed heating circuit and a potable water storage cylinder.  
With Regudis H transmission station, ball valve connection set and HT switching module.

Length	330 mm	Connection HT switching module	G 1 ½ external thread
Width	630 mm	Connection heating network	G 1 ½ external thread
Height	1182 mm	Max. primary volume flow	4,800 l/h
Connection heating circuit	G 1 ¼ external thread	Max. primary differential pressure	6 bar

#### Nominal size

DN 25

#### Item No.

1391037



### Regudis H-MT DN 20

For the connection of a mixed heating circuit and a potable water storage cylinder.  
With Regudis H transmission station, ball valve connection set, HT switching module and safety temperature monitor.

Length	295 mm	Connection HT switching module	G 1 ½ external thread
Width	545 mm	Connection heating network	G 1 external thread
Height	1074 mm	Max. primary volume flow	1,300 l/h
Connection heating circuit	G ¾ external thread	Max. primary differential pressure	4 bar

#### Nominal size

DN 20

#### Item No.

1392027



### Regudis H-MT DN 25

For the connection of a mixed heating circuit and a potable water storage cylinder.  
With Regudis H transmission station, ball valve connection set, HT switching module and safety temperature monitor.

Length	330 mm	Connection HT switching module	G 1 ½ external thread
Width	630 mm	Connection heating network	G 1 ½ external thread
Height	1182 mm	Max. primary volume flow	4,800 l/h
Connection heating circuit	G 1 ¼ external thread	Max. primary differential pressure	6 bar

#### Nominal size

DN 25

#### Item No.

1392037





### Regudis H-MHT DN 20

For the connection of a mixed and an unmixed heating circuit and a potable water storage cylinder.  
With Regudis H transmission station, ball valve connection set, HT switching module, Regumat M3, safety temperature monitor and connection set.

Length	295 mm	Connection HT switching module	G 1 ½ external thread
Width	545 mm	Connection heating network	G 1 external thread
Height	1613 mm	Max. primary volume flow	1,300 l/h
Connection heating circuit	G ¾ external thread	Max. primary differential pressure	4 bar

#### Nominal size

DN 20

#### Item No.

1393027



### Regudis H-MHT DN 25

For the connection of a mixed and an unmixed heating circuit and a potable water storage cylinder.  
With Regudis H transmission station, ball valve connection set, HT switching module, Regumat M3, safety temperature monitor and connection set.

Length	330 mm	Connection HT switching module	G 1 ½ external thread
Width	630 mm	Connection heating network	G 1 ½ external thread
Height	1706 mm	Max. primary volume flow	4,800 l/h
Connection heating circuit	G 1 ¼ external thread	Max. primary differential pressure	6 bar

#### Nominal size

DN 25

#### Item No.

1393037



### Regudis H-H DN 20

For the connection of an unmixed heating circuit.  
With Regudis H transmission station, ball valve connection set, Regumat S and connection set.

Length	295 mm	Connection heating network	G 1 external thread
Width	545 mm	Max. primary volume flow	1,300 l/h
Height	1220 mm	Max. primary differential pressure	4 bar
Connection heating circuit	G ¾ external thread		

#### Nominal size

DN 20

#### Item No.

1391021



### Regudis H-H DN 25

For the connection of an unmixed heating circuit.  
With Regudis H transmission station, ball valve connection set, Regumat S and connection set.

Length	330 mm	Connection heating network	G 1 ½ external thread
Width	630 mm	Max. primary volume flow	4,800 l/h
Height	1365 mm	Max. primary differential pressure	6 bar
Connection heating circuit	G 1 ¼ external thread		

#### Nominal size

DN 25

#### Item No.

1391031



**Regudis H-M DN 20**

For the connection of a mixed heating circuit.  
With Regudis H transmission station, ball valve connection set, Regumat S, safety temperature monitor and connection set.

Length	295 mm	Connection heating network	G 1 external thread
Width	545 mm	Max. primary volume flow	1,300 l/h
Height	1220 mm	Max. primary differential pressure	4 bar
Connection heating circuit	G ¾ external thread		

Nominal size	Item No.
DN 20	1392021



**Regudis H-M DN 25**

For the connection of a mixed heating circuit.  
With Regudis H transmission station, ball valve connection set, Regumat S, safety temperature monitor and connection set.

Length	330 mm	Connection heating network	G 1 ½ external thread
Width	630 mm	Max. primary volume flow	4,800 l/h
Height	1365 mm	Max. primary differential pressure	6 bar
Connection heating circuit	G 1 ¼ external thread		

Nominal size	Item No.
DN 25	1392031

# Regudis H - Accessories and spare parts



## Hydrocor WM Monovalent potable water storage cylinder

Surface	Enamelled	Max. operating temperature	95 °C
Energy efficiency class	B	Max. operating pressure	10 bar

Type	Connection	Total height (mm)	Ø (with ti)* (mm)	Thickness TI* (mm)	Item No.
120	R ¾	825	610	55	1395010
160	R ¾	1,035	610	55	1395011
200	G 1	1,200	650	75	1395012



## Diaphragm expansion tank

Feet welded on.

Description	Item No.
Nominal volume 35 l, R ¾ external thread, inlet pressure 1.5 bar	1399091
Nominal volume 50 l, R ¾ external thread, inlet pressure 1.5 bar	1399092



## Regtronic EM Extension module for the control of further mixed/ unmixed heating circuits

For extending the Regtronic controller by 6 sensor inputs and 5 relay outputs.

Operating voltage	230 V AC	Product compatible to	Regtronic RH
Sensor inputs	6		Regtronic RM
Solid-state relays	4		Regtronic RS
Potential-free relays	1		

Scope of delivery	Item No.
1 x Pipe contact sensor	1152098



## Replacement controller

Description	Item No.
For Regudis H, Regtronic RH HT, cabled	1152070



## Replacement actuator

Description	Item No.
For Regudis H, electrothermal 24 V DC, 0 - 10 V, NC	1012954



3.3



## 3.4 Stations for hot potable water preparation

### **Regumaq X Fresh water stations for central hot potable water preparation 467**

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### 3.4 Stations for hot potable water preparation

#### **Regumaq X Fresh water stations for 467 central hot potable water preparation**

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# Our Mr. Clean.

## Reliable potable water control.



### OUR REGUMAQ X-45 FRESH WATER STATIONS

- + Compact and powerful
- + Intuitive operation
- + Discharge capacity up to 45 l/min
- + Optional integration into building automation systems
- + Low excess temperature 5K
- + Suitable for low-temperature systems
- + One-man installation

Read more at [regumaq.oventrop.com](https://regumaq.oventrop.com)



# Regumaq X-25 Fresh water stations



The Regumaq X-25 fresh water station is an electronically controlled product assembly with heat exchanger for the hygienic heating of potable water according to the continuous flow principle for connection to a buffer storage cylinder. Depending on the temperature and the volume flow on the potable water side, the circulation pump on the heating side is speed controlled. When selecting the fresh water station, it is necessary to consider the water quality of the application area.

The stations consist of a plate heat exchang-

er, a controller box, a circulation pump, a back-flow preventer, a volume flow sensor, a safety valve, temperature sensors, fill and drain ball valves and ball valves.

The compact stations are characterised by high draw-off capacities at low excess temperatures. The control technology is particularly fast and precise due to turbine sensor technology and LIN pump technology. A circulation pump can be controlled permanently, thermally or on demand.

Circulation function	Extendable	Shutoff ball valve potable water circuit	Yes
Connection potable water circuit	G 1 external thread, flat sealing	Shutoff ball valve storage cylinder circuit	Yes
Connection storage cylinder circuit	G 1 external thread, flat sealing	Fill and drain valve potable water circuit	Yes
Length	240 mm	Fill and drain valve storage cylinder circuit	Yes
Width	400 mm	Number of fill and drain valves potable water circuit	2
Height	625 mm	Number of fill and drain valves storage cylinder circuit	2
Centre distance potable water circuit	250 mm	Preprogrammed system examples	No
Centre distance storage cylinder circuit	100 mm	Additional controller functions	Yes
Type of temperature control	Speed control storage cylinder circuit pump	Nominal draw-off quantity*	29 l/min
Pump control signal	LIN	Kv value potable water circuit	1.88
Volume flow sensor	Turbine	Kv value storage cylinder circuit	2.67
Temperature sensor	PT 1000	Max. operating temperature	95 °C
Setting range potable water temperature	25 up to 75 °C	Max. operating pressure	10 bar
Thermal insulation	Yes	Leak tested	Yes
Safety valve potable water circuit	Yes	Certification	SVGW



## Regumaq X-25



### Heat exchanger

Copper brazed
Copper brazed, Sealix

### Item No.

1381125
1381127



# Regumaq X-45 Fresh water stations



2019



2019



2020

The Regumaq X-45 fresh water station is an electronically controlled product assembly with heat exchanger for the hygienic heating of potable water according to the continuous flow principle for connection to a buffer storage cylinder. Depending on the temperature and the volume flow on the potable water side, the circulation pump on the heating side is speed controlled. When selecting the fresh water station, it is necessary to consider the water quality of the application area.

The stations consist of a plate heat exchanger, a controller with touch control panel, a circu-

lation pump, a backflow preventer, a volume flow sensor, a safety valve, temperature sensors, fill and drain ball valves and ball valves.

The compact stations are characterised by high draw-off capacities at low excess temperatures. The control technology is particularly fast and precise due to turbine sensor technology and LIN pump technology. With intuitive touch control panel for setting extensive functions such as circulation (continuous operation, timer, thermal or on demand), return water stratification or heat demand.

Circulation function	Extendable	Shutoff ball valve potable water circuit	Yes
Connection potable water circuit	G 1 external thread, flat sealing	Shutoff ball valve storage cylinder circuit	Yes
Connection storage cylinder circuit	G 1 external thread, flat sealing	Fill and drain valve potable water circuit	Yes
Length	240 mm	Fill and drain valve storage cylinder circuit	Yes
Width	400 mm	Number of fill and drain valves potable water circuit	2
Height	625 mm	Number of fill and drain valves storage cylinder circuit	2
Centre distance potable water circuit	250 mm	Preprogrammed system examples	Yes
Centre distance storage cylinder circuit	100 mm	Additional controller functions	Yes
Type of temperature control	Speed control storage cylinder circuit pump	Nominal draw-off quantity*	45 l/min
Pump control signal	LIN	Kv value potable water circuit	2.55
Volume flow sensor	Turbine	Kv value storage cylinder circuit	3.41
Temperature sensor	PT 1000	Max. operating temperature	95 °C
Setting range potable water temperature	20 up to 75 °C	Max. operating pressure	10 bar
Thermal insulation	Yes	Leak tested	Yes
Safety valve potable water circuit	Yes	Certification	SVGW

## Regumaq X-45



### Heat exchanger

	Item No.
Copper brazed	1381140
Copper brazed, Sealix	1381142



# Regumaq X-25/X-45 - Accessories and spare parts

## Potable water circulation set

For extending the Regumaq X-25 / X45 fresh water station by a potable water circulation.



### Description

### Item No.

For Regumaq X-25/X-45, with circulation pump Wilo PARA BZ Z 15-130/7-50/SC

1381150

For Regumaq X-25/X-45, without circulation pump

1381152

## Return stratification control valve

For temperature-dependent stratification of the return water in the lower or central storage cylinder section. A temperature sensor, item no. 1369095, is also required.



### Description

### Item No.

For Regumaq X-45, with actuator, 230 V, running time 20 s, kvs value 11.3, DN 25

1381190

## Installation relay



### Description

### Item No.

For the connection of high-performance pumps (> 1 A)

1152089

## Earthing clamp

For electrical connection of metallic pipework to the equipotential bonding.



### Description

### Item No.

DN 20 - DN 32

1359995

#### Maintenance cable



##### Description

For Regumaq X-45, consisting of a connecting cable (2 m) incl. 2 magnetic contacts

##### Item No.

1381172

#### Strainer



##### Description

Both sides flat sealing external thread, with double wire basket 250 µm, PN 25, DN 20

##### Item No.

1141006

#### Aquastrom P Water sampling valve



##### Description

DN 8, PN 10, flame resistant, bronze/stainless steel, G 1/4

DN 10, PN 10, flame resistant, bronze/stainless steel, G 3/8

##### Certification

DVGW, SVGW

DVGW, SVGW

##### Item No.

4209102

4209103

#### Aquastrom R Backflow preventer



##### Description

DN 25, 1 1/4 union nut x G 1 1/4 external thread, straight, bronze

DN 32, 1 1/2 union nut x G 1 1/2 external thread, straight, bronze

DN 25, G 1 1/4 external thread x G 1 1/4 external thread, straight, bronze

DN 32, G 1 1/2 external thread x G 1 1/2 external thread, straight, bronze

##### Certification

DVGW, SVGW

DVGW, SVGW

DVGW, SVGW

DVGW, SVGW

##### Item No.

4208608 °

4208610 °

4208708 °

4208710 °

#### Aquanova Magnum Water filter



##### Description

DN 25, Rp 1, PN 16, with transparent plastic cup

DN 32, Rp 1 1/4, PN 16, with transparent plastic cup

DN 40, Rp 1 1/2, PN 16, with transparent plastic cup

DN 50, Rp 2, PN 16, with transparent plastic cup

##### Certification

DVGW, ACS

DVGW, ACS

DVGW, ACS

DVGW, ACS

##### Item No.

6120008 °

6120010 °

6120012 °

6120016 °



#### Replacement heat exchanger

For Regumaq X-25 (performance range 2) and Regumaq X-45 (performance range 3).  
The possibility of using copper brazed plate heat exchangers must be checked.  
Information on this is available at [www.oventrop.com/to/trinkwasseranforderung](http://www.oventrop.com/to/trinkwasseranforderung).

Description	Item No.
Performance range 2, copper brazed	1344084
Performance range 3, copper brazed	1344085
Performance range 2, copper brazed with Sealix® protective layer	1344094
Performance range 3, copper brazed with Sealix® protective layer	1344095

#### Replacement volume flow sensor



Description	Item No.
For Regumaq X-25/X-45, housing with slide-in turbine, without hall effect sensor	1381164
For Regumaq X-25/X-45 and Regudis W-HTE, slide-in turbine for volume flow sensor	1381165
For Regumaq X-25, hall effect sensor	1381170
For Regumaq X-45, hall effect sensor	1381171

#### Replacement temperature sensor



Description	Item No.
For Regumaq X-25/X-45, PT 1000, length 1 m	1381163

#### Replacement check valve



Description	Item No.
For Regumaq X-25/X-45 primary circuit	1381167

#### Replacement housing with check valve



Description	Item No.
For Regumaq X-25/X-45 circulation	1381169

Replacement pump



Description	Item No.
For Regumaq X-25/X-45 primary circuit, Wilo PARA 15-130/8-75/LIN-9	1381166
For Regumaq X-25/X-45 potable water circulation set, Wilo PARA BZ Z 15-130/7-50/SC	1381168

Replacement power supply cable



Description	Item No.
For Wilo-Yonos PARA high-efficiency pump, with right-angle plug	1358171
For Wilo PARA high-efficiency pump, with right-angle plug	1358172

Replacement sealing ring



Description	Item No.
For Regumaq X-25/X-45 and Regudis W-HTE, 5-fold, for junction G 3/4	1344497
For Regumaq X-25/X-45 and Regudis W-HTE, 5-fold, for junction G 1	1344498

Replacement controller



Description	Item No.
For Regumaq X-25, cabled	1381162
For Regumaq X-45, cabled without touch control panel	1381160
For Regumaq X-45, touch control panel	1381161



# Regumaq X-80 Fresh water stations



The Regumaq X-80 fresh water station is an electronically controlled product assembly with heat exchanger for the hygienic heating of potable water according to the continuous flow principle for connection to a buffer storage cylinder. Depending on the temperature and the volume flow on the potable water side, the circulation pump on the heating side is speed controlled. When selecting the fresh water station, it is necessary to consider the water quality of the application area.

a controller, a circulation pump, a throttling valve with actuator, a volume flow sensor, a safety valve, temperature sensors, fill and drain ball valves and ball valves.

The particularly powerful stations are characterised by high draw-off capacities at low excess temperatures. Remote access as well as networking and visualization are possible via the CS-BS data logger. The controller data can be set and read out via a web interface or be passed on to the building management system (BMS).

The stations consist of a plate heat exchanger,



Circulation function	Extendable	Shutoff ball valve potable water circuit	Yes
Connection potable water circuit	G 1 1/2 external thread, flat sealing	Shutoff ball valve storage cylinder circuit	Yes
Connection storage cylinder circuit	G 1 1/2 external thread, flat sealing	Fill and drain valve potable water circuit	Yes
Length	300 mm	Fill and drain valve storage cylinder circuit	Yes
Width	660 mm	Number of fill and drain valves potable water circuit	2
Height	875 mm	Number of fill and drain valves storage cylinder circuit	2
Centre distance potable water circuit	205 mm	Preprogrammed system examples	No
Centre distance storage cylinder circuit	220 mm	Additional controller functions	Yes
Type of temperature control	Speed control storage cylinder circuit pump with throttling valve	Nominal draw-off quantity*	77 l/min
Pump control signal	PWM	Kv value potable water circuit	6.6
Volume flow sensor	Turbine	Kv value storage cylinder circuit	6.9
Temperature sensor	PT 1000	Max. operating temperature	95 °C
Setting range potable water temperature	20 up to 75 °C	Max. operating pressure	10 bar
Thermal insulation	Yes	Leak tested	Yes
Safety valve potable water circuit	Yes	Certification	SVGW



## Regumaq X-80



### Heat exchanger

Copper brazed
Copper brazed, Sealix

### Item No.

1381580
1381582

## Regumaq X-80 - Accessories and spare parts

### Potable water circulation set

For extending the Regumaq X-80 fresh water station by a potable water circulation.



#### Description

For Regumaq X-80, without circulation pump

#### Item No.

1381590

### High-efficiency circulation pump



#### Description

For Regumaq X-80 potable water circulation set, Wilo PARA BZ Z 15-130/7-50/SC

For Regumaq X-80 potable water circulation set, Wilo PARA MAXO-Z 25-180-10-F02

#### Item No.

1381591

1381592

### Shutoff unit

To prevent gravity circulation in the primary circuit (cannot be used in combination with a return water stratification).



#### Description

For Regumaq X-80, with Hycocn HTZ DN 40 and Aktor M 2P H

#### Item No.

1381078

### Regtronic KM-IP Communication module BACnet IP or Modbus TCP

For integration of a controller into a building automation system via Modbus TCP.



#### Description

Wall mounting

#### Item No.

1159094

### Collective fault module



Description	Item No.
For Regumaq X-80 and Regumaq X-30/XZ-30	1381594

### Return stratification ball valve



For temperature-dependent stratification of the return water in the lower or central storage cylinder section. A return stratification set consists of a return stratification ball valve, an actuator (item no. 1381199) and a temperature sensor PT 1000 (item no. 1369093).

Description	Item No.
DN 32, PN 16, internal thread, brass	1381192
DN 40, PN 16, internal thread, brass	1381193
DN 50, PN 16, internal thread, brass	1381194

### Actuator



Description	Item No.
For return stratification ball valve	1381199

### Installation relay



Description	Item No.
For the connection of high-performance pumps (> 1 A)	1152089

### Earthing clamp

For electrical connection of metallic pipework to the equipotential bonding.



Description	Item No.
DN 20 - DN 32	1359995
DN 40 - DN 50	1359996

### Connection fitting



One connection fitting item no. 1381585 is required to integrate a G 1 circulation pump installed on site into the potable water circulation set item no. 1381590. One connection fitting item no. 1381587 and one connection fitting item no. 1359091 are required for a G 1 ½ circulation pump.

Description	Item No.
G 1 ½ internal thread x G 1 union nut, 32 mm	1359091
G 1 internal thread x G 1 internal thread	1381585
G 1 ½ internal thread x G 1 internal thread	1381587

### Aquastrom P Water sampling valve



Description	Certification	Item No.
DN 8, PN 10, flame resistant, bronze/stainless steel, G ¼	DVGW, SVGW	4209102
DN 10, PN 10, flame resistant, bronze/stainless steel, G ⅜	DVGW, SVGW	4209103

### Aquastrom R Backflow preventer



Description	Certification	Item No.
DN 40, 1 ¾ union nut x G 1 ¾ external thread, straight, bronze	DVGW, SVGW	4208612 °
DN 40, G 1 ¾ external thread x G 1 ¾ external thread, straight, bronze	DVGW, SVGW	4208712 °

### Aquanova Magnum Water filter



Description	Certification	Item No.
DN 25, Rp 1, PN 16, with transparent plastic cup	DVGW, ACS	6120008 °
DN 32, Rp 1 ¼, PN 16, with transparent plastic cup	DVGW, ACS	6120010 °
DN 40, Rp 1 ½, PN 16, with transparent plastic cup	DVGW, ACS	6120012 °
DN 50, Rp 2, PN 16, with transparent plastic cup	DVGW, ACS	6120016 °

### Replacement heat exchanger



The possibility of using copper braided plate heat exchangers must be checked. Information on this is available at [www.ointrop.com/to/trinkwasseranforderung](http://www.ointrop.com/to/trinkwasseranforderung).

Description	Item No.
For Regumaq X-80, 46 plates, copper braided	1381595
For Regumaq X-80, 46 plates, copper braided, Sealix® protective layer	1381584




#### Replacement volume flow sensor



##### Description

For Regumaq X-80 (VTY25)

##### Item No.

1381693 

#### Replacement temperature sensor



##### Description

For Regumaq X-30/XZ-30/X-80 with Regtronic RQ, potable water hot, screw-in sensor PT 1000

##### Item No.

1389052

#### Replacement high-efficiency pump



##### Description

For Regumaq X-80 primary circuit, Grundfos UPML 25-105 180 PWM-C

##### Item No.

1381599

#### Replacement power supply cable



##### Description

For Wilo-Yonos PARA high-efficiency pump, with right-angle plug

##### Item No.

1358171

For Wilo PARA high-efficiency pump, with right-angle plug

1358172

#### Replacement controller



##### Description

For Regumaq X-80, Regtronic RQ

##### Item No.

1381597

# Regumaq X-30/XZ-30 - Accessories and spare parts

## Exchange set



### Description

For Regumaq X-30/XZ-30, with Regtronic RQ controller, VFD volume flow sensor, controller receptacle made of expanded polypropylene, screw-in sensor PT 1000 and high-efficiency pump Wilo-Yonos PARA RS 15/7 130 PWM for the primary circuit

### Item No.

1389095

## Replacement heat exchanger



The possibility of using copper brazed plate heat exchangers must be checked. Information on this is available at [www.otentrop.com/to/trinkwasseranforderung](http://www.otentrop.com/to/trinkwasseranforderung).

### Description

30 plates up to 55 kW (primary circuit 80/60°C, secondary circuit 50/70°C)

### Item No.

1351791

30 plates up to 55 kW (primary circuit 80/60°C, secondary circuit 50/70°C), completely made of stainless steel

1381068

## Replacement check valve



### Description

For Regumaq X-30/XZ-30

### Item No.

1381089

## Replacement volume flow sensor



### Description

For Regumaq X-30/XZ-30 mit Regtronic PQ, pulse water meter 40 pulses/litre

### Item No.

1381093

For Regumaq X-30/XZ-30 with Regtronic RQ, VFD sensor 2-40 l/min

1389901

For Regumaq X-30/XZ-30 with Regtronic RQ, VFD sensor 2-40 l/min, sensor head, without housing

1389902

## Replacement temperature sensor



### Description

For Regumaq X-30/XZ-30 with Regtronic PQ, potable water hot, screw-in sensor PT 1000

### Item No.

1389050

For Regumaq X-30/XZ-30 with Regtronic PQ, potable water cold, pipe contact sensor PT 1000

1389051

For Regumaq X-30/XZ-30/X-80 with Regtronic RQ, potable water hot, screw-in sensor PT 1000

1389052

Replacement high-efficiency pump



Description	Item No.
For Regumaq XZ-30 secondary circuit, Wilo ZRS 15/4-3 KU	1381091
For Regumaq X-30/XZ-30 primary circuit and Regusol X secondary circuit, Wilo PARA 15-130/7-50/iPWM2-6	1389010



Replacement controller

Description	Item No.
For Regumaq X-30/XZ-30, Regtronic RQ	1389099

## Regumaq XH - Accessories and spare parts

### Retrofit set high-efficiency pumps



#### Description

For Regumaq XH, with electronic box, mains cable, flow switch and high-efficiency pump for the primary circuit

#### Item No.

1381048

### Replacement proportional flow controller



#### Description

For Regumaq XH and Regucor WH/WHS

#### Item No.

1381045

### Replacement circulation pump



#### Description

For Regumaq XH and Regucor WH/WHS, Wilo-Yonos ST 15/7 130 PWM2 for the primary circuit

#### Item No.

1383582



3.4





### 3.4 Stations for hot potable water preparation

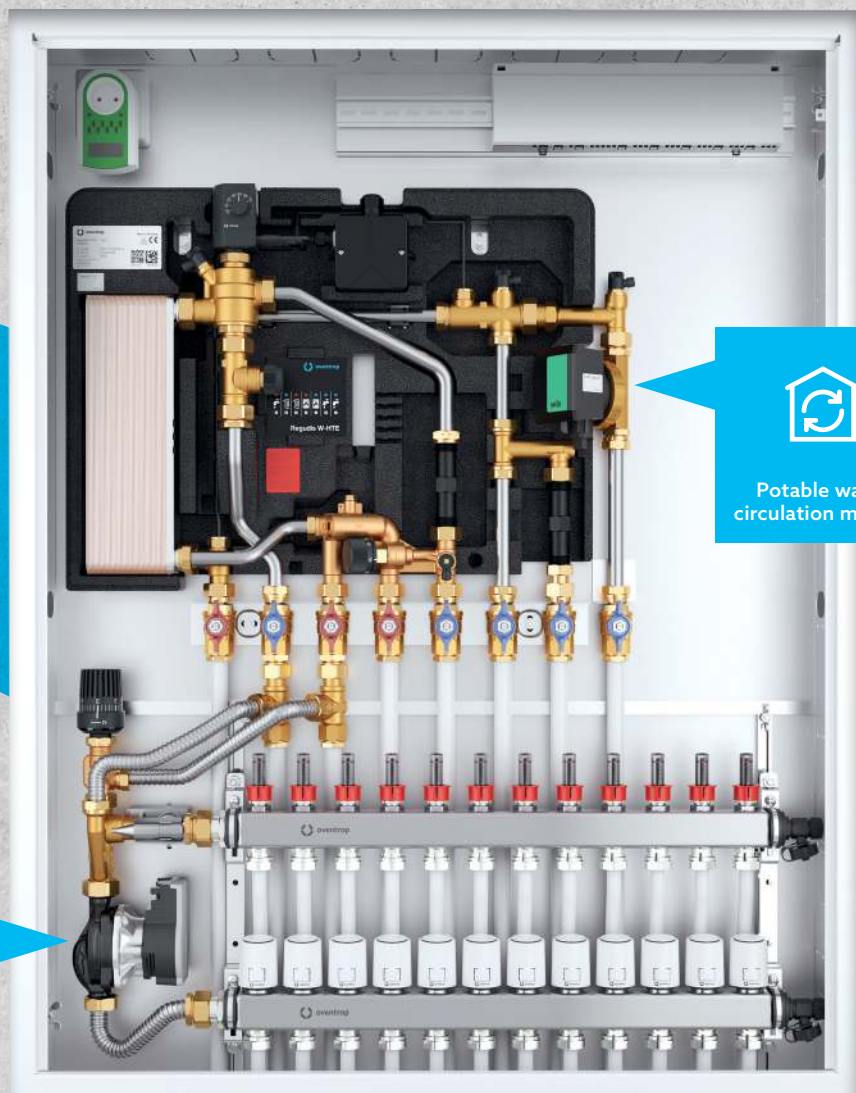
#### **Regudis W Dwelling stations for decentralised hot potable water preparation** **483**

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# One station. Zero complicated.



Flow temperature  
control module



Potable water  
circulation module

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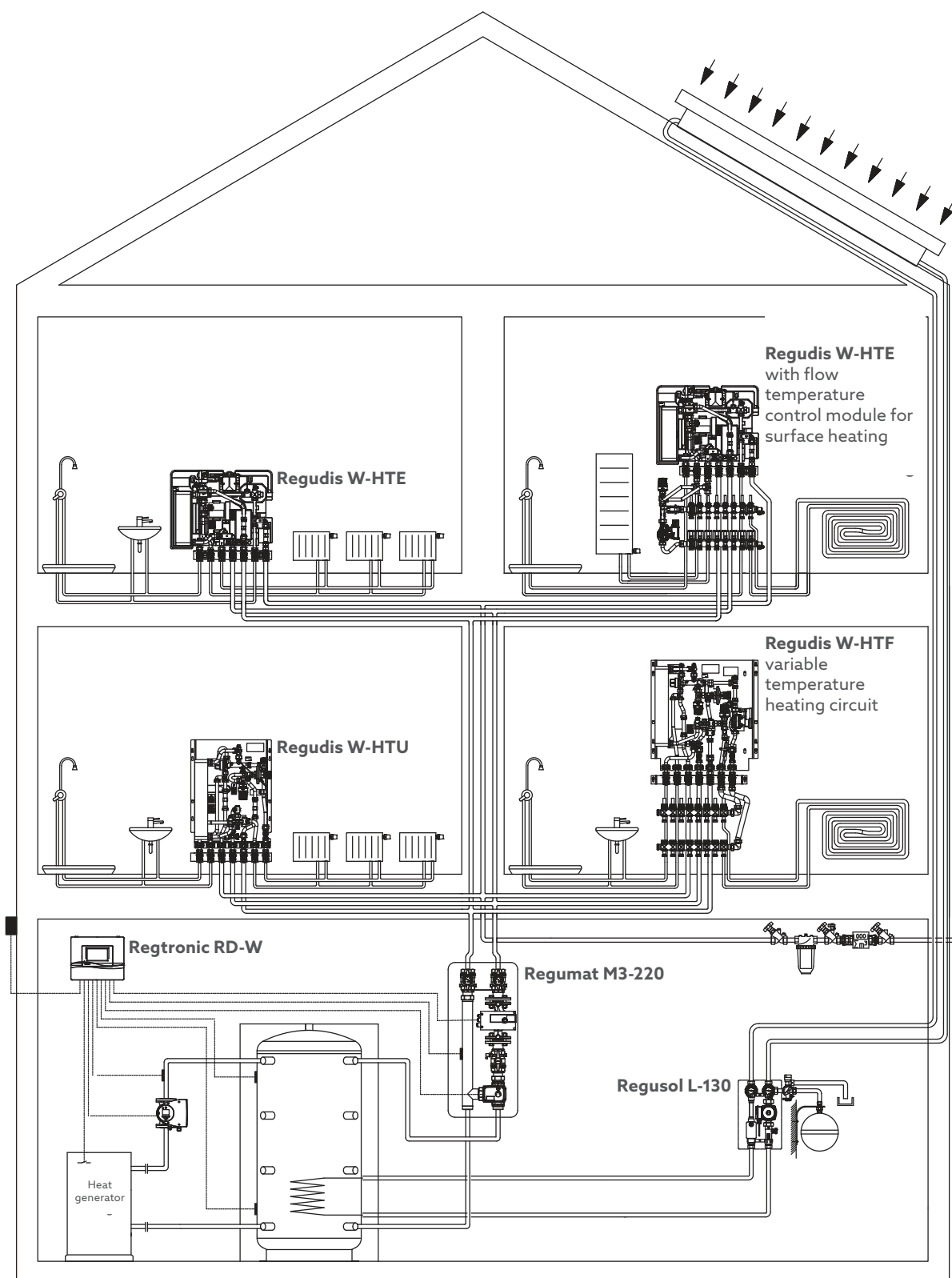
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Wir regeln das. Seit 1851.

## Regudis W with conventional heat generator, buffer storage cylinder and solar support



A control engineered integration of the **Regudis W** dwelling stations into the heating system can be carried out using the **Regtronic RD-W** system controller.



# Regudis W-HTE Electronic dwelling stations



2019



2019

For the supply of individual dwellings or commercial units with heating water, as well as with hot and cold potable water. The required heat is provided by a central heat supply. Hot potable water is prepared decentrally via a plate heat exchanger according to the continuous flow principle. When selecting the dwelling station, it is necessary to consider the water quality of the application area.

The stations consist of a plate heat exchanger, a control valve with integrated differential pressure and volume flow control, an actuator with integrated potable water temperature

control, a volume flow sensor, a temperature sensor, a filter insert, spacers for heat and water meter, vent valves and drain valves.

The Regudis W-HTE stations are designed for unmixed heating circuits and can also be used for mixed heating circuits with an optional flow temperature control module. The range of functions can also be extended in a modular way using extension modules. The stations are characterised by high draw-off capacities at low excess temperatures, are optimised in terms of pressure loss and offer a conclusive insulation concept.

Heating circuit	Unmixed, extendable	Integrated differential pressure regulator	Yes
Heat exchanger, double-walled	No	Setting range	40 up to 70 °C
Connection	G 3/4 union nut, flat sealing	Spacer for heat meter	Yes
Length	110 mm	Spacer for water meter	Yes
Width	600 mm	Filter insert	Yes
Height	455 mm	Safety valve	No
Supply connections	Bottom	Zone valve	Yes
Heating circuit separation system	Extendable	Max. operating temperature	90 °C
Circulation	Extendable	Max. operating pressure	10 bar
High temperature outlet	Yes	Min. differential pressure supply	150 mbar
Proportional flow controller	No	Leak tested	Yes
		Certification	SVGW

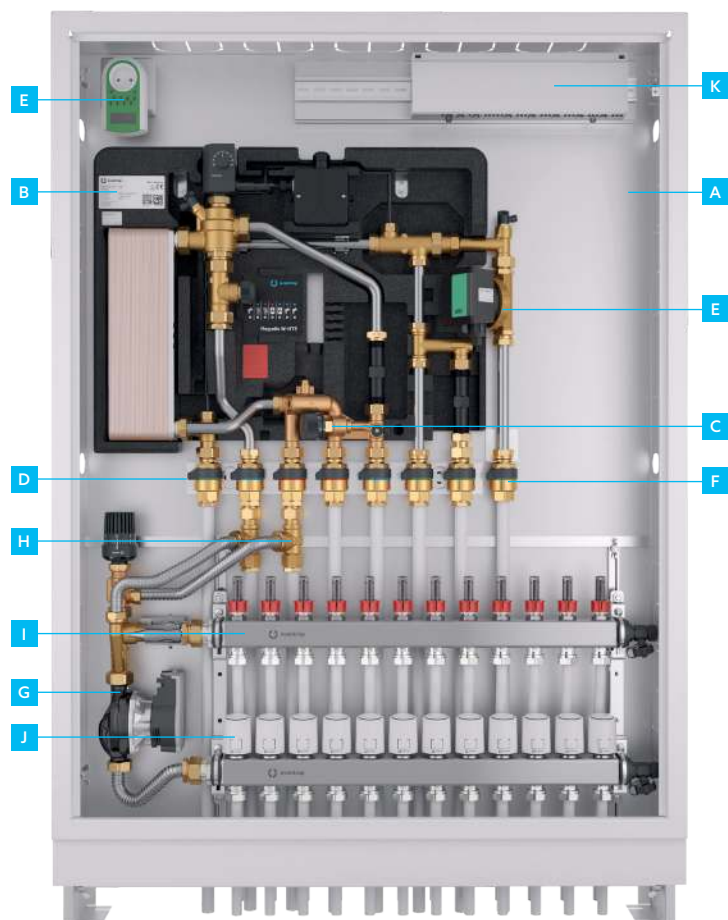


3.4

## Regudis W-HTE



Performance range	Nominal draw-off quantity 5 K* (l/min)	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
Performance range 1	12	21	Copper brazed	1344030
Performance range 2	18	25	Copper brazed	1344031
Performance range 3	25	30	Copper brazed	1344032
Performance range 1	12	21	Copper brazed, Sealix	1344050
Performance range 2	18	25	Copper brazed, Sealix	1344051
Performance range 3	25	30	Copper brazed, Sealix	1344052



#### Example Regudis W-HTE

#### Item no.

<b>A</b>	Cabinet	1344599
<b>B</b>	<b>Regudis W-HTE</b>	1344032
<b>C</b>	Derivative temperature control set	1344490
<b>D</b>	Connection and shutoff set	1344680
<b>E</b>	Potable water circulation module with time switch	1344555
<b>F</b>	Connection and shutoff set for potable water circulation module	1344684
<b>G</b>	Flow temperature control module	1344550
<b>H</b>	Heating circuit connection fitting	1344551
<b>I</b>	<b>Multidis SF</b> 12-fold Heating circuit distributor/collector	1406362
<b>J</b>	<b>Aktor T 2P</b> for individual room temperature control	1012452
<b>K</b>	Connecting bloc for room thermostats and actuators	1400983

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# Regudis W-HTE - Accessories and spare parts



## Flow temperature control module

Extension module for Regudis W-HTE.

### Description

### Item No.

For thermostatic flow temperature control of surface heating circuits, with high-efficiency pump Wilo PARA 15-130/6-43/SC-12, thermostatic temperature controller 25 °C - 50 °C, connection set and safety temperature monitor

1344550

For thermostatic flow temperature control of surface heating circuits, with high-efficiency pump Grundfos UPM3 Auto 15-70, thermostatic temperature controller 25 °C - 50 °C, connection set and safety temperature monitor

1344552

For thermostatic flow temperature control of surface heating circuits, with spacer G 1 x G 1 130 mm, thermostatic temperature controller 25 °C - 50 °C, connection set and safety temperature monitor

1344553 ::



## Heating circuit connection fitting

Extension module for Regudis W-HTE.

### Description

### Item No.

For the flow temperature control module, extension by an unmixed heating circuit, set consisting of 2 T-pieces and sealing washers

1344551



## Potable water circulation module

Extension module for Regudis W-HTE.

### Description

### Certification

### Item No.

For time controlled potable water circulation, with digital time switch and Wilo Star-Z NOVA

SVGW

1344555



## Instantaneous water heater module

Extension module for Regudis W-HTE.

### Description

### Item No.

For electronic reheating of the potable water

1344560



**Connection and piping set**

Extension module for Regudis W-HTE.



Description	Item No.
For Regudis W-HTE instantaneous water heater module, for fixing and piping in the cabinet	1344561

**Duo Heating circuit separation module**

Extension module for Regudis W-HTE.



Description	Item No.
For system separation of the heating circuit on the dwelling side from the heating circuit on the building side	1344576

**Connection module**

Extension module for Regudis W-HTE.



Description	Item No.
For Regudis W-HTE, for shutting off all connections and for flexible hydronic connection from above and/or below	1344570

**Front thermal insulation shell**



Description	Item No.
For Regudis W-HTE, made of expanded polypropylene, anthracite	1344470

**Derivative temperature control set**

To maintain the flow temperature in the Regudis W station to ensure a quick supply of hot potable water outside of the heating mode.



Description	Item No.
For Regudis W-HTE, thermostatically adjustable heating bypass	1344490



#### Ball valve connection set



Description	Item No.
For Regudis W-HTE, for shutting off all connections	1344480 °
For Regudis W-HTE, for shutting off all connections, with flushing function of the supply pipe	1344485 °
For Regudis W-HTE potable water circulation module, for shutting off the circulation pipe	1344484 °

#### Connection and shutoff set



Description	Item No.
For Regudis W-HTE, for shutting off all connections	1344680
For Regudis W-HTE, for shutting off all connections, with flushing function of the supply pipe	1344685
For Regudis W-HTE potable water circulation module, for shutting off the circulation pipe	1344684

#### Flushing and mounting bridge



Description	Item No.
For Regudis W-HTE, for flushing the heating system	1344489

#### Automatic deaerator



Description	Item No.
For Regudis W-HTE	1344460

#### Stainless steel spacer



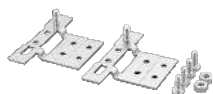
Description	Item No.
For Regudis W, for replacing the plastic spacers, G 3/4 x 110 mm	1349052

Earthing clamp



Description	Item No.
For Regudis W, for equipotential bonding of dwelling stations without cabinet	1341092

Mounting compensation



Description	Item No.
For mounting the Multidis heating circuit manifolds in the cabinet if the piping does not allow it to be mounted at the intended location	1408015

Sealing plug set

Accessory for installation in a four pipe system.



Description	Item No.
For Regudis W-HTE, 2-fold	1344481

3.4

Heat meter connection set

Accessory for installation in a four pipe system.



Max. operating temperature (°C)	Max. operating pressure (bar)	Item No.
100	10	1404578
100	10	1404580
100	10	1404682
100	10	1405578
100	10	1405580

Electrical connecting block for surface heating

Accessory for installation in a four pipe system.  
When using 24 V, an external power supply of 24 V must be available. Item no. 1153053 can be used as transformer.



Description	Item No.
6 control zones, heating, 24 V / 230 V	1400980



3.4

## Bonnets and cabinets for electronic dwelling stations

	Bonnets	Revision frame
Item no.	1344595	1344098
<b>Regudis W-HTE</b> Heat exchanger copper brazed 13444030/31/32	●	⊙
Heat exchanger copper brazed with Sealix <sup>®</sup> protective layer 1344050/51/52	●	⊙
<b>Plus extension modules</b> Flow temperature control module 1344550/52/53		
Heating circuit connection fitting 1344551		
Potable water circulation module 1344555		●
Instantaneous water heater module 1344560		
Connection and piping set 1344561		
Duo heating circuit separation module 1344576		
Heating circuit connection fitting 1344551		
Potable water circulation module 1344555		●

⊙ plus extension modules









































3.4



Flush-mounted cabinets

Surface-mounted cabinets

1344596	1344598	1344599	1344697	1344698	1344699
					
					
	 for heating circuit manifolds up to 8 circuits	 for heating circuit manifolds up to 12 circuits		 for heating circuit manifolds up to 8 circuits	 for heating circuit manifolds up to 12 circuits
	 for heating circuit manifolds up to 8 circuits	 for heating circuit manifolds up to 12 circuits		 for heating circuit manifolds up to 8 circuits	 for heating circuit manifolds up to 12 circuits
	 for heating circuit manifolds up to 8 circuits	 for heating circuit manifolds up to 12 circuits		 for heating circuit manifolds up to 8 circuits	 for heating circuit manifolds up to 12 circuits
		 for heating circuit manifolds up to 8 circuits			 for heating circuit manifolds up to 8 circuits
		 for heating circuit manifolds up to 8 circuits			 for heating circuit manifolds up to 8 circuits
		 for heating circuit manifolds up to 10 circuits			 for heating circuit manifolds up to 10 circuits
		 for heating circuit manifolds up to 10 circuits			 for heating circuit manifolds up to 10 circuits
		 for heating circuit manifolds up to 10 circuits			 for heating circuit manifolds up to 10 circuits



#### Regubox Exclusive surface-mounted bonnet

##### Description

For Regudis W-HTE, with integrated thermal insulation, cannot be used in combination with the potable water circulation module, W 670 x H 630 x D 121 mm

##### Item No.

1344595



#### Revision frame

##### Description

For Regudis W-HTE, standard version, for flush wall mounting, W 742 x H 660 x D 25 mm

##### Item No.

1344098



#### Flush-mounted cabinet

##### Description

For Regudis W-HTE, standard model, W 700 x H 785-900 x D 110-175 mm

##### Item No.

1344596

For Regudis W-HTE, long model, for heating circuit manifolds up to 8 circuits, W 700 x H 1298-1413 x D 110-175 mm

1344598

For Regudis W-HTE, long model, for heating circuit manifolds up to 12 circuits (with instantaneous water heater module up to a max. of 8 circuits), W 880 x H 1298-1413 x D 110-175 mm

1344599



#### Surface-mounted cabinet

##### Description

For Regudis W-HTE, standard model, W 750 x H 745-860 x D 160 mm

##### Item No.

1344697

For Regudis W-HTE, long model, for heating circuit manifolds up to 8 circuits, W 750 x H 1326-1441 x D 160 mm

1344698

For Regudis W-HTE, long model, for heating circuit manifolds up to 12 circuits (with instantaneous water heater module up to a max. of 8 circuits), W 880 x H 1326-1441 x D 160 mm

1344699

#### Cylinder lock



##### Description

With key for flush-mounted cabinets (item no. 1401151-54) and all Regudis W cabinets

##### Item No.

1401191



#### ClimaCon F 210 for two pipe applications, heating only/cooling only, leader

Electronic control component for the unmixed heating circuit.

Voltage	Control	Suitable for	Item No.
230 V AC	On/off / PWM	Electrothermal actuators (on/off), "normally closed"	1155021

#### Safety temperature monitor

Electronic control component for the mixed heating circuit.



Description	Item No.
For max. limitation of the heating circuit temperature, 20 °C - 90 °C	1344583



#### Regtronic RH Weather-compensated heating circuit controller for mixed/unmixed heating circuit

Compatible with data logger CS-BS-1 as well as Regtronic KM-TCP communication module. Extendable by a maximum of 5 extension modules.

Application	Heating circuit control	Solid-state relays	3
	Heat generator activation	Electromechanical relays	2
	Solid fuel boiler	Potential-free relays	1
	Service water heating	PWM*	2
Operating voltage	230 V AC	PWM switchable 0 - 10 V*	Yes
Further inputs	Pulse inputs V40	Heat meter	5
	Grundfos Direct Sensor	Product compatible to	Regtronic EM
Sensor inputs	8		

Scope of delivery	Item No.
1 x Outdoor sensor	
1 x Pipe contact sensor	
2 x Storage cylinder sensor	1152083



#### Aktor M Electromotive actuator 230 V, connection thread M 30 x 1.5

Electronic control component for the mixed heating circuit.

Description	Item No.
On/off and floating control, 1.5 m cable	1012729



#### Remote control with room temperature sensor

Electronic control component for the mixed heating circuit.

Description	Item No.
For heating curve and function setting (Party, Heating circuit off), control from the living room, PT 1000 sensor element, surface mounting	1152096

**Electrical connecting block for surface heating**

Electronic control component for the mixed heating circuit.



Description	Item No.
10 control zones, heating / cooling (change-over), pump and boiler control and integrated time switch, 230 V	1400983

**ClimaCon F 90 for two pipe applications, heating only/cooling only, follower**

Electronic control component for the mixed heating circuit.



Voltage	Control	Suitable for	Item No.
230 V AC	On/off	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1155009

**Aktor T 2P Electrothermal actuator**

Electronic control component for the mixed heating circuit.



Description	Item No.
On/off control, "normally closed", 230 V, 2 m cable	1012452

**Regtronic RD-W System controller for the integration of the Regudis W dwelling stations into the heat supply**



Description	Item No.
For Regudis W, with touch display	1342093

**Sensor connection set**

Accessory for Regtronic RD-W system controller.



Description	Item No.
For connecting differential pressure and temperature sensors to the pipework	1357291
For connecting temperature sensors to the pipework	1357292



### Regumat Tailpipe set

Accessory for Regtronic RD-W system controller.



Description	Item No.
Coupling G 2 union nut (2 x), for connection to Regumat DN 32	1352088
Coupling R 2 external thread x G 2 union nut (1 x), for connection to Regumat DN 40 / 50	1352089

### Outside temperature sensor

Accessory for Regtronic RD-W system controller.



Description	Item No.
For outside temperature measurement, PT 1000 sensor element, splash-proof housing, surface mounting	1152099

### Sensor LW TH Temperature sensor

Accessory for Regtronic RD-W system controller.



Description	Item No.
For temperature measurement and detection in immersion sleeves and storage cylinders, PT 1000 sensor element, continuous temperature range up to 105 °C, length 3 m	1369093
For temperature measurement and detection at collectors, PT 1000 sensor element, continuous temperature range up to 180 °C, length 2 m	1369094
For temperature measurement and detection at the pipework, with fastening clip Ø 25 - 40 mm and heat conducting paste, PT 1000 sensor element, continuous temperature range up to 180 °C, length 1.5 m	1369095

### Replacement heat exchanger

For Regudis W-HTE.

The possibility of using copper brazed plate heat exchangers must be checked.  
Information on this is available at [www.oventrop.com/to/trinkwasseranforderung](http://www.oventrop.com/to/trinkwasseranforderung).



Description	Item No.
Performance range 1, copper brazed	1344083
Performance range 2, copper brazed	1344084
Performance range 3, copper brazed	1344085
Performance range 1, copper brazed with Sealix® protective layer	1344093
Performance range 2, copper brazed with Sealix® protective layer	1344094
Performance range 3, copper brazed with Sealix® protective layer	1344095

### Replacement volume flow sensor



Description	Item No.
For Regudis W-HTE, housing with slide-in turbine and hall effect sensor	1344493
For Regudis W-HTE, hall effect sensor for volume flow sensor	1344499
For Regumaq X-25/X-45 and Regudis W-HTE, slide-in turbine for volume flow sensor	1381165

#### Replacement distributor

##### Description

For Regudis W-HTE

##### Item No.

1344486 



#### Replacement filter insert

##### Description

For Regudis W-HTE

##### Item No.

1344495

#### Replacement temperature sensor potable water

##### Description

For Regudis W-HTE, with cable and plug

##### Item No.

1344494



#### Replacement control valve

##### Description

For Regudis W-HTE, with integrated differential pressure and volume flow control

##### Item No.

1344492



#### Replacement actuator

##### Description

For Regudis W-HTE, with integrated potable water temperature control

##### Item No.

1344491



#### Replacement sealing ring

##### Description

For Regumaq X-25/X-45 and Regudis W-HTE, 5-fold, for junction G 3/4

For Regumaq X-25/X-45 and Regudis W-HTE, 5-fold, for junction G 1

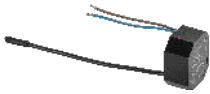
##### Item No.

1344497

1344498



#### Replacement power supply unit



Description	Item No.
For Regudis W-HTE	1344496

#### Replacement thermostatic temperature controller



Description	Item No.
For Regudis W-HTE flow temperature control module, with contact sensor, 25 °C - 50 °C	1344582

#### Replacement elbow

Description	Item No.
For Regudis W-HTE flow temperature control module	1344487 ::

#### Replacement connection group

Description	Item No.
For Regudis W-HTE potable water circulation module	1344488 ::



3.4

#### Replacement high-efficiency pump



Description	Item No.
For Regudis W-HTE potable water circulation module, Wilo Star-Z NOVA	1344580
For Regudis W-HTE flow temperature control module and Regudis W-HTF with mixed heating circuit, Wilo PARA 15-130/6-43/ SC-12	1344581

#### Replacement power supply cable



Description	Item No.
For Grundfos UPM 3 high-efficiency pump, cable length 2 m	1358149
For Wilo-Yonos PARA high-efficiency pump, with right-angle plug	1358171
For Wilo PARA high-efficiency pump, with right-angle plug	1358172



#### Replacement ball valve

##### Description

- For Regudis W ball valve connection sets, red handle
- For Regudis W ball valve connections sets, blue handle

##### Item No.

- 1341980
- 1341981



#### Replacement valve

##### Description

- For Regudis W-HTE connection and shutoff sets

##### Item No.

- 1344780

#### Replacement set for flush-mounted cabinet

##### Description

- For item no. 1344596, with door, frame and screed cover
- For item no. 1344598, with door, frame and screed cover
- For item no. 1344599, with door, frame and screed cover

##### Item No.

- 1344590 ::
- 1344591 ::
- 1344592 ::

#### Replacement set for surface-mounted cabinet

##### Description

- For item no. 1344697, with door and screed cover
- For item no. 1344698, with door and screed cover
- For item no. 1344699, with door and screed cover

##### Item No.

- 1344690 ::
- 1344691 ::
- 1344692 ::

#### Replacement mounting set for flush/surface-mounted cabinet

##### Description

- Including equipotential bonding, screws, spacers for manifolds

##### Item No.

- 1401197 ::



3.4



# Regudis W-HTU Hydronic dwelling stations



For the supply of individual dwellings or commercial units with heating water, as well as with hot and cold potable water. The required heat is provided by a central heat supply. Hot potable water is prepared decentrally via a plate heat exchanger according to the continuous flow principle. When selecting the dwelling station, it is necessary to consider the water quality of the application area.

The stations consist of a plate heat exchanger, a proportional flow controller for hydronic control of hot potable water preparation, a ther-

mostatic temperature controller, filter inserts, spacers for heat and water meter, a zone valve for heating circuit control, a differential pressure regulator, vent valves and drain valves.

The Regudis W-HTU dwelling stations are designed for unmixed heating circuits and are ideal for replacing existing gas boilers in building refurbishment projects. They are characterised by high-quality materials and are completely mounted on a base plate. The stations are tested for tightness and function.

Connection	G 3/4 union nut, flat sealing	Spacer for heat meter	Yes
Height	630 mm	Filter insert	Yes
Circulation	No	Max. operating temperature	90 °C
Proportional flow controller	Yes	Leak tested	Yes
Setting range	40 up to 70 °C		



## Regudis W-HTU

Heating circuit	Unmixed	Spacer for water meter	Yes
Heat exchanger, double-walled	No	Safety valve	No
Length	150 mm	Zone valve	Yes
Width	476 mm	Max. operating pressure	10 bar
Supply connections	Bottom	Min. differential pressure supply	300 mbar
Heating circuit separation system	No	Certification	SVGW, ACS, WRAS
High temperature outlet	Yes		
Integrated differential pressure regulator	Yes		

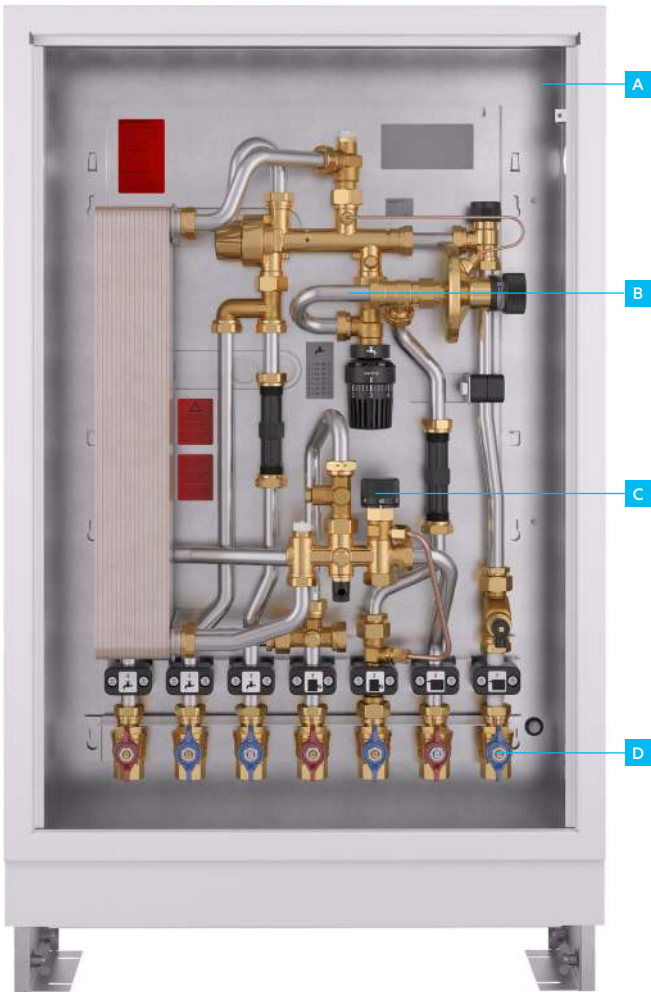
### Performance range

### Nominal draw-off quantity 15 K\* (l/min)

### Heat exchanger

### Item No.

Performance range 1	12	Copper brazed	1341030
Performance range 2	15	Copper brazed	1341031
Performance range 3	17	Copper brazed	1341032
Performance range 1	12	Nickel brazed	1341050
Performance range 2	15	Nickel brazed	1341051
Performance range 3	17	Nickel brazed	1341052



Example Regudis W-HTU		Item no.
A	Flush-mounted cabinet – narrow model	1341070
B	Regudis W-HTU	1341032
C	Derivative temperature control set	1341088
D	Ball valve connection set	1341080



Regudis W-HTU without cold water outlet and spacer for water meter

Heating circuit	Unmixed	Integrated differential pressure regulator	Yes
Heat exchanger, double-walled	No	Spacer for water meter	No
Length	150 mm	Safety valve	No
Width	476 mm	Zone valve	Yes
Supply connections	Bottom	Max. operating pressure	10 bar
Heating circuit separation system	No	Min. differential pressure supply	300 mbar
High temperature outlet	Yes		

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Certification	Item No.
Performance range 2	15	Copper brazed	ACS, SVGW	1341231
Performance range 2	15	Nickel brazed	SVGW	1341251



#### Regudis W-HTU without cold water outlet and spacer for water meter

With double-walled heat exchanger, KIWA certified.

Heating circuit	Unmixed	Integrated differential pressure regulator	Yes
Heat exchanger, double-walled	Yes	Spacer for water meter	No
Length	150 mm	Safety valve	No
Width	476 mm	Zone valve	Yes
Supply connections	Bottom	Max. operating pressure	10 bar
Heating circuit separation system	No	Min. differential pressure supply	300 mbar
High temperature outlet	Yes	Certification	SVGW

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Certification	Item No.
	8	Copper brazed		1341220



#### Regudis W-HTO without cold water outlet and spacer for water meter

Supply connctions from the top.

With strainer in the potable water inlet.

Without cold water outlet dwelling and spacer for water meter.

With six ball valves.

Heating circuit	Unmixed	Integrated differential pressure regulator	Yes
Heat exchanger, double-walled	No	Spacer for water meter	No
Length	150 mm	Safety valve	No
Width	476 mm	Zone valve	Yes
Supply connections	Top	Max. operating pressure	10 bar
Heating circuit separation system	No	Min. differential pressure supply	300 mbar
High temperature outlet	Yes		

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Certification	Item No.
Performance range 2	15	Copper brazed	SVGW, ACS	1341274
Performance range 2	15	Nickel brazed	SVGW	1341271



#### Regudis W-TU

For hot potable water preparation.

Without heating circuit.

Derivative temperature control set pre-assembled.

Heat exchanger, double-walled	No	Integrated differential pressure regulator	Yes
Length	150 mm	Spacer for water meter	Yes
Width	476 mm	Safety valve	No
Supply connections	Bottom	Zone valve	No
Heating circuit separation system	No	Max. operating pressure	10 bar
High temperature outlet	No	Min. differential pressure supply	300 mbar

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Certification	Item No.
Performance range 3	17	Copper brazed	SVGW, ACS	1341257
Performance range 3	17	Nickel brazed	SVGW	1341267



#### Regudis W-HTU Duo with heating circuit separation system

Heating circuit	Mixed	Integrated differential pressure regulator	Yes
Setting range heating circuit	40 up to 70 °C	Spacer for water meter	Yes
Heat exchanger, double-walled	No	Safety valve	Yes
Length	150 mm	Zone valve	Yes
Width	630 mm	Max. operating pressure	16 bar
Supply connections	Bottom	Min. differential pressure supply	300 mbar
Heating circuit separation system	Yes	Certification	ACS, WRAS
High temperature outlet	Yes		

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
Performance range 3	17	Copper brazed	1341332



#### Regudis W-HTO Duo with heating circuit separation system

Potable water and supply connections from the top.  
Without cold water outlet dwelling and spacer for water meter.  
Derivative temperature control set cannot be integrated.

Heating circuit	Mixed	Integrated differential pressure regulator	Yes
Setting range heating circuit	25 up to 50 °C	Spacer for water meter	No
Heat exchanger, double-walled	No	Safety valve	Yes
Length	150 mm	Zone valve	Yes
Width	630 mm	Max. operating pressure	10 bar
Supply connections	Top	Min. differential pressure supply	300 mbar
Heating circuit separation system	Yes	Certification	WRAS
High temperature outlet	Yes		

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
Performance range 3	17	Copper brazed	1341372



#### Regudis W-HTU Basic with double-walled heat exchanger

Without differential pressure regulator, cold water outlet dwelling and spacer for water meter.  
With double-walled heat exchanger, KIWA certified.

Heating circuit	Unmixed	Integrated differential pressure regulator	No
Heat exchanger, double-walled	Yes	Spacer for water meter	No
Length	175 mm	Safety valve	No
Width	476 mm	Zone valve	Yes
Supply connections	Bottom	Max. operating pressure	10 bar
Heating circuit separation system	No	Min. differential pressure supply	150 mbar
High temperature outlet	Yes		

Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
8	Copper brazed	1340920 °

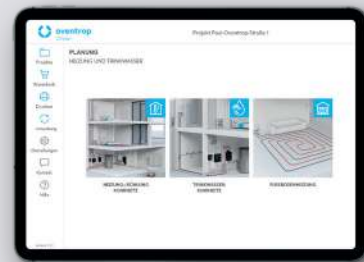


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3.4

# Regudis W-HTF Hydronic dwelling stations



For the supply of individual dwellings or commercial units with heating water, as well as with hot and cold potable water. The required heat is provided by a central heat supply. Hot potable water is prepared decentrally via a plate heat exchanger according to the continuous flow principle. When selecting the dwelling station, it is necessary to consider the water quality of the application area.

The stations consist of a plate heat exchanger, a proportional flow controller for hydronic control of hot potable water preparation, a thermostatic temperature controller, filter inserts, spacers for heat and water meter, a zone valve

for heating circuit control, a differential pressure regulator, vent valves and drain valves. The version with mixed heating circuit also features a thermostatic flow temperature control with integrated high-efficiency pump for the low temperature range.

The Regudis W-HTF dwelling stations are optionally available for unmixed or mixed heating circuits and are ideally suited for installation in lightweight partition walls due to their low installation depth. They are characterised by high-quality materials and are completely mounted on a base plate. The stations are tested for tightness and function.

Heat exchanger, double-walled	No	Spacer for heat meter	Yes
Connection	G ¾ union nut, flat sealing	Spacer for water meter	Yes
Supply connections	Bottom	Filter insert	Yes
Heating circuit separation system	No	Safety valve	No
Proportional flow controller	Yes	Zone valve	Yes
Integrated differential pressure regulator	Yes	Max. operating temperature	90 °C
Setting range	40 up to 70 °C	Max. operating pressure	10 bar
		Min. differential pressure supply	300 mbar
		Leak tested	Yes

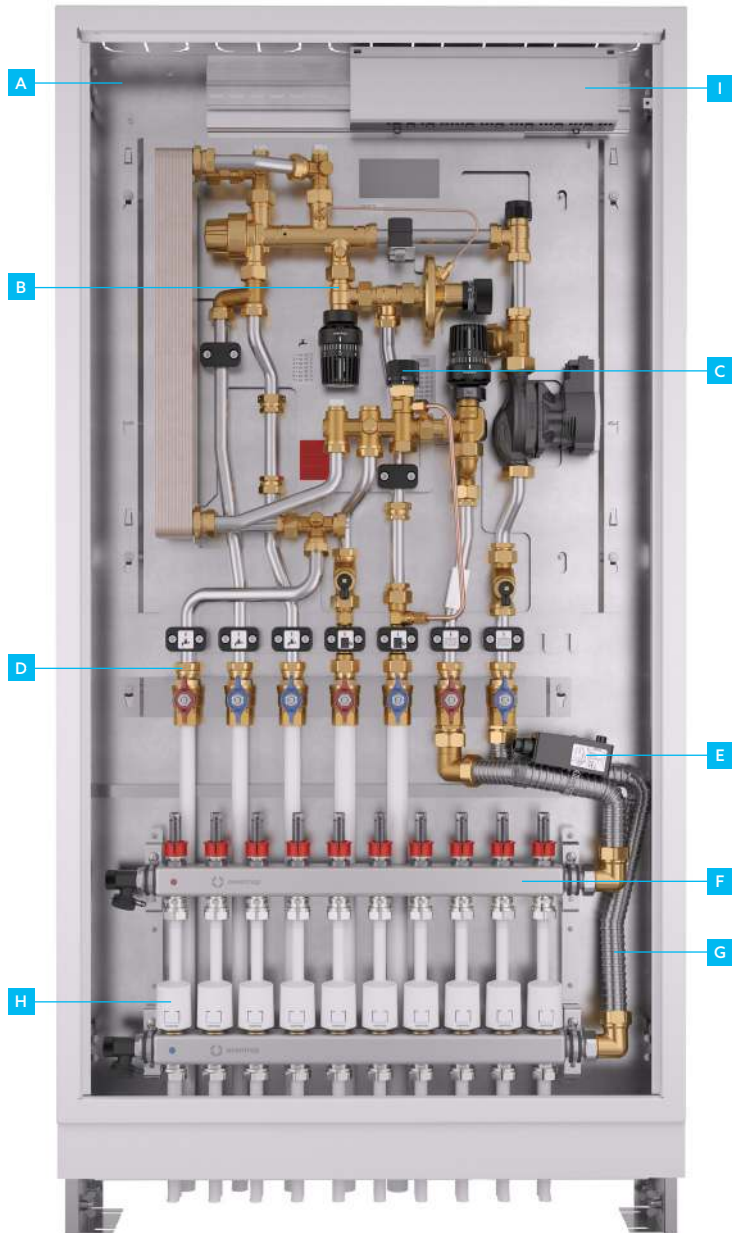
3.4



## Regudis W-HTF with unmixed heating circuit

Heating circuit	Unmixed	Height	655 mm
Length	110 mm	Circulation	No
Width	565 mm	High temperature outlet	Yes

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
Performance range 1	12	Copper brazed	1341130
Performance range 2	15	Copper brazed	1341131
Performance range 3	17	Copper brazed	1341132
Performance range 1	12	Nickel brazed	1341150
Performance range 2	15	Nickel brazed	1341151
Performance range 3	17	Nickel brazed	1341152



#### Example Regudis W-HTF

#### Item no.

<b>A</b>	Cabinet – long model	1341175
<b>B</b>	<b>Regudis W-HTF</b>	1341140
<b>C</b>	Derivative temperature control set	1341188
<b>D</b>	Ball valve connection set	1341180
<b>E</b>	Safety temperature monitor	1344583
<b>F</b>	<b>Multidis SF</b> 10-fold Heating circuit distributor/collector	1406360
<b>G</b>	Connection set for <b>Multidis SF</b> heating circuit distributor/collector	1341187
<b>H</b>	<b>Aktor T 2P</b> Electrothermal actuator	1012452
<b>I</b>	Connecting block with pump control	1400983



#### Regudis W-HTF with mixed heating circuit

Heating circuit	Mixed	Height	655 mm
Setting range heating circuit	25 up to 50 °C	Circulation	No
Length	110 mm	High temperature outlet	No
Width	630 mm	Certification	ACS

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
Performance range 1	12	Copper brazed	1341140
Performance range 2	15	Copper brazed	1341141
Performance range 3	17	Copper brazed	1341142
Performance range 1	12	Nickel brazed	1341160
Performance range 2	15	Nickel brazed	1341161
Performance range 3	17	Nickel brazed	1341162



#### Regudis W-HTF with mixed heating circuit and high temperature outlet

Heating circuit	Mixed	Circulation	No
Setting range heating circuit	25 up to 50 °C	High temperature outlet	Yes
Width	630 mm	Certification	ACS

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Length (mm)	Height (mm)	Item No.
Performance range 1	12	Copper brazed	110	655	1341340
Performance range 2	15	Copper brazed	110	655	1341341
Performance range 3	17	Copper brazed	110	655	1341342
Performance range 1	12	Nickel brazed	655	110	1341360
Performance range 2	15	Nickel brazed	110	655	1341361
Performance range 3	17	Nickel brazed	110	655	1341362



#### Regudis W-HTF with unmixed heating circuit and circulation pipe

Heating circuit	Unmixed	Height	655 mm
Length	110 mm	Circulation	Yes
Width	565 mm	High temperature outlet	Yes

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
Performance range 3	17	Copper brazed	1341642
Performance range 3	17	Nickel brazed	1341662



### Regudis W-HTF with mixed heating circuit and circulation pipe



Heating circuit	Mixed	Height	110 mm
Setting range heating circuit	25 up to 50 °C	Circulation	Yes
Length	655 mm	High temperature outlet	No
Width	630 mm		

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
Performance range 3	17	Copper brazed	1341442
Performance range 3	17	Nickel brazed	1341462

### Regudis W-HTF with mixed heating circuit, high temperature outlet and circulation pipe



Heating circuit	Mixed	Height	655 mm
Setting range heating circuit	25 up to 50 °C	Circulation	Yes
Length	110 mm	High temperature outlet	Yes
Width	630 mm		

Performance range	Nominal draw-off quantity 15 K* (l/min)	Heat exchanger	Item No.
Performance range 3	17	Copper brazed	1341542
Performance range 3	17	Nickel brazed	1341562

## Hydronic balancing? Quickly done with OVplan.



You want to design systems with the Regudis dwelling station?  
It's easy with our planning software OVplan.

Download now free of charge at [www.ventrop.com/qv/ovplan](http://www.ventrop.com/qv/ovplan)





# Regudis W-HTU/W-HTF - Accessories and spare parts

## Connection set



### Description

For Regudis W-HTF, for connecting Multidis SF heating circuit manifolds

### Item No.

1341187

## T-piece



### Description

For Regudis W-HTF, for connecting two Multidis SF heating circuit manifolds to one connection set

### Item No.

1685121

## Derivative temperature control set

To maintain the flow temperature in the Regudis W station to ensure a quick supply of hot potable water outside of the heating mode.



### Description

For Regudis W-HTU/W-TU, ready for installation

For Regudis W-HTO, ready for installation

For Regudis W-HTO Duo, ready for installation

For Regudis W-HTF, ready for installation

### Item No.

1341088

1341089

1341087

1341188

## Return temperature limiter set



### Description

For Regudis W-HTU/W-HTO, for limiting the heating circuit return temperature, setting range 0 °C - 40 °C

### Item No.

1341091

### Stainless steel spacer



#### Description

For Regudis W, for replacing the plastic spacers, G 3/4 x 110 mm

#### Item No.

1349052

### Ball valve connection set



#### Description

For Regudis W-HTU, for shutting off all connections

#### Item No.

1341080

For Regudis W-HTU, for shutting off all connections, with flushing function of the supply pipe

1341082

For Regudis W-TU, for shutting off all connections, without heating circuit connection dwelling

1341083

For Regudis W-HTU Basic, for shutting off all connections, without cold water outlet dwelling

1341084

For Regudis W-HTF, for shutting off all connections

1341180

For Regudis W-HTF, for shutting off all connections, with flushing function of the supply pipe

1341185

For Regudis W-HTF, angle version (GSWB), for shutting off all connections

1341182

For Regudis W-HTF, for shutting off the high temperature outlet

1341183

For Regudis W-HTF, for shutting off the circulation pipe

1341184

### Flushing and mounting bridge



#### Description

For Regudis W-HTF, for flushing the heating system

#### Item No.

1341189

### Plug



#### Description

For Regudis W-HTF, for temperature sensor, G 1/2 external thread x M 10 x 1.0 internal thread, Ø 5.6

#### Item No.

1349051

For Regudis W-HTF with high temperature outlet, for temperature sensor, G 1/4 external thread x M 10 x 1,0 internal thread, Ø 5.6

1349054

### Flow limiter



#### Description

Draw-off quantity limitation 12 l/min

#### Item No.

1349980

Draw-off quantity limitation 15 l/min

1349981

Draw-off quantity limitation 17 l/min

1349982



**Accessory set for equipotential bonding**

Fixing material for connection to the base plate of the dwelling station.



**Description**

For Regudis W-HTU/W-HTF

**Item No.**

1349983



3.4

## Bonnets and cabinets for hydronic dwelling stations

Item no.	Bonnets					
	1341072	1341095	1341195	1341197	1341295	1341296
1340920						●
1340930/31/32		●				
1340950/51/52		●				
1341030/31/32		●				
1341050/51/52		●				
1341130/31/32			●			
1341140/41/42				●		
1341150/51/52			●			
1341160/61/62				●		
1341220						●
1341231/51		●				
1341257/67		●				
1341271/74					●	
1341332						
1341340/41/42						
1341360/61/62						
1341372	●					
1341442/62						
1341542/62						
1341642/62						



3.4

Flush mounting				Surface mounting			
1341070	1341170	1341175	1341177	1341071	1341198	1341193	1341074
•		• <sup>1</sup>	• <sup>1</sup>		•	•	
•		• <sup>1</sup>	• <sup>1</sup>		•	•	
•		• <sup>1</sup>	• <sup>1</sup>		•	•	
•		• <sup>1</sup>	• <sup>1</sup>		•	•	
	•	•	•	•	•	•	
	•	•	•	•	•	•	
	•	•	•	•	•	•	
	•	•	•	•	•	•	
•							
•		• <sup>1</sup>	• <sup>1</sup>		•	•	
•		• <sup>1</sup>	• <sup>1</sup>		•	•	
		• <sup>1</sup>	• <sup>1</sup>				
		• <sup>1</sup>	• <sup>1</sup>	•	•	•	
	•	•	•	•	•	•	
	•	•	•	•	•	•	
							•
	•	•	•	•	•	•	
	•	•	•	•	•	•	
	•	•	•	•	•	•	

1 = Min. required installation depth: 150 mm



#### Surface-mounted bonnet

Description	Item No.
For Regudis W, wall-hung, pipe passage from above and below, W 750 x H 1000 x D 175 mm	1341072
For Regudis W, standard model, W 496 x H 800 x D 160 mm	1341095
For Regudis W, standard model, with door, W 590 x H 830 x D 120 mm	1341195
For Regudis W, wide model, W 645 x H 800 x D 120 mm	1341197
For Regudis W, long model, pipe passage from above and below, W 496 x H 1100 x D 160 mm	1341295
For Regudis W-HTU with double-walled heat exchanger, standard model, W 496 x H 800 x D 185 mm	1341296



#### Flush-mounted cabinet

Description	Item No.
For Regudis W, narrow model, W 560 x H 870-1075 x D 150-215 mm	1341070
For Regudis W, wide model, W 700 x H 980-1105 x D 110-180 mm	1341170
For Regudis W, long model, for heating circuit manifolds up to 10 circuits, W 700 x H 1440-1565 x D 110-180 mm	1341175
For Regudis W, long model, for heating circuit manifolds up to 12 circuits, W 880 x H 1440-1565 x D 110-180 mm	1341177



#### Surface-mounted cabinet

Description	Item No.
For Regudis W, standard model, W 700 x H 980-1105 x D 160 mm	1341071
For Regudis W, long model, for heating circuit manifolds up to 10 circuits, pipe passage from above and below, W 750 x H 1523-1648 x D 175 mm	1341074
For Regudis W-HTE, long model, for heating circuit manifolds up to 12 circuits, W 880 x H 1440-1565 x D 160 mm	1341193
For Regudis W, long model, for heating circuit manifolds up to 10 circuits, W 700 x H 1440-1565 x D 160 mm	1341198

#### Cylinder lock



Description	Item No.
With key for flush-mounted cabinets (item no. 1401151-54) and all Regudis W cabinets	1401191





#### Replacement heat exchanger

For Regudis W-HTU.

The possibility of using copper brazed plate heat exchangers must be checked.

Information on this is available at [www.oventrop.com/to/trinkwasseranforderung](http://www.oventrop.com/to/trinkwasseranforderung).

Description	Item No.
Performance range 1, copper brazed	1341280
Performance range 2, copper brazed	1341281
Performance range 3, copper brazed	1341282
Performance range 1, nickel brazed	1341290
Performance range 2, nickel brazed	1341291
Performance range 3, nickel brazed	1341292



#### Replacement heat exchanger

For Regudis W-HTF.

The possibility of using copper brazed plate heat exchangers must be checked.

Information on this is available at [www.oventrop.com/to/trinkwasseranforderung](http://www.oventrop.com/to/trinkwasseranforderung).

Description	Item No.
Performance range 1, copper brazed	1341283
Performance range 2, copper brazed	1341284
Performance range 3, copper brazed	1341282
Performance range 1, nickel brazed	1341383
Performance range 2, nickel brazed	1341384
Performance range 3, nickel brazed	1341292

#### Replacement proportional flow controller



Description	Item No.
For Regudis W, except for Regudis W-TU/GSWB and Regudis W with potable water circulation (manufactured until 2016)	1343050

#### Replacement differential pressure regulator

Description	Item No.
For Regudis W-HTU	1343053 ::
For Regudis W-HTF	1343052 ::

#### Replacement temperature controller



Description	Item No.
For Regudis W, for potable water temperature control, with spiral sensor made of stainless steel	1343092



**Replacement valve insert**

Description	Item No.
For hot potable water preparation Regudis W-HTU/W-HTF	1343051



**Replacement filter insert**

Description	Item No.
For Regudis W-HTU/W-HTF, 2-fold	1349098



**Replacement drain valve**

Description	Item No.
For Regudis W	1349099



**Replacement high-efficiency pump**

Description	Item No.
For Regudis W-HTE flow temperature control module and Regudis W-HTF with mixed heating circuit, Wilo PARA 15-130/6-43/ SC-12	1344581
For Regudis W-HTF with potable water circulation, Wilo-Star-Z NOVA	1349096



**Replacement power supply cable**

Description	Item No.
For Wilo-Yonos PARA high-efficiency pump, with right-angle plug	1358171
For Wilo PARA high-efficiency pump, with right-angle plug	1358172



#### Replacement ball valve

Description	Item No.
For Regudis W ball valve connection sets, red handle	1341980
For Regudis W ball valve connections sets, blue handle	1341981



3.4



## 3.5 Storage cylinders

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### 3.5 Storage cylinders

#### **Hydrocor Storage cylinders** **523**

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# Hydrocor HP Buffer storage cylinders



Buffer storage cylinders for the storage of heating water. Various heat generators, such as conventional boilers, heat pumps, solid fuel boilers or solar thermal systems can be connected.

The buffer storage cylinders have a separating sheet in the upper third of the cylinder for better separation of the standby volume. The loading and unloading connections are equipped with baffle plates, one unloading connection

has an internally raised connection pipe for withdrawal in the upper standby volume. Additionally there is a connection for an electric immersion heater and an air vent connection at the torispherical head. Temperature sensors can be positioned at lateral sensor clamps.

The storage cylinders are particularly energy efficient due to a fibre fleece insulation (energy efficiency class C).

Connection	G 1 1/2	Max. operating temperature	95 °C
Thickness TI*	150 mm		



## Hydrocor HP

With thermal insulation (energy efficiency class C).

Type	Total height (mm)	Ø (without ti)* (mm)	Ø (with ti)* (mm)	Max. operating pressure (bar)	Item No.
800	1,830	790	1,090	3	1385008
1,000	2,110	790	1,090	3	1385010
1,500	2,190	1,000	1,300	3	1385015
800	1,830	790	1,090	6	1386008
1,000	2,110	790	1,090	6	1386010
1,500	2,190	1,000	1,300	6	1386015

# Hydrocor HP - Accessories and spare parts



## Thermal insulation cap

For optimum thermal insulation of connections not in use.

Description	Item No.
For G 1 1/2 connection sleeves	1389001



# Hydrocor WM Monovalent potable water storage cylinders



Monovalent potable water storage cylinders for the storage of heating water with additional internal heat exchanger for reheating. Heat generators, such as conventional boilers, heat pumps or local district heating networks can be connected.

The monovalent potable water storage cylinders have an enamel coating, an integrated thermometer and a cleaning flange.

The storage cylinders are particularly energy efficient due to a PUR rigid foam thermal insulation (energy efficiency class B).

Surface	Enamelled	Max. operating temperature	95 °C
Energy efficiency class	B	Max. operating pressure	10 bar



## Hydrocor WM

Type	Connection	Total height (mm)	Ø (with ti)* (mm)	Thickness TI* (mm)	Item No.
120	R ¾	825	610	55	1395010
160	R ¾	1,035	610	55	1395011
200	G 1	1,200	650	75	1395012









**Potable water**

**4**



## 4 Potable water

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## 4.1 Products for the preservation of potable water hygiene

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## Potable water technology? Under control with our system.

Potable water can spoil like any other food. The potable water installation has a great influence on this. It is the "packaging" that carries the water from the house connection to the individual tapping points - hygienically

pure and safe for consumption, in accordance with the German Potable Water Ordinance (TrinkwV). Therefore, neither the operation nor the materials used in the potable water installation may impair the water quality.

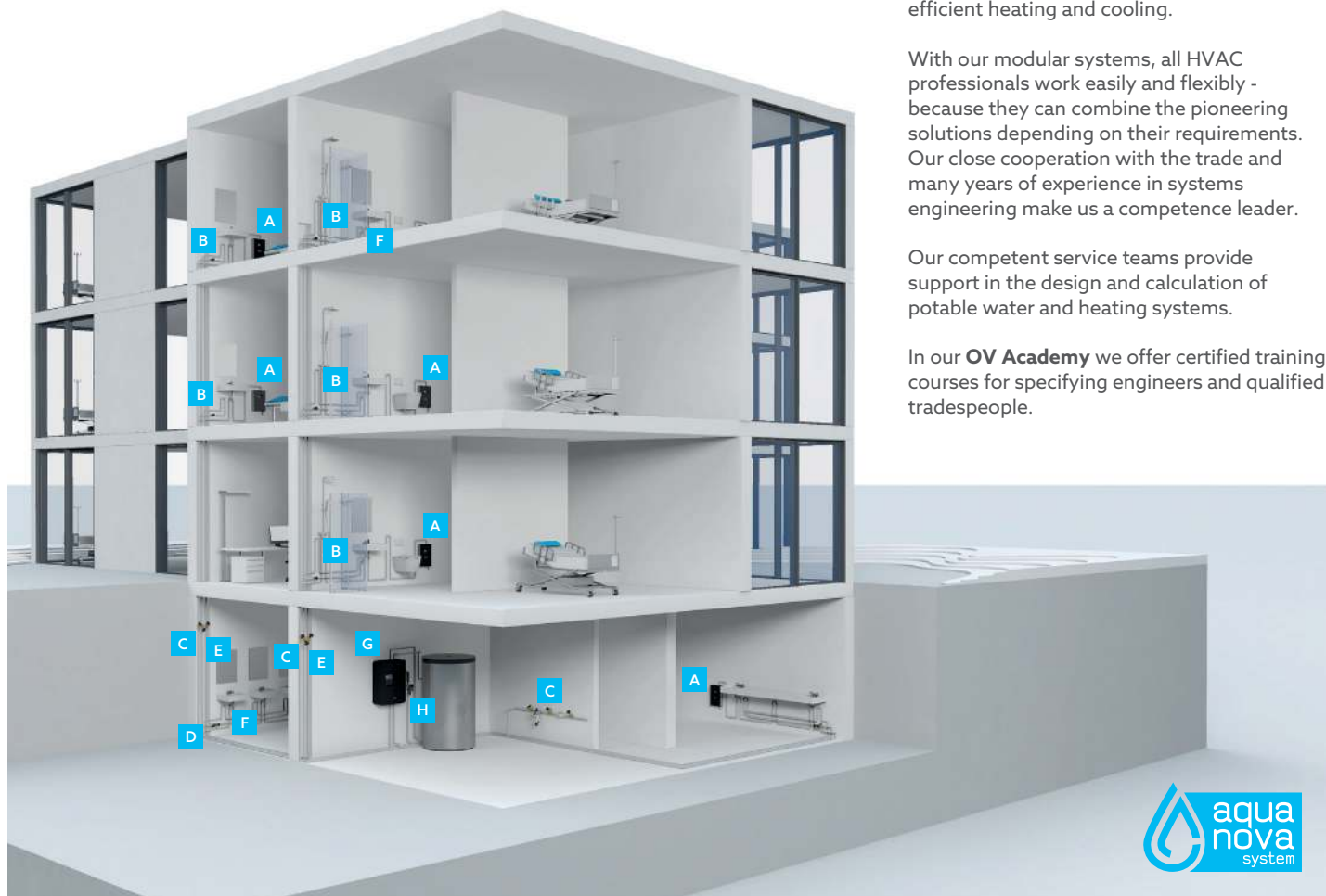
Our **Aquanova system** includes systems, products, software and other services related to potable water.

Another advantage: we are not only the partner for clean potable water, but also for efficient heating and cooling.

With our modular systems, all HVAC professionals work easily and flexibly - because they can combine the pioneering solutions depending on their requirements. Our close cooperation with the trade and many years of experience in systems engineering make us a competence leader.

Our competent service teams provide support in the design and calculation of potable water and heating systems.

In our **OV Academy** we offer certified training courses for specifying engineers and qualified tradespeople.



**A** Regudrain  
Hygiene flushing station



**B** Aquastrom UP-Therm



**C** Aquastrom F  
with mountable water sampling valve



**D** Aquastrom VT



**E** Aquastrom C



**F** Aquastrom P



**G** Regumaq X  
Fresh water station



**H** Optibal TW



# Aquastrom VT Thermal circulation valves



Thermal circulation valve with adjustable temperature control range for hydronic balancing in circulation pipes according to DVGW work sheet W551/W553.

Below the set temperature, the valve opens and automatically increases the hot water volume flow. The valve has an individual setting of the residual volume flow, automatically detects thermal disinfection and allows the riser to be shut off via a ball valve. The valve is equipped with a drain valve with hose connection and a thermometer. A temperature sensor can be retrofitted.

Valve made of bronze, all parts coming into contact with the medium free from brass. A thermal insulation shell made of expanded polystyrene according to the German Energy Saving Ordinance (EnEV) and building material class B1 according to DIN 4102 is included in the scope of delivery.

The temperature and volume flow settings can be lead sealed to prevent unintentional adjustment.



Setting range	50 up to 65 °C	Operating temperature	up to 90 °C
Body material	Bronze	Shutoff	Yes
Installation location	Circulation pipe	Draining	Yes
Max. operating pressure	16 bar	Measuring connection	Yes
Medium	Potable water	Thermal insulation	Yes

## Aquastrom VT with internal thread



Connections	Internal thread
Certification	DVGW, SVGW, KIWA, VA, WRAS, WaterMark

Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	144	4205704
DN 20	Rp 3/4		4205706

## Aquastrom VT with flat sealing external thread



Connections	External thread	Certification	DVGW, SVGW, KIWA, VA, WaterMark
-------------	-----------------	---------------	---------------------------------

Nominal size	Connection size	Item No.
DN 15	G 3/4	4206704
DN 20	G 1	4206706



**Aquastrom VT with press connection**

For direct connection of copper pipe according to DIN EN 1057 / DVGW GW 392 and stainless steel pipe according to DIN EN 10088 / DVGW GW 451.  
Pressing must be carried out to tighten the connection. Only use press jaws with original contours SANHA (SA), Geberit-Mapress (MM) or Viega (Profipress) in the appropriate size for pressing.

Connections	Press connection	Certification	DVGW, SVGW, KIWA, VA, WRAS
-------------	------------------	---------------	----------------------------

Nominal size	Connection size	Item No.
DN 15	15 mm	4205752
DN 15	18 mm	4205753
DN 20	22 mm	4205754

# Aquastrom T plus Thermal circulation valves



Thermal circulation valve with adjustable temperature control range for hydronic balancing in circulation pipes according to DVGW work sheet W551/W553.

Below the set temperature, the valve opens and automatically increases the hot water volume flow. The valve has a fixed residual volume flow, automatically detects thermal disinfection and allows the maximum volume flow to be limited and shut off via an integrated regulating unit with reproducible presetting. The valve is equipped with a drain valve with hose connection and a thermometer. A tem-

perature sensor can be retrofitted.

Valve made of bronze, all parts coming into contact with the medium free from brass. A thermal insulation shell made of expanded polystyrene according to the German Energy Saving Ordinance (EnEV) and building material class B1 according to DIN 4102 is included in the scope of delivery or is available as accessory.

The temperature and volume flow settings can be lead sealed to prevent unintentional adjustment.



Setting range	40 up to 65 °C	Max. operating pressure*	16 bar
Body material	Bronze	Medium	Potable water
Installation location	Circulation pipe	Operating temperature	up to 90 °C

## Aquastrom T plus with internal thread



Connections	Internal thread	Thermal insulation	Yes
Shutoff	Yes	Certification	DVGW, SVGW, KIWA, WRAS, ACS, VA, WaterMark
Draining	Yes		
Measuring connection	Yes		

Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	180	4205504
DN 20	Rp 3/4		4205506
DN 25	Rp 1		4205508

## Aquastrom T plus with flat sealing external thread



Connections	External thread	Thermal insulation	Yes
Shutoff	Yes	Certification	DVGW, SVGW, KIWA, WRAS, ACS, VA
Draining	Yes		
Measuring connection	Yes		

Nominal size	Connection size	Item No.
DN 15	G 3/4	4206504
DN 20	G 1	4206506
DN 25	G 1 1/4	4206508

#### Aquastrom T plus with press connection



For direct connection of copper pipe according to DIN EN 1057 / DVGW GW 392 and stainless steel pipe according to DIN EN 10088 / DVGW GW 451.

Pressing must be carried out to tighten the connection. Only use press jaws with original contours SANHA (SA), Geberit-Mapress (MM) or Viega (Profipress) in the appropriate size for pressing.

Connections	Press connection	Measuring connection	Yes
Shutoff	Yes	Thermal insulation	Yes
Draining	Yes	Certification	SVGW, VA

Nominal size	Connection size	Item No.
DN 15	15 mm	4205552
DN 15	18 mm	4205553
DN 20	22 mm	4205554
DN 25	28 mm	4205555

#### Aquastrom T plus with internal thread, without accessories



Connections	Internal thread	Measuring connection	No
Shutoff	Yes	Thermal insulation	No
Draining	No	Certification	SVGW, ACS, KIWA, VA

Nominal size	Connection size	Item No.
DN 15	Rp 1/2	4205604
DN 20	Rp 3/4	4205606
DN 25	Rp 1	4205608

#### Aquastrom T plus with flat sealing external thread, without accessories



Connections	External thread	Measuring connection	No
Shutoff	Yes	Thermal insulation	No
Draining	No	Certification	SVGW, ACS, KIWA, VA

Nominal size	Connection size	Item No.
DN 15	G 3/4	4206604
DN 20	G 1	4206606
DN 25	G 1 1/4	4206608

#### Aquastrom T plus with internal thread, without accessories and without shutoff facility and presetting



Connections	Internal thread	Measuring connection	No
Shutoff	No	Thermal insulation	No
Draining	No	Certification	SVGW, ACS, KIWA, VA

Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	288	4205404
DN 20	Rp 3/4		4205406



# Thermal circulation valves - Accessories and spare parts

## Wire seal kit



### Description

10-fold, consisting of seal and sealing wire

### Item No.

1089091

## Blocking pin with sealing wire



### Description

For Hycocon VTZ and Aquastrom T plus

### Item No.

1061792

## Drain valve for hose connection



Also serves to accommodate the dial thermometer item no. 4205593 or the sensor element item no. 4205592.

### Description

For Aquastrom VT, T plus, C, F, KFR and M, with G 1/4

### Item No.

4205593

## Dial thermometer

For installation in the drain valve for hose connection item no. 4205593.



### Description

For Aquastrom VT, T plus, C, F, KFR, M and Regucirc B, bimetal, NG 50

### Item No.

4205591

Sensor LW TQ Sensor element



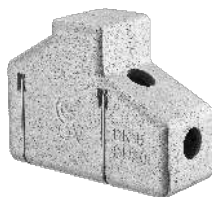
Description

For remote monitoring of circulation pipes with Aquastrom VT, T plus, C, F, KFR, M and PT 1000 sensor element, G 1/4. Also serves to accommodate the dial thermometer item no. 4205593 or the sensor element item no. 4205592.

Item No.

4205592

Replacement thermal insulation shell



Description

For Aquastrom T plus, DN 15 and DN 20

For Aquastrom T plus, DN 25

For Aquastrom VT, DN 15 and DN 20

Item No.

4205581

4205583

4205781

# Aquastrom K Thermostatic cold water circulation valves



WRAS

Thermal circulation valve for hydronic balancing in chilled potable water and service water systems.

Above the set temperature, the valve opens and automatically increases the cold water volume flow. The valve construction does not feature a dead space. The spindle seal is maintenance-free thanks to a double O-ring made of

EPDM.

Valve made of bronze, all parts coming into contact with the medium free from brass. A thermal insulation shell made of expanded polystyrene according to the German Energy Saving Ordinance (EnEV) and building material class B1 according to DIN 4102 is included in the scope of delivery.

Connection size	Rp 1/2	Operating temperature	up to 90 °C
Connections	Internal thread	Shutoff	Yes
Body material	Bronze	Draining	Yes
Installation location	Circulation pipe	Measuring connection	Yes
Max. operating pressure	16 bar	Thermal insulation	Yes
Medium	Potable water		

## Aquastrom K with internal thread



Nominal size	Setting range (°C)	Certification	Item No.
DN 15	6 up to 18	WRAS	4205904
DN 15	12 up to 24		4206304

# Aquastrom UP-Therm Flush-mounted circulation valves



Thermal circulation valve for hydronic balancing of the storey distribution in circulation pipes according to DVGW work sheet W551/W553.

Below the operating point temperature, the valve opens and automatically increases the hot water volume flow. The valve has a fixed residual volume flow, automatically detects thermal disinfection and allows the volume flow to be shut off.

The valve construction does not feature a dead space. The spindle seal is maintenance-free thanks to a double O-ring made of EPDM.

Valve made of bronze, all parts coming into contact with the medium free from brass. A thermal insulation shell made of expanded polystyrene according to the German Energy Saving Ordinance (EnEV) and building material class B1 according to DIN 4102 is included in the scope of delivery.



Connection size	Rp 1/2 x Rp 1/2	Operating temperature	up to 90 °C
Setting range	40 up to 70 °C	Shutoff	Yes
Connections	Internal thread	Draining	Yes
Body material	Bronze	Measuring connection	Yes
Installation location	Circulation pipe	Thermal insulation	Yes
Max. operating pressure	16 bar	Certification	DVGW, SVGW, WRAS
Medium	Potable water		

## Aquastrom UP-Therm with internal thread



Nominal size	Operating point* (°C)	Item No.
DN 15	57 ± 1	4225004 °
DN 15	63 ± 1	4225504 °

## Aquastrom UP-Therm with internal thread and plaster sleeve



Nominal size	Operating point* (°C)	Item No.
DN 15	57 ± 1	4225104 °



# Flush-mounted circulation valves - Accessories and spare parts



## Handwheel set for Aquastrom UP-Therm flush-mounted circulation valves without plaster sleeve

Suitable for flush-mounted valves without plaster sleeve and water meter installation sets, consisting of chrome plated operating handle, chrome plated cover rosette and sleeve as well as three coloured marking plates.

Description	Item No.
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 0-35 mm	4223192 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 35-135 mm, lockshield configuration	4223193 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 35-90 mm	4223195 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 0-40 mm, lockshield configuration	4223196 °



## Handwheel set for Aquastrom UP-Therm flush-mounted circulation valves with plaster sleeve

Suitable for flush-mounted valves with plaster sleeve consisting of top part assembly with clamping unit, rack, chrome plated operating handle, chrome plated cover rosette as well as three coloured marking plates.

Description	Item No.
For Aquastrom UP, DN 15 / DN 20	4229001 °
For Aquastrom UP, DN 15 / DN 20, lockshield configuration	4229010 °



## Extension set for Aquastrom UP-Therm flush-mounted circulation valves with plaster sleeve

Description	Item No.
For Aquastrom UP, DN 15 / DN 20	4229040 °



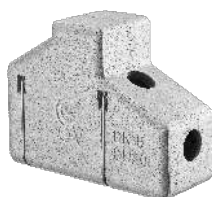
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## Mounting set for Aquastrom UP-Therm flush-mounted circulation valves with plaster sleeve

For front wall installation.



Description	Item No.
For Aquastrom UP, DN 15 / DN 20	4229020 °



#### Replacement thermal insulation shell

Description	Item No.
For Aquastrom UP, DN 15 / DN 20 and Aquastrom K, DN 15	4229050 °
For Aquastrom UP, DN 25	4229051 °



#### Replacement flush-mounted valve insert

Description	Item No.
For Aquastrom K, adjustable between 6 °C and 18 °C	4205990
For Aquastrom K, adjustable between 12 °C and 24 °C	4205992
For Aquastrom UP- Therm, DN 15, operating point 57 °C	4225090
For Aquastrom UP- Therm, DN 15, operating point 63 °C	4225590



#### Replacement handwheel

Description	Item No.
For Aquastrom UP, DN 15 / 20 and Aquastrom UP-MS	4223197 °



#### Replacement plaster sleeve

Description	Item No.
With rack and protection cap, DN 15 / DN 20	4229015 °



## 4.1 Products for the preservation of potable water hygiene

### **Aquastrom Static control valves** 545

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# Aquastrom C Static control valves



Static circulation valve for hydronic balancing in circulation pipes according to DVGW work sheet W551/W553.

The valve allows the maximum volume flow to be limited and shut off via an integrated regulating unit with reproducible presetting. The valve is equipped with a drain valve with hose connection and a thermometer. A temperature sensor can be retrofitted.

Valve made of bronze, all parts coming into

contact with the medium free from brass. A thermal insulation shell made of expanded polystyrene according to the German Energy Saving Ordinance (EnEV) and building material class B1 according to DIN 4102 is included in the scope of delivery or is available as accessory.

The temperature and volume flow settings can be lead sealed to prevent unintentional adjustment.



Body material	Bronze	Medium	Potable water
Installation location	Circulation pipe	Operating temperature	up to 90 °C
Max. operating pressure	16 bar	Shutoff	Yes

## Aquastrom C with internal thread



Draining	Yes	Certification	DVGW, SVGW, KIWA, ACS, VA, WaterMark
Measuring connection	Yes		
Thermal insulation	Yes		

Nominal size	Connection size	PU	Item No.
DN 20	G 1	160	4207106
DN 15	Rp 1/2		4208104
DN 20	Rp 3/4		4208106
DN 25	Rp 1		4208108
DN 32	Rp 1 1/4		4208110

## Aquastrom C with internal thread, without accessories



Draining	No	Certification	DVGW, SVGW, KIWA, ACS, WaterMark
Measuring connection	No		
Thermal insulation	No		

Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	10	4208152
DN 20	Rp 3/4	10	4208154
DN 25	Rp 1	10	4208156
DN 32	Rp 1 1/4	5	4208158



**Aquastrom C with external thread**



Draining	Yes	Certification	DVGW, SVGW, KIWA, ACS, VA,
Measuring connection	Yes		WaterMark
Thermal insulation	Yes		

Nominal size	Connection size	PU	Item No.
DN 15	G ¾		4207104
DN 20	G 1	160	4207106
DN 25	G 1 ¼	76	4207108
DN 32	G 1 ½		4207110

# Aquastrom C - Accessories and spare parts



## Aquastrom P Water sampling valve

PU 10 Certification DVGW, SVGW

### Description

DN 8, PN 10, flame resistant, bronze/stainless steel, G 1/4

### Item No.

4209102



## Aquastrom P Water sampling valve for mounting on angle valves

Certification DVGW, SVGW

### Description

DN 10, PN 10, flame resistant, dezincification resistant brass/stainless steel, chrome plated, for mounting on angle valves, inlet: pipe 10 x 1.25, outlet: G 3/8 external thread conical compression fitting

### Item No.

4209202



## Aquastrom M Measuring and drain device with flat sealing external thread

With outlet connection pieces G 1/4 internal thread and G 3/8 internal thread.

### Description

DN 15, G 3/4 external thread, PN 10

DN 20, G 1 external thread, PN 10

DN 25, G 1 1/4 external thread, PN 10

DN 32, G 1 1/2 external thread, PN 10

### Item No.

4209204 °

4209206 °

4209208 °

4209210 °



## Measuring valve

Please observe the local regulations for measuring potable water systems

### Description

Classic measuring technique, bronze, red/blue, set = 2 pieces

### Item No.

4209090

**Drain valve for hose connection**

Also serves to accommodate the dial thermometer item no. 4205593 or the sensor element item no. 4205592.



Description	Item No.
For Aquastrom VT, T plus, C, F, KFR and M, with G ¼	4205593

**Dial thermometer**

For installation in the drain valve for hose connection item no. 4205593.



Description	Item No.
For Aquastrom VT, T plus, C, F, KFR, M and Regucirc B, bimetal, NG 50	4205591

**Sensor LW TQ Sensor element**



Description	Item No.
For remote monitoring of circulation pipes with Aquastrom VT, T plus, C, F, KFR, M and PT 1000 sensor element, G ¼. Also serves to accommodate the dial thermometer item no. 4205593 or the sensor element item no. 4205592.	4205592

**Blocking set**



Description	Item No.
1-fold, consisting of blocking cap, seal and sealing wire	1060180

**Wire seal kit**



Description	Item No.
10-fold, consisting of seal and sealing wire	1089091



#### Identification ring

Can be clipped onto the handwheel for riser identification.

Description	Item No.
10-fold, blue	1069650
10-fold, red	1069651
10-fold, violet	1069652
10-fold, green	1069653



#### Replacement thermal insulation shell

Description	Item No.
For Aquastrom C DN 15 and DN 20, with recess for Aquastrom P	4208181
for Aquastrom C DN 25, with recess for Aquastrom P	4208182
for Aquastrom C DN 32, with recess for Aquastrom P	4208183



#### Replacement insert

Description	Item No.
For Aquastrom C, DN 15	4208192
For Aquastrom C, DN 20	4208193
For Aquastrom C, DN 25	4208194
For Aquastrom C, DN 32	4208195





## 4.1 Products for the preservation of potable water hygiene

### **DynaTemp system solutions for monitoring and automation** 551

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DynaTemp CW-BS Thermal balancing in potable water circulation systems..... 552

# DynaTemp CW-BS Thermal balancing in potable water circulation systems



The control unit (DDC) assumes optimisation tasks in the system hydraulics, which is determined here by maintaining a sufficiently high potable water circulation temperature (according to DVGW 57 °C). The temperature is detected by the Oventrop Aquastrom DT valve for potable water circulation systems. The temperature values of the sensor are transmitted by the bus-based field module to the DDC CW-BS control unit which transmits the control commands via the field module to the Aquastrom DT valve. A further task of the control unit is the control and regulation of thermal disinfection. Here, the control unit generates a start signal for the boiler control to increase the potable water temperature and then the risers of the circulation system are sequential-

ly thermally disinfected. The operator of the system also has the option of automatically receiving the disinfection log and any fault messages by e-mail. Settings and temperature curves of the system can be documented in the control unit.

The control unit can be connected via BACnet IP to the building management system (BMS) for monitoring and visualisation tasks and can send warning messages via LAN or Internet.

Note: The FM-CW Plus field module (item no. 1153321) is required at least once per system, the Sensor LW TQ (item no. 1150090) is required at least three times per system.

## DDC CW-BS Control unit

For thermal balancing of potable water circulation systems. With BACnet IP interface and integrated user interface via web server.



Number of field modules*	Operating/bus voltage (V)	Frequency (Hz)	Mounting	Item No.
31	24 V AC	50	Surface mounting	1153350

## Transformer

For power supply of the DDC, field modules, relay modules and circulation valves.



Designation	Power (VA)	Primary power	Secondary power	Frequency (Hz)	Item No.
TR-80	80	230 V AC	24 V AC	50	1153053
TR-250	250	230 V AC	24 V AC	50	1153055

## Aquastrom DT Electronic circulation regulating valve with internal thread and FM-CW K field module

For potable water systems PN 10, max. water temperature 90 °C.



Connection size	Nominal size	Item No.
Rp 1/2 x Rp 1/2	DN 15	1150004
Rp 3/4 x Rp 3/4	DN 20	1150006
Rp 1 x Rp 1	DN 25	1150008



### Aquastrom DT Electronic circulation regulating valve with flat sealing external thread and FM-CW K field module

For potable water systems PN 10, max. water temperature 90 °C.



Connection size	Nominal size	Item No.
G 3/4 x G 3/4	DN 15	1150104
G 1 x G 1	DN 20	1150106
G 1 1/4 x G 1 1/4	DN 25	1150108

### FM-CW Plus Field module for temperature detection

With C-bus communication. Two potential-free relays can be used to switch e.g. a circulation pump, a storage cylinder loading pump, a hydraulic bypass of a service water mixing valve and a burner activation. The burner can also optionally be activated via a 0 - 10 V signal.



Voltage	Potential-free relays	Inputs	Frequency (Hz)	Mounting	Item No.
24 V AC	2	3 x PT 1000 temperature sensor	50	Surface mounting	1153321

### REM-CW Relay module for burner activation

Potential-free contact that is controlled via a 0 - 10 V analogue input (from the FM-CW Plus field module) and can be used for burner activation.



Voltage	Potential-free relay contact	Item No.
24 V AC	NO contact (max.) 230 V, 5 A	1153331

### Sensor LW TQ Sensor element



Description	PU	Item No.
For remote monitoring of the riser temperature and for integration into a building management system (BMS), PT 1000 sensor element, G 1/4		1150090
For remote monitoring of circulation pipes with Aquastrom VT, T plus, C, F, KFR, M and PT 1000 sensor element, G 1/4. Also serves to accommodate the dial thermometer item no. 4205593 or the sensor element item no. 4205592.	10	4205592

### Sensor LW TH Temperature sensor

Suitable for all Oventrop controllers.



Description	Item No.
For temperature measurement and detection in immersion sleeves and storage cylinders, PT 1000 sensor element, continuous temperature range up to 105 °C, length 3 m	1369093
For temperature measurement and detection at collectors, PT 1000 sensor element, continuous temperature range up to 180 °C, length 2 m	1369094

**Pipe contact temperature sensor**

Suitable for all Oventrop controllers.



Description	Item No.
For temperature measurement and detection at the pipework, with fastening clip Ø 25 - 40 mm and heat conducting paste, PT 1000 sensor element, continuous temperature range up to 180 °C, length 1.5 m	1369095



**Replacement FM-CW K Field module**

With C-bus communication.

Description	Item No.
For the connection of the Aquastrom DT circulation regulating valve for one riser, 24 V AC, 50 Hz, surface mounting	1153301





## 4.1 Products for the preservation of potable water hygiene

### **Flushing and circulation stations 555**

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Regucirc Circulation station.....	560
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# Regudrain Flushing stations



Hygiene flushing station for protecting cold and hot water risers and for maintaining the intended operation in potable water installations, e.g. in the event of interruptions in use. For installation at the end of the riser or in ring installations.

Completely pre-assembled and leak tested

unit. Flushing riser with solenoid valve and volume flow sensor, with shutoff facility. Regtronic HS electronic control for controlling the valves, individually programmable, with web access via LAN or WLAN and log function.

Free outlet type AB according to EN 1717 for connection to the sewage network.

Thermal insulation	Yes	Mounting	Wall
Material thermal insulation	Expanded polypropylene (EPP)	Volume flow sensor	Yes
Max. operating pressure	10 bar	Additional controller functions	Yes
Max. operating temperature	90 °C	Certification	DVGW, SVGW



2018



2019



2018

## Regudrain with Regtronic HS controller, individually programmable, with web access, with log function

Connections:

Potable water circuit: flat sealing G 3/4 external thread

Sewage network: DN 40

Certification DVGW, SVGW



System*	Nominal size	Height (mm)	Length (mm)	Width (mm)	Item No.
One pipe	DN 15	100	500	300	4207004
Two pipe	DN 15	100	520	300	4207005



# Regudrain - Accessories and spare parts

## Extension set Duo

For extending the one pipe version by a second flushing riser.



### Description

With fixing material

### Item No.

4207094

## h-fitting with union nut (flat sealing)

For extension when installed in ring circuit installations, 2 sets are required for the two pipe version.



### Description

G 3/4 union nut x G 3/4 external thread x G 3/4 external thread

### Item No.

4207095

## Sensor LW TQ Sensor element



### Description

For remote monitoring of the riser temperature and for integration into a building management system (BMS), PT 1000 sensor element, G 1/4

### Item No.

1150090

## Humidity sensor

To indicate leaks or blocked drains.



### Description

2 m

### Item No.

4207099

Temperature sensor



Description	Item No.
For temperature measurement and detection at the pipework, with fastening clip Ø 25 - 40 mm and heat conducting paste, PT 1000 sensor element, continuous temperature range up to 180 °C, length 1.5 m	1369095

Sensor cable

For connecting the sensors item no. 1150090, 1369095 and 4207099 to the Regudrain flushing stations.



Description	Item No.
For Regudrain, 1.5 m	4207098

Revision frame ready for tiling, made of aluminium, infinitely adjustable



Description	Item No.
For Regudrain, from 200 mm x 350 mm to 520 mm x 620 mm, with fixing material	4207090

Surface-mounted bonnet, white, made of galvanised steel



Description	Item No.
For Regudrain, W 315 mm x H 472 mm x D 108 mm	4207091

Replacement flush valve



Description	Item No.
With volume flow sensor, flow controller and jet regulator, 24 V DC	4207092





**Replacement siphon**

Description	Item No.
For Regudrain	4207093



**Replacement jet regulator**

Description	Item No.
For Regudrain flush valve	4207097



**Replacement flow controller**

Description	Item No.
For Regudrain flush valve, set with versions 5 l/min, 7 l/min and 11 l/min	4207096

# Regucirc Circulation station



Circulation pump assembly for potable water circulation systems with storage cylinder in detached and semi-detached houses.

With energy-saving high-efficiency pump,

backflow preventer and Aquastrom VT thermal circulation valve as well as control thermometer for direct connection to the return pipe of a circulation pipe according to DVGW work sheet W551/W553.

## Regucirc B with pump and integrated thermal circulation valve

Pre-installed pump: Biral AX20-4 120BLUE



Nominal size	System*	Height (mm)	Length (mm)	Width (mm)	Item No.
DN 20	One pipe	210	420	200	4206776 °

## Regucirc B with pump, integrated service water mixing valve and thermometer ball valves

Pre-installed pump: Biral AX20-4 120BLUE



Nominal size	System*	Height (mm)	Length (mm)	Width (mm)	Item No.
DN 20	Two pipe	185	425	350	4206780 °

# Regucirc - Accessories and spare parts

## Dial thermometer



### Description

For Aquastrom VT, T plus, C, F, KFR, M and Regucirc B, bimetal, NG 50

### Item No.

4205591

## Replacement thermal insulation



### Description

For Regucirc B

For Regucirc M

### Item No.

4206795 °

4206797 °

## Replacement high-efficiency pump

Biral AX20-4 120BLUE



### Nominal size

DN 20

### Item No.

4206790



## 4.2 Shutoff valves and other products for potable water

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## 4.2 Shutoff valves and other products for potable water

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# Aquastrom F Free-flow valves



Extremely low-noise free-flow valve for potable water installations.

Y-pattern valve made of bronze, all parts coming into contact with the medium free from brass, with plastic handwheel, design according to DIN 3502. All functions accessible from the top. Maintenance-free spindle sealing by double O-ring.

Can be converted to a KFR valve by changing the insert. Draining facility within same plane as handwheel, therefore allowing pipes to be at close centres. The valves with drain bores can be retrofitted with a drain ball valve which is available as accessory.

Sound insulation according to DIN EN ISO 3822: Product group I

Body material	Bronze	Medium	Potable water
Installation location	Supply or return	Operating temperature	up to 120 °C
Max. operating pressure	16 bar	Shutoff	Yes



## Aquastrom F with internal thread and drain ball valve G 1/4

Certification DVGW, SVGW, KIWA



Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	10	4201204 °
DN 20	Rp 3/4	10	4201206 °
DN 25	Rp 1	10	4201208 °
DN 32	Rp 1 1/4	5	4201210 °
DN 40	Rp 1 1/2	5	4201212 °
DN 50	Rp 2	5	4201216 °

## Aquastrom F with internal thread and drain bores G 1/4 closed with plugs

Certification DVGW, KIWA



Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	10	4201004 °
DN 20	Rp 3/4	10	4201006 °
DN 25	Rp 1	10	4201008 °
DN 32	Rp 1 1/4	5	4201010 °
DN 40	Rp 1 1/4	5	4201012 °
DN 50	Rp 2	5	4201016 °



#### Aquastrom F with internal thread, without drain bores



Certification DVGW, SVGW, KIWA

Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	10	4200804 °
DN 20	Rp 3/4	10	4200806 °
DN 25	Rp 1	10	4200808 °
DN 32	Rp 1 1/4	5	4200810 °
DN 40	Rp 1 1/2	5	4200812 °
DN 50	Rp 2	5	4200816 °

#### Aquastrom F with press connection and drain ball valve G 1/4



For direct connection of copper pipe according to DIN EN 1057 / DVGW GW 392 and stainless steel pipe according to DIN EN 10088 / DVGW GW 451.

Pressing must be carried out to tighten the connection. Only use press jaws with original contours SANHA (SA), Geberit-Mapress (MM) or Viega (Profipress) in the appropriate size for pressing.

Certification SVGW

Nominal size	Connection size	PU	Item No.
DN 15	15 mm	10	4201252 °
DN 15	18 mm	10	4201253 °
DN 20	22 mm	10	4201254 °
DN 25	28 mm	10	4201255 °
DN 32	35 mm	5	4201256 °
DN 40	42 mm	5	4201257 °
DN 50	54 mm	5	4201258 °

#### Aquastrom F with flat sealing external thread and drain ball valve G 1/4



Certification DVGW, SVGW, KIWA

Nominal size	Connection size	PU	Item No.
DN 15	G 3/4	10	4202204 °
DN 20	G 1	10	4202206 °
DN 25	G 1 1/4	10	4202208 °
DN 32	G 1 1/2	5	4202210 °
DN 40	G 1 3/4	5	4202212 °
DN 50	G 2 3/8	5	4202216 °

**Aquastrom F with flat sealing external thread and drain bores G ¼ closed with plugs**

Certification DVGW, SVGW, KIWA



Nominal size	Connection size	PU	Item No.
DN 15	G ¾	10	4201804 °
DN 20	G 1	10	4201806 °
DN 25	G 1 ¼	10	4201808 °
DN 32	G 1 ½	5	4201810 °
DN 40	G 1 ¾	5	4201812 °
DN 50	G 2 ¾	5	4201816 °

**Aquastrom F with flat sealing external thread and drain bores G ¾ closed with plugs**

Certification DVGW



Nominal size	Connection size	Item No.
DN 65	G 3	4202220 °
DN 80	G 3 ½	4202224 °

**Aquastrom F with flanges and drain bores G ¾ closed with plugs**

Certification DVGW, SVGW



Nominal size	Item No.
DN 65	4204451 °
DN 80	4204452 °



# Aquastrom KFR Combined free-flow valves with backflow preventer



Extremely low-noise free-flow valve with integrated backflow preventer for potable water installations.

Y-pattern valve made of bronze, all parts coming into contact with the medium free from brass, with plastic handwheel, design according to DIN 3502. All functions accessible from the top. Maintenance-free spindle sealing by

double O-ring.

Draining facility within same plane as handwheel, therefore allowing pipes to be at close centres. The valves with drain bores can be retrofitted with a drain ball valve which is available as accessory.

Sound insulation according to DIN EN ISO 3822: Product group I

Body material	Bronze	Medium	Potable water
Installation location	Supply or return	Operating temperature	up to 120 °C
Max. operating pressure	16 bar	Shutoff	Yes

## Aquastrom KFR with internal thread and drain ball valve G 1/4



Certification DVGW, SVGW

Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	10	4206204 °
DN 20	Rp 3/4	10	4206206 °
DN 25	Rp 1	10	4206208 °
DN 32	Rp 1 1/4	5	4206210 °
DN 40	Rp 1 1/2	5	4206212 °
DN 50	Rp 2	5	4206216 °

## Aquastrom KFR with internal thread and drain bores G 1/4 closed with plugs



Certification DVGW, SVGW

Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	10	4205804 °
DN 20	Rp 3/4	10	4205806 °
DN 25	Rp 1	10	4205808 °
DN 32	Rp 1 1/4	5	4205810 °
DN 40	Rp 1 1/2	5	4205812 °
DN 50	Rp 2	5	4205816 °

#### Aquastrom KFR with flat sealing external thread and drain ball valve G 1/4



Certification DVGW, SVGW

Nominal size	Connection size	PU	Item No.
DN 15	G 3/4	10	4208204 °
DN 20	G 1	10	4208206 °
DN 25	G 1 1/4	10	4208208 °
DN 32	G 1 1/2	5	4208210 °
DN 40	G 1 3/4	5	4208212 °
DN 50	G 2 3/8	5	4208216 °

#### Aquastrom KFR with flat sealing external thread and drain bores G 1/4 closed with plugs



Certification DVGW, SVGW

Nominal size	Connection size	PU	Item No.
DN 15	G 3/4	10	4207804 °
DN 20	G 1	10	4207806 °
DN 25	G 1 1/4	10	4207808 °
DN 32	G 1 1/2	5	4207810 °
DN 40	G 1 3/4	5	4207812 °
DN 50	G 2 3/8	5	4207816 °

#### Aquastrom KFR with flat sealing external thread and drain bores G 3/8 closed with plugs



Certification DVGW, SVGW

Nominal size	Connection size	Item No.
DN 65	G 3	4208220 °
DN 80	G 3 1/2	4208224 °

#### Aquastrom KFR with flanges and drain bores G 3/8 closed with plugs



Certification DVGW

Nominal size	Connection size	Item No.
DN 65	Rp 1/2	4209451 °
DN 80	-	4209452 °

# Free-flow and KFR valves - Accessories and spare parts



## Aquastrom P Water sampling valve

PU	10	Certification	DVGW, SVGW
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### Description

DN 8, PN 10, flame resistant, bronze/stainless steel, G 1/4

DN 10, PN 10, flame resistant, bronze/stainless steel, G 3/8

### Item No.

4209102

4209103



## Aquastrom P Water sampling valve for mounting on angle valves

Certification	DVGW, SVGW
---------------	------------

### Description

DN 10, PN 10, flame resistant, dezincification resistant brass/stainless steel, chrome plated, for mounting on angle valves, inlet: pipe 10 x 1.25, outlet: G 3/8 external thread conical compression fitting

### Item No.

4209202



## Thermal insulation shell made polyurethane rigid foam

Only for heating systems. Operating temperature: 130 °C. Complies with the German Energy Saving Ordinance (EnEV) according to appendix 5, table 1, line 5. Building material class B1 according to DIN 4102.

### Description

For Hydrocontrol VTR, ATR, Hydromat DTR and Aquastrom F/KFR, DN 15

For Hydrocontrol VTR, ATR, Hydromat DTR and Aquastrom F/KFR, DN 20

For Hydrocontrol VTR, ATR, Hydromat DTR and Aquastrom F/KFR, DN 25

For Hydrocontrol VTR, ATR, Hydromat DTR and Aquastrom F/KFR, DN 32

For Hydrocontrol VTR, ATR, Hydromat DTR and Aquastrom F/KFR, DN 40

For Hydrocontrol VTR, ATR, Hydromat DTR and Aquastrom F/KFR, DN 50

### PU

350

260

130

80

### Item No.

1060081

1060082

1060083

1060084

1060085

1060086

## Aquastrom R Backflow preventer with internal thread / external thread

Certification	DVGW, SVGW
---------------	------------



### Description

DN 15, 3/4 union nut x G 3/4 external thread, straight, bronze

DN 20, 1 union nut x G 1 external thread, straight, bronze

DN 25, 1 1/4 union nut x G 1 1/4 external thread, straight, bronze

DN 32, 1 1/2 union nut x G 1 1/2 external thread, straight, bronze

DN 40, 1 3/4 union nut x G 1 3/4 external thread, straight, bronze

DN 50, 2 3/8 union nut x G 2 3/8 external thread, straight, bronze

### Item No.

4208604 °

4208606 °

4208608 °

4208610 °

4208612 °

4208616 °

### Aquastrom R Backflow preventer with external thread

Certification DVGW, SVGW



Description	Item No.
DN 15, G 3/4 external thread x G 3/4 external thread, straight, bronze	4208704 °
DN 20, G 1 external thread x G 1 external thread, straight, bronze	4208706 °
DN 25, G 1 1/4 external thread x G 1 1/4 external thread, straight, bronze	4208708 °
DN 32, G 1 1/2 external thread x G 1 1/2 external thread, straight, bronze	4208710 °
DN 40, G 1 3/4 external thread x G 1 3/4 external thread, straight, bronze	4208712 °
DN 50, G 2 3/8 external thread x G 2 3/8 external thread, straight, bronze	4208716 °

### Drain valve for hose connection

Also serves to accommodate the dial thermometer item no. 4205593 or the sensor element item no. 4205592.

PU 10



Description	Item No.
For Aquastrom VT, T plus, C, F, KFR and M, with G 1/4	4205593

### Dial thermometer

For installation in the drain valve for hose connection item no. 4205593.



Description	Item No.
For Aquastrom VT, T plus, C, F, KFR, M and Regucirc B, bimetal, NG 50	4205591

### Sensor LW TQ Sensor element

PU 10



Description	Item No.
For remote monitoring of circulation pipes with Aquastrom VT, T plus, C, F, KFR, M and PT 1000 sensor element, G 1/4. Also serves to accommodate the dial thermometer item no. 4205593 or the sensor element item no. 4205592.	4205592





### Replacement insert

Description	Item No.
For Aquastrom F, DN 15, bronze	4209004
For Aquastrom F, DN 20, bronze	4209006
For Aquastrom F, DN 25, bronze	4209008
For Aquastrom F, DN 32, bronze	4209010
For Aquastrom F, DN 40, bronze	4209012
For Aquastrom F, DN 50, bronze	4209016
For Aquastrom F, DN 65, bronze	4209020
For Aquastrom F, DN 80, bronze	4209024
For Aquastrom KFR, DN 15, bronze	4209504
For Aquastrom KFR, DN 20, bronze	4209506
For Aquastrom KFR, DN 25, bronze	4209508
For Aquastrom KFR, DN 32, bronze	4209510
For Aquastrom KFR, DN 40, bronze	4209512
For Aquastrom KFR, DN 50, bronze	4209516
For Aquastrom KFR, DN 65, bronze	4209520
For Aquastrom KFR, DN 80, bronze	4209524

# Aquastrom UP Flush-mounted free-flow valves

## Aquastrom UP-F with internal thread



Certification DVGW, SVGW

Nominal size	Connection size	Item No.
DN 15	Rp 1/2	4220004 °
DN 20	Rp 3/4	4220006 °

## Aquastrom UP-F with internal thread and plaster sleeve



Nominal size	Connection size	Certification	Item No.
DN 15	Rp 1/2	DVGW, SVGW	4220104 °
DN 20	Rp 3/4	DVGW, SVGW	4220106 °
DN 25	Rp 1		4220108 °
DN 32	Rp 1 1/4		4220110 °

# Flush-mounted free-flow valves - Accessories and spare parts



## Handwheel set for Aquastrom UP flush-mounted free-flow valves without plaster sleeve

Suitable for flush-mounted valves without plaster sleeve and water meter installation sets, consisting of chrome plated operating handle, chrome plated cover rosette and sleeve as well as three coloured marking plates.

Description	Item No.
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 0-35 mm	4223192 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 35-135 mm, lockshield configuration	4223193 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 35-90 mm	4223195 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 0-40 mm, lockshield configuration	4223196 °



## Handwheel set for Aquastrom UP flush-mounted free-flow valves with plaster sleeve

Suitable for flush-mounted valves with plaster sleeve consisting of top part assembly with clamping unit, rack, chrome plated operating handle, chrome plated cover rosette as well as three coloured marking plates.

Description	Item No.
For Aquastrom UP, DN 15 / DN 20	4229001 °
For Aquastrom UP, DN 25 / DN 32	4229002 °
For Aquastrom UP, DN 15 / DN 20, lockshield configuration	4229010 °
For Aquastrom UP, DN 25 / DN 32, lockshield configuration	4229011 °



## Extension set for Aquastrom UP flush-mounted free-flow valves with plaster sleeve

PU 10

Description	Item No.
For Aquastrom UP, DN 15 / DN 20	4229040 °
For Aquastrom UP, DN 25 / DN 32	4229041 °

## Mounting set for front wall installation

PU 10



Description	Item No.
For Aquastrom UP, DN 15 / DN 20	4229020 °
For Aquastrom UP, DN 25 / DN 32	4229021 °



#### Replacement valve inserts

Description	Item No.
For Aquastrom UP-F and UP-MS, DN 15	4223191
For Aquastrom UP-F, DN 15 / DN 20 (manufactured until 2016)	4220190
For Aquastrom UP-F, UP-MS, DN 25 / DN 32	4220191
For Aquastrom UP-KFR, DN 15 / DN 20	4221090



#### Replacement insulation shell

Description	Item No.
For Aquastrom UP, DN 15 / DN 20 and Aquastrom K, DN 15	4229050 °
For Aquastrom UP, DN 25	4229051 °



#### Replacement handwheel

Description	Item No.
For Aquastrom UP, DN 15 / 20 and Aquastrom UP-MS	4223197 °



#### Replacement plaster sleeve

PU	25
----	----

Description	Item No.
With rack and protection cap, DN 15 / DN 20	4229015 °
With rack and protection cap, DN 25 / DN 32	4229016 °





## 4.2 Shutoff valves and other products for potable water

### **Optibal Ball valves for potable water 575**

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# Optibal TW Ball valves for potable water



Ball valve for potable water without dead space and with full flow according to DIN EN 13828. The ball is always surrounded by water.

Body made of bronze, ball chrome plated,

ed, maintenance-free spindle sealing by double O-ring made of EPDM, all parts coming into contact with the medium are free from brass. Up to size DN 50 with extended plastic handle, from size DN 65 with lever made of galvanised steel.

Body material	Bronze	Operating temperature	up to 90 °C
Installation location	Supply or return	Pressure rating	PN 10
Medium	Potable water	Surface	Untreated



## Optibal TW with internal thread and drain bore G 1/4 closed with a plug

Certification DVGW, ACS, GDV, VA

Nominal size	Connection size	PU	Item No.
DN 15	Rp 1/2	10	4208804
DN 20	Rp 3/4	10	4208806
DN 25	Rp 1	10	4208808
DN 32	Rp 1 1/4	10	4208810
DN 40	Rp 1 1/2	5	4208812
DN 50	Rp 2	5	4208816

## Optibal TW with internal thread, without drain bore

Certification DVGW, GDV, VA



Nominal size	Connection size	Item No.
DN 65	Rp 2 1/2	4208820
DN 80	Rp 3	4208824



#### Optibal TW with press connection and drain bore G 1/4 closed with a plug

For direct connection of copper pipe according to DIN EN 1057 / DVGW GW 392 and stainless steel pipe according to DIN EN 10088 / DVGW GW 451.

Pressing must be carried out to tighten the connection. Only use press jaws with original contours SANHA (SA), Geberit-Mapress (MM) or Viega (Profipress) in the appropriate size for pressing.

Certification DVGW, ACS

Nominal size	Connection size	PU	Item No.
DN 15	15 mm	10	4208852
DN 15	18 mm	10	4208853
DN 20	22 mm	10	4208854
DN 25	28 mm	10	4208855
DN 32	35 mm	10	4208856
DN 40	42 mm	5	4208857
DN 50	54 mm	5	4208858



#### Optibal TW with external thread and drain bore G 1/4 closed with a plug

Nominal size	Connection size	Certification	PU	Item No.
DN 15	G 3/4	DVGW, ACS, GDV, VA	10	4208904
DN 20	G 1	DVGW, ACS, GDV, VA	10	4208906
DN 25	G 1 1/4	DVGW, ACS, GDV, VA	10	4208908
DN 32	G 1 1/2	DVGW, ACS, GDV, VA	10	4208910
DN 40	G 1 3/4	DVGW, ACS, GDV, VA	5	4208912
DN 50	G 2 3/8	DVGW, GDV, VA, ACS	5	4208916



# Optibal TW - Accessories and spare parts



## Aquastrom P Water sampling valve

PU	10	Certification	DVGW, SVGW
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### Description

DN 8, PN 10, flame resistant, bronze/stainless steel, G 1/4

### Item No.

4209102



## Aquastrom P Water sampling valve for mounting on angle valves

Certification	DVGW, SVGW
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### Description

DN 10, PN 10, flame resistant, dezincification resistant brass/stainless steel, chrome plated, for mounting on angle valves, inlet: pipe 10 x 1.25, outlet: G 3/8 external thread conical compression fitting

### Item No.

4209202



## Thermal insulation shell

The thermal insulation shell complies with the German Energy Saving Ordinance (EnEV) and fire protection requirements of building material class B1 according to DIN 4102.

### Description

For Optibal TW DN 15  
For Optibal TW DN 20  
For Optibal TW DN 25  
For Optibal TW DN 32  
For Optibal TW DN 40  
For Optibal TW DN 50

### PU

50  
25  
25  
25  
10  
10

### Item No.

4208881  
4208882  
4208883  
4208884  
4208885  
4208886



## Thermometer conversion set

### Description

For Optibal P, DN 25 and DN 32 and Optibal TW, DN 20 and DN 25  
For Optibal TW DN 32 to DN 50

### Item No.

1078382  
4208893



## Electromotive actuator

### Description

For Optibal TW DN 15 to DN 25, 24 V AC/DC, with spring return

### Item No.

4208890





## 4.2 Shutoff valves and other products for potable water

### **System components for the potable water installation** 579

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# Brawa-Mix Thermostatic service water mixing valves



Service water mixing valve made of bronze for installation in potable water or heating systems.

Without dead space, mixing temperature infinitely adjustable by turning the handwheel, temperature setting can be blocked and lead sealed, high-quality control piston insensitive

to calcification and corrosion.

Installation in potable water systems directly in the hot water outlet of water heaters. In heating systems, the service water mixing valve can be used as temperature limiter for surface heating systems or as return temperature limiter.

Body material	Bronze	Medium	Potable water
Installation location	Supply pipe	Operating temperature	up to 90 °C
Max. operating pressure	10 bar		



## Brawa-Mix with flat sealing external thread, with scald protection

Nominal size	Connection size	Setting range (°C)	Item No.
DN 20	G 1	35 up to 65	1300306 °
DN 25	G 1 ¼	35 up to 65	1300308 °
DN 32	G 1 ½	35 up to 65	1300310 °



## Brawa-Mix with external thread, flat sealing, without scald protection

Nominal size	Connection size	Setting range (°C)	Description	PU	Item No.
DN 20	G 1	30 up to 70	Without union nuts	25	1300200 °
DN 20	G 1	30 up to 70	With union nuts	20	1300251 °



## Brawa-Mix with external thread, flat sealing

Nominal size	Connection size	Setting range (°C)	Description	Item No.
DN 20	G 1	35 up to 50	Without union nuts	1300352 °
DN 20	G 1	35 up to 50	With union nuts	1300351 °



# Brawa-Mix - Accessories and spare parts



## Thermal insulation shell made of expanded polypropylene

The thermal insulation shell complies with the German Energy Saving Ordinance (EnEV) and fire protection requirements of building material class B2 according to DIN 4102.

### Description

For Brawa-Mix DN 20
For Brawa-Mix DN 25 and DN 32

### Item No.

1300385 °
1300386 °



## Inline thermometer

### Description

For Brawa-Mix DN 20, G 1 union nut x G 1 external thread, bronze, length 74 mm
For Brawa-Mix DN 25, G 1¼ union nut x G 1¼ external thread, bronze, length 70 mm
For Brawa-Mix DN 32, G 1½ union nut x G 1½ external thread, bronze, length 81 mm

### Item No.

1300952 °
1300953 °
1300954 °



## Non-return valve for cold water

### Description

For Brawa-Mix DN 20, Rp ¾ x Rp ¾, bronze, length 61 mm
For Brawa-Mix DN 25, Rp 1 x Rp 1, bronze, length 81 mm
For Brawa-Mix DN 32, Rp 1¼ x Rp 1¼, bronze, length 91 mm

### Item No.

1302006 °
1302008 °
1302010 °



## Strainer

### Description

PN 25, DN 20, screen insert 0.6 mm, bronze
PN 25, DN 25, screen insert 0.6 mm, bronze
PN 25, DN 32, screen insert 0.6 mm, bronze

### Certification

WRAS
WRAS
WRAS

### PU

10
10
5

### Item No.

1120006
1120008
1120010

# Domestic water stations



## Domestic water station

Consisting of backflush filter, pressure reducer and pressure gauge.  
Suitable for horizontal and vertical installation.  
Body and transparent cup made of plastic.

Mesh size: 95-110 µm  
Medium temperature (continuous operation): up to 30 °C  
Inlet pressure: min. 1.5 bar, max. 16 bar  
Outlet pressure: 1.5 - 6 bar, adjustable

Description	PU	Item No.
DN 20 with couplings with R ¾ external thread, PN 16		4204506 °
DN 20 with couplings with R 1 external thread, PN 16	72	4204508 °
DN 32 with couplings with R 1 ¼ external thread, PN 16		4204510 °



# Domestic water stations - Accessories and spare parts



## Spare parts for domestic water station

Description	Item No.
Replacement pressure reducer insert	4204590
Replacement filter insert 100 µm	4204591
Replacement filter cup, complete	4204592
Replacement pressure gauge	4204593

# Aquastrom UP-MS Water meter installation sets

## Aquastrom UP-MS



Nominal size	System*	Connection size	Certification	Item No.
DN 20	One pipe	Rp 3/4 x Rp 3/4	DVGW, SVGW	4223116 °
DN 20	Two pipe	Rp 3/4	DVGW, SVGW	4223216 °



## Handwheel set for Aquastrom UP-MS water meter installation sets

Suitable for flush-mounted valves without plaster sleeve and water meter installation sets, consisting of chrome plated operating handle, chrome plated cover rosette and sleeve as well as three coloured marking plates.

Description	Item No.
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 0-35 mm	4223192 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 35-135 mm, lockshield configuration	4223193 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 35-90 mm	4223195 °
For Aquastrom UP, DN 15 / DN 20 and Aquastrom UP-MS, wall construction 0-40 mm, lockshield configuration	4223196 °

## Replacement thermal insulation shell



Description	Item No.
For Aquastrom UP-MS, one pipe	4223190 °
For Aquastrom UP-MS, two pipe	4223290 °

# Aquastrom G Frost-proof outdoor tap



Frost-proof outdoor tap for potable water installations.

Wall rosette design for masonry duct, all parts coming into contact with the medium made of ceramic, lead-free brass or stainless steel.

Operating handle chrome-plated, in various

designs.

Simple shutoff through patented ceramic cartridge.

Automatic internal venting, draining to the outside.

Maintenance-free spindle seal, all functional parts can be replaced from the outside.

PU 10

## Aquastrom G with external thread

Bonnet handle and key handle included in the scope of delivery.



Description	Item No.
DN 15, R 1/2, for wall thickness 200 mm to 530 mm, PN 10	4205204

## Drain valves

### Optiflex with external thread PN 16, DVGW certified



Nominal size	Connection size	kvs	Operating temperature (°C)	Certification	Item No.
DN 15	G 1/2	3.30	0 up to 90	DVGW	1033152

### Drain ball valve



Nominal size	Connection size	Item No.
DN 10	G 1/4	4200191

### Drain valve



Description	Item No.
DN 8, G 1/4 external thread, self-sealing, with rotatable outlet for 3/8 hose	4209602
DN 10, G 3/8 external thread, self-sealing, with rotatable outlet for 3/8 hose	4209603
DN 15, G 1/2 external thread, self-sealing, with rotatable outlet for 3/8 hose	4209604

### Drain valve for hose connection



Description	Item No.
For Aquastrom VT, T plus, C, F, KFR and M, with G 1/4	4205593






## 4.2 Shutoff valves and other products for potable water

### **Potable water distribution** **587**


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# Multidis R Sanitary distributors




Sanitary distributor made of bronze, without dead space. Completely pre-assembled and leak tested unit.

With rotatable identification plate for marking the outlet connections.




Multidis R with internal/external thread, self-sealing



Description	PU	Item No.
2-fold, with shutoff, DN 20, G 3/4 internal thread x G 3/4 external thread, bronze	384	4200552 °
3-fold, with shutoff, DN 20, G 3/4 internal thread x G 3/4 external thread, bronze	288	4200553 °
4-fold, with shutoff, DN 20, G 3/4 internal thread x G 3/4 external thread, bronze	192	4200554 °

Multidis R with internal/external thread, self-sealing



Description	Certification	Item No.
2-fold, without shutoff, DN 20, G 3/4 internal thread x G 3/4 external thread, bronze	ACS	4200453 °



# Multidis R - Accessories and spare parts

## Bracket



### Description

For Multidis R with shutoff, steel, galvanised  
For Multidis R without shutoff, steel, galvanised

### Item No.

4200571  
4201071

## Cap



### Description

G 3/4 internal thread

### Item No.

1400692

## Cabinet



Flush-mounted model, steel, galvanised, frame and door white lacquered.

### Description

Inner width 400 mm  
Inner width 600 mm

### PU

30  
20

### Item No.

4201081  
4201082

## Replacement insert



### Description

For Multidis R with shutoff

### Item No.

4200590



## 4.2 Shutoff valves and other products for potable water

### **Products for potable water treatment**590

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# Aquanova Water filters



Potable water filters for horizontal installation in potable water systems. Without dead space, in compact design for smaller flow rates as Aquanova Compact or

optimised in terms of pressure loss for larger flow rates as Aquanova Magnum. Filter mesh sizes from 95 µm to 140 µm.



## Aquanova Magnum with internal thread

Head and union nut: Brass  
Max. medium temperature (continuous operation): 30 °C  
Filter insert: Plastic support body with tissue  
Mesh size: 95 - 140 µm, one-piece

Description	Certification	Item No.
DN 25, Rp 1, PN 16, with transparent plastic cup	DVGW, ACS	6120008 °
DN 32, Rp 1 ¼, PN 16, with transparent plastic cup	DVGW, ACS	6120010 °
DN 40, Rp 1 ½, PN 16, with transparent plastic cup	DVGW, ACS	6120012 °
DN 50, Rp 2, PN 16, with transparent plastic cup	DVGW, ACS	6120016 °



## Aquanova Magnum with internal thread, for industrial applications

Head and union nut: Brass  
Max. medium temperature (continuous operation): 30 °C  
Filter insert: Plastic support body with tissue  
Mesh size: 250 - 280 µm, multi-piece

Certification	Item No.
DVGW, ACS	6120058 °
DVGW, ACS	6120060 °
DVGW, ACS	6120062 °
DVGW, ACS	6120066 °



## Aquanova Compact with internal thread

Head: Brass  
Max. medium temperature (continuous operation): 30 °C  
Filter insert: Plastic support body with tissue  
Mesh size: 100 - 120 µm

Certification	Item No.
DVGW, ACS	6120508 °

# Aquanova Water filters - Accessories and spare parts



## Filter insert

Description	PU	Item No.
For Aquanova Compact, mesh size 100 - 120 µm, one-piece, DIN DVGW tested	10	6120591
For Aquanova Magnum, mesh size 80 - 120 µm, with support body, multi-piece, for industrial applications	10	6125100
For Aquanova Magnum, mesh size 95 - 140 µm, one-piece, DIN DVGW tested		6125101
For Aquanova Magnum, mesh size 250 - 280 µm, with support body, multi-piece, for industrial applications	10	6125161
For Aquanova Magnum, mesh size 800 - 1000 µm, with support body, multi-piece, for industrial applications	10	6125163



## Filter stocking

Filter stockings can only be used with multi-piece filter inserts. If required, order support body and collar separately.

Description	PU	Item No.
For Aquanova Magnum, mesh size 80 - 120 µm	150	6125300
For Aquanova Magnum, mesh size 250 - 280 µm	50	6125361
For Aquanova Magnum, mesh size 800 - 1000 µm	50	6125363



## Support body with collar

Description	Item No.
For Aquanova Magnum	6125200



## Replacement filter cup

Description	Item No.
For Aquanova Compact, transparent plastic cup made of Trogamid T	6120581
For Aquanova Magnum, transparent plastic cup made of Trogamid T	6125400
For Aquanova Magnum, brass cup	6125500



## Replacement pressure gauge

Description	Item No.
For Aquanova water filters, DN 6, G 1/8 external thread, set = 2 pieces	6127000

### Replacement union nut



Description	Item No.
For Aquanova Magnum, for mounting the filter cup	6125000

### Replacement O-ring for mounting the filter cup



Description	PU	Item No.
For Aquanova Magnum	10	6126000
For Aquanova Compact		6120595

### Special key for loosening the filter cup



Description	PU	Item No.
For Aquanova Magnum	50	6124000
For Aquanova Compact		6124100

# Bypass mixing valves and bypass valves



Bypass mixing valves and bypass valves for potable water softening installations in industry, trade and household. Inlet and outlet of the softener can be shut off for service work.

## Bypass mixing valve with internal thread and shutoff valves

Body made of bronze.



Description	Certification	Item No.
DN 25 , G 1, PN 10, connection to the water softener G 1 external thread	ACS	6101008
DN 25 , G 1, PN 10, connection to the water softener G 1 ¼ external thread	ACS	6101051



## Bypass mixing valve with internal thread

Body made of bronze, bonnet made of brass, for large systems.

Description	Certification	Item No.
DN 32 , G 1 ¼, PN 10	ACS	6102010



## Bypass mixing valve with internal thread

Body made of bronze, bonnet made of brass, for large systems.

Description	Item No.
DN 50 , G 2, PN 10	6102016





**Bypass valve with internal thread, shutoff valves and draining facilities G ¼ and G ½**

For systems with integrated mixing device.  
Brass body.

Description	PU	Item No.
DN 25 , Rp 1, PN 10, bypass valve with bonnet key		6105008
DN 25 , Rp 1, PN 10, bypass valve with handwheel	64	6105108

# Bypass mixing valves and bypass valves - Accessories and spare parts



## Insert

Description	PU	Item No.
For bypass mixing valve DN 25, for setting large flow rates	50	6101053
For bypass mixing valve DN 25 / DN 32, for setting small flow rates	100	6102051
For bypass mixing valve DN 32, for setting large flow rates	10	6102053
For bypass valve and bypass mixing valve DN 25, with bonnet with O-ring, from 07.2004	25	6109552



## Replacement regulating insert

Description	Item No.
For bypass mixing valve DN 50, with diaphragm and spring	6109152



## Replacement bonnet

Description	Item No.
For bypass mixing valve DN 50, with adjustment spindle	6109052



## Replacement regulating screw

Description	Item No.
For bypass mixing valve DN 50, for setting small flow rates	6109851







Oil

5



## 5 Oil

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## 5.1 Products for heating oil installations

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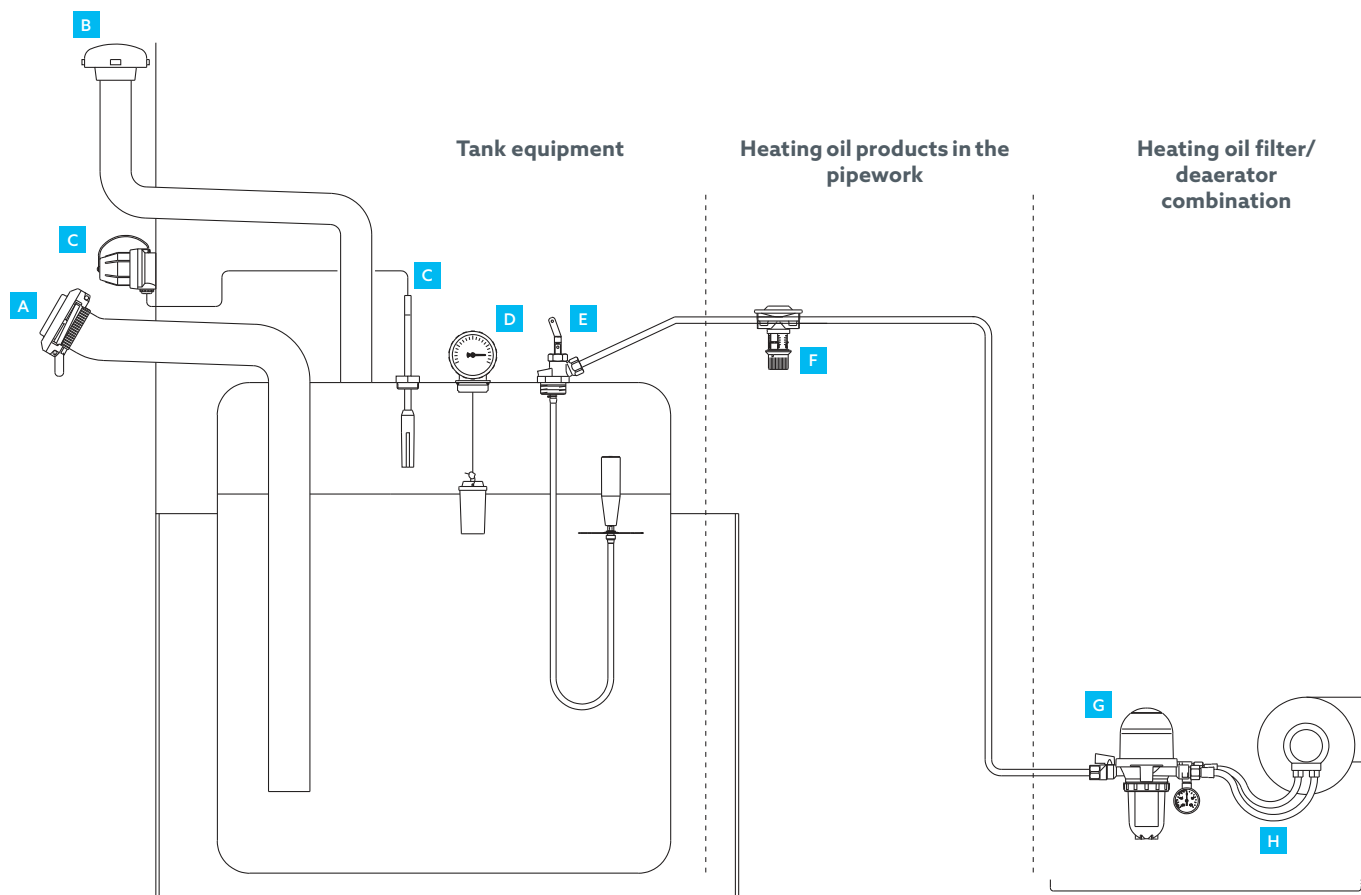
## 5.1 Products for heating oil installations

### **Deaerators and filters for oil heating 603 technology**

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## Example of a one pipe system



- A** Tank inlet cap
- B** Vent cap
- C** Tank filling limiter
- D** Tank level indicator
- E** Tank extraction
- F** Siphon protection
- G** Heating oil filter/deaerator combination with vacuum pressure gauge
- H** Burner hoses

### Other components:

- Connection elements for connecting the components to the pipework
- Shut-off device (in the suction pipe, if the shut-off device on the tank is not directly accessible or can be operated with a ripcord)
- Change-over valve (if there is more than one tank)

### The one pipe system:

There is only one oil pipe from the tank to the filter. The oil flow rate corresponds to the nozzle capacity, i.e. only approx. 1 litre of heating oil per hour is consumed for every 10 kW of heat output. The oil pipe to the tank should be designed accordingly small.

One pipe systems with return flow feed: There are usually two lines from the heating oil filter or heating oil deaerator to the burner pump. The burner pump delivers more oil than is burnt. The excess is fed back to the pump via the heating oil filter or heating oil deaerator.

One pipe system (without return flow feed): There is only one pipe from the heating oil filter to the burner pump. Since the burner pump delivers more oil than is burnt, the pump must have an internal overflow or return flow feed. This installation is rare.

### The two pipe system:

There are two oil pipes from the tank to the burner pump. The oil flow rate corresponds to that of the burner pump. This system is no longer recommended for new installations.

**Recommendations regarding the conversion of an existing two pipe system to a one pipe system:**

- The suction pipe should be re-routed in the appropriate, smaller dimension, as the oil flow rate is usually considerably lower. Disturbances as a result of occasional air accumulations are thus avoided. According to DIN 4755, the flow velocity should be approx. 0.2 to 0.5 m/s. Observe the notes on this in the installation instructions and data sheets.
- The installation of a heating oil deaerator, e.g. a Toc-Duo-3 heating oil filter and heating oil deaerator combination.  
Note: A two pipe filter cannot be used as one pipe filter with return flow feed!
- Old oil pipes should be removed

**Note regarding liquid fuels:**

Heating oil is a liquid fuel that is produced from fossil mineral oil. In order to conserve fossil deposits, liquid fuels, e.g. from renewable raw materials, can be added to the heating oil. This admixture - "alternative proportions" or "bio oils" - is, for example: Bio diesel (= FAME = fatty acid methyl ester).

The fatty acids contained in bio oils can damage the seals and hoses that were common in the past.

New oil fittings are generally designed for a bio proportion of 20 % and more. Observe the notes.

**Recommendation when switching to "bio heating oil" (low-sulphur heating oil with organic content):**

- The one pipe system is highly recommended for oil installations.
- Check remaining old construction components to see if they are suitable for the planned bio proportion and replace if necessary.
- Before filling, the heating oil in the tank should be used up.
- Tank cleaning with disposal of the residual oil is recommended.
- Filter inserts with a large filter surface area should be used, e.g.: "opticlean". This applies especially if no tank cleaning has been carried out.

**Reasons:**

- Bio proportions (FAME) can dissolve existing deposits, these can block filter inserts.
- Back flowing oil in two pipe systems can adversely affect the shelf life of the stored product.
- The mixture of used and fresh low-sulphur heating oil may cause corrosion of the burner's flame tubes ("metal dusting").



Oil fittings Resistance to liquid fuels		Heating oil (diesel)			Paraffinic <sup>[3]</sup> fuels	
		EL heating oil (diesel)	Bio heating oil with up to 30% FAME <sup>[2]</sup>	Bio heating oil with up to 100% FAME <sup>[2]</sup>	HVO <sup>[4]</sup> , GtL <sup>[5]</sup> , PtL <sup>[6]</sup>	Mixtures with EL heating oil <sup>[3]</sup>
<b>Heating oil filter and heating oil deaerator combination</b>	Toc-Duo-3	●	●		●	●
	Toc-Duo-3 metal version	●	●	●	●	●
<b>Heating oil deaerators</b>	Toc-Uno	●	●		●	●
<b>Heating oil filters</b>	Oilpur E, EA, EAR for one pipe systems	●	●		●	●
	Oilpur E, EA, EAR for one pipe systems, with metal cup	●	●	●	●	●
	Oilpur ZA for two pipe systems <sup>[1]</sup>	●			●	●
<b>Filling spouts</b>	Brass	●	●	●	●	●
<b>Tank level indicators</b>	Mechanical	●	●			
<b>Tank extraction</b>	Flexo-Bloc <sup>[1]</sup>	●	●		●	●
	Flexo-Bloc with tank filling limiter <sup>[1]</sup>	●	●		●	●
<b>Anti-siphon valves</b>	Oilstop V	●	●		●	●
	Oilstop MV	●	●	●	●	●
<b>Fittings, valves</b>		●	●		●	●
<b>Burner hoses</b>		●	●		●	●

1 Two pipe systems should not be operated with admixtures of FAME. FAME can adversely affect the shelf life of the stored product.

2 FAME = Fatty Acid Methyl Ester

3 Paraffin is a natural component of heating oil. Paraffins can also be produced synthetically.

4 HVO = Hydrated vegetable oil

5 GtL = Gas to Liquid = Synthetic liquid fuel from gas (methane)

6 PtL = Power to Liquid = Synthetic liquid fuel produced from renewable electrical energy via electrolysis of water and other process steps.

Resistance to liquid fuels according to the manufacturer's current state of knowledge. Approvals and product documentation may contain different information. Standards, testing and certification bases are gradually being updated.



# Toc Heating oil filter / deaerator combinations and heating oil deaerators



**Toc** heating oil deaerators are used in oil firing systems (suction operation) that are operated as one pipe system with return flow feed. A return pipe to the tank is not necessary. The **Toc** supports a trouble-free oil supply to the burner by a high venting capacity. Pure heating oil deaerators (**Toc-Uno**) as well as heating oil filter/heating oil deaerator combinations (**Toc-Duo-3**) are available.

The installation is permitted below and above the oil level.

All **Toc-Uno** and **Toc-Duo** are supplied with wall bracket and are suitable for heating oil with "alternative additives" or a bio proportion of up to 20 % according to DIN SPEC 51603-6. The models with deaerator cap and filter cup made of metal are also suitable for heating oil EL A Bio according to DIN SPEC 51603-6 with up to 100 % FAME as well as for various low-viscosity vegetable oils.

The tank side connection G 3/8 internal thread is suitable for OV compression fittings 6, 8, 10 and 12 mm.

Nominal size	DN 10	Max. flow of returned oil (heating oil)	120 l/h
System*	One pipe with return flow feed	Min. venting capacity (air)	6 l/h
Body	Metal	Certification	DIN, Ü sign
Max. nozzle capacity (heating oil)	110 l/h		



## Toc-Duo-3 Heating oil filter and heating oil deaerator combination

Connection tank side	G 3/8 internal	Filter element	Yes
Shutoff	Yes	Certification	DIN, Ü sign

Connection burner side	Cap*	Cup*	Filter*	Mesh size* (µm)	Pressure gauge*	PU	Item No.
G 1/4 internal	Plastic transparent	Plastic transparent	Sintered plastic	50-75	No		2142700
G 3/8 external	Plastic transparent	Plastic transparent	Sintered plastic	25-40	No	130	2142732
G 3/8 external	Plastic transparent	Plastic transparent	Paper	5-20	No		2142735
G 3/8 external	Plastic transparent	Plastic transparent	Sintered plastic	25-40	Yes		2142762
G 3/8 external	Metal	Metal	Paper	5-20	Yes		2152754



## Toc-Uno Heating oil deaerator

With hose G 3/8 union nut x G 1/4 external thread (does not apply to item no. 2142901).

Connection tank side	G 1/4 internal	Pressure gauge*	No
Cap*	Plastic transparent	Filter element	No
Shutoff	No	Certification	DIN, Ü sign

Connection burner side	Hose length (mm)	PU	Item No.
G 3/8 external (brass)	300		2142900
G 1/4 internal	-		2142901
G 3/8 external	300	600	2142951

# Oilpur Heating oil filters



**Oilpur** heating oil filters are used in oil firing systems that are operated as one pipe system with or without return flow feed or as two pipe system. Filters with plastic cups are generally only approved for suction operation, metal filter cups and filter cartridges are also approved for pressurised systems and are available optionally or as accessories.

All **Oilpur** heating oil filters are suitable for heating oil with "alternative additives" or a bio

proportion of up to 20 % according to DIN SPEC 51603-6. The models with metal filter cup are also suitable for heating oil with a bio, FAME or low-viscosity vegetable oil proportion up to 100 %. All Oilpur heating oil filters with shutoff are supplied with a mounting bracket.

The tank side connection G 3/8 internal thread is suitable for OV compression fittings 6, 8, 10 and 12 mm.

Cup*	Plastic transparent	Pressure gauge*	No
Body	Brass	PU	10
Filter element	Yes	Certification	DIN, Ü sign



## Oilpur E A with shutoff for one pipe systems

The heating oil filters with G 3/8 internal thread on the tank side can be connected with Oventrop compression fittings 6, 8, 10 or 12 mm. The compression fittings must be ordered separately.

Item no. **2123871**: long model **Magnum**

Certification	DIN, Ü sign
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Nominal size	Connection tank side	Connection burner side	Filter*	Mesh size* (µm)	Item No.
DN 10	G 3/8 internal	G 3/8 internal	Stainless steel	100-150	2123103
DN 10	G 3/8 internal	G 3/8 internal	Sintered plastic	50-75	2123261
DN 15	G 1/2 internal	G 1/2 internal	Stainless steel	100-150	2123104
DN 10	G 3/8 internal	G 3/8 external	Sintered plastic	50-75	2123561



## Oilpur E A R with shutoff for one pipe systems with return flow feed

Venting	Yes	Certification	DIN, Ü sign
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Nominal size	Connection tank side	Connection burner side	Filter*	Mesh size* (µm)	Item No.
DN 10	G 3/8 internal	G 3/8 internal	Stainless steel	100-150	2122103
DN 10	G 3/8 internal	G 3/8 external	Sintered plastic	50-75	2122261
DN 15	G 1/2 internal	G 1/2 internal	Sintered plastic	50-75	2122262
DN 10	G 3/8 internal	G 3/8 external	Stainless steel	100-150	2122403
DN 10	G 3/8 internal	G 3/8 external	Sintered plastic	50-75	2122561



#### Oilpur E without shutoff for one pipe systems

The heating oil filters with G 3/8 internal thread on the tank side can be connected with Oventrop compression fittings 6, 8, 10 or 12 mm. The compression fittings must be ordered separately.

Certification DIN, Ü sign

Nominal size	Connection tank side	Connection burner side	Filter*	Mesh size* (µm)	Item No.
DN 8	G 1/4 internal	G 1/4 internal	Sintered plastic	50-75	2124360
DN 10	G 3/8 internal	G 3/8 internal	Stainless steel	100-150	2124203
DN 15	G 1/2 internal	G 1/2 internal	Stainless steel	100-150	2124204



#### Oilpur ZA with shutoff for two pipe systems

The heating oil filters with G 3/8 internal thread on the tank side can be connected with Oventrop compression fittings 6, 8, 10 or 12 mm. The compression fittings must be ordered separately.

Certification DIN, Ü sign

Nominal size	Connection tank side	Connection burner side	Filter*	Mesh size* (µm)	Item No.
DN 10	G 3/8 internal	G 3/8 internal	Stainless steel	100-150	2120103
DN 15	G 1/2 internal	G 1/2 internal	Stainless steel	100-150	2120104
DN 10	G 3/8 internal	G 3/8 internal	Sintered plastic	50-75	2120261
DN 10	G 3/8 internal	G 3/8 external	Stainless steel	100-150	2120403
DN 10	G 3/8 internal	G 3/8 external	Sintered plastic	50-75	2120561



# Heating oil filters/Heating oil deaerators - Accessories and spare parts

## Filter insert



Suitable for Toc-Duo-3 heating oil filter and heating oil deaerator combination and Oilpur heating oil filters. The filter inserts have a bayonet catch and are interchangeable, taking into account the size of the filter cups (except for filter cartridge PN 10).

The finer Siku filter inserts (25-40 µm) can be recognized by the red bayonet.

Description	PU	Item No.
Sika 0, sintered bronze, 50 – 100 µm	25	2126051
Stainless steel 100 – 150 µm	25	2126100
Siku, sintered plastic, 50 – 75 µm	25	2126300
Siku, sintered plastic, 25 – 40 µm	25	2126354
Siku, sintered plastic, 50 – 75 µm, for Magnum	10	2126355
Siku, sintered plastic, 25 – 40 µm, for Magnum	10	2126371
Filter cartridge PN 10, paper in metal cartridge, 25 µm		2126400
opticlean MC-7, paper, 5 – 20 µm	25	2126454
opticlean MC-18, paper, 5 – 20 µm, long	10	2126474
opticlean MX-11, paper, ~2 µm, long	10	2126484

## Filter cup



Transparent cups made of plastic are only to be used for suction operation.

Description	PU	Item No.
Transparent cup made of plastic for Oilpur small heating oil filter and condensate collectors	10	2129102
Brass cup for pressurised systems PN 6, for Oilpur small heating oil filter and condensate collectors	10	2129152
Transparent cup made of plastic, also suitable as replacement for Toc-Duo-3	25	2126751
Transparent cup made of plastic, for Magnum	25	2126755
Transparent cup made of plastic, for opticlean, long	25	2126774
Metal cup PN 16		2126754

## Sealing ring and O-ring



Description	PU	Item No.
O-ring for Oilpur heating oil filters and Toc-Duo-3 heating oil filter and heating oil deaerator combinations, suitable for bio heating oils	100	2129200
O-ring for Oilpur small heating oil filter and condensate collectors	10	2166500





#### Magnum Conversion set

Not suitable for opticlean MC-18 and MX-11, long.

Description	Item No.
Filter cup Magnum with filter insert made of sintered plastic 50-75 µm and O-ring	2120891



#### Vacuum pressure gauge

Vacuum pressure gauges are used to check the filter contamination. They are installed directly behind the filter in the suction line to the burner. The indicator can be positioned as required.

Description	Item No.
With connection fitting, filter side R 3/8, burner side Rp 3/8	2120285
With connection piece, filter side G 3/8 union nut, burner side G 3/8 with internal cone	2120585



#### Adapter

Description	Item No.
For retrofitting the filter cartridge (item no. 2126400)	2120691



#### Union nut

Description	Item No.
For Oilpur heating oil filters and Toc-Duo-3 heating oil filter and heating oil deaerator combinations	2126600



#### Tool

Description	Item No.
Multi-purpose spanner for loosening the union nut of Oilpur heating oil filters and Toc-Duo-3 heating oil filter and heating oil deaerator combinations	2126691
Filter cartridge tool, for loosening the filter cartridge item no. 2126400 from the adapter	2126695

### Vent hose, 10 m



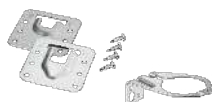
#### Description

With hose nozzle for Toc-Duo-3 and Toc-Uno for the discharge of outgassing

#### Item No.

2142990

### Replacement mounting bracket



#### Description

Mounting bracket for Oilpur heating oil filters DN 10

Mounting bracket for Oilpur heating oil filters DN 15

Bracket with screws for Toc-Duo-3 and Toc-Uno

#### Item No.

2126803

2126804

2142992

### Replacement handwheel



#### Description

For Oilpur heating oil filters DN 8 and DN 10

For Oilpur heating oil filters DN 15

#### Item No.

2126951

2126952



## 5.1 Products for heating oil installations

### **Tank equipment for oil heating technology** **613**

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# Filling and venting, filling level



Fittings for safe filling and venting, as well as for level detection.

Tank caps ensure a secure closure and connection of the filling hose to the filling pipe of the tank. Tank caps with bayonet according to EN 14420 part 6 (or part 8 for France) are recommended for a direct connection of the filling hose of the tank vehicle. Tank caps with screw

connection provide a secure hold for adapter pieces.

Metal vent caps are particularly durable.

Fuel gauge locks as well as mechanical and pneumatic tank level indicators are available for determining the fill level.

## Screw tank cap



Nominal size	Connection tank side	Connection filling spout	Material	PU	Item No.
DN 50 - 2	G 2 internal	G 2	Brass	25	2010152 °
DN 50 - 2		G 2 ½	Brass	25	2010153
DN 50 - 2	G 2 internal	G 2 ¾	Brass	5	2010154 °



## Tank cap with bayonet catch

Item no. 2010882 with green cap for "low-sulphur heating oil".

Nominal size	Connection tank side	Connection filling spout	Material	Types (according to EN 14420-6)	Item No.
DN 50 - 2	G 2 internal	DN 50	Brass	VK 50 + MB 50	2010816
DN 50 - 2		DN 50	Brass	VK 50 + MB 50	2010851

## Tank inlet cap

Item no. 2018182 green lacquered for "low-sulphur heating oil".



Connection filling spout	Material	Types (according to EN 14420-6)	PU	Item No.
G 1 ¼	Brass	-		2018090
G 1 ½	Brass	-	100	2018091 °
G 2	Brass	-		2018092 °
G 2 ½	Brass	-		2018093
G 2 ¾	Brass	-		2018094 °
DN 50	Brass	MB 50	10	2018192



### Vent cap



Variants with dirt strainer for export only (according to DIN 4755, cross-section reductions such as strainers in vent pipes are not permitted).

The dirt strainers of the variants DN 20 - DN 50 are made of plastic, those of the variants DN 65 and DN 80 are made of brass.

Nominal size	Connection tank side	Material	Dirt strainer	PU	Item No.
DN 20		Brass	No	50	2020006 °
DN 25	G 1 internal thread	Brass	No	50	2020008 °
DN 32	G 1 ¼ internal	Brass	No	50	2020010 °
DN 40	G 1 ½ internal	Brass	No	50	2020012 °
DN 50	G 2 internal	Brass	No	20	2020016 °
DN 65	G 2 ½ internal	Brass	No	10	2020020 °
DN 80	G 3 internal thread	Brass	No	5	2020024 °

### Fuel gauge lock



#### Description

Universal version, G 1 internal thread, with quick-acting lock, lockable

#### Item No.

2014151 °

### Tank level indicator



#### Description

Mechanical, G 1 ½, infinitely adjustable, for tank heights 0 - 200 cm, odour-proof

#### PU

300

#### Item No.

2060312

Pneumatic, infinitely adjustable, for tank heights 100 - 300 cm, max. measuring line length 50 m, connection pipe diameter 6 mm, scale graduated in %

2060400

# Products for vacuum tank monitoring



## Liquid safety device

For the suction and measuring line, lower connection G  $\frac{3}{8}$  internal thread and G  $\frac{1}{2}$  external thread, upper connection M 18 x 1.5 mm with ball cone for hose connection.

Only for holders of a type approval.

The liquid safety devices are subject to testing and therefore TÜV approved.

### Description

### Item No.

Lower connection G  $\frac{3}{8}$  internal thread and G  $\frac{1}{2}$  external thread, upper connection M 18 x 1.5 mm

2073051

With condensate collector and bracket for mounting on the dome cover, hose connections 4 and 6 mm

2073161



## Elbow with locknut and two seals

For passing through the suction and measuring line.

### Description

### Item No.

With outer hose connections 4 and 6 mm, hose connection in the tank 6 mm

2074061

As above, but extended with copper pipe, outer hose connections 4 and 6 mm, hose connection in the tank 6 mm

2074261



## Spacer plate

Is required if the hose line is not routed to the bottom of the tank.

### Description

### Item No.

With inner fixing possibility of the elbows item no. 2074061 und 2074261

2076200

# Flexo-Bloc Tank extraction systems



The **Flexo-Bloc** tank extraction devices combine suction opening with spacer foot, suction hose, tank and pipe connections, backflow preventer and quick shutoff in one device. The **Flexo-Bloc** is also available with a level indicator pipe (for pneumatic tank level indicators), floating suction or tank filling limiter. Pipe connection for supply pipe and partly for return

pipe available.

The suction hose is suitable for tank heights up to 2 m and up to 3 m.

The G 3/8 internal thread on the burner side is suitable for OV compression fittings 6, 8, 10 and 12 mm.

Nominal size	DN 10	Shutoff	Yes
Pipe connection	G 3/8 internal	Check valve	Yes
Material	Brass		



## Flexo-Bloc

### Export models 2053051-2053354:

The export versions comply with German regulations when brass compression fittings are used.

Floating suction	No	PU	10
------------------	----	----	----

Connection tank side	Tank height up to (mm)	Plastic compression fitt.*	Return connection	Compression fitting	Certification	Item No.
G 1 external	2,000	-	Yes	10 and 12 mm (brass)	Ü sign	2052151
G 1 external	3,000	-	Yes	10 and 12 mm (brass)	Ü sign	2052152
G 1 1/2 external thread	2,000	-	Yes	10 and 12 mm (brass)	Ü sign	2052153
G 1 1/2 external thread	3,000	-	Yes	10 and 12 mm (brass)	Ü sign	2052154
G 2 external	2,000	8, 10 and 12 mm	Yes	-		2053051
G 2 external	3,000	8, 10 and 12 mm	Yes	-		2053052
G 2 external	2,000	6 and 8 mm	No	-		2053351
G 1 external	2,000	6 and 8 mm	No	-		2053353
G 1 external	3,000	6 and 8 mm	No	-		2053354



**Flexo-Bloc with tank filling limiter**

Tank filling limiter with fitting for wall mounting, cable length approx. 5 m.

Tank height up to	2,000 mm	Compression fitting	10 and 12 mm (brass)
Type	21301	Floating suction	Yes
Probe length	385 mm	PU	5
Return connection	Yes	Certification	Ü sign

Connection tank side	Item No.
G 1 ½ external thread	2052351



**Flexo-Bloc with floating suction**

With floating suction, the permanent heating oil extraction takes place approx. 4 - 6 cm below the oil level. This means that only the cleanest heating oil is extracted.

Tank height up to	2,000 mm	PU	10
Return connection	No	Certification	Ü sign
Floating suction	Yes		

Connection tank side	Item No.
G 1 ½ external thread	2052051
G 1 external	2052053



# Tank extraction

## Conversion set



### Description

For converting Flexo-Bloc tank extraction devices to floating suction up to 3 m tank height

### Item No.

2052091



## 5.1 Products for heating oil installations

### **Pipeline valves and components for oil heating technology**

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# Oilstop Anti-siphon valves



**Oilstop** siphon protection valves or anti-siphon valves and solenoid valves are used as safety devices in oil pipes according to DIN 4755 to prevent the contents of the tank from leaking.

Siphon protection valves must be installed in the suction line above the maximum permissible tank level before it reaches a lower level. Both valves have a general type approval (AbZ) and are pressure-balanced in the direction of the tank.



## Oilstop Diaphragm anti-siphon valve

AbZ (general type approval) no.: Z-65.50-305,  
G  $\frac{3}{8}$  internal thread for Oventrop compression fittings 6, 8, 10 and 12 mm, protection heights infinitely adjustable from 1 m to 4 m, lead sealable, venting function for initial operation, with shutoff facility, permissible ambient temperature -25 °C to +60 °C, max. oil flow rate 200 l/h.

### Description

Oilstop V Diaphragm anti-siphon valve

### Item No.

2104203



## Oilstop MV Solenoid valve

AbZ (general type approval) no.: Z-65.50-456,  
G  $\frac{3}{8}$  internal thread, protection height up to 3 m, "normally closed" (NC), ~230 V, 50 Hz, protection category IP 65, max. oil flow rate 100 l/h.

### Description

Oilstop MV Solenoid valve

### Item No.

2104553



## Pipeline valves



### Shutoff valve

Straight needle valve made of brass, for pipework PN 16. For use with mineral, heating and hydraulic oils as well as air PN 6.

Nominal size	Item No.
DN 8	2091002



### Double change-over valve

Double change-over valve (with forced change-over) for the connection of two storage tanks in two pipe operation to one point of consumption. By flipping the lever, the supply and return pipe of one tank is shut off and the supply and return pipe of the other tank is released. Also resistant to fuels and combustibles with "alternative additives" or a bio proportion of up to 20 %, e.g. heating oils according to DIN SPEC 51603-6.

Temperature range: 0 °C up to 60 °C

Pressure range: -0.6 bar up to 10 bar

Description	Item No.
Ball valve design, brass, connections G 3/8 internal thread (6 x)	2103260



# Ofix-Oil Compression fittings



## Ofix-Oil Connection set 2-fold

Made of brass, for Oilpur two pipe heating oil filters, Flexo-Bloc (two pipe) and diaphragm anti-siphon valves of size DN 10. Support sleeves must be used for copper pipes.

Set consisting of two compression fittings.

Size connection 1	Size connection 2	Item No.
$\frac{3}{8}$	6 mm	2127050
$\frac{3}{8}$	8 mm	2127051
$\frac{3}{8}$	10 mm	2127052
$\frac{3}{8}$	12 mm	2127053

# Ofix-Oil Cutting ring compression fittings

## Ofix-Oil Straight screw-in fitting

Made of steel, galvanised with brass cutting ring. DIN 2353 series L.  
Support sleeves must be used for copper pipes.



		Item No.
R 3/8	Cutting ring connection 6 mm	2083060
R 3/8	Cutting ring connection 8 mm	2083053
R 3/8	Cutting ring connection 10 mm	2083054
R 3/8	Cutting ring connection 12 mm	2083055

## Ofix-Oil Brass support sleeve

Are required for laying of soft pipes with 1 mm wall thickness. Dimensions refer to outer pipe diameter.



Description	PU	Item No.
6 mm	100	2083951
8 mm	100	2083952
10 mm	100	1029651
12 mm	100	1029652
15 mm	50	1029654
18 mm	50	1029656

# Ofix-Oil Double nipples

## Ofix-Oil Double nipple with internal cone on both sides

Made of brass, for connecting hose/hose



		Item No.
G 1/4	G 3/8	2080050
G 3/8	G 3/8	2080051

## Ofix-Oil Double nipple with one internal cone

Made of brass for connecting hose/burner or fitting.



		Item No.
G 3/8	G 1/4	2080254
G 1/4	G 1/4	2080351
G 3/8	R 3/8	2080352
G 1/2	R 1/2	2080354

# Hose lines according to DIN EN ISO 6806



Up to a max. of 70 °C, the hose lines are also suitable for heating oil with “alternative additives” or a bio proportion of up to 20 % according to DIN SPEC 51603-6.

For higher bio proportions or temperatures up to 100 °C, burner hoses with a diffusion-tight

inner layer should be used, for example.

Hose lines with galvanised wire braiding PN 10. Flexible hose lines as connection between a solid pipeline (e.g. from the filter) and the burner or feeder unit.

## Hose line, both sides G 3/8 union nut

With sealing cone.



NI*	Hose length (mm)	Item No.
8	1,000	2110053
8	1,500	2110055





## 5.1 Products for heating oil installations

### **Kits** **627**

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# Heating oil kits for export

## Heating oil filter kit for two pipe systems



Consisting of:  
Oilpur Heating oil filter, both sides internal thread G 3/8, with stainless steel filter insert  
Item no. 2120103

Ofix-Oil Compression fittings 8, 10 and 12 mm  
Item no. 2127500

### Description

Completely packed in carton

### Item No.

2120153

## Heating oil filter kit for one pipe systems with return flow feed



Consisting of:  
Oilpur Heating oil filter, both sides internal thread G 3/8, with stainless steel filter insert  
Item no. 2122103

Ofix-Oil Compression fittings 8, 10 and 12 mm  
Item no. 2127700

### Description

Completely packed in carton

### Item No.

2122153

## Heating oil filter kit for one pipe systems (without return flow feed)



Consisting of:  
Oilpur Heating oil filter, both sides internal thread G 3/8, with stainless steel filter insert  
Art.-Nr. 2123103

Ofix-Oil Compression fittings 8, 10 and 12 mm  
Item no. 2127700

### Description

Completely packed in carton

### Item No.

2123153

## Ofix-Oil Compression fittings for export

Plastic compression rings for metal pipes, brass pressure screw. For Oilpur heating oil filters G 3/8, Flexo Bloc and Toc-Duo-3. Not permitted in Germany.



### Description

2-fold, for 8, 10 and 12 mm pipes

1-fold, for 8, 10 and 12 mm pipes

### Item No.

2127500

2127700









**Smart Home  
Smart Building**

6



## 6 Smart Home, Smart Building

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## 6.1 Smart Home

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## 6.1 Smart Home

### **Smart Home system** **635**

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## wibutler Smart Home system



The Smart Home sector includes the networking of several trades within individual dwellings or detached houses. By means of a gateway, various components can be integrated into the Smart Home system and controlled via smartphone, tablet or PC. By connecting the gateway to a commercially available rout-

er, remote access is easily possible while on the move.

The intelligent wibutler pro 2 gateway is the heart of the smart home. In addition to surface heating and radiators, other systems such as lighting and shading can also be integrated.



### OVbalance Home Basic set - radiator with wibutler pro 2



#### Scope of delivery

1 x wibutler pro 2 item no. 1150791  
1 x R-Tronic RT B wireless thermostat item no. 1150780  
1 x mote 420 wireless actuator item no. 1150766

#### Item No.

1150792

### Basic set - surface heating with wibutler pro 2



#### Scope of delivery

1 x wibutler pro 2 item no. 1150791  
1 x R-Tronic RT B wireless thermostat item no. 1150780  
1 x R-Con eight-channel wireless receiver item no. 1150772

#### Item No.

1150793

### wibutler pro 2 gateway (EnOcean, Zigbee, LAN, WLAN)



The lighting, shading, heating and sanitary, air conditioning, ventilation and security systems can be interconnected with the help of the wibutler gateway.

#### Operation

With smartphone app  
With tablet app  
Via computer  
Amazon Alexa  
Google home

#### System requirements terminals

Apple: at least iOS 9  
Android: at least Android 5

#### Voltage

100 - 230 V AC

#### Item No.

1150791

### R-Tronic Wireless thermostat (EnOcean)



#### Installation

Surface mounting

#### Power supply

Battery operated

#### Communication

EnOcean

#### Designation

#### Humidity sensor\*

#### EEP\*

#### Item No.

RT B (EnOcean)

No

A5-10-02  
A5-10-03  
A5-10-04  
A5-10-06  
A5-10-06 + RPS

1150780

RTF B (EnOcean)

Yes

A5-10-11  
A5-10-12  
A5-10-22  
A5-10-23

1150781





#### mote 420 Wireless actuator (EnOcean)

Only functions in combination with communication centres / gateways (e.g. with the wibutler gateway) and room thermostats supporting this EnOcean Equipment Profile.

Communication	EnOcean	Battery lifespan	About 2 years
Power supply	Battery operated		

#### Valve connection

Connection thread M 30 x 1.5

#### EEP\*

A5-20-01

#### Item No.

1150766



#### R-Con Multi-channel wireless receiver for surface heating (proprietary radio communication)

Time programme adjustable with R-Tronic wireless thermostats. Item no. 1150770 / 72 additionally with pump and burner logic. To be installed in a cabinet, the protective housing item no. 1150776 (see "R-Con Accessories") can be used alternatively.

Voltage	230 V AC	Communication	Proprietary radio
Control	On/off / PWM	Mounting	Carrier rail (DIN EN 60715 TH35)

#### Number of radio channels

4 (max. of 4 actuators per channel)

4 (max. of 4 actuators per channel)

8 (max. of 4 actuators per channel)

8 (max. of 4 actuators per channel)

#### Logic module

Yes

No

Yes

No

#### Item No.

1150770

1150771

1150772

1150773



#### R-Con T 2P Four-channel extension module (proprietary radio communication)

For R-Con multi-channel wireless receiver

Voltage	230 V AC	Communication	Proprietary radio
Control	On/off / PWM	Mounting	Carrier rail (DIN EN 60715 TH35)

#### Number of radio channels

4 (max. of 4 actuators per channel)

#### Item No.

1150775



#### R-Con HC Extension module heating/cooling (proprietary radio communication)

For R-Con multi-channel radio receiver. For switching between heating and cooling mode via a change-over input. The change-over signal is provided e.g. by a reversible heat pump.

Voltage	230 V AC	Mounting	Carrier rail (DIN EN 60715 TH35)
Communication	Proprietary radio		

#### Inputs

Dew point monitoring, cooling mode is interrupted if the dew point is exceeded

#### Item No.

1150774





Aktor T 2P Electrothermal actuator, on/off control

Version	"Normally closed"	Mounting	Plug-in connection with valve adapter
Valve connection	Connection thread M 30 x 1.5		
Installation position	Any		

Voltage	Cable* (m)	PU	Item No.
230 V AC	1	100	1012415
24 V AC / DC	1		1012416

Cable = Cable length

## Hydronic balancing with the wibutler gateway and Q-Tech in detached and semi-detached houses

### AUTOMATIC PRESETTING WITH THE WIBUTLER GATEWAY

With the **wibutler** gateway and the **mote 420** wireless actuators, the automatic presetting of thermostatic valves at radiators, e.g. in detached or semi-detached houses, can be carried out from a smartphone, tablet or PC. Manual presetting at each radiator on site is therefore no longer necessary. The setup wizard enables the user to carry out the automatic presetting in a few steps via his smartphone, tablet or PC.

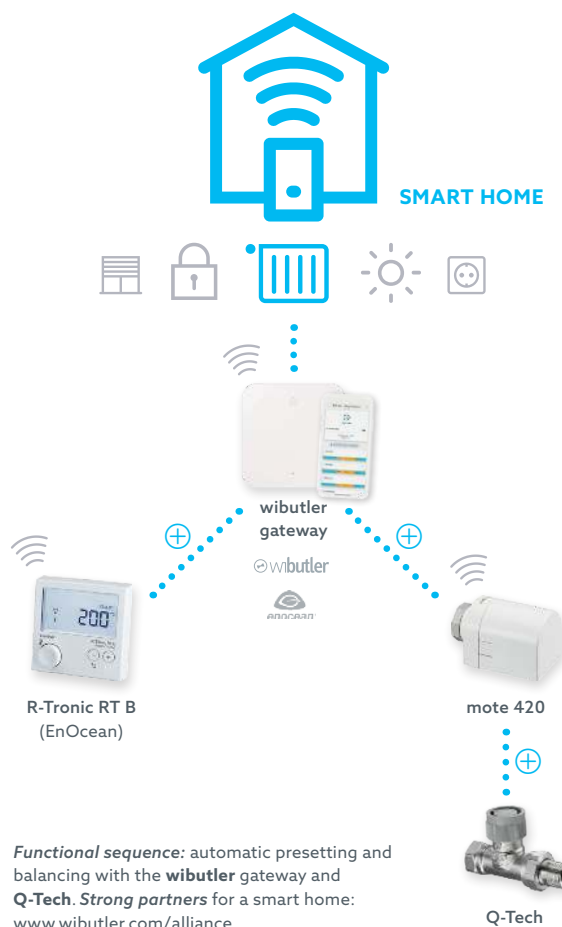
In addition to the room temperature control function, the calculation of the maximum required volume flow is provided in the **wibutler** gateway for each radiator. The calculation procedure is stored in the **wibutler** gateway. (Procedure according to "VdZ-Fachregel Heizungsoptimierung-Verfahren A"). The valve characteristic line of the Q-Tech thermostatic valves is integrated in the **wibutler** gateway. It is used to convert the determined volume flows for the stroke limitations of the **mote 420** actuators (only possible in conjunction with item. no. 1150766).

### AUTOMATIC BALANCING WITH Q-TECH

The **Q-Tech** thermostatic valve keeps the volume flow required for room temperature control in the radiator constant, independent of differential pressure fluctuations in the heating system. Here, the volume flow is limited to a maximum stroke via the automatic presetting described above with the **wibutler** gateway and the **mote 420** actuator mounted on the **Q-Tech** valve.

#### ADVANTAGES

- + Automatic calculation of the required volume flows for each radiator and automatic presetting of the Q-Tech valves via the **mote 420**
- + Manual setting of the thermostatic valves at the radiator is no longer necessary
- + No need for pipe network calculation and balancing of the risers



### QUICKLY INSTALLED

- 1 New installation of the **Q-Tech** valves at the radiator or replacement of the valve inserts with **QA** inserts
- 2 Installation of the **mote 420** wireless actuators
- 3 Installation of the **R-Tronic** wireless thermostats
- 4 Commissioning of the **wibutler** gateway
- 5 Entry of the building and room data in the app using the commissioning wizard



- + Presetting of the valves in the riser is no longer necessary
- + Hydraulically balanced heating system at full and partial load
- + Long battery life, as control commands from the **mote 420** are only carried out for the room temperature control

# Smart Home - Accessories

## FK-C F Wireless window contact (EnOcean)



### Description

Solar powered, white (similar to RAL 9003), EnOcean Equipment Profile D5-00-01

### Item No.

1153070



## Cover frame

PU

50

### Description

For covering flush-mounted box ( milled hole up to Ø 83 mm, e.g. Switzerland), cover 88 x 88 mm, traffic white (RAL 9016)

### Item No.

1150693

## Flush-mounted power supply unit with wall bracket



### Description

For the conversion of battery operated R-Tronic wireless thermostats to an external power supply 100 - 240 V AC, 50 - 60 Hz

### Item No.

1150692

## Plug-in power supply unit with table stand



### Description

For the conversion of battery operated R-Tronic wireless thermostats to an external power supply 100 - 240 V AC, 50 - 60 Hz

### Item No.

1150694



Wireless repeater (EnOcean)

PU 50

Description	Item No.
For amplification of EnOcean radio telegrams to increase the radio range, 230 V AC, 50 Hz, flush mounting	1153060



Antenna extension

Description	Item No.
With SMA screw terminal, antenna length 1 m, surface mounting, white glossy (RAL 9003)	1150777



Protective housing with carrier rail

Description	Item No.
As alternative to installation in the cabinet, 230 V, surface mounting	1150776





## 6.1 Smart Home

### **Proprietary radio system** **643**

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# R-Tronic System for individual room temperature control



The R-Tronic wireless thermostats with closed radio communication (proprietary) are used in stand-alone operation in connection with wireless actuators to control radiators or in connection with a multi-channel wireless receiver to control surface heating systems.

The temperature setting as well as the storage of time programmes is carried out at the wireless thermostat. Depending on the model, an additional measurement of the relative humidity in % is possible.

ity in % is possible.

Power is supplied by batteries or a power supply unit (100 - 240 V). For the battery-operated models, power supply via the mains is possible as an alternative.

In battery operation, up to 3 participants can be taught in, in mains operation, up to 8 participants can be taught in. In mains operation it is also possible to teach in window contacts.

## R-Tronic Wireless thermostat (proprietary radio communication)



Installation	Surface mounting	Power supply	Battery operated
Communication	Proprietary radio		

Designation	Humidity sensor*	Item No.
RT B	No	1150680
RTF B	Yes	1150681

## mote 320 Wireless actuator (proprietary radio communication)

Compatible with R-Tronic wireless thermostats (proprietary radio communication).



Power supply	Battery operated	Communication	Proprietary radio
Battery lifespan	About 2 years	Valve connection	Connection thread M 30 x 1.5

Item No.
1150665

## R-Con Multi-channel wireless receiver for surface heating (proprietary radio communication)

Time programme adjustable with R-Tronic wireless thermostats. Item no. 1150770 / 72 additionally with pump and burner logic. To be installed in a cabinet, the protective housing item no. 1150776 (see "R-Con Accessories") can be used alternatively.

Voltage	230 V AC	Communication	Proprietary radio
Control	On/off / PWM	Mounting	Carrier rail (DIN EN 60715 TH35)

Number of radio channels	Logic module	Item No.
4 (max. of 4 actuators per channel)	Yes	1150770
4 (max. of 4 actuators per channel)	No	1150771
8 (max. of 4 actuators per channel)	Yes	1150772
8 (max. of 4 actuators per channel)	No	1150773





### R-Con T 2P Four-channel extension module (proprietary radio communication)

For R-Con multi-channel wireless receiver

Voltage	230 V AC	Communication	Proprietary radio
Control	On/off / PWM	Mounting	Carrier rail (DIN EN 60715 TH35)

#### Number of radio channels

4 (max. of 4 actuators per channel)

#### Item No.

1150775



### R-Con HC Extension module heating/cooling (proprietary radio communication)

For R-Con multi-channel radio receiver. For switching between heating and cooling mode via a change-over input. The change-over signal is provided e.g. by a reversible heat pump.

Voltage	230 V AC	Mounting	Carrier rail (DIN EN 60715 TH35)
Communication	Proprietary radio		

#### Inputs

Dew point monitoring, cooling mode is interrupted if the dew point is exceeded

#### Item No.

1150774



### Aktor T 2P Electrothermal actuator, on/off control

Version	"Normally closed"	Mounting	Plug-in connection with valve adapter
Valve connection	Connection thread M 30 x 1.5		
Installation position	Any		

#### Voltage

230 V AC  
24 V AC / DC

#### Cable\* (m)

1  
1

#### PU

100

#### Item No.

1012415  
1012416



# R-Tronic - Accessories

## FK-C F Wireless window contact (EnOcean)

With EnOcean radio technology. Transmits a radio signal when opening or closing a window. Compatible with R-Tronic wireless thermostats (mains operated), wireless room module (DynaTemp CR-BSX) and wibutler gateway.



Power supply	EEP*	Colour	Item No.
Solar powered	D5-00-01	White	1153070



## Cover frame

For R-Tronic wireless thermostats.

PU	50
----	----

Description	Item No.
For covering flush-mounted box ( milled hole up to Ø 83 mm, e.g. Switzerland), cover 88 x 88 mm, traffic white (RAL 9016)	1150693

## Flush-mounted power supply unit with wall bracket



Description	Item No.
For the conversion of battery operated R-Tronic wireless thermostats to an external power supply 100 - 240 V AC, 50 - 60 Hz	1150692

## Plug-in power supply unit with table stand



Description	Item No.
For the conversion of battery operated R-Tronic wireless thermostats to an external power supply 100 - 240 V AC, 50 - 60 Hz	1150694



### Wireless repeater (EnOcean)



PU

50

#### Description

For amplification of EnOcean radio telegrams to increase the radio range, 230 V AC, 50 Hz, flush mounting

#### Item No.

1153060



### Antenna extension

For R-Con multi-channel wireless receiver

#### Description

With SMA screw terminal, antenna length 1 m, surface mounting, white glossy (RAL 9003)

#### Item No.

1150777



### Protective housing with carrier rail

For R-Con multi-channel wireless receiver

#### Description

As alternative to installation in the cabinet, 230 V, surface mounting

#### Item No.

1150776



## 6.2 Smart Building

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## 6.2 Smart Building

### **DynaTemp system solutions for monitoring and automation** **649**

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## System solutions in Smart Building

The various DynaTemp systems enable the automation of control and regulation processes in the areas of heat generation, heat distribution and transfer as well as potable water hygiene and circulation of larger residential and non-

residential buildings. In addition to the Oventrop control units (DDC), components such as room thermostats, actuators, control valves and stations can be integrated.

### SYSTEM SOLUTIONS FOR MONITORING AND AUTOMATION





# DynaTemp CW-BS Thermal balancing in potable water circulation systems



The control unit (DDC) assumes optimisation tasks in the system hydraulics, which is determined here by maintaining a sufficiently high potable water circulation temperature (according to DVGW 57 °C). The temperature is detected by the Oventrop Aquastrom DT valve for potable water circulation systems. The temperature values of the sensor are transmitted by the bus-based field module to the DDC CW-BS control unit which transmits the control commands via the field module to the Aquastrom DT valve. A further task of the control unit is the control and regulation of thermal disinfection. Here, the control unit generates a start signal for the boiler control to increase the potable water temperature and then the risers of the circulation system are sequential-

ly thermally disinfected. The operator of the system also has the option of automatically receiving the disinfection log and any fault messages by e-mail. Settings and temperature curves of the system can be documented in the control unit.

The control unit can be connected via BACnet IP to the building management system (BMS) for monitoring and visualisation tasks and can send warning messages via LAN or Internet.

Note: The FM-CW Plus field module (item no. 1153321) is required at least once per system, the Sensor LW TQ (item no. 1150090) is required at least three times per system.

## DDC CW-BS Control unit

For thermal balancing of potable water circulation systems. With BACnet IP interface and integrated user interface via web server.

Operating/bus voltage	24 V AC V	Frequency	50 Hz
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Number of field modules*	Mounting	Item No.
31	Surface mounting	1153350



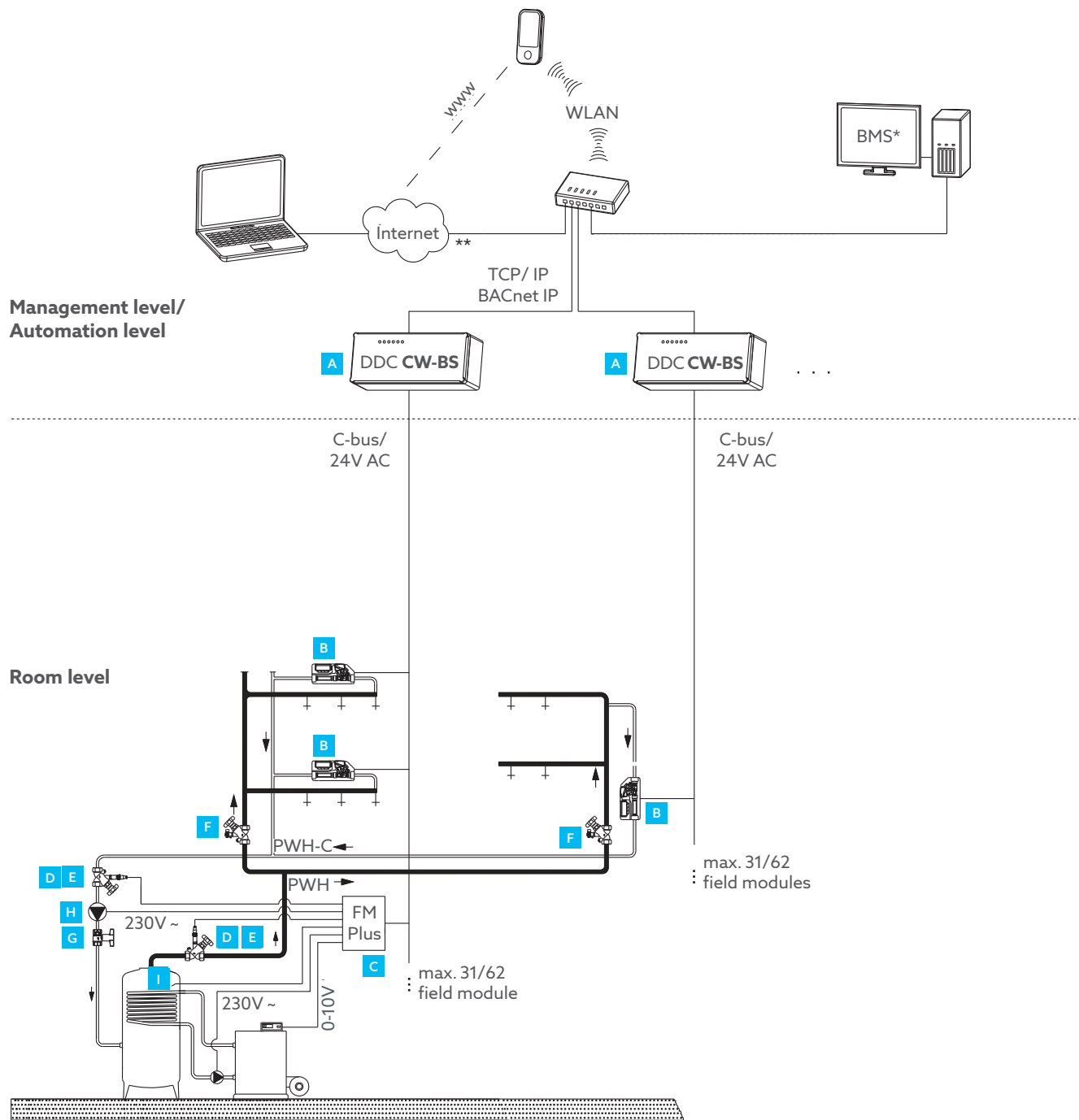
## Transformer

For power supply of the DDC, field modules, relay modules and circulation valves.

Primary power	230 V AC	Frequency	50 Hz
Secondary power	24 V AC		

Designation	Power (VA)	Item No.
TR-80	80	1153053
TR-250	250	1153055

## DDC **CW-BS** for automatic thermal balancing and thermal disinfection in potable water circulation systems



\* Integration into a building management system from other suppliers (e.g. Honeywell, Kieback & Peter, Sauter, Siemens, etc.) is possible via the standardised BACnet IP interface

\*\* Router configurations are required for access to the DDC, e.g. port forwarding

- |                                                                                                                          |                                                                       |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>A</b> DDC <b>CW-BS</b> Control unit                                                                                   | <b>F</b> <b>Aquastrom KFR</b> Free-flow valve with backflow preventer |
| <b>B</b> <b>Aquastrom DT</b> Regulating valve including field module with actuator 24 V, 0 - 10 V and temperature sensor | <b>G</b> <b>Optibal TW</b> Ball valve for potable water               |
| <b>C</b> <b>FM-CW Plus</b> Field module for connecting sensors and pumps                                                 | <b>H</b> Circulation pump                                             |
| <b>D</b> <b>Aquastrom F</b> Free-flow valve                                                                              | <b>I</b> <b>PT 1000</b> Storage cylinder temperature sensor           |
| <b>E</b> Temperature sensor G 1/4                                                                                        |                                                                       |



#### Aquastrom DT Electronic circulation regulating valve with internal thread and FM-CW K field module

For potable water systems PN 10, max. water temperature 90 °C.

Operating/bus voltage 24 V AC V

Nominal size	Connection size	Item No.
DN 15	Rp 1/2 x Rp 1/2	1150004
DN 20	Rp 3/4 x Rp 3/4	1150006
DN 25	Rp 1 x Rp 1	1150008



#### Aquastrom DT Electronic circulation regulating valve with flat sealing external thread and FM-CW K field module

For potable water systems PN 10, max. water temperature 90 °C.

Operating/bus voltage 24 V AC V

Nominal size	Connection size	Item No.
DN 15	G 3/4 x G 3/4	1150104
DN 20	G 1 x G 1	1150106
DN 25	G 1 1/4 x G 1 1/4	1150108



#### FM-CW Plus Field module for temperature detection

With C-bus communication. Two potential-free relays can be used to switch e.g. a circulation pump, a storage cylinder loading pump, a hydraulic bypass of a service water mixing valve and a burner activation. The burner can also optionally be activated via a 0 - 10 V signal.

Inputs	3 x PT 1000 temperature sensor	Voltage	24 V AC
Potential-free relays	2	Frequency	50 Hz

Mounting	Item No.
Surface mounting	1153321



#### REM-CW Relay module for burner activation

Potential-free contact that is controlled via a 0 - 10 V analogue input (from the FM-CW Plus field module) and can be used for burner activation.

Voltage 24 V AC Potential-free relay contact NO contact (max.) 230 V, 5 A

Item No.
1153331



#### Sensor LW TQ Sensor element

Description	PU	Item No.
For remote monitoring of the riser temperature and for integration into a building management system (BMS), PT 1000 sensor element, G 1/4		1150090
For remote monitoring of circulation pipes with Aquastrom VT, T plus, C, F, KFR, M and PT 1000 sensor element, G 1/4. Also serves to accommodate the dial thermometer item no. 4205593 or the sensor element item no. 4205592.	10	4205592

#### Sensor LW TH Temperature sensor

Suitable for all Oventrop controllers.



##### Description

For temperature measurement and detection in immersion sleeves and storage cylinders, PT 1000 sensor element, continuous temperature range up to 105 °C, length 3 m

##### Item No.

1369093

#### Pipe contact temperature sensor

Suitable for all Oventrop controllers.



##### Description

For temperature measurement and detection at the pipework, with fastening clip Ø 25 - 40 mm and heat conducting paste, PT 1000 sensor element, continuous temperature range up to 180 °C, length 1.5 m

##### Item No.

1369095

#### Replacement FM-CW K Field module

With C-bus communication.



##### Description

For the connection of the Aquastrom DT circulation regulating valve for one riser, 24 V AC, 50 Hz, surface mounting

##### Item No.

1153301



# DynaTemp CR-BSX Decentralised and centralised individual room temperature control



The control unit (DDC) enables room temperature control with the help of sensors and actuators as well as temperature setback of conventional thermostats via their electrical setback input, such as the Uni LHZ liquid sensor thermostats. The data is exchanged between the DDC and the individual rooms by means of so-called field modules via a bus system. The system allows for a demand-oriented and energy-saving operation in which time profiles and sensors are used to control the temperature. Presence in the room and opening of windows are taken into account. By combining

decentralised and centralised room temperature control, it is possible to react flexibly to different requirements in the building.

The integrated web server enables access to the system via a PC and a standard web browser. Via the user interface, parameter settings (e.g. time profiles with setback values, user profiles, etc.) can be carried out in the system and trend data and the current status can be queried.

The system can be integrated into the building management system (BMS) via BACnet IP.

## DDC CR-BSX Control unit

For individual room temperature control. With BACnet IP interface and integrated user interface via web server.

Operating/bus voltage	24 V AC V	Frequency	50 Hz
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### Number of field modules\*

31

### Mounting

Surface mounting

### Item No.

1153100

## Transformer

For power supply of the DDC, room modules, thermostats and actuators.

Primary power	230 V AC	Frequency	50 Hz
Secondary power	24 V AC		

### Designation

TR-80

TR-250

### Power (VA)

80

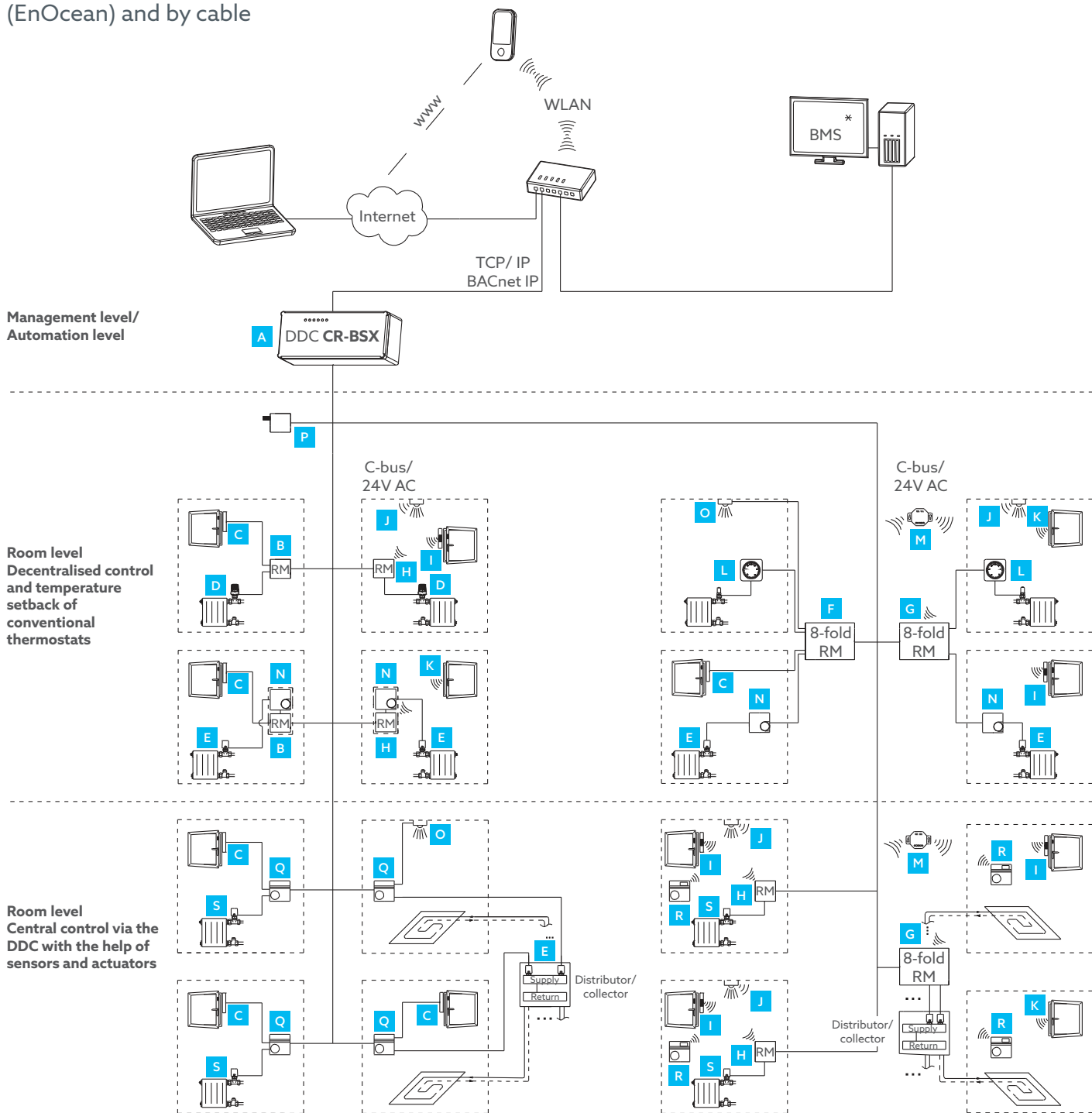
250

### Item No.

1153053

1153055

## DDC **CR-BSX** Control unit for temperature control with transmission of control signals by radio (EnOcean) and by cable



\* Integration into a building management system from other suppliers (e.g. Honeywell, Kieback & Peter, Sauter, Siemens, etc.) is possible via the standardised BACnet IP interface

- |                                                                       |                                                                     |                                                                  |
|-----------------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------|
| <b>A</b> DDC <b>CR-BSX</b> Control module                             | <b>H</b> <b>RM-C F</b> Wireless room module, flush mounting, 1-fold | <b>O</b> Wired motion detector (on site)                         |
| <b>B</b> <b>RM-C K</b> Room module, flush mounting, wired, 1-fold     | <b>I</b> <b>FK-C F</b> Solar powered wireless window contact        | <b>P</b> <b>FM-C WS</b> Outside temperature sensor               |
| <b>C</b> Wired window contact (on site)                               | <b>J</b> <b>BWM-C F</b> Wireless motion detector                    | <b>Q</b> <b>RBG-C K</b> Room controller, surface mounting, wired |
| <b>D</b> <b>Uni LHZ</b> Thermostat                                    | <b>K</b> SecuSignal Window handle of the company Hoppe (on site)    | <b>R</b> <b>RBG-C F</b> Solar powered wireless room controller   |
| <b>E</b> <b>Aktor T 2P</b> Electrothermal actuator, 24 V, two point   | <b>L</b> <b>Uni FHZ</b> Thermostat with remote control              | <b>S</b> Electrothermal actuator, 0 - 10 V or two point          |
| <b>F</b> <b>RM-C K8</b> Room module, surface mounting, wired, 8-fold  | <b>M</b> <b>RP-C F</b> Wireless repeater, flush mounting, 230 V     |                                                                  |
| <b>G</b> <b>RM-C F 8</b> Wireless room module, flush mounting, 8-fold | <b>N</b> Room thermostat with setback input, 24 V                   |                                                                  |

#### Room module for the connection of 8 rooms

For connecting thermostats or room thermostats and wired window contacts installed on site.



Number of rooms	8	Frequency	50 Hz
Voltage	24 V AC	Mounting	Surface mounting

Designation	Interfaces	Item No.
RM-C F8 (EnOcean)	EnOcean	1153118
RM-C K8	Wired (C-bus)	1153128

#### Room module for the connection of one room

For connecting actuators, thermostats or room thermostats. Cover frame must be ordered separately (accessory).



Number of rooms	1	Mounting	Flush mounting
Voltage	24 V AC	Colour	White
Frequency	50 Hz		

Designation	Interfaces	Item No.
RM-C F (EnOcean)	EnOcean	1153101
RM-C K	Wired (C-bus)	1153121

#### ABR-55 Cover frame



Description	Item No.
For room modules item no. 1153101 / 21, 55 x 55 mm, white	1153170

#### RBG-C K Room control unit, wired

With C-bus communication. With setpoint adjuster and presence key with LED.



Voltage	24 V AC	Frequency	50 Hz
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Mounting	Colour	Item No.
Surface mounting	White	1153271

#### RBG-C F Wireless room control unit (EnOcean)

With EnOcean radio technology. With setpoint adjuster and presence key.



Power supply	Solar powered	PU	75
--------------	---------------	----	----

Mounting	Colour	Item No.
Surface mounting	White	1153050



#### ClimaCon F 100 for two pipe applications, heating or cooling, follower

Voltage	24 V AC	Mounting	Surface mounting
Control	On/off / PWM		

##### Suitable for

Electrothermal actuators (on/off), "normally closed"

##### Item No.

1155510



#### Uni LHZ Thermostat

For time-controlled temperature setback by means of a built-in heated liquid sensor. When an electrical voltage of 24 V is applied to the thermostat, it switches to setback mode. The temperature setback is approx. 7 K.

Voltage	24 V AC	Cable*	1 m
Setpoint range	7 up to 28 °C		

##### Valve connection

Connection thread M 30 x 1.5

##### Item No.

1150300



#### Wall connection set

##### Description

For additional protection of the wall installation (in flush-mounted box) of the connecting cable of the Uni LHZ thermostat

##### Item No.

1150390



#### Uni FHZ Thermostat with remote control

For time-controlled temperature setback by means of a built-in heated liquid sensor. When an electrical voltage of 24 V is applied to the thermostat, it switches to setback mode. The temperature setback is approx. 7 K.

Voltage	24 V AC / DC	Cable*	1 m
Setpoint range	7 up to 28 °C	Capillary tube	2 m

##### Valve connection

Connection thread M 30 x 1.5

##### Item No.

1152265



#### Aktor T 2P Electrothermal actuator, on/off control

Installation position	Any	Voltage	24 V AC / DC
Mounting	Plug-in connection with valve adapter		

##### Version

"Normally closed"

"Normally closed"

##### Valve connection

Connection thread M 30 x 1.5

Connection thread M 30 x 1.5

##### Cable\* (m)

1

2

##### Item No.

1012416

1012442





#### Aktor T ST Electrothermal actuator, 0 - 10 V

Voltage	24 V AC	Mounting	Plug-in connection with valve adapter
Zero point detection	Yes	PU	500
Valve travel detection	Yes		
Installation position	Any		

Version	Valve connection	Cable* (m)	Item No.
"Normally closed"	Connection thread M 30 x 1.5	1	1012953

#### Reinforcing cap

For the protection against vandalism.



Description	PU	Item No.
For Uni LH, LHZ and LA thermostats, not lockable, white	10	1011865
For Uni LH, LHZ and LA thermostats, lockable, white	10	1011866
For electrothermal actuators, including special valve adapter with connection thread M 30 x 1.5 for installation		1012450

#### FK-C F Wireless window contact (EnOcean)

With EnOcean radio technology. Transmits a radio signal when opening or closing a window. Compatible with R-Tronic wireless thermostats (mains operated), wireless room module (DynaTemp CR-BSX) and wibutler gateway.



Power supply	Colour	EEP*	Item No.
Solar powered	White	D5-00-01	1153070



#### FM-C WS Outside temperature sensor, wired

With C-bus communication. For outside temperature measurement. For the DDC function "variable heat-up time".

Protection category	65 IP
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Mounting	Item No.
Surface mounting	1153130

#### Wireless repeater (EnOcean)

PU	50
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Description	Item No.
For amplification of EnOcean radio telegrams to increase the radio range, 230 V AC, 50 Hz, flush mounting	1153060



## 6.3 Components for control, regulation and the building management system (BMS)

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### 6.3 Components for control, regulation and the building management system (BMS)

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# ClimaCon F Room thermostats for surface heating



The ClimaCon F room thermostats are used to control the temperature of surface heating and cooling systems as well as heating and cooling ceilings in detached houses or dwellings. Depending on the room thermostat, switching between heating and cooling is possible via a change-over signal, e.g. from the heat pump.

The ClimaCon F room thermostats can be

used in combination with electrothermal actuators (e.g. Aktor T 2P). Alternatively, connection to a connecting block (e.g. FloorCon) is possible. The simple surface-mounted installation and quick configuration make the product very installer-friendly.

Depending on the model, there are room thermostats with reduced display, with integrated time switch and setting options via app.



## ClimaCon F 100 for two pipe applications, heating or cooling, follower

Control	On/off / PWM	Operation	At the room thermostat
Installation	Surface mounting	Switching h / c*	Via change-over
Setback*	Via leader room thermostat		

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators (on/off), "normally closed"	1155010
24 V AC	Electrothermal actuators (on/off), "normally closed"	1155510



## ClimaCon F 310 for two pipe applications, heating or cooling, leader

Switching between time programme and manual mode possible.

Control	On/off / PWM	Switching h / c*	Via change-over
Installation	Surface mounting	Other outputs	1 x potential-free
Setback*	Via time programme (adjustable in the app) Via Eco button at the room thermostat	Communication	Bluetooth
Operation	At the room thermostat With smartphone app		

Voltage	0 - 10 V*	Temperature sensor*	Suitable for	Item No.
230 V AC	No	No	Electrothermal actuators (on/off), "normally closed"	1155031
24 V AC	Yes	Yes	Electrothermal actuators (on/off), "normally closed" Electrothermal actuators (0 - 10 V) "normally closed"	1155531





**ClimaCon F 90 for two pipe applications, heating only/cooling only, follower**

Control	On/off	Setback*	Via leader room thermostat
Installation	Surface mounting	Operation	At the room thermostat

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1155009





**ClimaCon F 210 for two pipe applications, heating only/cooling only, leader**

Switching between time programme and manual mode possible.

Control	On/off / PWM	Operation	At the room thermostat
Installation	Surface mounting		With smartphone app
Setback*	Via time programme (adjustable in the app) Via Eco button at the room thermostat	Communication	Bluetooth

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators (on/off), "normally closed"	1155021

	ClimaCon F 90		ClimaCon F 100		ClimaCon F 210	ClimaCon F 310	
							
	230 V		230 V	24 V	230 V	230 V	24 V
Item no.	1155009	1155010	1155510	1155021	1155031	1155531	
<b>Application</b>							
Heating only / Cooling only	●	—	—	●	—	—	
Heating or cooling (switchable)	—	●	●	—	●	●	
<b>Display</b>							
Setpoint temperature	●	●	●	●	●	●	
Actual temperature	—	—	—	●	●	●	
Status (heating / cooling)	—	—	—	●	●	●	
Mode (Auto / Eco)	—	—	—	●	●	●	
<b>Setting options</b>							
Temperature setting at the room thermostat	●	●	●	●	●	●	
Temperature setting via time profiles in the app	—	—	—	●	●	●	
Setback activation at the room thermostat	—	—	—	●	●	●	
Timed setback via app	●*	●*	●*	●	●	●	
Setback temperature	4 K	4 K	4 K	Flexible via app	Flexible via app	Flexible via app	
Temperature limitation via app	—	—	—	●	●	●	
External limiter function – automatic switch-off when reaching the max. / min. temperature set via app	—	—	—	—	—	●	

\* Leader function - only possible if leader room thermostats (ClimaCon F 210 / F 310) or a FloorCon connecting block are used.

# Room thermostats heating, flush mounting



The flush-mounted electric room thermostat is required in conjunction with the Aktor T 2P electrothermal actuators (on/off) for individual room temperature control.

Heating: Use electrothermal actuators (on/off) "normally closed". Temperature setback possible via external time switch.

Cooling: Use electrothermal acutators (on/off) "normally open".

Temperature range between 5 and 30 °C. Setpoint range can be limited by concealed locking clips.



## Room thermostat for two pipe applications, flush mounting


Setpoint range can be limited by concealed locking clips.

Control	On/off	PU	128
Setback*	Via external time switch (follower function)		

Voltage	Suitable for	Item No.
230 V AC	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1152071

Setback = Temperature setback

# Room thermostats heating/cooling



The electronic surface-mounted room thermostat is used in conjunction with electromotive or electrothermal actuators for individual room temperature control in heating and cooling systems. It can also be used in three or four pipe systems and has an adjustable neutral zone between heating and cooling stage. The temperature is set at the room thermostat.

Room thermostat for four pipe applications, surface mounting



Neutral zone	Adjustable between 0.5 K and 7.5 K	PU	25
Voltage	Control	Suitable for	Item No.
24 V AC	0 - 10 V (2x)	Electrothermal actuators (0 - 10 V) "normally closed"	1152151



# Room thermostats heating/cooling with fan control



Room thermostats for electrical control of fan coil units for demand-oriented heating and cooling. Depending on the room thermostat, fan coil units in two or four pipe systems can

be controlled.

The temperature as well as the fan speed can be set at the room thermostat. Furthermore, various operating modes can be set.



## Room thermostat for two pipe applications, heating only/cooling only, 230 V

Setback*	Via adjustable time programme	PU	60
Installation	Flush mounting		

Voltage	Control	Suitable for	Item No.
230 V AC	On/off	Electrothermal actuators "normally closed" (heating) Electrothermal actuators "normally open" (cooling)	1152453



## Room thermostat for two pipe applications, heating or cooling, 24 V

Installation	Surface mounting	Other outputs	On/off auxiliary heating
--------------	------------------	---------------	--------------------------

Voltage	Control	Suitable for	Item No.
24 V AC	0 - 10 V	Electrothermal actuators (0 - 10 V) "normally closed"	1152064



## Room thermostat for four pipe applications, heating and cooling, 24 V

Installation	Surface mounting	Other outputs	On/off auxiliary heating
--------------	------------------	---------------	--------------------------

Voltage	Control	Suitable for	Item No.
24 V AC	0 - 10 V (2x)	Electrothermal actuators (0 - 10 V) "normally closed"	1152065

## Room thermostats - Accessories



### Electrical connecting block for surface heating

When using item no. 1400980 / 82 with 24 V, an external power supply of 24 V must be available. Item no. 1153053 can be used as transformer.

PU 25

Description	Item No.
6 control zones, heating, 24 V / 230 V	1400980
10 control zones, heating / cooling (change-over), pump control, 230 V	1400981
10 control zones, heating / cooling (change-over), pump control, 24 V	1400982
10 control zones, heating / cooling (change-over), pump and boiler control and integrated time switch, 230 V	1400983



### FloorCon Electrical connecting block with automatic hydronic balancing for surface heating and cooling

Description	Item No.
FloorCon F 200, without channel allocation, connection of 8 room thermostats / 12 actuators, 230 V	1400984
FloorCon F 300, with channel allocation, connection of 8 room thermostats / 12 actuators, 230 V	1400985



### Temperature sensor for FloorCon

The temperature sensor is required 1x for the supply of the heating circuit manifold and 1x in the return per heating circuit.

PU 25

Description	Item No.
Temperature sensor for FloorCon F, 850 mm	1029094



### Aktor T 2P electrothermal actuator for FloorCon connecting block

Description	Item No.
On/off control, "normally closed", 230 V, 2 m cable	1012452

**Safety temperature limiter**



Description	Item No.
For max. limitation of the heating circuit temperature, 20 °C - 90 °C	1344583

**Sensor GA FD Dew point monitor**

Is required in conjunction with room thermostats to protect against condensation on cooling surfaces.



Description	Item No.
For heating/cooling applications to prevent condensation, 24 V, with change-over contact	1141951

# R-Tronic Wireless thermostats



Oventrop offers wireless thermostats with two types of radio communication:

The R-Tronic wireless thermostats with open radio communication according to EnOcean standard can be integrated directly into Smart Home systems.

The R-Tronic wireless thermostats with closed radio communication (proprietary) are used in stand-alone operation in connection with wireless actuators to control radiators or in connection with a multi-channel wireless receiver to control surface heating systems.

The temperature setting as well as the storage of time programmes is carried out at the wireless thermostat or in the app of the Smart

Home System. Depending on the model, an additional measurement of the relative humidity in % is possible.

Power is supplied by batteries or a power supply unit (100 - 240 V). For the battery-operated models, power supply via the mains is possible as an alternative (see chapter "R-Tronic Accessories").

For the closed R-Tronic system, the following applies: In battery operation, up to 3 participants can be taught in, in mains operation, up to 8 participants can be taught in. In mains operation it is also possible to teach in window contacts.

## R-Tronic Wireless thermostat (EnOcean)



COMPATIBLE WITH  
eWbutler

Installation	Surface mounting	Power supply	Battery operated
Communication	EnOcean		

Designation	Humidity sensor*	EEP*	Item No.
RT B (EnOcean)	No	A5-10-02 A5-10-03 A5-10-04 A5-10-06 A5-10-06 + RPS	1150780
RTF B (EnOcean)	Yes	A5-10-11 A5-10-12 A5-10-22 A5-10-23	1150781

## R-Tronic Wireless thermostat (proprietary radio communication)



Installation	Surface mounting	Communication	Proprietary radio
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Designation	Humidity sensor*	Power supply	Item No.
RT B	No	Battery operated	1150680
RTF B	Yes	Battery operated	1150681



# R-Tronic - Accessories

## Flush-mounted power supply unit with wall bracket



Description	Item No.
For the conversion of battery operated R-Tronic wireless thermostats to an external power supply 100 - 240 V AC, 50 - 60 Hz	1150692

## Plug-in power supply unit with table stand



Description	Item No.
For the conversion of battery operated R-Tronic wireless thermostats to an external power supply 100 - 240 V AC, 50 - 60 Hz	1150694



Cover frame
PU 50

Description	Item No.
For covering flush-mounted box ( milled hole up to Ø 83 mm, e.g. Switzerland), cover 88 x 88 mm, traffic white (RAL 9016)	1150693



### 6.3 Components for control, regulation and the building management system (BMS)

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# Aktor T Electrothermal actuators



Electrothermal actuators are used for heating, ventilation and air conditioning. The actuators can be used for room temperature control or as zone valves.

They can be used, for example, with conventional radiators, radiators with integrated valve sets, heating circuit manifolds, radiant heating ceilings, cooling ceilings and induction units in conjunction with on/off room thermostats.

All electrothermal actuators are protected against overvoltage, a varistor is not required.

Oventrop offers actuators in the variants "normally closed" and "normally open". The model with auxiliary switch can switch e.g. a pump directly via the integrated, potential-free contact.



## Aktor T 2P on/off control

Valve connection	Connection thread M 30 x 1.5	Stroke	5 mm
Installation position	Any		
Mounting	Plug-in connection with valve adapter		

Voltage	Version	Cable* (m)	PU	Item No.
230 V AC	"Normally closed"	1	100	1012415
24 V AC / DC	"Normally closed"	1		1012416
230 V AC	"Normally open"	1		1012425
24 V AC / DC	"Normally open"	1		1012426
230 V AC	"Normally closed" with integrated auxiliary switch	1		1012435
24 V AC / DC	"Normally closed"	2		1012442
230 V AC	"Normally closed"	2		1012452
230 V AC	"Normally closed"	5		1012455
230 V AC	"Normally closed"	10		1012459



## Aktor T ST 0 - 10 V control

Valve connection	Connection thread M 30 x 1.5	Mounting	Plug-in connection with valve adapter
Zero point detection	Yes	Stroke	5 mm
Valve travel detection	Yes	PU	500
Installation position	Any		

Voltage	Version	Cable* (m)	Item No.
24 V AC	"Normally closed"	1	1012953

# Aktor T - Accessories



## Valve adapter

PU 5

### Description

### Item No.

Connection thread M 30 x 1.5

1012461

Connection thread M 30 x 1.5, high model (11 mm), necessary when using the actuators item no. 10124.. and 1012953 with Hycocan ETZ/HTZ or Multiblock T/TU/TFU/TQ and the design cover

1012462

For Oventrop valves with connection thread M 30 x 1.0 (manufactured until 1998)

1012890

For valves with squeeze connection

1012463



## Reinforcing cap

### Description

### Item No.

For electrothermal actuators, including special valve adapter with connection thread M 30 x 1.5 for installation

1012450



# Aktor M Electromotive actuators



Electromotive actuators are used for heating, ventilation and air conditioning. Amongst others, the actuators can be used for room temperature control. They can be used, for example, with conventional radiators, radiators with integrated valve sets, heating circuit manifolds

(except for item no. 1012710 / 11), radiant heating ceilings, cooling ceilings and induction units.

Oventrop offers electromotive actuators with and without communication interfaces.



## Aktor M modulating with 0 - 10 V

With the electrical emergency control function, the actuator moves to a predefined stroke position in the event of a supply voltage failure. Various characteristic lines can be set for Cocon QTZ (item no. 1012717, PN 25 only).

Valve connection	Connection thread	Direction of action adjustable	Yes
	M 30 x 1.5	Stroke	4 mm
Modulating proportional actuator	Yes	Cable*	1.5 m
Automatic valve blocking protection function	Yes	Zero point detection	Yes

Voltage	Electrical emergency control function	Additional on/off / floating control	Position feedback	Item No.
24 V AC / DC	Yes	No	Yes	1012717
24 V AC / DC	No	Yes	No	1012725
24 V AC / DC	No	No	Yes	1012726



## Aktor M on/off and floating control

Valve connection	Connection thread	Stroke	4 mm
	M 30 x 1.5	Cable*	1.5 m
Automatic valve blocking protection function	No	Zero point detection	Yes
Direction of action adjustable	No		

Voltage	Item No.
230 V AC	1012729



**Aktor M on/off control, with short running time (3 s)**

Valve connection	Connection thread M 30 x 1.5	Stroke	6.5 mm
Automatic valve blocking protection function	No	Cable*	1.5 m
Contact open - drive tappet retracts	Yes		

Voltage	Item No.
230 V AC	1012710
24 V AC / DC	1012711



**Aktor M modulating with 0 - 10 V or on/off control**

For Cocon QTR / QFC DN 40 / 50.

Valve connection	Squeeze connection	Stroke	10 mm
Automatic valve blocking protection function	Yes	Cable*	1.5 m

Voltage	Note	Item No.
24 V AC / DC	Additionally also for floating control	1158012
24 V AC / DC	Additionally with emergency control function (failsafe)	1158013



**Aktor M modulating with 0 - 10 V or on/off / floating control**

For two-way valve item no. 11308.. and 16708.. DN 15 to DN 50.

Valve connection	Squeeze connection	Characteristic line	Adjustable (linear and equal percentage)
Automatic valve blocking protection function	Yes	Stroke	10 mm
Position feedback	0 - 10 V	Cable*	1.2 m

Voltage	Item No.
24 V AC / DC	1158011



**Aktor M modulating with 0(2) - 10 V or 0(4) - 20 mA or on/off / floating control**

For Cocon QTR / QFC DN 40 to DN 100.

Valve connection	Squeeze connection	Stroke	20 mm
Position feedback	0 - 10 V		

Voltage	Characteristic line	Included accessory	Item No.
24 V AC	Linear	Adapter	1158020 °
24 V AC	Adjustable	Adapter	1158023 ☐

**Aktor M modulating with 0(2) - 10 V resp. 0(4) - 20 mA or on/off / floating control**

For Cocon QTR / QFC DN 40 to DN 100.

Valve connection	Squeeze connection	Characteristic line	Linear
Position feedback	0 - 10 V	Stroke	20 mm



Voltage	Version	Included accessory	Item No.
24 V AC	Electromotive, normally opening	Spring return Adapter	1158021
24 V AC	Electromotive, normally closing	Spring return Adapter	1158022

**Aktor M modulating with 0 - 10 V, 4 - 20 mA or on/off / floating control**

For Cocon QFC DN 125 to DN 200 and for two-way valves DN 65 to DN 150.

Valve connection	Squeeze connection	Stroke	40 mm
Position feedback	0 - 10 V		
Characteristic line	Adjustable (linear, square-law and equal percentage)		



Voltage	Version	Included accessory	Item No.
24 V AC / DC	Electromotive	Adapter	1158030
24 V AC / DC	Electromotive, normally opening	Spring return Adapter	1158031
24 V AC / DC	Electromotive, normally closing	Spring return Adapter	1158032

**Aktor M with KNX interface**

Power consumption extremely low, no external power supply necessary. With integrated binary input (e.g. for window contact, dew point sensor, motion detector).

Valve connection	Connection thread M 30 x 1.5	PU	120
Stroke	4 mm		



Voltage	Item No.
21 - 32 V DC (from KNX bus)	1012746

**Aktor M with Modbus RTU interface**

Various parameters can be configured and/or read out via Modbus RTU (e.g. volume flow, valve characteristic line, sensor type, operating hours, operating and fault messages). Two universal inputs/outputs enable the connection of temperature sensors, window contacts and humidity sensors, as well as the control of 0 - 10 V rotary actuators.

Valve connection	Connection thread M 30 x 1.5	Position feedback	0 - 100 %
		Cable*	1.5 m
Automatic valve blocking protection function	Yes	Zero point detection	Yes



Voltage	Suitable for	Stroke (mm)	Item No.
24 V AC / DC	Cocon QTZ	9	1012745
24 V AC / DC	Cocon QTR/QFC DN 40/50	14	1158014

## Aktor M - Accessories



### Connection module 230 V

For Aktor M 24 V (item no. 1158030 / 31 / 32).

Description	Item No.
For connection to the supply voltage (230 V), pluggable module	1158033



# Actuators with radio interface



Electronic battery operated actuators for room temperature control at the radiator with communication interface:

The mote 420 wireless actuator can be used in combination with R-Tronic wireless thermostats (EnOcean) or be integrated into Smart Home systems (e.g. wibutler). The actuator is configured in the Smart Home system via app.

The mote 320 wireless actuator can be used in combination with R-Tronic wireless thermostats (proprietary radio communication). The actuator is configured at the R-Tronic wireless thermostat.

The mote 200 wireless actuator offers a stand-alone solution. The actuator with Bluetooth interface is configured via a mobile terminal or directly at the actuator.

## mote 420 Wireless actuator (EnOcean)



Only functions in combination with communication centres / gateways (e.g. with the wibutler gateway) and room thermostats supporting this EnOcean Equipment Profile.

Communication	EnOcean	Battery lifespan	About 2 years
Power supply	Battery operated		

### Valve connection

Connection thread M 30 x 1.5

### EEP\*

A5-20-01

### Item No.

1150766



## mote 320 Wireless actuator (proprietary radio communication)

Compatible with R-Tronic wireless thermostats (proprietary radio communication).

Communication	Proprietary radio	Battery lifespan	About 2 years
Power supply	Battery operated		

### Valve connection

Connection thread M 30 x 1.5

### Item No.

1150665



### 6.3 Components for control, regulation and the building management system (BMS)

#### **Controllers** **680**

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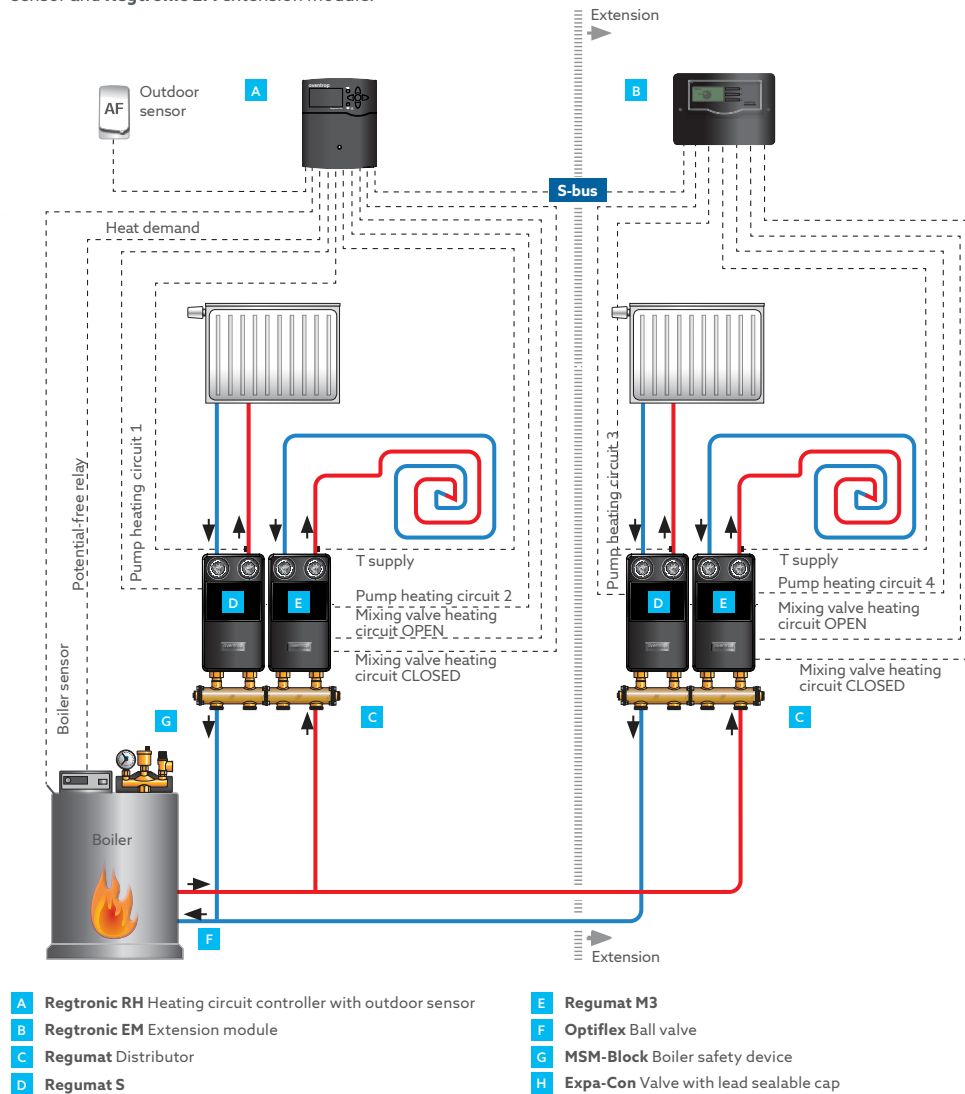
# Regtronic Electronic controllers



Electronic controllers from Oventrop ensure efficient use of energy for heating and cooling. They enable the control, combination and monitoring of various functions in the areas of generation, distribution and transfer

to an intelligent system. The controllers can take over the coordination of different heat generators (amongst others gas boilers, solid fuel boilers or solar thermal systems) to ensure economical operation.

**Weather-compensated control of 2 variable and 2 constant temperature heating circuits with heat demand** (e.g. via a conventional boiler, solid fuel boiler or heat pump) consisting of the **Regtronic RH** heating circuit controller with outdoor sensor and **Regtronic EM** extension module.





### Regtronic RH Weather-compensated heating circuit controller for mixed/unmixed heating circuit

Compatible with data logger CS-BS-1 as well as Regtronic KM-TCP communication module. Extendable by a maximum of 5 extension modules.

Application	Heating circuit control	Solid-state relays	3
	Heat generator activation	Electromechanical relays	2
	Solid fuel boiler	Potential-free relays	1
	Service water heating	PWM*	2
Operating voltage	230 V AC	PWM switchable 0 - 10 V*	Yes
Sensor inputs	8	Heat meter	5
Further inputs	Pulse inputs V40	Product compatible to	Regtronic EM
	Grundfos Direct Sensor		

#### Scope of delivery

#### Item No.

1 x Remote control incl. room temperature sensor	
1 x Outdoor sensor	1152080
1 x Pipe contact sensor	
1 x Storage cylinder sensor	
1 x Outdoor sensor	1152083
1 x Pipe contact sensor	
2 x Storage cylinder sensor	
1 x Outdoor sensor	1357290
1 x Pipe contact sensor	
2 x Storage cylinder sensor	
1 x Controller receptacle made of expanded polypropylene with controller bracket made of metal	

#### ErP classification Regtronic RH heating circuit controller

Item no.	Controller	Required accessories	Boiler control			
			Modulating (0-10 V)	On/Off	ErP %	Class
1152083	Regtronic RH	Adapter cable 1152086	●		2.0	II
1152083		—		●	1.5	III
1152080	Regtronic RH incl. remote control with room temperature sensor	Adapter cable 1152086	●		4.0	VI
1152080		—		●	3.5	VII
1152080		2x Room temperature sensor 1152095 Adapter cable 1152086	●		5.0	VIII

### Regtronic EM Extension module for the control of further mixed/ unmixed heating circuits

For extending the Regtronic controller by 6 sensor inputs and 5 relay outputs.



Operating voltage	230 V AC	Product compatible to	Regtronic RH Regtronic RM Regtronic RS
Sensor inputs	6		
Solid-state relays	4		
Potential-free relays	1		

#### Scope of delivery

#### Item No.

1 x Pipe contact sensor	1152098
-------------------------	---------



**Regtronic RM Multifunction controller for the control of weather-compensated mixed/unmixed heating circuits as well as solar plants**

Compatible with data logger CS-BS-1.

Application	Heating circuit control	Solid-state relays	13
	Heat generator activation	Potential-free relays	1
	Solid fuel boiler, solar	PWM*	4
	Service water heating	PWM switchable 0 - 10 V*	Yes
	Storage cylinder management	Heat meter	7
Operating voltage	230 V AC	Product compatible to	Regtronic EM
Sensor inputs	12		
Further inputs	Pulse inputs V40 Grundfos Direct Sensor FlowRotor		

**Scope of delivery****Item No.**

6 x Storage cylinder sensor  
2 x Collector sensor

1369555

**Regtronic RC-P Flexible solar controller for more complex solar thermal systems, hot potable water preparation and additional functions**

Compatible with data logger CS-BS-1.

Application	Solar	Solid-state relays	3
	Storage cylinder management	Potential-free relays	1
	Service water heating	PWM*	2
Operating voltage	230 V AC	Heat meter	2
Sensor inputs			
Further inputs	Pulse inputs V40 FlowRotor Grundfos Direct Sensor		

**Scope of delivery****Item No.**

1 x Collector sensor  
3 x Storage cylinder sensor

1369551

**Regtronic RC Simple solar controller for controlling a solar plant**

Compatible with data logger CS-BS-1.

Application	Solar	Solid-state relays	2
Operating voltage	230 V AC	Potential-free relays	1
Sensor inputs		PWM*	2
Further inputs	Pulse inputs V40		

**Scope of delivery****Item No.**

1 x Collector sensor  
3 x Storage cylinder sensor

1369549

# Products for the networking of controls and stations



The CS-BS data logger reads out the controllers of stations for solar heat generation, for fresh water heating or for different heating circuits via a bus technology. Data from the different controllers are read in by the CS-BS data logger in order to store and visualise operating states, temperatures and volume flows as well as energy data, even over a longer period of time. From this, new setting parameters for the controllers can be determined in order to improve the operating behaviour of the entire system, which includes the storage cylinder

and the boiler, or to carry out error diagnoses. The integrated web interface allows access to the system using a standard web browser.

The Regtronic KM-BACnet IP communication module feature a BACnet IP or a Modbus TCP interface to integrate the connected controllers into a building automation system.

A maximum of one Regtronic KM or one CS-BS data logger can be connected per Regtronic controller.

## CS-BS-1 Data logger

For collecting and reading out of the data of one controller. System visualisation of various controllers and components possible via the Oventrop Portal (web browser). Use only within the EU.

### Mounting

Wall mounting

### Item No.

1159097

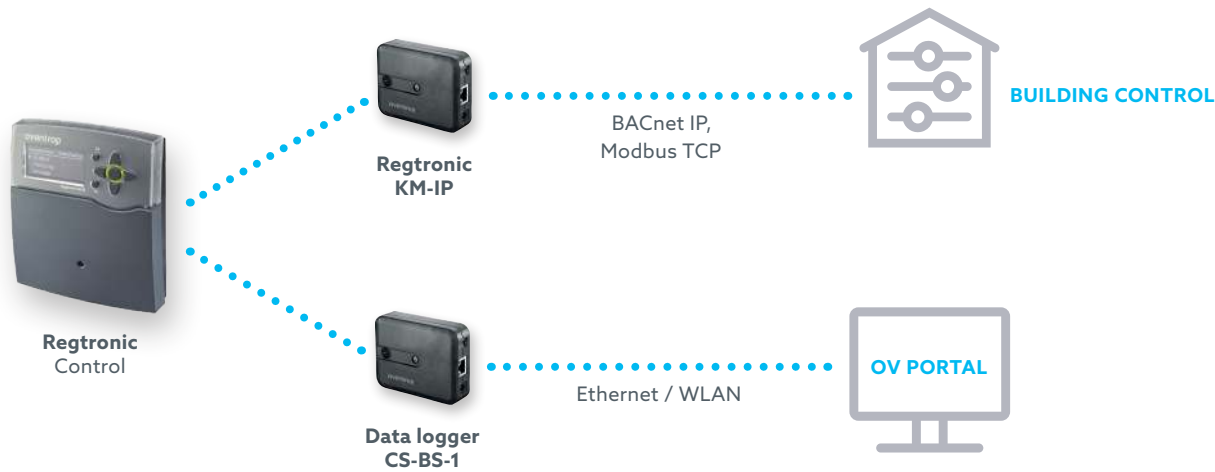




## Regtronic KM-IP Communication module BACnet IP or Modbus TCP

For integration of a controller into a building automation system via Modbus TCP.

### Item No.

1159094 ::



Controller name	Item description	Regtronic KM-IP	Data logger CS-BS-1	Item no.
		 Item no. 1159094 Interfaces: <b>BACnet IP, Modbus TCP</b>	 Item no. 1159097 Interfaces: <b>LAN, WLAN</b>	
<b>Regtronic RH</b>	Heating circuit control	●	●	1152080/83
<b>Regtronic RH</b>	Heating circuit control	—	●	1152090/93
<b>Regtronic RH HT</b>	Regudis H Transmission station	●	●	1391021-3037
<b>Regtronic RQ</b>	Regumaq X-30 Fresh water station	—	●	1381025-1037
<b>Regtronic RQ</b>	Regumaq X-80 Fresh water station	●	●	1381580/81/82
<b>Regtronic RQ</b>	Regumaq X-45 Fresh water station	●	●	1381140/42
<b>Regtronic RC</b>	Regusol Solar station	—	●	1366597, 1360862/84, 1369549
<b>Regtronic RC-P</b>	Regusol Solar station	—	●	1360394, 1369551
<b>Regtronic RX</b>	Regusol Solar station	—	●	1361050/60
<b>Regtronic RM</b>	System control	●*	●	1369555
<b>Regtronic RS</b>	System control for Regucor energy storage centres	—	●	1383485, 1383550, 1383555, 1383562, 1383645, 1383567
<b>Regtronic RD-W</b>	System control for Regudis dwelling stations	—	—	1342093

\*only BACnet IP, no Modbus TCP

# Regtronic - Accessories

### Sensor LW TH Temperature sensor

Suitable for all Oventrop controllers.



Description	Item No.
For temperature measurement and detection in immersion sleeves and storage cylinders, PT 1000 sensor element, continuous temperature range up to 105 °C, length 3 m	1369093
For temperature measurement and detection at collectors, PT 1000 sensor element, continuous temperature range up to 180 °C, length 2 m	1369094

### Pipe contact temperature sensor

Suitable for all Oventrop controllers.



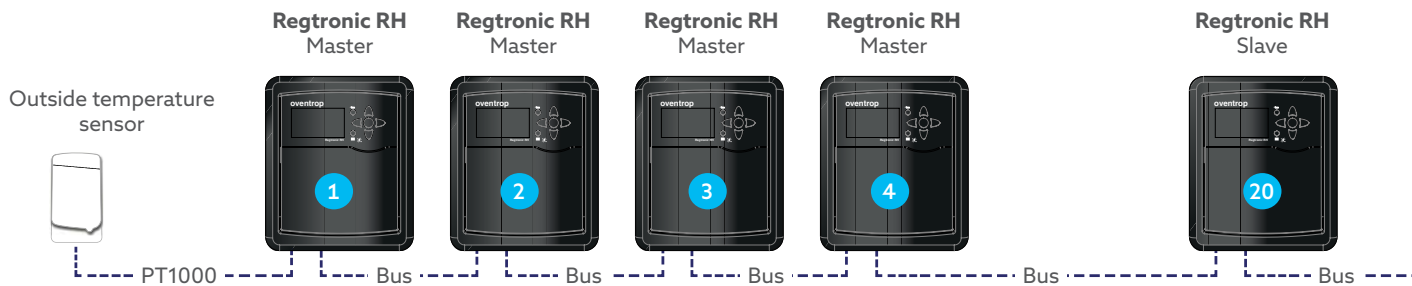
Description	Item No.
For temperature measurement and detection at the pipework, with fastening clip Ø 25 - 40 mm and heat conducting paste, PT 1000 sensor element, continuous temperature range up to 180 °C, length 1.5 m	1369095

### Outside temperature sensor

Suitable for Regtronic RH, RH-HT, EM, RM, RS and RD-W.



Description	Item No.
For outside temperature measurement, PT 1000 sensor element, splash-proof housing, surface mounting	1152099



Example: Distribution of a temperature sensor (outside temperature sensor item no. 1152099) to up to 20 **Regtronic RH** heating circuit controllers (item no. 1152080/1152083)





#### Room control unit

Suitable for Regtronic RH, RH-HT, EM, RM and RS. With operating mode switch, remote control and room temperature sensor.

##### Description

For operating mode setting (Auto, Night, Summer, Off), for heating curve and function setting (Party, Heating off), control from the living room, PT 1000 sensor element, surface mounting

##### Item No.

1152087



#### Remote control with room temperature sensor

Suitable for Regtronic RH, RH-HT, EM, RM and RS.

##### Description

For heating curve and function setting (Party, Heating circuit off), control from the living room, PT 1000 sensor element, surface mounting

##### Item No.

1152096



#### Room temperature sensor

Suitable for Regtronic RH, RH-HT, EM, RM and RS.

##### Description

For room temperature measurement, PT 1000 sensor element, surface mounting

##### Item No.

1152095



#### ClimaCon F 310 for two pipe applications, heating or cooling, leader

Suitable for Regtronic RH, RH-HT, EM, RM and RS.

##### Voltage

230 V AC

##### Control

On/off / PWM

##### Suitable for

Electothermal actuators (on/off), "normally closed"

##### Item No.

1155031



#### Adapter cable PWM/0 - 10 V

Suitable for Regtronic RH, RH-HT, RM, RS and RQ.

##### Description

For signal transmission from the heating circuit controller to a modulating heat generator with 0 - 10 V interface

##### Item No.

1152086



**Regtronic PSW Signal converter (PWM/0-10 V)**

For all solar controllers.

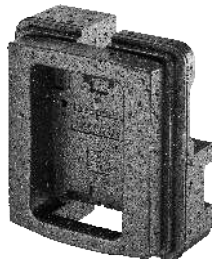
Description	Item No.
For the conversion of an asynchronous signal into a high-efficiency pump control signal (PWM / 0 - 10 V)	1369532



**Connection socket with surge protection**

For all solar controllers.

Description	Item No.
For protection of the collector sensor against externally induced overvoltage and local lightning strikes, splash-proof, IP 65	1369591



**Controller insertion block**

For solar controller Regtronic RC / RC-P.

Description	Item No.
For Regusol SH/LH DN 25 (manufactured from 2015), for retrofitting a Regtronic RC/RC-P controller	1369553







**Service and data**

**7**



## 7 Service and data

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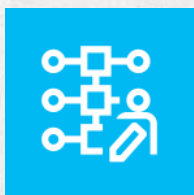


## 7.1 Service

### **Design** **695**

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# Cofloor surface heating design



In order for our systems to be installed efficiently and safely at our customer's premises and to be operated without any problems, the right planning is required. To make this as easy as possible for you, we help you to design all components to suit the system. This way you can be sure that everything works reliably

and efficiently during installation and operation and that your customers are satisfied.

We distinguish between three levels of service, so that you can choose a service tailored to your personal needs.

## Heating load calculation

New construction / renovation

The heating load calculation is limited to residential buildings with a maximum of 10 dwelling units.

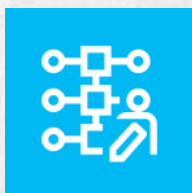
Consisting of	Item No.
- Calculation of the building heating load based on DIN EN 12831 (new construction) according to specifications	9900028
- Calculation of the building heating load according to the building age class or according to the current EnEV (German Energy Saving Ordinance) certificate (to be provided by the client)	9900029

## Cofloor surface heating design

Consisting of	Item No.
- Determination and tabular output of room heating and laying data (number of heating circuits, pipe lengths, laying grid, volume flow, pressure loss, preset values, surface temperatures)	9900015
- Material determination of the Oventrop components	
- Optional: Compilation of tender texts (Word and GAEB format)	9900016
- Optional: Compilation of tender texts (Word and GAEB format)	
- Insertion of the laying data (number of heating circuits, laying grid, circuit length) into the floor plan drawing in the form of heating circuit stamps	9900017
- Optional: Compilation of tender texts (Word and GAEB format)	
- Graphic design planning for the laying of the heating circuits / arrangement of the manifolds, supply pipes and heating circuits	
- Determination of the nominal pipe diameters from the heat generator to the respective heating circuit manifold	
- Determination of the pump capacity	9900017
- If necessary, buffer storage cylinder design	
- Output of the data in a riser scheme	



# Regudis/Regumaq system design



In order for our systems to be installed efficiently and safely at our customer's premises and to be operated without any problems, the right planning is required. To make this as easy as possible for you, we help you to design all components to suit the system. This way you can be sure that everything works reliably

and efficiently during installation and operation and that your customers are satisfied.

We distinguish between three levels of service, so that you can choose a service tailored to your personal needs.

## Regudis dwelling station design

### Consisting of

- Determination and calculation of the number of Regudis dwelling stations
- Dimensioning of the pipework (heating) from the heat generator to the dwelling stations
- Determination of the nominal pipe diameters (potable water/PWC) from the house connection to the dwelling stations
- Heat generator and buffer storage cylinder design
- Output of the results in a riser scheme

### Item No.

9900033

## Regumaq fresh water station design

### Consisting of

- Determination and calculation of the number of Regumaq fresh water stations
- Determination of the total number of cascades
- Determination of the nominal pipe diameters between the buffer storage cylinder and the fresh water station
- Determination of the nominal pipe diameters (potable water/PWC) from the house connection to the fresh water station
- Tabular output of the results

### Item No.

9900034



## 7.1 Service

### **Rental** **698**

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# Rental devices



**Rental of OV-DMC 3 measuring system**

Price on request at rental

**Rental** of a measuring device. A measuring device for the regulation of double regulating and commissioning valves can be rented from Oventrop GmbH & Co. KG.

Consisting of	Item No.
With interfaces for communication with commercially available smartphones, tablets and PCs	1069278



## 7.1 Service

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- + DIN radiator design in existing and new buildings
- + Pipework calculation for heating, cooling and potable water
- + Regudis W dwelling station design
- + Surface heating design
- + Output of valve presetting values, pipe dimensioning, pump delivery heads, material lists and much more

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The function of the OVapp at a glance:

- + Simplified heating load calculation according to DIN 12831
- + DIN radiator design – also in existing buildings
- + Thermostatic valve design
- + Double regulating and commissioning valve design
- + OV-DMC 3 measuring system for the balancing of double regulating and commissioning valves or for the measurement of Cocon Q pressure independent control valves in heating or cooling systems
- + Creation of ErP energy efficiency labels





# Data



## BIM/CAD Data

- Revit
- DWG
- VDI 3805

## ETIM Classifications

## VDI 3805 Data sets

- Heating
- Potable water
- Surface heating
- Solar thermal energy
- Storage cylinders

## Article master data (Excel, Datanorm, 2ba)

### Formats:

- Excel
- Datanorm
- 2ba



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## IMPRINT

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### **Oventrop GmbH & Co. KG**

Paul-Oventrop-Str. 1  
59939 Olsberg2, Germany

☎ +49 2962 820  
☎ +49 2962 82400  
✉ mail@oventrop.com  
🌐 www.oventrop.com

Limited partnership, seat Olsberg  
Commercial register: Local court of Arnsberg HRA 4050

Personally liable partner:  
OV Verwaltungs-GmbH, seat Olsberg  
Commercial register: Local court of Arnsberg HRB 3860

Managing directors: Johannes Rump, Gabi Wilwers

VAT ID no.: DE124283065

Print:  
BasseDruck GmbH  
Leimstr. 54-58  
58135 Hagen, Germany

We cannot accept any liability for printing errors.  
We reserve the right to make modifications at any time





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9900034	4026755466997	697



Room climate



Hydronics



Stations,  
Storage cylinders



Potable water



Oil



Smart Home,  
Smart Building

Oventrop is the partner for efficient heating, cooling and clean potable water. The modular systems and services offer pioneering solutions which all HVAC experts use to work with – easily and flexibly – from planning to installation, from industry to trade. As a family business, Oventrop accompanies all its partners over many years – competently and personally.



**oventrop**

Wir regeln das. Seit 1851.

Oventrop GmbH & Co. KG · Paul-Oventrop-Str. 1 · 59939 Olsberg, Germany  
Tel. +49 2962 820 · Fax +49 2962 82400 · mail@oventrop.com · www.oventrop.com



4 026755 237836