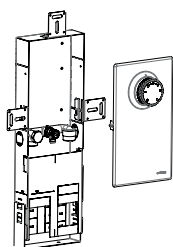


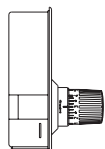
2.a System summary

Content	2.05
System summary	2.06



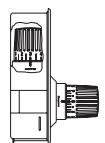
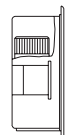
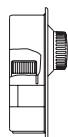
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"Floorbox U"	2.12
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Fixing channel with isolating facility	2.14
"Unibox E BV" Room temperature control with bypass (exclusive)	2.14
Pipe connection press T-piece	2.15
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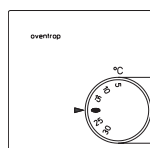
2.c "Unibox" Room temperature control with "Q-Tech" for automatic hydronic balancing

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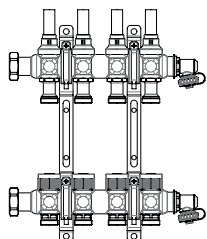
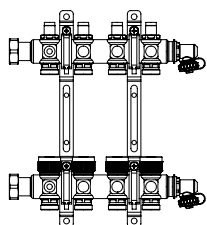
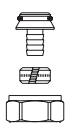
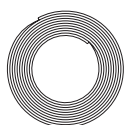
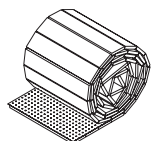
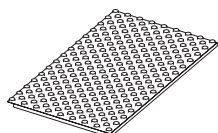
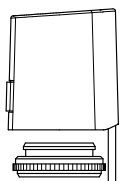
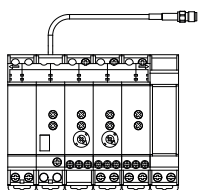
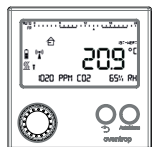
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2.h "Cofloor" Systems, "Copex" Pipes and accessories

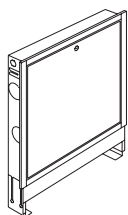
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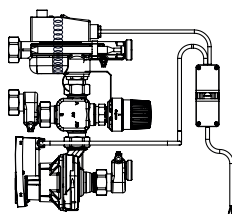
2.j "Multidis SF/SFB/SFI" Distributors/collectors for surface heating and cooling systems

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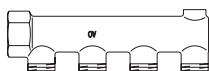


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2.k "Regufloor" Control units

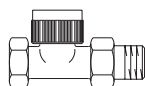


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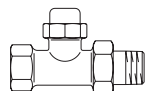
2.l Single components for distributors/collectors

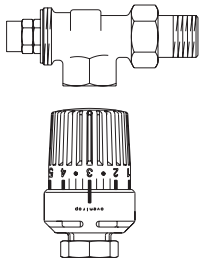
Content	2.73
Individual components for distributor systems	2.74
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2.m Regulating sets for surface heating systems

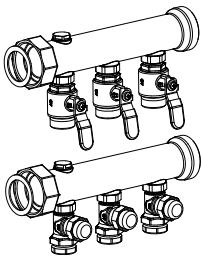
Content	2.77
Regulating sets for surface heating systems	2.78





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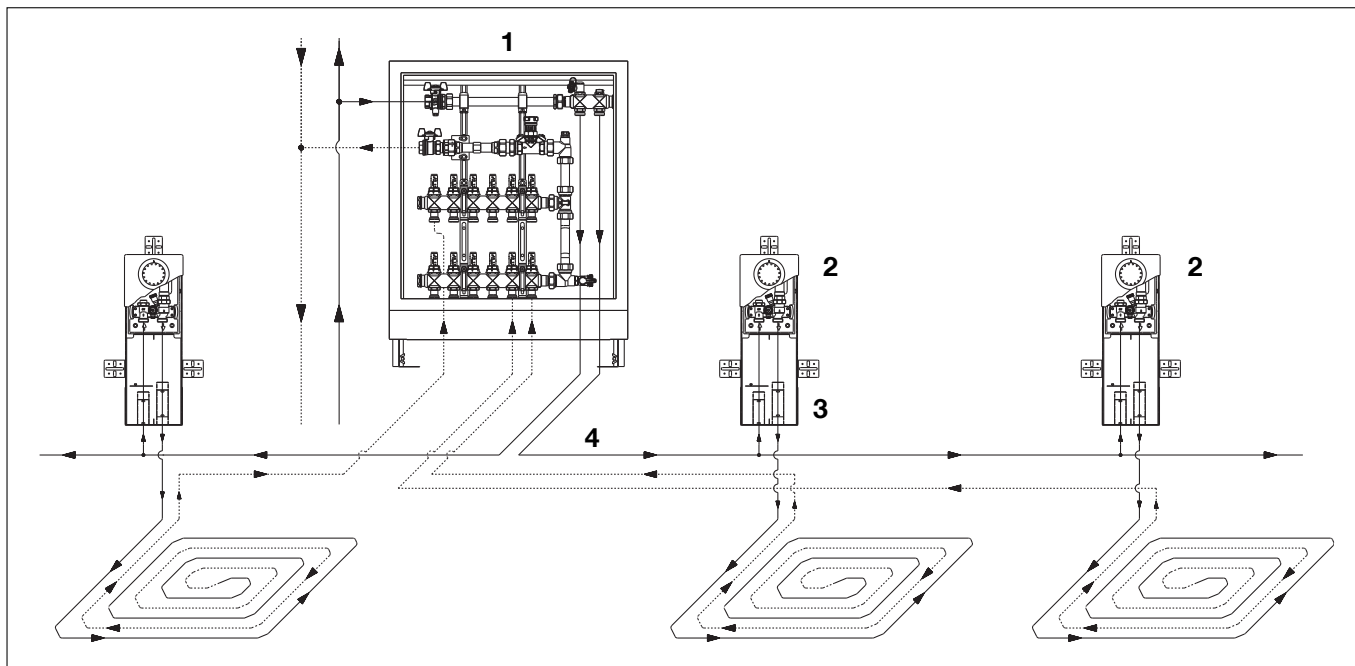
2.o Components for concrete core activation

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PE-Xc "Copex" Plastic pipes	2.85
"Cofit S" Compression fittings	2.85
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2.a System summary

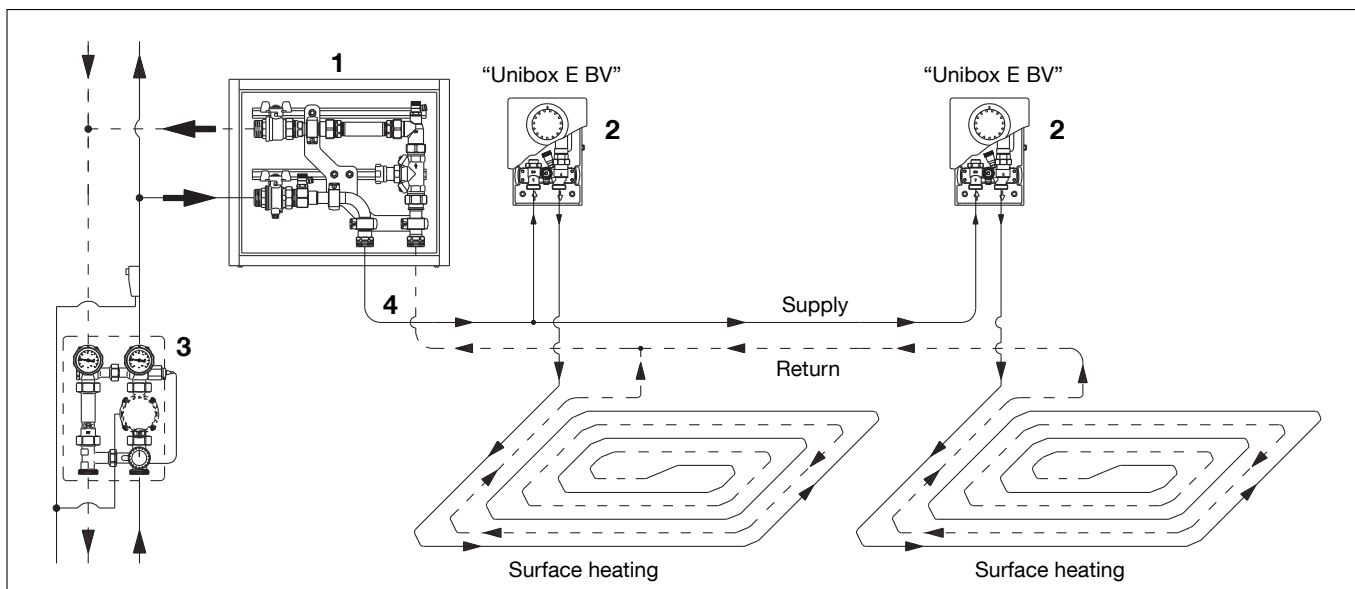
Content

System summary	2.06
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System illustration: "Unidis" Surface heating with return collector "Floorbox MH", "Unibox E BV" and fixing channel

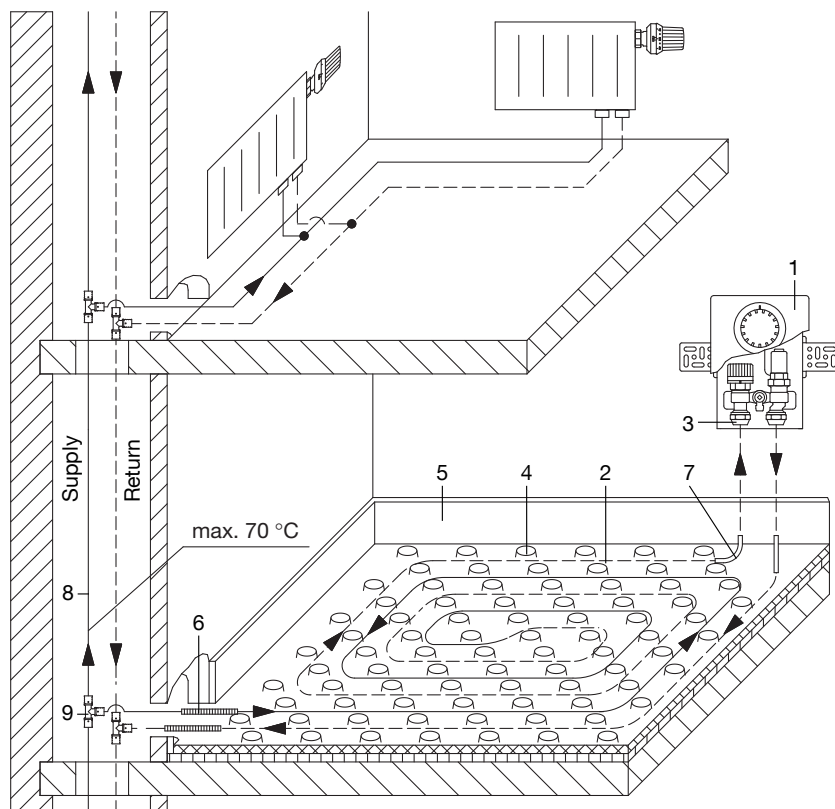
- 1 "Floorbox MH" Return collector
- 2 "Unibox E BV"
- 3 Fixing channel
- 4 "Copipe" Composition pipe
"Copex" PE-Xc pipe
"Copert" PE-RT pipe



System illustration: "Unidis" Surface heating with "Floorbox UH" and "Unibox E BV"

- 1 "Floorbox UH"
- 2 "Unibox E BV"
- 3 "Regumat F-130/180" Fixed value control unit
- 4 "Copipe" Composition pipe
"Copex" PE-Xc pipe
"Copert" PE-RT pipe

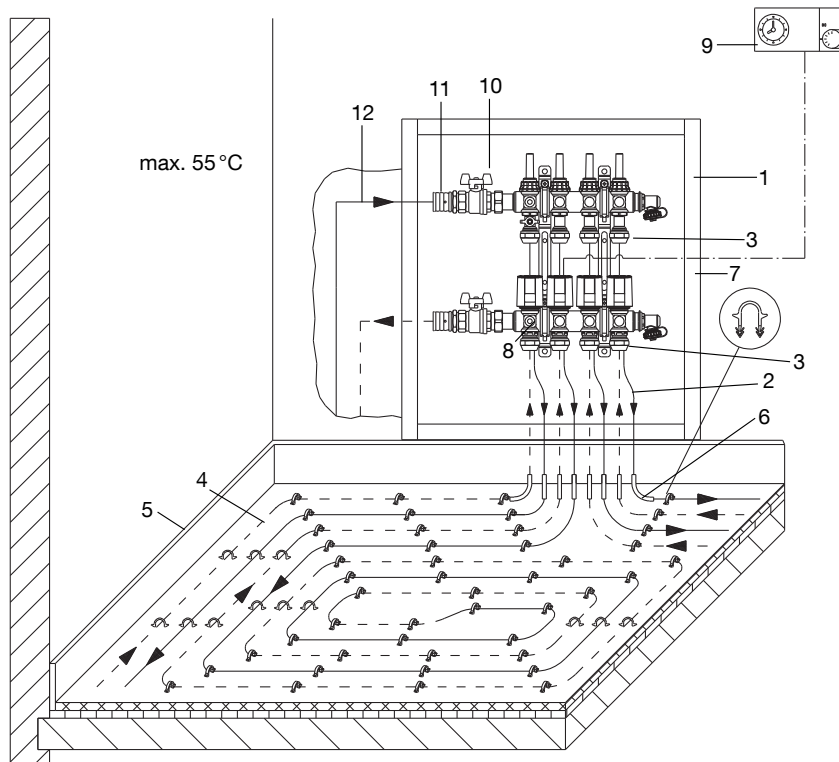
Examples of the application (further examples see product ranges "Unibox", "Multidis" stainless steel distributors/collectors and "Combi-System")



“Cofloor” Surface heating with “Unibox E plus” individual room temperature control

consisting of the Oventrop components:

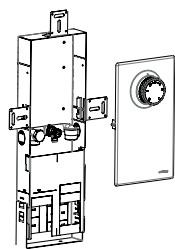
- 1 "Unibox E plus" Installation set
- 2 "Copex" PE-Xc pipe
- 3 "Ofix K" Compression fittings
- 4 Base mat
- 5 Edge insulating strip
- 6 Protection pipe, slit
- 7 Pipe guiding elbow
- 8 "Copipe HSC" Composition pipe
- 9 "Cofit P" Press T-piece



“Cofloor” Surface heating and cooling with stainless steel distributor/collector “Multidis SF”

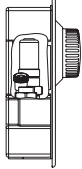
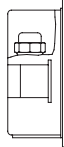
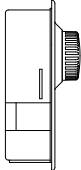
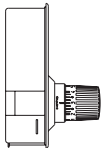
consisting of the Oventrop components:

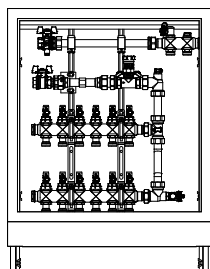
- 1 "Multidis SF" Stainless steel distributor/collector
- 2 "Copex" PE-Xc pipe
- 3 "Ofix K" Compression fitting
- 4 Tacker board
- 5 Edge insulating strip
- 6 Pipe guiding elbow
- 7 Cabinet
- 8 Electrothermal actuator
- 9 Room thermostat – clock
- 10 "Optibal" Ball valve
- 11 "Cofit P" Press connection
- 12 "Copipe HSC" Composition pipe



2.b "Unidis" Surface heating system with local flow distribution

Content	
"Unibox E BV" Room temperature control with bypass (exclusive)	2.10
"Unibox RLA" Flush-mounted box for isolation	2.10
"Unibox E T" Room temperature control (exclusive)	2.10
"Unibox T" Room temperature control	2.10
"Floorbox MH" Return collector	2.11
"Floorbox U"	2.12
Fixing channel	2.13
Fixing channel with isolating facility	2.14
"Unibox E BV" Room temperature control with bypass (exclusive)	2.14
Pipe connection press T-piece	2.15
Pipe connection press elbow	2.15

Article	kvs	kv at 1K P-dev.	kv at 2K P-dev.	Article-No.	Hint
"Unibox E BV" Room temperature control with bypass (exclusive)					
Combination room temperature control and presettable bypass Depth: 57 mm					
	0.81	0.34	0.57	1022662	<p>Application:</p> <p>For installations with flow temperatures suitable for surface heating systems according to DIN EN 1264.</p> <p>Installation set consisting of: Wall box unit with thermostatic valve with integrated bypass stem and regulating insert, working without auxiliary energy. Venting and flushing valve, valve insulation, cover plate and thermostat with '0' setting. Valve connection G ¾ for Oventrop compression fittings. For the division of the heating water volume flow into a thermostatically controlled volume flow and a bypass volume flow. The bypass volume flow allows for the setting of a basic heat load (no cooling down).</p>
"Unibox RLA" Flush-mounted box for isolation					
Combination isolating and regulating function					
I-57-I 					<p>Installation set for the isolation of surface heating circuits in combination with "Uniboxes".</p> <p>Page 2.20.</p>
"Unibox E T" Room temperature control (exclusive)					
Room temperature control					
					<p>Installation set consisting of: Wall box unit with presettable thermostatic valve, venting and flushing valve.</p> <p>Page 2.20.</p>
"Unibox T" Room temperature control					
Room temperature control with thermostat "Uni LH"					
I-57-I 					<p>Installation set consisting of: Wall box unit with presettable thermostatic valve, venting and flushing valve, cover plate and thermostat "Uni LH".</p> <p>Page 2.20.</p>



"Floorbox MH" Return collector
for "Unidis" surface heating

Central consolidation of heating circuit returns
in the "Unibox" system, lateral riser connection

with one return collector (6-fold) for 6 circuits	1027053°
with two return collectors (4-fold each) for 8 circuits	1027054°
with two return collectors (5-fold each) for 10 circuits	1027055°
with two return collectors (6-fold each) for 12 circuits	1027056°

The "Floorbox MH" is used for central consolidation of the individual heating circuit returns together with "Uniboxes".
(Riser connection from the right and left hand side)

Installation set consisting of:

- Cabinet

Supply:

- Ball valve with temperature sensor connection
- 2-fold distributor for the connection of two supply pipes to the boxes

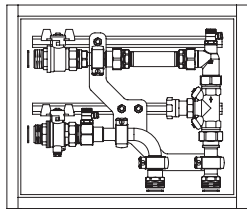
Return:

- Two return collectors (with flow measuring and regulating inserts)
- Fill and drain cock
- Vent plug
- "Hycocoon VTZ" Double regulating and commissioning valve
- Meter stool piece
- Ball valve

Article

Article-No.

Hint

"Floorbox U"Connection without distributor/collector
for surface heating systemsThe "Floorbox" serves to connect each
dwelling to the surface heating system together
with the installation sets "Unibox".

lateral connection

"Floorbox UH" lateral riser connection**1022668**

Installation set consisting of:

Supply:

- Ball valve G 1 with temperature sensor connection

Return:

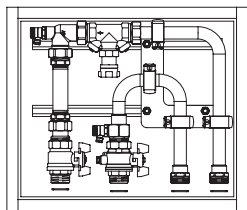
- "Hycoccon VTZ" Double regulating and commissioning valve
- Meter stool piece
- Ball valve with coupling
- Venting and flushing valve
- Flat seals

Depth: 110 - 145 mm

Width: 400 mm

Height: 350 mm

System illustration: page 2.06

For further information see
"Technical information":

lower connection

"Floorbox UV" lower riser connection**1022669**

Article

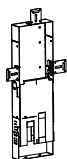
Article-No.

Hint

Fixing channel

for "Unibox", depth: 57 mm

1022653



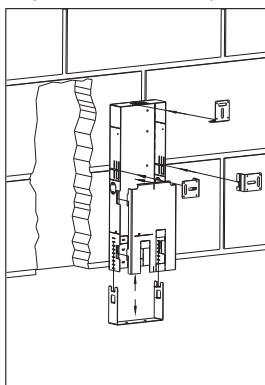
For heavyweight and lightweight walls, made of galvanised steel sheet for pipework installation out of the ground into the wall to the "Unibox". An additionally required installation set of the "Unibox" range has to be ordered separately and has to be installed in the fixing channel. Assembly without screws or rivets. Adaptation to the installation height via an adjustable extension. The adaptation to the installation depth for heavyweight walls is carried out by use of elbows. The fixing channel of lightweight walls is screwed directly onto the profiles. Additional cut-outs in the reverse side of the fixing channel allow the connection of the "Unibox" even from an adjoining room. The "Unibox" has to be mounted in the fixing channel only shortly before plastering commences.

An exact installation of the "Unibox" is guaranteed by the variable installation options. The connection openings (rated break points) of the fixing channel allow the connection of all remote controls, remote sensors (mechanical or electric).

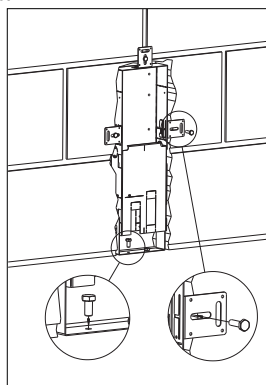
Height: 440 - 490 mm (extendible)

Width: 160 mm

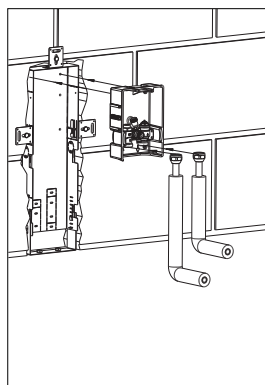
Sequence of installation (summary):



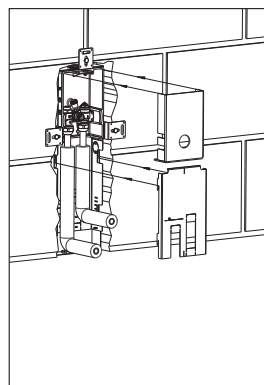
1 Adjust depth and height, align with wall recess



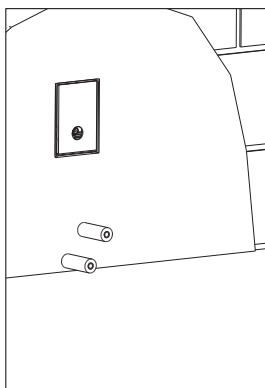
2 Place fixing channel into the wall



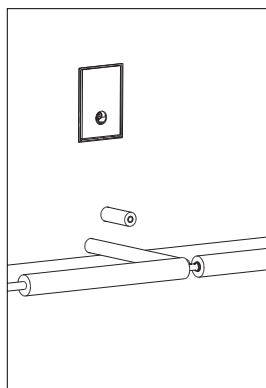
3 Mount "Unibox" and both supply connection pieces



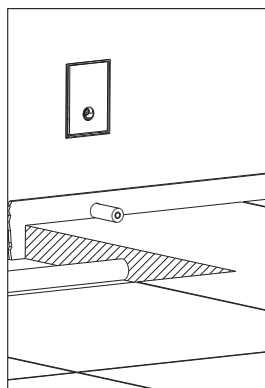
4 Mount protection cover of the "Unibox" and of the fixing channel



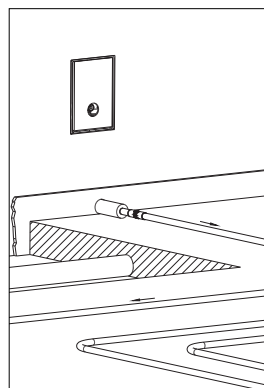
5 Carry out wall plastering



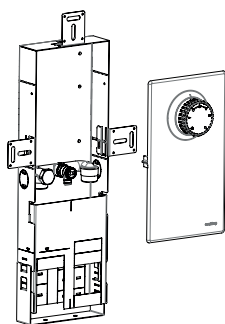
6 Lay supply pipe from the heat generator on the bare floor and insulate



7 Lay edge insulating strip and system board



8 Lay heating circuit, connect to supply connection piece and feed return to return collector



Fixing channel with isolating facility
 with cover plate and thermostat with remote control

for "Unibox", depth: 57 mm

1022654

For heavyweight and lightweight walls, made of galvanised steel sheet for pipework installation out of the ground into the wall to the "Unibox".

An additional installation set of the "Unibox" programme has to be ordered separately and has to be fit into the fixing channel.

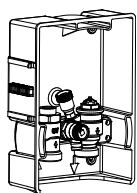
For this purpose, the "Unibox E BV" is available without cover plate (see item no. 1022676).

For the connection without distributors/collectors and the room to room isolation of surface heating circuits.

Isolating facility consisting of:
 Isolating valve, venting and flushing valve.
 Valve connection G $\frac{3}{4}$ for Oventrop compression fittings.

Assembly without screws or rivets. Adaptation to the installation height via an adjustable extension. The adaptation to the installation depth for heavyweight walls is carried out by use of elbows. In case of of lightweight walls, the fixing channel is screwed directly onto the profiles. Additional cut-outs in the reverse side of the fixing channel allow the connection of the "Unibox" even from an adjoining room.

The "Unibox" has to be mounted in the fixing channel only shortly before plastering commences. A special cover plate for the "Unibox" is supplied with the fixing channel. An exact installation of the "Unibox" is guaranteed by the variable installation options. The connection openings (rated break points) of the fixing channel allow for the connection of all remote controls, remote sensors (mechanical or electric).
 Height: 440 - 490 mm (extendible)
 Width: 160 mm



"Unibox E BV" Room temperature control with bypass (exclusive)
 without cover plate and thermostat

Combination room temperature control and presettable bypass

1022676

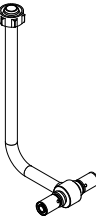
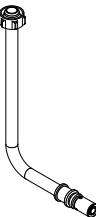
Application:

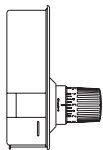
For installations with flow temperatures suitable for surface heating systems according to DIN EN 1264.

Installation set for use in the fixing channel with heating circuit isolation (item no. 1022654).

Installation set consisting of:
 Wall box unit without cover plate, with thermostatic valve with integrated bypass stem and regulating insert, working without auxiliary energy. Venting and flushing valve and valve insulation. Valve connection G $\frac{3}{4}$ for Oventrop compression fittings.

For the division of the heating water volume flow into a thermostatically controlled volume flow and a bypass volume flow. The bypass volume flow allows for the setting of a basic heat load (no cooling down).

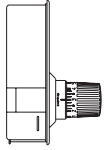
Article	Article-No.	Hint
	Pipe connection press T-piece	Height: 321 mm Stainless steel pipe: Ø 15 x 1.0 mm
	Pipe made of stainless steel, fitting made of brass for composition pipe "Copipe", with "Ofix CEP" - Snap & Seal - compression fitting for male thread G ¾ according to DIN EN 16313 (cone "Euro")	For a simple connection of the "Unibox" to the supply pipe or the heating loop via the fixing channel. The pipes have to be shortened according to the required installation height.
	16 x 2.0 mm 1515153 20 x 2.5 mm 1515156	
	Pipe connection press elbow	
	Pipe made of stainless steel, fitting made of brass for composition pipe "Copipe", with "Ofix CEP" - Snap & Seal - compression fitting for male thread G ¾ according to DIN EN 16313 (cone "Euro")	
	16 x 2.0 mm 1515353 20 x 2.5 mm 1515356	



**2.c "Unibox" Room temperature control with "Q-Tech"
for automatic hydronic balancing**

Content

"Unibox TQ" Room temperature control	2.18
"Unibox Q plus" Room temperature and return temperature control	2.18



"Unibox TQ" Room temperature control
with "Q-Tech" for automatic hydronic balancing
Room temperature control
with thermostat "Uni LH"
Depth: 57 mm

white

1022686

Application:

**For installations with flow temperatures
suitable for surface heating systems**
according to DIN EN 1264.

Installation set consisting of:

Wall box unit with presettable thermostatic
valve with valve insert "QA", venting and
flushing valve, cover plate and thermostat
"Uni LH" with '0' setting. Valve connection
G ¾ for Oventrop compression fittings.
For room temperature control.

"Q-Tech" function:

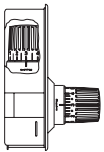
The valve insert "QA" is a combined control
and regulating insert which is used for room
temperature control in combination with
thermostats with liquid sensor or actuators.
The max. flow rate is set to the required
nominal value and is constantly maintained
within the necessary proportional band.

Temperature range: 7 - 28 °C

(room temperature)

Flow range: 10 - 170 l/h

Presetting is carried out by using the
presetting key supplied with the "Unibox".



**"Unibox Q plus" Room temperature and return temperature
control**

with "Q-Tech" for automatic hydronic balancing
Combination thermostat "Uni LH"
and thermostat "Uni RTLH"
Depth: 57 mm

white

1022684

"Unibox" individual room temperature
control and limitation of return temperature
for surface heating systems.

Application:

In combination with heating systems with
radiator operation.

Installation set consisting of:

Wall box unit with presettable thermostatic
valve with valve insert "QA", RTLH valve,
venting and flushing valve, cover plate and
thermostats "Uni LH" and "Uni RTLH" with
'0' setting. Valve connection G ¾ for Oventrop
compression fittings.

The RTLH valve insert with double disc
prevents inadvertent overheating, with frost
protection.

For room temperature control and return
temperature limitation.

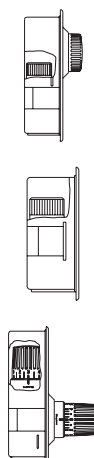
Temperature range: 7-28 °C

(room temperature)

Temperature range: 10-40 °C factory setting
(return temperature) may be increased to
50 °C by cancelling the limitation (40 °C).

Flow range: 10 - 170 l/h

Presetting is carried out by using the
presetting key supplied with the "Unibox".

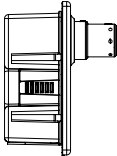


2.d "Unibox" Room temperature control

Content

"Unibox E BV" Room temperature control with bypass (exclusive)	2.20
"Unibox RLA" Flush-mounted box for isolation	2.20
"Unibox E T" Room temperature control (exclusive)	2.20
"Unibox T" Room temperature control	2.20
"Unibox TSH" Room temperature control with "Uni SH"	2.21
"Unibox E plus" Room and return temperature control (exclusive)	2.22
"Unibox E vario" Room and return temperature control (exclusive, closed)	2.22
"Unibox E RTL" Return temperature control (exclusive)	2.22
"Unibox plus" Room and return temperature control	2.23
"Unibox RTL" Return temperature control	2.23
Conversion set "Unibox T"	2.24
Accessories	2.24
Valve inserts	2.26
Gland nut	2.26
Duo connection piece	2.26

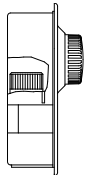
Article	kvs	kv at 1K P-dev.	kv at 2K P-dev.	Article-No.	Hint
"Unibox E BV" Room temperature control with bypass (exclusive) Combination room temperature control and presettable bypass Depth: 57 mm					"Unibox E" (exclusive model) and "Unibox" individual room temperature control for surface heating systems Application: For installations with flow temperatures suitable for surface heating systems according to DIN EN 1264. Installation set consisting of: Wall box unit with thermostatic valve with integrated bypass stem and regulating insert, working without auxiliary energy. Venting and flushing valve, valve insulation, cover plate and thermostat with '0' setting. Valve connection G ¾ for Oventrop compression fittings. For the division of the heating water volume flow into a thermostatically controlled volume flow and a bypass volume flow. The bypass volume flow allows for the setting of a basic heat load (no cooling down).
white					
	0.81	0.34	0.57	1022662	
"Unibox RLA" Flush-mounted box for isolation Combination isolating and regulating function Depth: 57 mm					Installation set consisting of: Wall box unit with isolating valve, venting and flushing valve and closed cover plate. Valve connection G ¾ for Oventrop compression fittings. For the isolation of surface heating circuits in combination with the installation sets "Unibox".
white				1022663	
"Unibox E T" Room temperature control (exclusive) Room temperature control Depth: 57 mm					Installation set consisting of: Wall box unit with presettable thermostatic valve, venting and flushing valve, valve insulation, cover plate and thermostat with '0' setting. Valve connection G ¾ for Oventrop compression fittings. For room temperature control. Temperature range: 7 - 28 °C (room temperature)
white	0.81	0.34	0.57	1022632	
"Unibox T" Room temperature control Room temperature control with thermostat "Uni LH" Depth: 57 mm					Installation set consisting of: Wall box unit with presettable thermostatic valve, venting and flushing valve, cover plate and thermostat "Uni LH" with '0' setting. Valve connection G ¾ for Oventrop compression fittings. For room temperature control. Temperature range: 7 - 28 °C (room temperature) The models "Unibox E T", "Unibox T" and "Unibox TSH" comply with the requirements of the German Energy Saving Directive (EnEV § 14).
white	1.10	0.36	0.67	1022636	
chrome plated	1.10	0.36	0.67	1022646°	



Article	kvs	kv at 1K P-dev.	kv at 2K P-dev.	Article-No.	Hint
"Unibox TSH" Room temperature control with "Uni SH"					
Room temperature control with thermostat "Uni SH" Depth: 57 mm					
white					Application: For installations with flow temperatures suitable for surface heating systems according to DIN EN 1264. Installation set consisting of: Wall box unit with presettable thermostatic valve, venting and flushing valve, angle pattern adapter, frame, cover plate and thermostat "Uni SH" with '0' setting. Valve connection G 3/4 for Oventrop compression fittings. For room temperature control. Temperature range: 7-28 °C (room temperature) The models "Unibox E T", "Unibox T" and "Unibox TSH" comply with the requirements of the German Energy Saving Directive (EnEV § 14).
	0.81	0.34	0.57	1022612	

For further information see
"Technical information":





"Unibox E plus" Room and return temperature control (exclusive)
Combination room temperature control
and limitation of return temperature
Depth: 57 mm

Article	kvs	kv at 1K P-dev.	kv at 2K P-dev.	Article-No.
white	0.81	0.34	0.57	1022633
chrome plated	0.81	0.34	0.57	1022643
stainless steel finish	0.81	0.34	0.57	1022673

**"Unibox E" (exclusive model) individual
room temperature control and limitation of
return temperature for surface heating
systems**

Application:

**In combination with heating systems with
radiator operation.**

Installation set consisting of:

Wall box unit with presettable thermostatic
valve and integrated return temperature limiter,
venting and flushing valve, valve insulation,
cover plate and thermostat with '0' setting.
Valve connection G 3/4 for Oventrop
compression fittings.

For the control of the room temperature and
limitation of the return temperature.

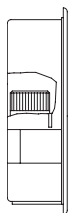
Temperature range: 7-28 °C

(room temperature)

20-40 °C (return temperature)



Good Design Award Japan



**"Unibox E vario" Room and return temperature control (exclusive,
closed)**

Basic model for limitation of
return temperature (concealed)
Depth: 57 mm

white	0.81	0.34	0.57	1022634
chrome plated	0.81	0.34	0.57	1022644

Room temperature control is possible by mounting the following
thermostats (to be ordered separately):

- **Thermostat with remote control "Uni FH"**
(page 2.75)

or:

- **room thermostat (page 2.28) and actuator**
(page 3.85)

Installation set consisting of:

Wall box unit with presettable thermostatic
valve and integrated return temperature limiter,
venting and flushing valve and closed cover
plate. Valve connection G 3/4 for Oventrop
compression fittings.

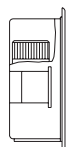
For the control of the room temperature and
limitation of the return temperature.

Temperature range: 20-40 °C

(return temperature)

Room temperature depending on the used
control.

For further information see
"Technical information":



"Unibox E RTL" Return temperature control (exclusive)

Limitation of return temperature (concealed)
Depth: 57 mm

white	1022631
chrome plated	1022641

Limitation of the return temperature from the outside:
page 2.23, item no. 1022635

Installation set consisting of:

Wall box unit with integrated return
temperature limiter, venting and flushing valve
and closed cover plate. Valve connection G 3/4
for Oventrop compression fittings.

For return temperature limitation.

Temperature range: 20-40 °C

(return temperature).

The models

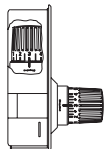
- "Unibox E plus"

- "Unibox E vario"

comply with the requirements of the German
Energy Saving Directive (EnEV § 14).

Article	kvs	kv at 2K P-dev.	Article-No.	Hint
---------	-----	-----------------------	-------------	------

"Unibox plus" Room and return temperature control
Combination thermostat "Uni LH"
and thermostat "Uni RTLH"
Depth: 57 mm



white 1.10 0.67 **1022637**

„Unibox" individual room temperature control and limitation of return temperature for surface heating systems.

Application:

In combination with heating systems with radiator operation.

Installation set consisting of:

Wall box unit with presettable thermostatic valve and RTLH valve, venting and flushing valve, cover plate and thermostats "Uni LH" and "Uni RTLH" with '0' setting. Valve connection G 3/4 for Oventrop compression fittings.

The RTLH valve insert with double disc prevents inadvertent overheating, with frost protection.

For the control of the room temperature and limitation of the return temperature.

Temperature range: 7–28 °C
(room temperature)

Temperature range: 10–40 °C factory setting
(return temperature) may be increased to 50 °C by cancelling the limitation (40 °C) .

Awards "Unibox Plus":

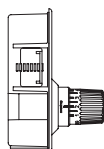


Interclima Paris
Trophée du Design



Interclima Paris
Concours de l'Innovation

"Unibox RTL" Return temperature control
with thermostat "Uni RTLH"
Depth: 57 mm



white **1022635**

Installation set consisting of:

Wall box unit with RTLH valve, venting and flushing valve, cover plate and thermostat "Uni RTLH" with '0' setting. Valve connection G 3/4 for Oventrop compression fittings.

The RTLH valve insert with double disc prevents inadvertent overheating, with frost protection.

For return temperature limitation.

Temperature range: 10–40 °C factory setting
(return temperature) may be increased to 50 °C by cancelling the limitation (40 °C).

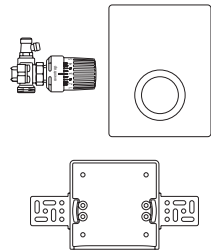
The models

- "Unibox plus"
- "Unibox vario"

comply with the requirements of the German Energy Saving Directive (EnEV § 14).

For further information see
"Technical information":



**Conversion set "Unibox T"**

for "Unibox E RTL"
consisting of:
1 Presettable thermostatic valve
2 Thermostat "Uni LH"
3 Spacer, screws
4 White cover plate

1022639

5 Wall box unit
6 Bracket
7 Protection cover plate

Position 1 - 4 are used for the conversion of a "Unibox E RTL" to a "Unibox T".

A "Unibox E RTL" can be re-assembled by use of the valve dismantled before and positions 5 - 7.

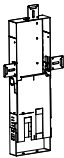
Accessories

Fixing channel

for "Unibox", depth: 57 mm

1022652

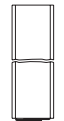
Made of galvanised steel sheet, with cover made of gypsum plaster board.
Height: extendible between 275 and 350 mm
Width: 130 mm



for "Unibox", depth: 57 mm

1022653

Made of galvanised steel sheet
Height: extendible between 440 and 490 mm
Width: 160 mm

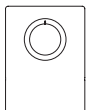


Pipe conduit unit

for "Unibox", depth: 57 mm

1022650

Suitable for the wall box units.
For a simple installation of the pipe into the wall. May be easily reduced to other dimensions.
L = 1 m.



Cover plates

white (RAL 9016)

1022687

For "Unibox E BV", "Unibox E plus", and "Unibox E T" with depth 57 mm.

chrome plated

1022688

closed

white (RAL 9016)

1022679

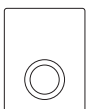
For "Unibox E vario" with depth 57 mm.



white (RAL 9016)
chrome plated

1022689
1022690

For "Unibox E RTL" with depth 57 mm.

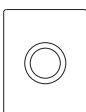


white (RAL 9016)

1022693

For "Unibox RTL", "Unibox T", "Unibox plus", "Unibox TQ" and "Unibox Q plus" with depth 57 mm.

chrome plated

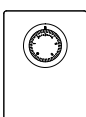
1022694

white (RAL 9016)

(2) **1022691**

For "Unibox RTL", "Unibox T" and "Unibox plus" with depth 110 mm.

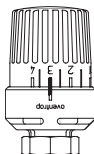


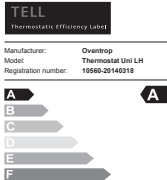

chrome plated










1022692

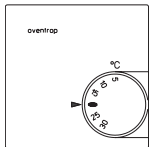
Cover plate with thermostat with remote control

chrome plated

1022697

Article	Packing unit	Article-No.	Hint	
<hr/>				
	Thermostat "Uni RTLH"		With '0' setting, may be limited or locked. Temperature range: 10 °C - 40 °C factory setting (return temperature) may be increased to 50 °C by cancelling the limitation (40 °C).	
white	(25)	1027165		
chrome plated	(25)	1027172		
Thermostat "Uni LH"				
	white	(10)	1011465	<u>with '0' setting</u>  Busse Design Ulm Longlife Design Award
				
<hr/>				
<small>Information: www.tell-online.eu</small>				
<small>A Label of EUropean Valves European Valve Manufacturers Association</small>				
	chrome plated with collar nut cover	(25)	1011469	

Article	kv at 2K P-dev.	Packing unit	Article-No.	Hint
Valve inserts				
	"AV 9, CV 9, RFV 9, E" and "Multiblock T-RTL" (manufactured since 2016)			Also for "Hycocoon ETZ" (manufactured since 2016).
	0.67	(100)	1187047#	
	for return flow valves connection thread M 30 x 1.5	(100)	1026981	Valve insert with double disc. Prevents inadvertent overheating, with frost protection.
	"AV 6, RFV 6, E" and "Multiblock T-RTL" (manufactured up to 2015)			Also for "Hycocoon ETZ" (manufactured up to 2015 inclusive).
	0.65	(100)	1187057#	#These valve inserts are suitable for all valve bodies with connection thread M 30 x 1.5 of all sizes of the thermostatic valves "A, AV 9, AQ, AV 6, ADV 9, ADV 6, CV 9, E, EQ, AF, RF, RFV 9, RFQ and RFV 6".
	Valve insert RTLH	(100)	1026970	Special valve insert for reversed supply and return pipe for "Unibox RTL".
	Special valve insert for reversed supply and return pipe with presetting			As replacement for:
	"AV6U" 0.52	(100)	1187077°	– "Multiblock T/TU/TFU"
	"AV9U" 0.57	(100)	1187078*	– "Unibox E T"
				– "Unibox E plus"
				– "Unibox E vario"
				– "Unibox E BV"
				In case of reversed direction of flow for:
				– "Unibox T"
				– "Unibox TQ"
				– "Unibox plus" (connection for room temperature control)
				– "Unibox vario" (connection for room temperature control)
				– "Unibox Q plus" (connection for room temperature control)
Extensions				
	L = 20 mm			
	for thermostatic valves	(10)	1022698	For "Unibox T", "Unibox plus", "Unibox TQ" and "Unibox Q plus".
	for RTLH valves	(10)	1022699	For "Unibox RTL", "Unibox vario", "Unibox TQ" and "Unibox Q plus".
Gland nut				
	Set = 5 pieces	(10)	1026986	
Duo connection piece				
	1 x G ¾ collar nut 2 x G ¾ male thread		1022655	For the connection of two heating circuits.



2.e Room thermostats

Content

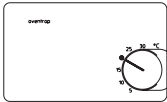
Room thermostats (heating)	2.28
Room thermostats (heating/cooling)	2.29

Article	Packing unit	Article-No.	Hint	
Room thermostats (heating)				
Room thermostat-clock - surface mounting (heating)				
with daily setting			The electric room thermostat-clock is required for individual room temperature control of heating systems in combination with the electrothermal actuators (two point) "Aktor T 2P". Output signal pulse-width modulation. Temperature range: 5 °C up to 30 °C Heating: Use electrothermal actuators (two point) "closed with current off". Central temperature setback is carried out according to a timed programme. Limitation of the control range by using the concealed limiting elements.	
230 V	(78)	1152551		
with weekly setting				
230 V		1152552		
24 V		1152554		
Room thermostat - surface mounting (heating)				
Heating two point control				
230 V	(25)	1152051	The electric thermostat is used for individual room temperature control in combination with the electrothermal actuators (two point) "Aktor T 2P". Temperature range: 5 °C up to 30 °C Heating: Use electrothermal actuators (two point) "closed with current off". As for item no. 1152051/52/55/71/72, temperature may be set back by use of an external time switch (item no. 1152551/52 for 230 V, item no. 1152554 for 24 V). Cooling: Use electrothermal actuators (two point) "open with current off". Limitation of the control range of item no. 1152051/52/71/72 by using the concealed limiting elements.	
24 V	(25)	1152052		
230 V	(25)	1152055*		
with concealed temperature setting				
Room thermostat - flush mounting (heating)				
Heating two point control				
230 V	(128)	1152071		
24 V	(128)	1152072		
Room thermostat - flush mounting (heating)				
with display				
Heating two point control				
230 V	(40)	1152561	With LCD display and adjustable timed programme. Temperature range: 5 °C up to 35 °C Operating current range (item no. 1152561): 100 up to 230 V AC Heating: Use electrothermal actuators (two point) "closed with current off" (terminal "NC") or "open with current off" (terminal "NO").	
24 V	(40)	1152562		

Article	Packing unit	Article-No.	Hint
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Room thermostats (heating/cooling)

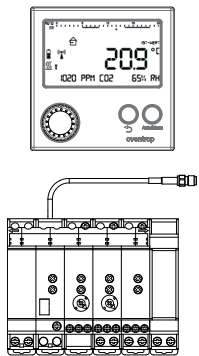
Room thermostat - surface mounting (heating and cooling)
Heating 0 - 10 V control
Cooling 0 - 10 V control



24 V (25) **1152151**

The room thermostat is used for individual room temperature control in combination with the electrothermal actuator (0- 10 V) "Aktor T ST L NC", item no. 1012953, page 1.27, or the electromotive actuator "Aktor M ST L", item no. 1012705/06, page 1.28 (may also be used in three- or four-pipe systems). With one analogue output 0–10 V each for heating and cooling as well as adjustable neutral zone (0.5–7.5 K). Temperature range: 5 °C up to 30 °C For further information see "Technical information":

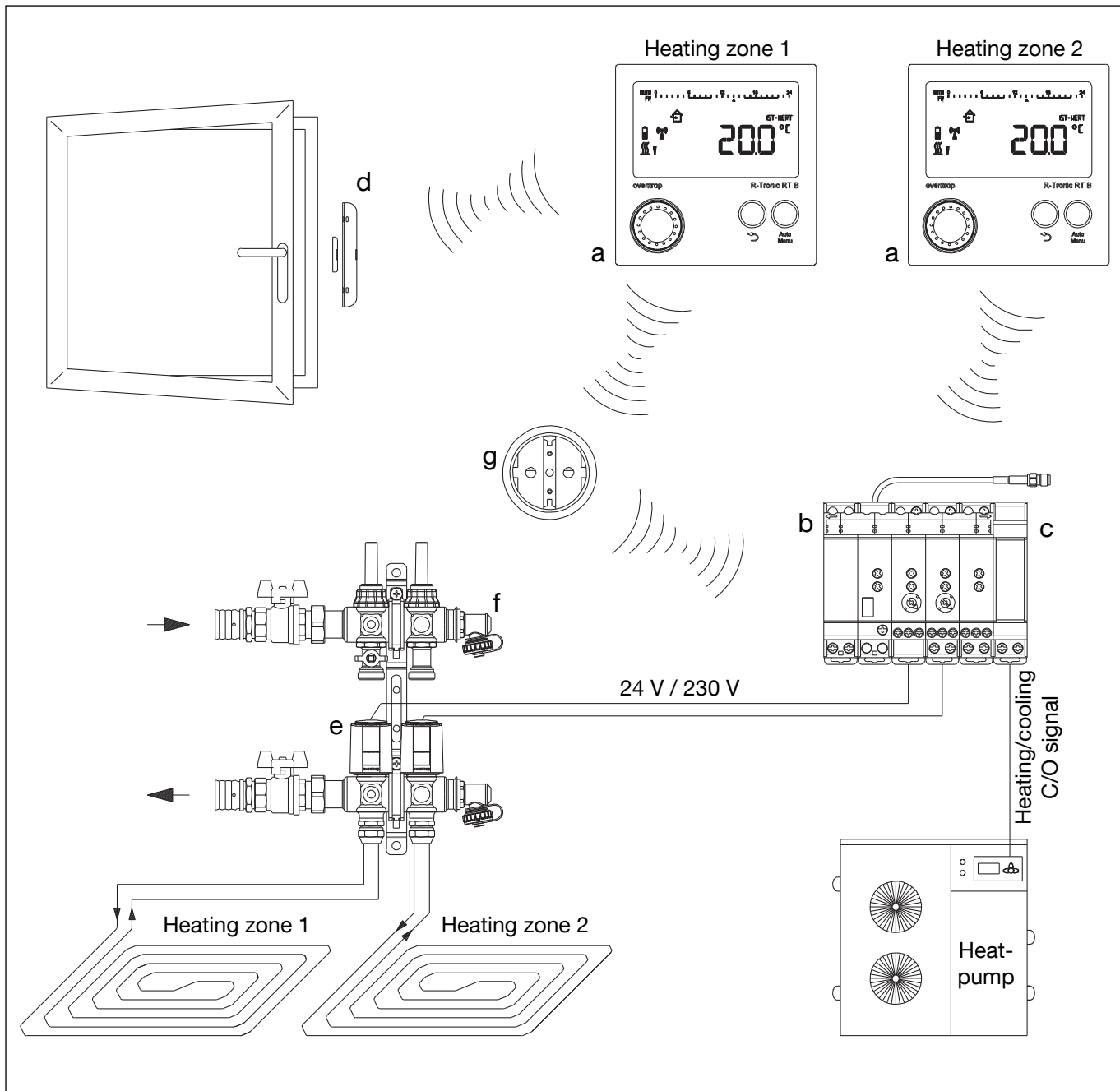




2.f Room thermostats with wireless transmitter, wireless receivers

Content

"R-Tronic RT B" Wireless thermostat	2.33
"R-Tronic RTF B" Wireless thermostat with humidity display	2.33
"R-Tronic RTFC K" Wireless thermostat with humidity and CO ₂ display	2.33
Accessories	2.34
"FK-C F" Wireless window contact	2.34
"RP-S F" Wireless repeater	2.34
"RP-C F" Wireless repeater	2.34
"Synet CR" Gateway	2.35
"R-Con" Wireless receiver	2.36

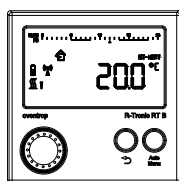


- a "R-Tronic RT B" / "R-Tronic RTF B" / "R-Tronic RTFC K" Wireless thermostat
- b "R-Con" Wireless receiver
- c "R-Con HC" Extension module heating/cooling
- d "FK-C F" Wireless window contact
- e "Aktor T 2P" (two point) Electrothermal actuator
- f "Multidis SF" Stainless steel distributor/collector
- g "RP-S F" Wireless repeater

Article

Article-No.

Hint



"R-Tronic RT B" Wireless thermostat

Wireless thermostat
with bi-directional wireless communication,
battery operated,
surface mounting

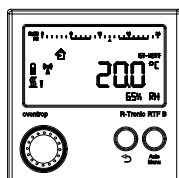
traffic white (RAL 9016)

1150680°
1150880*#

Electronic wireless thermostat "R-Tronic RT B" for room temperature control according to adjustable timed programmes. The nominal and actual temperature of the room can be displayed.

Up to 3 participants (such as actuators for wireless thermostats "Aktor MH/MD CON B" and wireless receivers "R-Con") can be connected during battery operation. A supply via the network is an alternative, see accessories page 1.37.

During mains operation, the number of participants can be increased to 8 which allows, for instance, for an integration of window contacts for room temperature setback.



"R-Tronic RTF B" Wireless thermostat with humidity display

Wireless thermostat
with bi-directional wireless communication and
integrated humidity sensor,
battery operated,
surface mounting

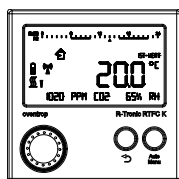
traffic white (RAL 9016)

1150681°
1150881*#

Electronic wireless thermostat "R-Tronic RTF B" for room temperature control according to adjustable timed programmes. The nominal and actual temperature of the room can be displayed. An integrated humidity sensor supplies information on the relative humidity RH in %. The value is displayed in the text line.

Up to 3 participants (such as actuators for wireless thermostats "Aktor MH/MD CON B" and wireless receivers "R-Con") can be connected during battery operation. A supply via the network is an alternative, see accessories page 1.37.

During mains operation, the number of participants can be increased to 8 which allows, for instance, for an integration of window contacts for room temperature setback.



"R-Tronic RTFC K" Wireless thermostat with humidity and CO₂ display

Wireless thermostat
with bi-directional wireless communication and
integrated humidity and CO₂ sensor

traffic white (RAL 9016)

Power supply:
Flush-mounted power pack (100-240 V ~ / 50-60 Hz)
with wall bracket

1150682°
1150882*#

Power supply:
Mains adaptor (100-240 V ~ / 50-60 Hz)
with table stand

1150684°
1150884*#

Electronic wireless thermostat "R-Tronic RTFC K" for room temperature control according to adjustable timed programmes. The nominal and actual temperature of the room can be displayed. An integrated humidity sensor supplies information on the relative humidity RH in % and an integrated CO₂ sensor on the CO₂ content in ppm in the room air. Both values are displayed in the text line. If preset limits are exceeded, a symbol asking for fresh air supply is displayed.

Up to 8 participants (such as actuators for wireless thermostats "Aktor MH/MD CON B", wireless receivers "R-Con" and wireless window contacts for room temperature setback) can be connected to the "R-Tronic RTFC K".

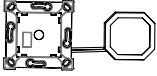
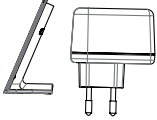

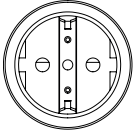

Power is supplied by a flush-mounted power pack or a mains adaptor with table stand.

Compatible with the gateway "Synet CR"

oventrop

Surface heating and cooling "Cofloor"

2

Article	Packing unit	Article-No.	Hint
Accessories			
	Flush-mounted power pack (100-240 V ~ /50-60 Hz) with wall bracket	1150692	For the conversion of battery operated wireless thermostats "R-Tronic RT B/ RTF B" to an external power supply (100-240 V ~ / 50-60 Hz).
	Mains adaptor (100-240 V ~ / 50-60 Hz) with table stand, white for stationary use, suitable for "i-Tronic TFC" and "R-Tronic RT B/RTF B"	1150694	
	"FK-C F" Wireless window contact solar powered, white (similar to RAL 9003)	1153070	A radio signal is transmitted when opening or closing the window. The solar powered energy storage ensures a maintenance-free operation. Compatible with: - "R-Tronic" Wireless thermostats ("DynaTemp HA") - Wireless room modules ("DynaTemp BA") Note: The wireless thermostats "R-Tronic" require the software version 01-06-02 or higher and have to be mains-operated.
	"RP-S F" Wireless repeater for installation into an earthed plug white (similar to RAL 9003)	1150699*	The wireless repeater "RP-S F" serves to amplify the signal between the wireless thermostat "R-Tronic" and the communication centre "Synet CR" as well as the wireless receiver "R-Con"/"R-Con 2P".
	"RP-C F" Wireless repeater for EnOcean wireless technology, flush mounting, 230 V/ 50 Hz	(50) 1153060	The repeater serves to amplify the EnOcean radiograms and is for instance used to increase the radio range between wireless window contacts and the wireless room modules.



"Synet CR" Gateway

Centre for the connection of up to 16 "R-Tronic" climate display devices/controls and for regulation in combination with "Q-Tech" valves

In preparation.

Article-No. **1150687**

Centre for the simple networking, visualization and parameterization of "R-Tronic" climate display devices/controls.

Up to 16 wireless thermostats or rooms can be managed by the centre by transmitting adjustable timed programmes for the individual rooms from the centre to the "R-Tronic" via the bi-directional radio communication.

Furthermore, automatic hydronic balancing is supported in combination with the "Q-Tech" valves (see page 1.42). For this purpose, the heat load, the maximum required volume flows for each radiator as well as the required maximum stroke limitations at the actuators "Aktor MH CON B" are calculated by the gateway "Synet CR" after having entered the building and room data. The stroke limitations at the "Q-Tech" valves are carried out automatically.

Access options:

- Local access in the building
- Worldwide mobile remote access via Internet

User interfaces:

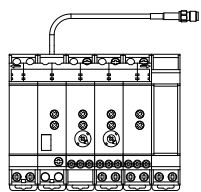
- Integrated web interface
- App for iOS and Android terminals

Interfaces:

- LAN
 - a. Direct PC/laptop connection
 - b. Direct router connection
- USB for WLAN stick
 - a. Access Point Mode
 - b. Client mode
- 868 MHz radio communication with "R-Tronic" display devices/controls
- Mains adaptor 5 V

Installation options:

- Wall attachment with the help of the supplied fixing plate.
- Table stand with mains adaptor see accessories, page 1.37.

**"R-Con" Wireless receiver**

230 V, without plug, wiring on site

4 channels with logic module

1150770*

4 channels without logic module

1150771*

8 channels with logic module

1150772

8 channels without logic module

1150773*

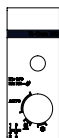
Electronic multichannel wireless receiver for room temperature control of up to 8 independent heating zones (surface heating) according to adjustable timed programmes at the wireless thermostats "R-Tronic RT B", "R-Tronic RTF B" and "R-Tronic RTFC K". Operation via the menu-driven wireless thermostat.

Additional functions (direct selection via the rotary switches at the wireless receiver):

- Pump logic with adjustable lead time and follow-up time (only item no. 1150770/ 72)
- Burner logic for heat demand (only item no. 1150770/ 72)
- Two point control
- PWM control for surface heating

Electrothermal actuators "Aktor T 2P" 24 V or 230 V can be connected to the 8 channels (closing contact with 4A/250 V AC each).

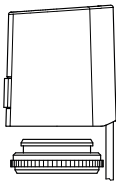
An external transformer is required for the power supply of 24 V actuators.

**"R-Con HC"**

Extension module heating/cooling for wireless receiver "R-Con"
In preparation.

1150774

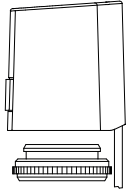
The extension module is connected to the wireless receiver "R-Con" and is used for switching between heating and cooling operation via a C/O signal (change-over input). The C/O signal is provided by a reversible heat pump (volt free). Furthermore, the "R-Con HC" module features an input for dew point monitoring which interrupts cooling when the dew point is exceeded.



2.g Actuators

Content

"Aktor T" Electrothermal actuators	2.38
Accessories	2.38


"Aktor T 2P" Electrothermal actuators (two point)
 connection thread M 30 x 1.5

"H NC", closed with current "off", 230 V	1012415
"L NC", closed with current "off", 24 V	1012416

Oventrop electrothermal actuators are used for heating, ventilation and air conditioning. The actuators serve to control the room temperature and can be used e. g. with conventional radiators, radiators with integrated distributor, radiant ceiling panels, chilled ceiling systems and induction air systems in combination with two point room thermostats.

Further applications in bivalent heating installations.

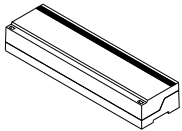
Connecting cable 1 m.

With "First-Open" function and stroke index.

Simple plug-in connection with valve adapter.

Actuators can be installed in any position.

Due to their construction, the electrothermal actuators are secured against overvoltage which could occur when switching on neon tubes. A varistor is thus not necessary.

Accessories


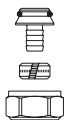
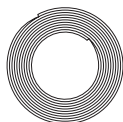
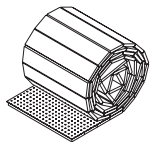
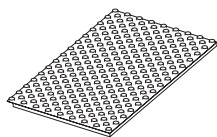
Connecting block (6 control zones)
for room thermostats and actuators

24 V/ 230 V, heating (25) **1400980***

Connecting block (10 control zones)
for room thermostats and actuators

230 V, heating/cooling, (25) **1400981***
pump control

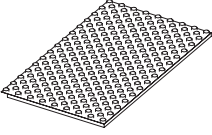
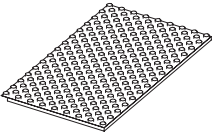
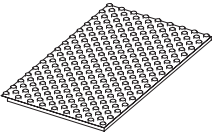
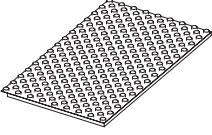
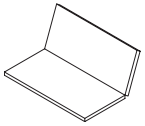
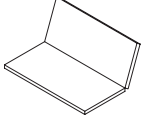
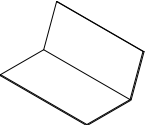
24 V, heating/cooling, (25) **1400982***
pump control

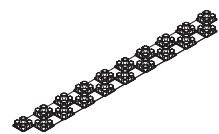


2.h "Cofloor" Systems, "Copex" Pipes and accessories

Content

"Cofloor" Base mat system	2.40
"Cofloor" Base mat system NP-R	2.42
"Cofloor" Tacker system	2.43
"Cofloor" Clamping rail system	2.44
"Cofloor" Dry-build system	2.45
Accessories	2.46
PE-Xc "Copex" Plastic pipes	2.48
PE-RT/AL/PE-RT "Copipe HSC" Composition pipes	2.48
PE-RT "Copert" Plastic pipes	2.49
"Ofix K" Compression fittings	2.50
"Cofit S" Compression fittings	2.50
Double nipples	2.51
"Cofit P" Press couplings	2.51

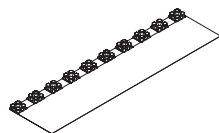
Article	Packing unit	Article-No.	Hint
"Cofloor" Base mat system for fixing 14 and 16 mm pipes with the possibility of 45° diagonal laying without auxiliary material			
Laying distances 5, 10, 15, 20, 25, 30 cm			
	Base mat NP-35 1.0 x 1.0 m = 1.0 m ² with thermal and sound insulation made of expanded polystyrene, thermal conductivity group 040, thickness: 35-2 mm, covered with polystyrene foil, building material class B2 according to DIN 4102		Thermal resistivity: R = 0.85 (m ² K)/W.
	Max. load: 5 kN/m ²	(10) 1402210	Only sold in units of 10 base mats per box.
	Base mat NP-30 1.0 x 1.0 m = 1.0 m ² with thermal and sound insulation made of expanded polystyrene, thermal conductivity group 040, thickness: 30-2 mm, covered with polystyrene foil, building material class B2 according to DIN 4102		Thermal resistivity: R = 0.75 (m ² K)/W
	Max. load: 5 kN/m ²	(10) 1402410	Only sold in units of 10 base mats per box.
	Base mat NP-11 1.0 x 1.0 = 1.0 m ² with thermal insulation made of expanded polystyrene, thermal conductivity group 035, thickness: 11 mm, covered with polystyrene foil, building material class B2 according to DIN 4102		Thermal resistivity: R = 0.314 (m ² K)/W.
	Max. load: 50 kN/m ²	(10) 1402310	Only sold in units of 10 base mats per box.
	Base mat NP 1.0 x 1.0 m = 1.0 m ² without thermal insulation made of		
	made of moulded polystyrene foil	(18) 1402110	Only sold in units of 18 base mats per box.
	Compensation element 35 1.0 x 1.0 m folded, made of expanded polystyrene, thermal conductivity group 040, thickness: 35-2 mm,		For fixing of the connection pipes in front of the distributor/collector and for laying in doorways.
	covered with foil	(5) 1402290	
	Compensation element 30 1.0 x 1.0 m folded made of expanded polystyrene, thermal conductivity group 040, thickness: 30-2 mm		
	covered with foil	(5) 1402490	
	Compensation element 11 1.0 x 1.0 m folded, made of expanded polystyrene, thermal conductivity group 035, thickness: 11 mm,		
	covered with foil	(5) 1402390	



Connection element for
base mat

(10) **1402391**

For the connection of butt-jointed base mats.



Door and distributor/collector
connection element

(10) **1402392**

For use in doorways and the distributor/
collector area.



Fixing hook set for base mats
plastic
for 14 and 16 mm pipes


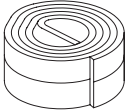
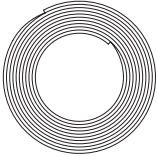

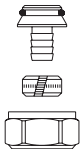
1 bag = 200 pieces

1409082

For fixing heating pipes onto insulation boards
> 30 mm, for instance in front of the distributor/
collector.

For further information see
"Technical information":



Article	Packing unit	Article-No.	Hint
"Cofloor" Base mat system NP-R Thin layered system Pre-punched base mat without thermal insulation with foil overlap on both sides, for fixing 12 mm pipes with the possibility of 45° diagonal laying without auxiliary material Laying distances 5, 10, 15 cm			
			The perforation of the base mats allows a simple application and a safe bonding of the levelling compound and the existing ground. Tested minimum construction heights: -Knauf levelling compound Alphasur 430 min. 17 mm -PCI periplan extra min. 18 mm -Weber-Maxit weber.floor min. 18 mm -Knauf levelling screed 425 min. 21 mm Further products on request! The laying advice must be observed.
Only sold in units of 10 base mats per box.			
	Base mat NP-R 1.0 x 1.0 m = 1.0 m ² without thermal insulation made of moulded polystyrene foil, with adhesive layer on reverse		
	(10)	1402010	
	Edge insulating strip with adhesive edge and integrated fleece back height: 50 mm, thickness: 5 mm		
	length per roll 20 m	(5)	1401990
	PE-RT "Copert" Plastic pipe with oxygen barrier		
	rolls		
	Dimension 12 x 2.0 mm		
	length per roll 200 m	(200)	1401952
Duo connection piece			
	1 x G 3/4 collar nut 2 x G 3/4 male thread	1022655	
"Ofix K" compression fittings			
	"Ofix K" for plastic pipes according to DIN 4726, PE-X according to DIN 16892/16893, PB according to DIN 16968, PP according to DIN 8078 A1, collar nut unplated , metal to metal sealing plus O-ring		
	12 x 2 mm	(10)	1027772

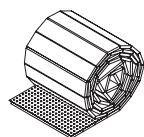
Application:
 Surface heating and cooling.
 Pipes according to
 DIN 16833 / DIN 16834 / DIN 4721.
 Oxygen tight according to DIN 4726.
 Max. operating pressure p_s: 6 bar at 70 °C

For the connection of two heating circuits.

Article	Packing unit	Article-No.	Hint
"Cofloor" Tacker system for fixing 14, 16, 17 and 20 mm pipes			Suitable for concrete and liquid screed complying with standards.

Base mat roll and folded board with laminated tissue foil, with imprinted laying screen (screen distance 5 cm), foil overlap on the edge, with adhesive strip on the opposite

Laying distances 5, 10, 15, 20, 25, 30 cm



Base mat roll

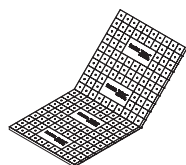
10.0 x 1.0 m = 10.0 m²

made of expanded polystyrene according to DIN EN 13163, building material class B2 according to DIN 4102

Thickness 20-2 mm	1402515
Thickness 35-3 mm	1402500
Thickness 30-3 mm	1402505
Thickness 25-2 mm	1402510
Thickness 30-2 mm	1402507
Thickness 20-2 mm	1402520



Thermal resistivity	Thermal conductivity group	Max. load
R = 0.50 (m ² K)/W	040	5 kN/m ²
R = 0.78 (m ² K)/W	045	4 kN/m ²
R = 0.67 (m ² K)/W	045	4 kN/m ²
R = 0.56 (m ² K)/W	045	4 kN/m ²
R = 0.75 (m ² K)/W	040	5 kN/m ²
R = 0.44 (m ² K)/W	045	4 kN/m ²



Folded board

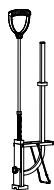
2.0 x 1.0 m = 2.0 m²

made of expanded polystyrene according to DIN EN 13163, building material class B2 according to DIN 4102

Thickness 35-3 mm	(5)	1402600
Thickness 30-3 mm	(5)	1402605*
Thickness 30-2 mm	(5)	1402607*
Thickness 25-2 mm	(5)	1402610*
Thickness 20-2 mm	(5)	1402620*

Thermal resistivity	Thermal conductivity group	Max. load
R = 0.78 (m ² K)/W	045	4 kN/m ²
R = 0.67 (m ² K)/W	045	4 kN/m ²
R = 0.75 (m ² K)/W	040	5 kN/m ²
R = 0.56 (m ² K)/W	045	4 kN/m ²
R = 0.44 (m ² K)/W	045	4 kN/m ²

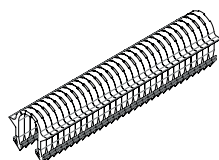
Only sold in units of 5 boards per foil bag.



Tacker machine

1402597

For fixing the heating pipes onto the base mat roll or folded board by use of tacker hooks.



Tacker hooks

plastic

for 14, 16, 17 and 20 mm pipes

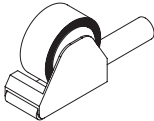

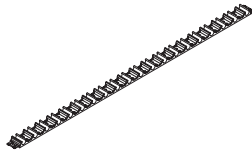
1 magazine = 30 pieces	(10)	1402591
10 magazines = 300 pieces	(20)	1402592

For fixing the heating pipes onto the base mat roll or folded board by use of the tacker machine.

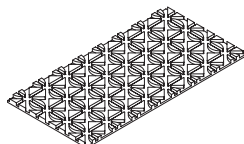
Only sold in packing units.

For further information see "Technical information":



Article	Packing unit	Article-No.	Hint
	Tape gun for tapes		For bonding the linings of the base mat rolls or insulation boards.
	with a width of 50 mm	1402598	
	Adhesive tape		For bonding the linings of the base mat rolls or insulation boards to prevent penetration of screed water.
	50 mm x 66 m	(36) 1402599	
"Cofloor" Clamping rail system			
	Self-adhesive clamping rail made of polypropylene, clamping distance 5 cm, length 1 m		For fixing the heating pipes onto the insulation.
	for 14 mm pipe	(100) 1402580	
	for 16 mm pipe	(100) 1402581	

Article	Packing unit	Article-No.	Hint
"Cofloor" Dry-build system for fixing 14 mm "Copipe" composition pipes Laying distances 12.5, 25 cm			For laying of surface heating systems on solid or timber beam floors as a dry-build system (reduced overall thickness, for instance renovation of existing buildings) or with heating screed according to DIN 18560 on a membrane made of polystyrene. Taking certain installation conditions into consideration, the dry-build system is also suitable for wall heating and cooling systems.



Dry-build element
 1000 x 500 x 25 mm
 made of expanded polystyrene according to DIN EN 13163, thermal conductivity group 035, building material class B1 according to DIN 4102

 Max. load: 60 kN/m² (10) **1402800**

Element for serpentine or spiral laying of the heat conducting strips and elbows. For "Copipe HSC" composition pipe 14 x 2 mm. Thermal resistivity: $R = 0.5 \text{ (m}^2\text{K)/W}$.

Only sold in units of 10 boards wrapped up in a plastic foil.

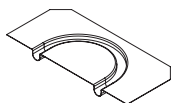


Heat conducting strip
 998 x 122 x 0.4 mm
 made of galvanised sheet steel

 with pre-punched break points in the grooves (48) **1402850**

For laying "Copipe HSC" composition pipe 14 x 2 mm and for improvement of the heat transmission by a large surface covering of the dry-build elements.

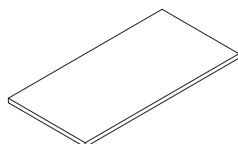
Only sold in units of 48 strips per box.



Heat conducting elbow
 110 x 245 x 0.5 mm
 made of galvanised sheet steel (25) **1402855**

For serpentine laying of the "Copipe HSC" composition pipe 14 x 2 mm in the edge areas.

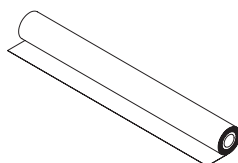
Only sold in units of 25 elbows per box.



Infill panel
 1000 x 500 x 25 mm
 made of expanded polystyrene according to DIN EN 13163, thermal conductivity group 035, max. load 60 kN/m², building material class B1 according to DIN 4102

 (19) **1402857**

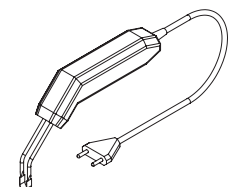
Only sold in units of 19 panels wrapped up in a plastic foil.



Membrane
 made of polyethylene 0.2 mm

 Dimensions of roll 25 m x 4 m **1402895**

As separation layer between dry-build system and concrete or liquid screed.

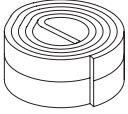
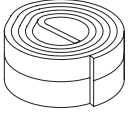
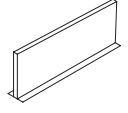
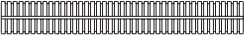
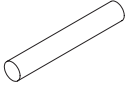
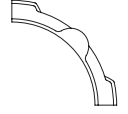




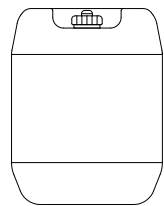
Hot cutting machine **1402891**

Manual tool for cutting individual pipe ducts into the infill panel.

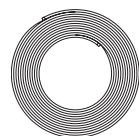
For further information see "Technical information":

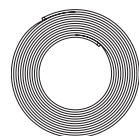
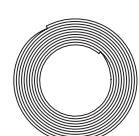


Article	Packing unit	Article-No.	Hint
Accessories			
	Edge insulating strip with bonded foil and perforation, height: 150 mm, thickness: 10 mm, made of polyethylene foam		Suitable for concrete and liquid screed complying with DIN EN 1264-4/ DIN 18560 T2.
	length per roll 25 m	(8) 1402090	
	Edge insulating strip with perforation self-adhesive on the wall side, with self-adhesive polyethylene flap, height: 150 mm, thickness: 10 mm, made of polyethylene foam		The self-adhesive polyethylene flap allows sealing of the junction between the base mat and the edge insulating strip when laying liquid screed.
	length per roll 25 m	(8) 1402191	
	Expansion strip with adhesive edge, height: 120 mm, thickness: 10 mm, made of polyethylene foam		To provide screed joints according to DIN EN 1264-4 / DIN 18560 T2.
	length: 1.20 m	(20) 1402091	
	Protective tube made of LDPE		For protecting the pipe - at junction points of screed joints according to DIN EN 1264-4 / DIN 18560 T 2 - at the entry points when set in concrete - at the exit points when set in concrete
	Length: 300 mm, slotted, for 14, 16 and 17 mm pipes	(20) 1501184	Only sold in units of 20 protective tubes per bag.
	Round profile made of polystyrene foam Ø 20 mm		Serves as sealing between base mat and edge insulating strip when using concrete screed.
	Dispenser of 150 m	1402092	Only sold in units = 1 dispenser.
	Pipe guiding elbow plastic		For the inversion and fixing of the "Copert" and "Copex" pipes in case of 90 ° bends, for instance in front of the distributor/collector and in screed passages.
	for 14 - 16 mm pipes Set = 10 pieces	(50) 1409085	
	for 20 mm pipe Set = 10 pieces	(10) 1409086*	
	for 26 mm pipe Set = 10 pieces	(10) 1409087*	
	Marker point for measuring screed humidity plastic		To mark the points of measurement of humidity of the screed.
	Set = 5 pieces	(10) 1409090	
	Calculation software for the design of surface heating systems	1409999	



Article	Packing unit	Article-No.	Hint
Screed additive Additional component to produce concrete screed for heated underfloor constructions			For homogenization and improvement of the workability as well as for increase of the concrete screed density.
Content of canister 10 l		1409095	

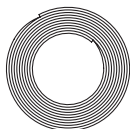


Article	Packing unit	Article-No.	Hint
PE-Xc "Copex" Plastic pipes			Application: Surface heating and cooling.
with oxygen barrier			
rolls			Pipes according to DIN 16892 / DIN 16893 / DIN EN ISO 15 875 / EN1264-4 (except for dimension 26). Oxygen tight according to DIN 4726 (all dimensions).
	Dimension 14 x 2 mm		Max. operating pressure p _s :
	length per roll 120 m	(120) 1400051	6 bar at 90 °C
	length per roll 240 m	(240) 1400052	10 bar at 60 °C
	length per roll 600 m	(600) 1400054	
	Dimension 16 x 2 mm		Max. operating pressure p _s :
	length per roll 120 m	(120) 1400151	6 bar at 90 °C
	length per roll 240 m	(240) 1400152	10 bar at 60 °C
	length per roll 600 m	(600) 1400154	
	Dimension 17 x 2 mm		Max. operating pressure p _s :
	length per roll 120 m	(120) 1400251	6 bar at 90 °C
	length per roll 240 m	(240) 1400252	10 bar at 60 °C
	length per roll 600 m	(600) 1400254	
	Dimension 20 x 2 mm		Max. operating pressure p _s :
	length per roll 240 m	(240) 1400352	6 bar at 90 °C
	length per roll 600 m	(600) 1400354	8 bar at 70 °C
	Dimension 26 x 3 mm		Max. operating pressure p _s :
	length per roll 50 m	(50) 1400560	6 bar at 90 °C
	length per roll 200 m	(200) 1400562	10 bar at 60 °C
	length per roll 300 m	(300) 1400563	
	PE-RT/AL/PE-RT "Copepe HSC" Composition pipes		Application:
	rolls		Central heating systems with circulation pump, surface heating and cooling systems as well as sanitary installations.
	Dimension 14 x 2 mm		DVGW tested (dimensions 14 x 2.0 mm and 17 x 2.0 mm).
	length per roll 50 m	(50) 1541054	DVGW approved (dimensions 16 x 2.0 mm and 20 x 2.5 mm).
	length per roll 100 m	(100) 1540154	DVGW reg.-no.: DW-8501 AT2407
	length per roll 200 m	(200) 1540254	
	Dimension 16 x 2 mm		Max. operating pressure p _s :
	length per roll 50 m	(50) 1541055	6 bar at 90 °C
	length per roll 100 m	(100) 1540155	10 bar at 70 °C
	length per roll 200 m	(200) 1540255	
	length per roll 500 m	(500) 1540555	Oxygen tight three-layered composition pipe
	Dimension 17 x 2 mm		– inner layer made of PE-RT
			– aluminium pipe welded end to end
			– outer coating made of PE-RT bonded by adhesive layers
	length per roll 200 m	(200) 1540257	
	length per roll 500 m	(500) 1540557	
	Dimension 20 x 2.5 mm		
	length per roll 50 m	(50) 1541060	
	length per roll 100 m	(100) 1540160	
	length per roll 200 m	(200) 1540260	

Article	Packing unit	Article-No.	Hint
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PE-RT "Copert" Plastic pipes with oxygen barrier

rolls



Dimension 14 x 2 mm

length per roll 240 m
length per roll 600 m

(240) **1402052**
(600) **1402054**

Application:
Surface heating and cooling.

Pipes according to
DIN 16833/DIN 16834.
Oxygen tight according to DIN 4726.

Max. operating pressure p_s : 6 bar at 70 °C

Dimension 16 x 2 mm

length per roll 240 m
length per roll 600 m

(240) **1402152**
(600) **1402154**

Dimension 17 x 2 mm

length per roll 240 m
length per roll 600 m

(240) **1402252**
(600) **1402254**

Dimension 20 x 2 mm

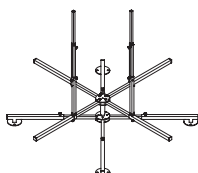
length per roll 240 m

(240) **1402352**

Other sizes, for instance for the installation of risers: page 13.06.

Press and screwed fittings: from page 13.09.

**Tools, e. g. pipe cutter, pipe shears, universal tool for deburring
and calibrating: from page 13.35.**

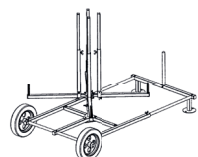


**Coil unwinder
for pipes**

fixed

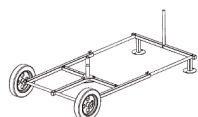
1402096

For rolls up to 600 m.
Completely dismountable and collapsible.



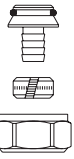
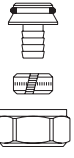
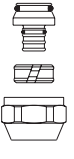
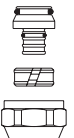
mobile

1402098



Transport cart

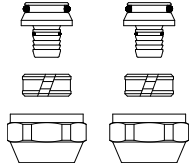
1402099

Article	Packing unit	Article-No.	Hint
<hr/>			
"Ofix K" Compression fittings for G ¾ male thread according to DIN EN 16313 (cone "Euro")			For the connection of the "Copex" PE-Xc pipes and the "Copert" PE-RT pipes to the distributor/collector and for couplings. The permissible operating pressures and operating temperatures depend on the application classes of the respective standards of the plastic pipework systems (e.g. PE-X, DIN EN ISO 15875).
	"Ofix K" for plastic pipes according to DIN 4726, PE-X according to DIN 16892/16893, PB according to DIN 16968, PP according to DIN 8078 A1, collar nut nickel plated , metal to metal sealing plus O-ring		
	14 x 2 mm	(10) 1027755	
	16 x 2 mm	(10) 1027757	
	17 x 2 mm	(10) 1027759	
	20 x 2 mm	(10) 1027763	
	"Ofix K" for plastic pipes according to DIN 4726, PE-X according to DIN 16892/16893, PB according to DIN 16968, PP according to DIN 8078 A1, collar nut unplated , metal to metal sealing plus O-ring		
	14 x 2 mm	(10) 1027775	
	16 x 2 mm	(10) 1027777	
	17 x 2 mm	(10) 1027779	
	20 x 2 mm	(10) 1027783	
"Cofit S" Compression fittings for G ¾ male thread according to DIN EN 16313 (cone "Euro"), for "Copepe" composition pipes and, provided similar preparation is used, for plastic pipes, metal to metal sealing plus O-ring, outlet made of bronze, compression ring and collar nut made of brass			For the connection of the pipes to the distributor/collector and for couplings. (Interior of plastic pipes must be deburred.)
Collar nut nickel plated			
	14	x 2.0 mm	x G ¾ c/nut (10) 1507954
	16	x 2.0 mm	x G ¾ c/nut (10) 1507955
	17	x 2.0 mm	x G ¾ c/nut (10) 1507959
Collar nut unplated			
	14	x 2.0 mm	x G ¾ c/nut (10) 1507974
	16	x 2.0 mm	x G ¾ c/nut (10) 1507975

Article	Packing unit	Article-No.	Hint
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"Cofit S" Compression fittings

for G 3/4 male thread according to DIN EN 16313 (cone "Euro"),
for "Copipe" composition pipes and, provided similar
preparation is used, for plastic pipes,
2-fold, metal to metal sealing plus O-ring,
outlet made of bronze,
compression ring and collar nut made of brass,
collar nut **nickel plated**



14 x 2.0 mm x G 3/4 collar nut	(10)	1507934
16 x 2.0 mm x G 3/4 collar nut	(10)	1507935
17 x 2.0 mm x G 3/4 collar nut	(10)	1507937
18 x 2.0 mm x G 3/4 collar nut	(10)	1507938
20 x 2.0 mm x G 3/4 collar nut	(10)	1507939
20 x 2.5 mm x G 3/4 collar nut	(10)	1507940

Double nipples



Double nipple, brass, nickel plated

G 3/4 male x G 3/4 male	(10)	1028263
-------------------------	------	----------------

Port G 3/4 with tapered sealing according to
DIN EN 16313 (cone "Euro").



Double nipple, bronze, unplated

G 3/4 male thread x G 3/4 male thread	(25)	1504054
--	------	----------------

"Cofit P" Press couplings

for "Copipe HSC" composition pipes and, provided
similar preparation is used, for plastic pipes,
dimension 16 and 20 x 2.5 mm made of bronze,
dimension 14, 17 and 20 x 2.0 mm made of brass resistant
to dezincification, casing made of stainless steel

(Interior of plastic pipes must be deburred.)

Further sizes see page 11.12.

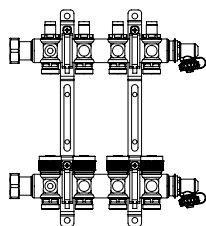


Press coupling

14 x 2 mm	x 14 x 2 mm	(10)	1512542
16 x 2 mm	x 16 x 2 mm	(10)	1512543
17 x 2 mm	x 17 x 2 mm	(10)	1512544
20 x 2.5 mm	x 20 x 2.5 mm	(10)	1512545
20 x 2 mm	x 20 x 2 mm	(10)	1512541*

Suitable press bits:

Item no. 1519489 (Ø 14 x 2 mm)
Item no. 1519491 (Ø 16 x 2 mm)
Item no. 1519488 (Ø 17 x 2 mm)
Item no. 1519492 (Ø 20 x 2.5 mm)
Item no. 1519481 (Ø 20 x 2 mm)



2.i "Multidis SFQ" distributor/collector with "Q-Tech"
for automatic hydronic balancing

Content

"Multidis SFQ" Stainless steel distributor/collector	2.54
--	------

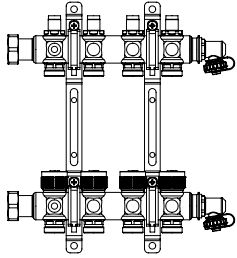
Article

Article-No.

Hint

**"Multidis SFQ" Stainless steel distributor/collector
for surface heating and cooling systems**

with "Q-Tech" for automatic hydronic balancing
flat sealing, with valve inserts M 30 x 1.5
for thermostatic and electronic control



for 2 circuits

1404752

for 3 circuits

1404753

for 4 circuits

1404754

for 5 circuits

1404755

for 6 circuits

1404756

for 7 circuits

1404757

for 8 circuits

1404758

for 9 circuits

1404759

for 10 circuits

1404760

for 11 circuits

1404761

for 12 circuits

1404762

Application:

Stainless steel distributor/collector for surface
heating and cooling systems.

Max. operating pressure p_s : 6 bar (PN 6)

Max. operating temperature t_s : 80° C

Flow range: 0,5 - 5 l/min

Description:

Distributor/collector pre-assembled. With fill
and drain valves.

Heating circuit connections G ¾ male thread
for Oventrop compression fittings.

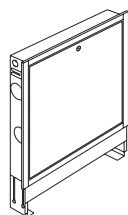
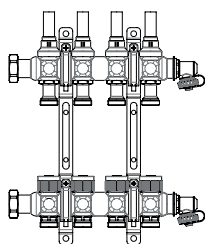
Flow distributor with integrated isolating

facilities. Return collector with integrated

valve inserts. Brackets (loosely added)

soundabsorbing according to DIN 4109.

Cabinets and dimension chart: page 2.60



2.j "Multidis SF/SFB/SFI" Distributors/collectors for surface heating and cooling systems

Content

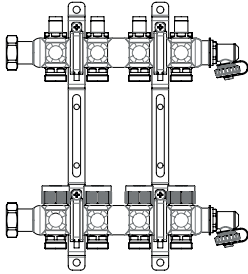
"Multidis SF" Stainless steel distributor/collector	2.56
"Multidis SFB" Stainless steel distributor/collector	2.57
"Multidis SFI" Brass distributor/collector for industrial surface heating and cooling systems	2.57
Accessories	2.58
"Optiflex" Ball valve	2.58
"Cofit S" Compression fittings	2.58
Valve insert for stainless steel distributors/collectors "Multidis SF"	2.59
Ball valves	2.59
Flush-mounted cabinets	2.60
Surface-mounted cabinets	2.60
Cylinder lock	2.61
Heat meter connection sets	2.62
Differential pressure relief device	2.62
Angle pattern connection set	2.63
"Hycoccon VTZ" Double regulating and commissioning valve	2.63
"Hycoccon DTZ" Differential pressure regulator	2.63

Article

Article-No.

Hint

**"Multidis SF" Stainless steel distributor/collector
for surface heating and cooling systems
with integrated regulating inserts in the flow distributor**
flat sealing, with valve inserts M 30 x 1.5
for thermostatic and electronic control



for 2 circuits
for 3 circuits
for 4 circuits
for 5 circuits
for 6 circuits
for 7 circuits
for 8 circuits
for 9 circuits
for 10 circuits
for 11 circuits
for 12 circuits

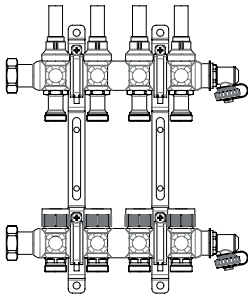
1405552*
1405553*
1405554*
1405555*
1405556*
1405557*
1405558*
1405559*
1405560*
1405561*
1405562*

Application:
Stainless steel distributor/collector for surface
heating and cooling systems.
Max. operating pressure p_g : 6 bar (PN 6)
Max. operating temperature t_g : 80° C

Description:
Distributor/collector pre-assembled. With fill
and drain valves. Heating circuit connections
G 3/4 male thread for Oventrop compression
fittings.
Flow distributor with integrated regulating
inserts. Return collector with integrated valve
inserts. Brackets (loosely added) sound-
absorbing according to DIN 4109.

Cabinets and dimension chart: page 2.60

**"Multidis SF" Stainless steel distributor/collector
for surface heating and cooling systems
with integrated flow measuring and regulating devices 0-5 l/min.
in the flow distributor**
flat sealing, with valve inserts M 30 x 1.5
for thermostatic and electronic control



for 2 circuits
for 3 circuits
for 4 circuits
for 5 circuits
for 6 circuits
for 7 circuits
for 8 circuits
for 9 circuits
for 10 circuits
for 11 circuits
for 12 circuits

1405352*
1405353*
1405354*
1405355*
1405356*
1405357*
1405358*
1405359*
1405360*
1405361*
1405362*

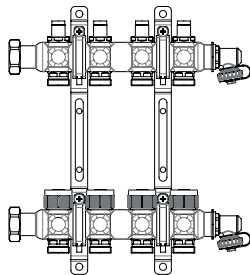
Article

Article-No.

Hint

"Multidis SFB" Stainless steel distributor/collector for surface heating and cooling systems with heating circuit valves with presettable bypass and integrated regulating inserts in the flow distributor

flat sealing, with valve inserts M 30 x 1.5
for thermostatic and electronic control



for 2 circuits	1405452*
for 3 circuits	1405453*
for 4 circuits	1405454*
for 5 circuits	1405455*
for 6 circuits	1405456*
for 7 circuits	1405457*
for 8 circuits	1405458*
for 9 circuits	1405459*
for 10 circuits	1405460*
for 11 circuits	1405461*
for 12 circuits	1405462*

Application:

Stainless steel distributor/collector for surface heating and cooling systems.

Max. operating pressure p_s : 6 bar (PN 6)

Max. operating temperature t_s : 80°C

Setting of a minimum volume flow via the bypass at the heating circuit valve guaranteeing a perfect operation of heat pumps and a basic heat load of the underfloor heating (no cooling down).

Description:

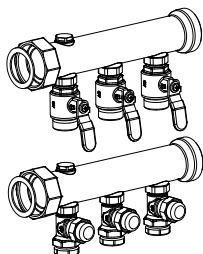
Distributor/collector pre-assembled. With fill and drain valves. Heating circuit connections G 3/4 male thread for Oventrop compression fittings.

Flow distributor with integrated regulating inserts. Return collector with integrated valve inserts with presettable bypass. Brackets (loosely added) sound-absorbing according to DIN 4109.

Cabinets and dimension chart: page 2.60

"Multidis SFI" Brass distributor/collector for industrial surface heating and cooling systems

flat sealing distributor/collector modules, flow distributor with ball valves and return collector with regulating valves, extension to max. 20 circuits by connecting the distributor/collector modules



for 2 circuits	1414452
for 3 circuits	1414453
for 4 circuits	1414454
for 5 circuits	1414455
for 6 circuits	1414456

Application:

Central heating systems with circulation pump and cooling systems.

Max. operating pressure p_s : 6 bar (PN 6)

Max. operating temperature t_s : 90 °C

Description:

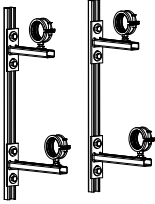
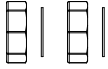
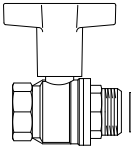
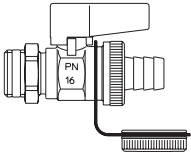

Pre-assembled distributor/collector modules, one port G 2 male thread, one port G 2 collar nut, with G 1/2 blind plug.

Flow distributor with ball valves. Return collector with regulating valves.

Heating circuit connections with G 1 male thread for Oventrop compression fittings.

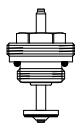
For further information see
"Technical information":



Article	Packing unit	Article-No.	Hint
Accessories			
	Console for "Multidis SFI" brass distributor/collector 2-fold, steel galvanised, adjustable height and depth		
		1414490	Consoles with 2 pipe clamps each including sound insulation supports and quick acting lock. Wall attachment included.
	Cap G 2 female thread for "Multidis SFI" brass distributor/collector, 2-fold, brass		
		1414493	For closing the distributor/collector.
	Ball valve flat sealing DN 50		
	G 2 F x G 2 M	1406586	For the isolation of the flow distributors and return collectors.
	"Optiflex" Ball valve brass, handle with stop self sealing, with couternut, with hose connection (soft seal) and cap		
	DN 15	(50) 1033314	For filling and venting.
	"Cofit S" Compression fittings for "Copex" PE-Xc plastic pipes, 2-fold, metal to metal sealing plus O-ring, outlet bronze / brass resistant to dezincification, brass compression ring, brass collar nut, unplated		
	20 x 3.0 mm x G 1 collar nut	(10) 1507969	For the connection of the "Copex" PE-Xc plastic pipes to the distributor as well as for couplings.
	26 x 3.0 mm x G 1 collar nut	(10) 1507979	

Article	Packing unit	Article-No.	Hint
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Valve insert for stainless steel distributors/collectors "Multidis SF"



Brass	(25)	1404091
Stainless steel	(25)	1404092*



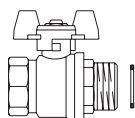
Coupling

nickel plated

G ¾ male x G 1 male (50) 1407206

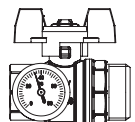
For the connection of two stainless steel distributors/collectors "Multidis SF" (do not exceed a maximum of 12 heating circuits in total).

Ball valves



flat sealing

DN 20	G ¾ F x G 1 M	(10)	1406383
DN 25	G 1 F x G 1 M	(10)	1406384

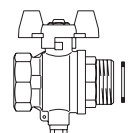


flat sealing, with thermometer (0–80°C)
with red T-handle

DN 20	G ¾ F x G 1 M	1406483
DN 25	G 1 F x G 1 M	1406484

flat sealing, with thermometer (0–80°C)
with blue T-handle

DN 20	G ¾ F x G 1 M	1406583
DN 25	G 1 F x G 1 M	1406584

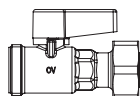


flat sealing,
with sensor connection M 10 x 1.0

DN 25 G 1 F x G 1 M (10) 1406708

Ball valve

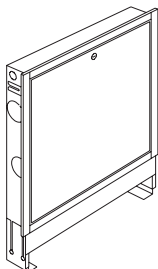
for "Multidis SF/SFB" stainless steel distributor/collector



with cone "Euro"

G ¾ male x G ¾ collar nut (50) 1406504

Ball valve for the isolation of the heating circuits at the distributor/collector. Heating circuit connection G ¾ male thread according to DIN EN 16313 (cone "Euro") for Oventrop compression fittings. Distributor/collector connection with collar nut G ¾ and O-ring seal.

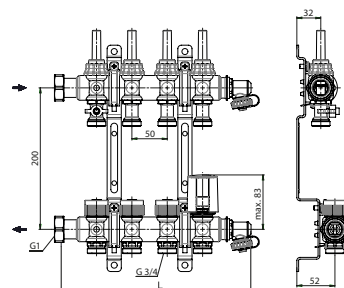
**Flush-mounted cabinets**

steel, galvanised, frame and doors white lacquered
removable screen

No. 1: inner width: 560 mm	1401151
No. 2: inner width: 700 mm	1401152
No. 3: inner width: 900 mm	1401153
No. 4: inner width: 1200 mm	1401154

Depth: 115 – 180 mm
Height: 760 – 885 mm

When using heat meter connection sets, the sum of the installation length and the length of the distributor have to be taken into consideration.

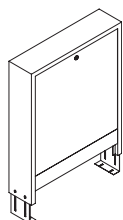


Outlet	Length (L)	No. ^{°°}	Length (L) with ball valve 1406384	No. ^{°°}
2	168 mm	1	248 mm	1
3	218 mm	1	298 mm	1
4	268 mm	1	348 mm	1
5	318 mm	1	398 mm	1
6	368 mm	1	448 mm	1
7	418 mm	1	498 mm	2
8	468 mm	2	548 mm	2
9	518 mm	2	598 mm	2
10	568 mm	2	648 mm	3
11	618 mm	3	698 mm	3
12	668 mm	3	748 mm	3

^{°°}No. of cabinets

Surface-mounted cabinets

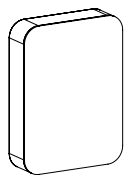
Surface-mounted model
steel, galvanised, frame and doors white lacquered



No. 1: inner width: 600 mm	1401171
No. 2: inner width: 750 mm	1401172
No. 3: inner width: 1000 mm	1401173
no. 4: inner width: 1250 mm	1401174

Depth: 160 mm
Height: 760 – 870 mm

When using heat meter connection sets, the sum of the installation length and the length of the distributor have to be taken into consideration.



"Regubox" Exclusive cabinet

with white, frameless, opaque and lockable glass door

Frame surface made of brushed stainless steel, without rear wall

Surface-mounted model **1341098**
for dwelling stations "Regudis W-HTU" and "Regudis W-HTF" with constant temperature heating circuit and for stainless steel distributors/collectors "Multidis SF" with a maximum of 6 heating circuit connections (angle pattern connection set, item no. 1404780, taken into account)

Dimensions (W x H x D):
630 mm x 900 mm x 170 mm
The mounting set for installation during construction for floor-standing installation (item no. 1341099) or wall attachment (item no. 1341199) is to be ordered separately.

Awards:

DESIGN **PLUS** ISH Frankfurt 2015



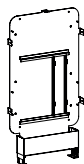
ICONIC AWARDS 2015



GERMAN DESIGN AWARD
SPECIAL 2016



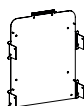
iF Design Award 2016



Mounting set for installation during construction for "Regubox" steel sheet, galvanised

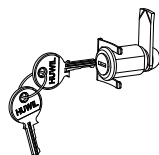
Floor-standing installation, adjustable height **1341099***

Only for "Regubox", item no. 1341098.



Wall attachment **1341199***

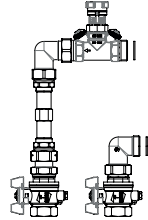
With screen for covering the lower connection channel of the "Regubox" in case of wall attachment.



Cylinder lock
with key

for surface-mounted cabinets **1401190**
(1401171-74)
for flush-mounted cabinets **1401191**
(1401151-54)

Only suitable for surface-mounted cabinets manufactured since November 2011.

**Heat meter connection sets**

for "Multidis SF/SFB" stainless steel distributors/collectors for surface heating and cooling systems as well as for "Multidis SH" stainless steel distributors/collectors for radiator connection

Set no. 1
with double regulating and commissioning valve
"Hycococon VTZ"

Angle pattern:

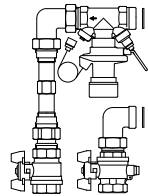
with ball valves DN 20
with ball valves DN 25

1404578
1404580

Straight pattern:

with ball valves DN 20
with ball valves DN 25

1404579
1404581



Set no. 2
with differential pressure regulator "Hycococon DTZ"

Angle pattern:

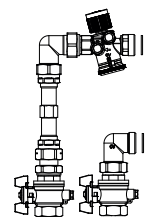
with ball valves DN 25

1404680

Straight pattern:

with ball valves DN 25

1404681



Set no. 3
with pressure independent control valve „Cocon QTZ“

Angle pattern:

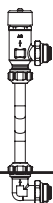
DN 25, 150 - 1050 l/h

1404880

Straight pattern:

DN 25, 150 - 1050 l/h

1404881

**Differential pressure relief device**

for "Multidis SF/SFB" stainless steel distributors/collectors

G 3/4 male thread

1404790

Heat meter connection sets are suitable for left and right hand side connection to the distributor/collector.

Set no. 1 consists of:

Supply

- Ball valve with temperature sensor connection M 10 x 1.0, for sensor Ø 5.0 / 5.2 mm directly immersing

Return

- "Hycococon VTZ" Double regulating and commissioning valve
- Meter stool piece
- Ball valve with temperature sensor connection M 10 x 1.0, for sensor Ø 5.0 / 5.2 mm directly immersing
- Flat seals

Set no. 2 consists of:

Supply

- Ball valve with temperature sensor connection M 10 x 1.0, for sensor Ø 5.0 / 5.2 mm directly immersing
- Measuring adapter

Return

- "Hycococon DTZ" Differential pressure regulator
- Capillary
- Meter stool piece
- Ball valve with temperature sensor connection M 10 x 1.0, for sensor Ø 5.0 / 5.2 mm directly immersing
- Flat seals

Set no. 3 consists of:

Supply

- Ball valve with temperature sensor connection M 10 x 1.0, for sensor Ø 5.0 / 5.2 mm directly immersing

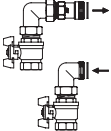
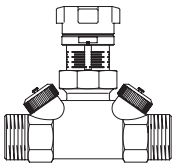
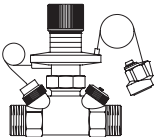
Return

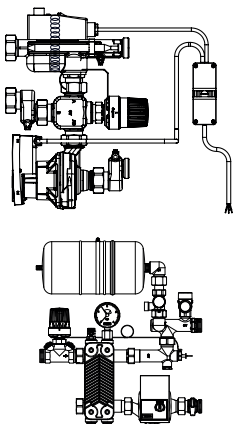
- "Cocon QTZ" Pressure independent control valve
- Meter stool piece
- Ball valve with temperature sensor connection M 10 x 1.0, for sensor Ø 5.0 / 5.2 mm directly immersing
- Flat seals

Differential pressure relief device for the right hand side connection to the distributor/collector.

To avoid flow noises.

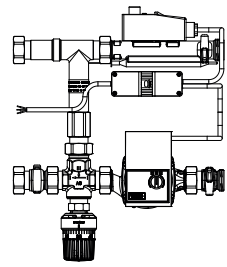
Control range: 50-400 mbar

Article	kvs	Packing unit	Article-No.	Hint
Angle pattern connection set				
	for "Multidis SF/SFB" stainless steel distributors/collectors for surface heating and cooling systems as well as for "Multidis SH" stainless steel distributors/collectors for radiator connection			Angle pattern connection set for a bottom connection to the distributor/collector when using surface-mounted cabinets.
			1404780	
	"Hycococon VTZ" Double regulating and commissioning valve with infinitely adjustable presetting "eco" measuring technique both ports with integrated pressure test points and drain valves			"eco" measuring technique: Information: page 3.94. Operating temperature: -10 °C up to +120 °C
				General information: Body and bonnet made of brass resistant to dezincification. Male thread G 1.
	"Hycococon DTZ" Differential pressure regulator nominal value: 50 to 300 mbar, infinitely adjustable "eco" measuring technique with integrated pressure test point and drain valve			"eco" measuring technique: Information: page 3.94. Operating temperature: -10 °C up to +120 °C
				General information: Body and bonnet made of brass resistant to dezincification. Male thread G 1.



2.k "Regufloor" Control units

Content	
"Regufloor H"	2.66
"Regufloor HW"	2.66
"Regufloor HN"	2.66
System components	2.67
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"Regtronic EM" Extension module	2.68
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"Regufloor HC"	2.70
System components for "Regufloor HC"	2.70
"Tri-D TR" Three-way diverting valves PN 16	2.71
"Tri-M TR" Three-way mixing valves PN 16	2.71
"Tri-CTR" Three-way diverting and mixing valves PN 16	2.71
"Regufloor HX"	2.72

**"Regufloor H"****Control unit DN 25 Heating**

for connection to the stainless steel distributor/collector

with high-efficiency pump (5) **1151300**
 Wilo-Yonos PARA RS 15/6, 130 mm
 (Energy Efficiency Index EEI ≤ 0.23
 according to EC Regulation 641/2009)

with Wilo pump E15/ 1-5 **1151000**
 (export model, only for sales outside
 the European Union)

Application ("Regufloor H and HW"):
 Fixed value control unit for connection to
 the stainless steel distributor/collector for
 surface heating systems.

Connection of 2 - 12 heating circuits.

Length: 315 mm

Depth: 145 mm

Pump length: 130 mm

Max. operating pressure: 6 bar

Max. differential pressure: 0.75 bar

Max. flow temperature:

Primary side: 90 °C

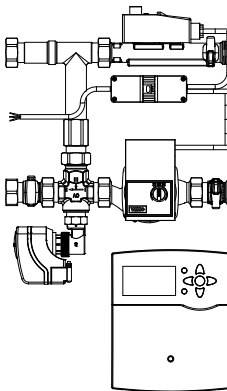
Secondary side: 50 °C

Control range temperature controller:

("Regufloor H" only): 20–50 °C

Control range electric pipe contact

safety switch: 20–90 °C

**"Regufloor HW"****Control unit DN 25 Heating**

as above, but with
 weather guided control for connection
 to the stainless steel distributor/collector

with high-efficiency pump **1151800**
 Wilo-Yonos PARA RS 15/6, 130 mm and
 heating circuit controller "Regtronic RH"
 (Energy Efficiency Index EEI ≤ 0.23
 according to EC Regulation 641/2009)

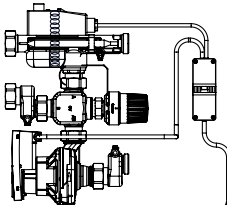
with Wilo pump E15/1-5 and **1151500**
 heating circuit controller "Regtronic EH"
 (export model, only for sales outside
 the European Union)

Description ("Regufloor H"):

Pre-assembled and tested fixed value control
 unit with electronic pump, three-way diverting
 valve, check valve, temperature controller with
 contact sensor. Electric pipe contact safety
 switch for max. limitation of the flow
 temperature.

Description ("Regufloor HW"):

As "Regufloor H" but three-way diverting valve
 with electromotive actuator (three point),
 heating circuit controller with outdoor sensor
 and flow temperature sensor.

**"Regufloor HN"****Control unit DN 25 Heating**

for connection to the stainless steel distributor/collector

with high-efficiency pump **1151600**
 Wilo-Yonos PARA RSB 15/6, 130 mm
 (Energy Efficiency Index EEI ≤ 0.23
 according to EC Regulation 641/2009)

Application:

Fixed value control unit for connection to
 the stainless steel distributor/collector for
 surface heating systems.

Connection of 2 - 12 heating circuits.

Length: 195 mm

Depth: 100 mm

Axial pump housing

Max. operating pressure: 6 bar

Permissible pressure difference:

200 kPa (2 bar)

Max. flow temperature:

Primary side: 90 °C

Secondary side: 50 °C

Control range temperature controller:

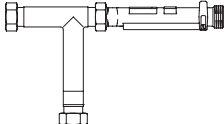
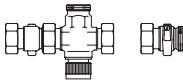
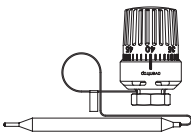
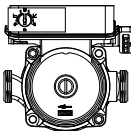
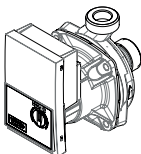
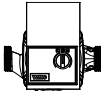
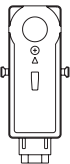
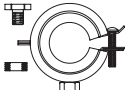
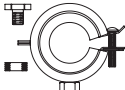
20 - 50 °C

Control range electric pipe contact

safety switch: 20 - 90 °C

Description ("Regufloor HN"):

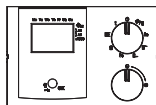
Pre-assembled and tested fixed value control
 unit with electronic pump with axial pump
 housing, three-way diverting valve, check
 valve, temperature controller with contact
 sensor. Electric pipe contact safety switch for
 max. limitation of the flow temperature.

	Article	Article-No.	Hint
	System components		For the isolation of the supply and return, use Oventrop ball valves item no. 1406383 DN 20 and item no. 1406384 DN 25.
	T-connection piece	1151080	With check valve and sensor point.
	Three-way diverting valve with S-connection fitting	1151081	
	Temperature controllers with contact sensor	1151082	Control range 20–50 °C. Only supplied as replacement.
	Wilo E15/1-5 (export model, only for sales outside the European Union)	1151086	Pump <u>without</u> pump cable. Only supplied as replacement.
	High-efficiency pump Wilo-Yonos PARA with axial pump housing (Energy Efficiency Index EEI ≤ 0.23 according to EC Regulation 641/2009)	1151089*	Only for "Regufloor HN", item no. 1151600. Pump <u>without</u> pump cable. Only supplied as replacement.
	High-efficiency pump Wilo-Yonos PARA (Energy Efficiency Index EEI ≤ 0.23 according to EC Regulation 641/2009)	1151088	Pump <u>without</u> pump cable. Only supplied as replacement.
	Electric pipe contact safety switch	1151087	Including cabling for Wilo pump E15/1-5.
	Bracket		
	T-connection piece	1151085	

Article

Article-No.

Hint

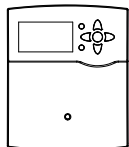
"Regtronic EH" Heating circuit controller

with 1 outdoor sensor and 3 additional sensors (NTC 5000)

230 V

1152092°

Weather-guided control of the flow temperature of the heating system by activation of a heat generator and/or a mixing valve.

"Regtronic RH" Heating circuit controller

with 1 outdoor sensor
and 3 additional sensors (PT 1000)

1152093

with 1 outdoor sensor,
2 additional sensors (PT 1000)
and remote control including room temperature sensor (PT 1000)

1152090

Weather guided flow temperature control of the heating system via the demand of a heat generator and/or a mixing valve (e.g. "Regumat M3" or "Regufloor HW" with three-way mixing valve). Controller for wall attachment with data bus (S-bus).

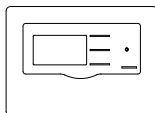
Basic functions: 1 variable and 1 constant temperature heating circuit with heat demand. Extendable by "Regtronic EM". The status can be viewed via a full graphic display. Interfaces: S-bus, SD-card slot for data recording

Inputs: 8 sensor inputs (PT 1000, KTY, switch or remote control), inputs for electronic volume flow sensor/pressure sensor and irradiation sensor

Outputs: 4 solid-state relays (speed controlled), 1 standard relay (voltage free), 2 PWM outputs for the speed controlled activation of high-efficiency pumps. Both PWM outputs can be switched to 0-10 V.

For the connection of high-performance pumps (> 1A) see load relay, page 6.72.

ErP classification heating circuit controllers "Regtronic RH" and "Regtronic EH"					
Item no.	Controller	Required accessories	Boiler control modulating (0-10 V)	On/Off	ErP % Class
1152092	"Regtronic EH"	—		X	1.5 III
1152093	"Regtronic RH"	Adapter cable 1152086	X		2.0 II
1152093	"Regtronic RH"	—		X	1.5 III
1152090	"Regtronic RH" incl. remote control with room temperature sensor	Adapter cable 1152086	X		4.0 VI
1152090	"Regtronic RH" incl. remote control with room temperature sensor	—		X	3.5 VII
1152090	"Regtronic RH" incl. remote control with room temperature sensor	2 x room temperature sensor 1152095 Adapter cable 1152086	X		5.0 VIII

"Regtronic EM" Extension module



for the connection to the heating circuit controller "Regtronic RH"

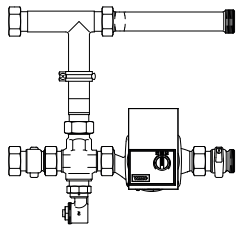
1152098

"Regtronic EM" for the extension of the heating circuit controller "Regtronic RH" by 6 sensor inputs and 5 relay outputs.

This allows the activation of further variable and constant temperature heating circuits. Up to **five** extension modules can be connected to the heating circuit controller "Regtronic RH".

1 sensor attached to the pipe PT 1000 is included.

Article	Article-No.	Hint
Accessories		
	Room temperature sensor PT 1000 1152095	Room temperature sensor for fixing on level surfaces (surface mounting).
	Remote control with room temperature sensor PT 1000 1152096	Remote control with room temperature sensor PT 1000 for the connection to the electronic controllers "Regtronic RH, RM and RS" for a comfortable control of the heating curve of the controller from the living area. When increasing the heating curve, the flow temperature is increased and vice versa. The remote control also features the functions "heating circuit off" and "party position".



"Regufloor HC"
Control unit DN 25 Heating/Cooling
 for connection to the stainless steel distributor/collector

with high-efficiency pump
 Wilo-Yonos PARA RS 15/6, 130 mm
 (Energy Efficiency Index EEI ≤ 0.23
 according to EC Regulation 641/2009)

1152100

with Wilo pump E15/1-5
 (export model only for sales outside
 the European Union)

1152000

Application:

Control unit for flow temperature control of surface heating systems or alternatively of surface cooling systems in combination with the Oventrop stainless steel distributors/collectors. Pre-assembled and tested control unit with electronic pump and three-way diverting valve.

Suitable for the connection of 2 - 12 heating circuits to two-, three- and four-pipe systems Heating and Cooling.

Length: 315 mm

Max. operating pressure: 6 bar

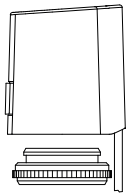
Max. differential pressure: 0.75 bar

Max. flow temperature:

Primary side: 90 °C

Secondary side: 50 °C

System components for "Regufloor HC"



"Aktor T 2P" Electrothermal actuators (two point)
 connection thread M 30 x 1.5

"H NC", closed with current "off", 230 V **1012415**

"L NC", closed with current "off", 24 V **1012416**

Oventrop electrothermal actuators are used for heating, ventilation and air conditioning. The actuators serve to control the room temperature and can be used e. g. with conventional radiators, radiators with integrated distributor, radiant ceiling panels, chilled ceiling systems and induction air systems in combination with two point room thermostats.

Further applications in bivalent heating installations.

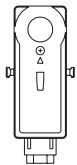
Connecting cable 1 m.

With "First-Open" function and stroke index.

Simple plug-in connection with valve adapter.

Actuators can be installed in any position.

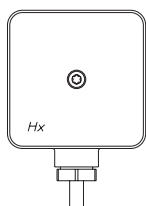
Due to their construction, the electrothermal actuators are secured against overvoltage which could occur when switching on neon tubes. A varistor is thus not necessary.



Electric pipe contact safety switch

1151087

Including cabling for Wilo pump E15/1-5.



"Sensor GA FD" Dew point control 24 V

with alternating contact

1141951

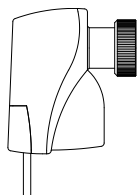
Is required in combination with room thermostats to protect chilled ceilings against condensation.

An actuator interrupting the cooling water flow is for instance activated in combination with the "Regufloor HC".

Connection to the cooling water supply.

Connecting cable 1 m.

Article	kvs	Packing unit	Article-No.	Hint
---------	-----	--------------	-------------	------

System components**"Aktor M" Electromotive actuators**

connection thread M 30 x 1.5
with manual setting, adjustable mode of operation

"ST L", 24 V, modulating proportional actuator, 0-10 V, automatic anti-blocking function and recognition of neutral point, multiple characteristic lines adjustable **1012705**

"ST L", 24 V, modulating proportional actuator, 0-10 V, with position feedback, automatic anti-blocking function and recognition of neutral point, multiple characteristic lines adjustable **1012706**

"3P L", 24 V, three point actuator, without anti-blocking function **1012708**

"3P H", 230 V, three point actuator, without anti-blocking function, mode of operation not adjustable **1012709**

Oventrop electromotive actuators are used for heating, ventilation and air conditioning. The actuators serve to control the room temperature and can be used e. g. with conventional radiators, radiators with integrated distributor, distributors/collectors for surface heating (except for item no. 1012710/11), radiant ceiling panels, chilled ceiling systems and induction air systems. Further application in bivalent heating installations.

The actuators (0-10 V) can be used in centralised building control systems in combination with the electronic room thermostat, item no. 1152151/53, or with a central controller.

Anti-blocking function:

The actuator opens and closes the valve completely once every 24 hours. Connecting cable 1.5 m.

With the appropriate control, the actuator, item no. 1012708, can also be used for two point operation.

In case of electric emergency function, the actuator returns to zero position if the power supply is interrupted.

Application:

Max. operating pressure p_s : 16 bar (PN 16)

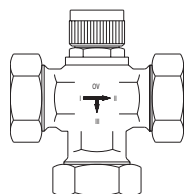
Operating temperature t_s : 0 °C up to 120 °C

Diverting respectively changing-over ("Tri-D TR") or mixing ("Tri-M TR") of volume flows in heating and cooling systems in combination with thermostatic or electric actuators.

"Tri-D TR" Three-way diverting valves PN 16

bronze

connection thread M 30 x 1.5
with collar nuts, flat sealing

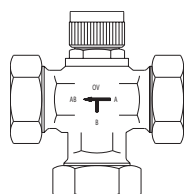


DN 20	4.50	1130206
DN 25	6.50	1130208
DN 40	9.50	1130212

"Tri-M TR" Three-way mixing valves PN 16

bronze

connection thread M 30 x 1.5
with collar nuts, flat sealing



DN 20	4.50	1131706°
DN 25	6.50	1131708°
DN 40	9.50	1131712°

Male thread:

G 1

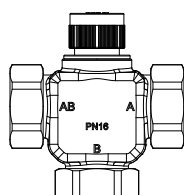
G 1 1/4

G 2

"Tri-CTR" Three-way diverting and mixing valves PN 16

bronze

connection thread M 30 x 1.5
with collar nuts, flat sealing



DN 15	(10)	1131204
DN 20	(10)	1131206
DN 25	(10)	1131208
DN 32	(5)	1131210
DN 40	(5)	1131212
DN 50	(5)	1131216

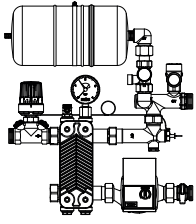
Function:

For use as diverting valve, the three-way valve has one inlet port (AB) and two outlet ports (A and B). Depending on the position of the valve disc, the direction of flow is diverted from one to the other outlet port.

For use as mixing valve, the three-way valve has two inlet ports (A and B) and one outlet port (AB). Depending on the position of the valve disc, the cold and hot water is mixed.

The three-way valves "Tri-CTR" can be used for high differential pressures.

Combination possibilities of valves and actuators: Page 3.08

**"Regufloor HX"****Control unit DN 25 Heating**

for connection to the stainless steel distributor/collector
 For flow temperature control of
 surface heating systems, with heat exchanger.

with high-efficiency pump
 Wilo-Yonos PARA RS Ku 15/6, 130 mm
 (Energy Efficiency Index EEI ≤ 0.23
 according to EC Regulation 641/2009)

1151065

with Wilo pump E15/1-5
 (export model, only for sales
 outside the European Union)

1151060**Application:**

Fixed value control unit for the operation
 of open vented surface heating systems in
 heating systems (separate circuits).
 Installation on the left hand side of the
 distributor/collector.

Connection of 2-12 heating circuits.

Max. operating pressure:

Primary side: 6 bar

Secondary side: 3 bar

Max. flow temperature:

Primary side: 90 °C

Secondary side: 50 °C

Control range temperature controller:

20–50 °C

Description:

Pre-assembled and tested fixed value control
 unit with electronic pump (plastic body).

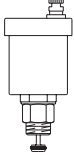

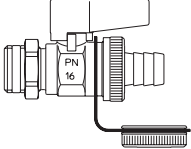
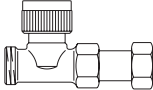
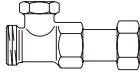
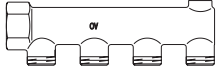
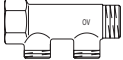
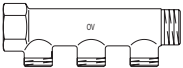
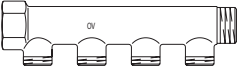

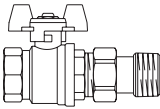
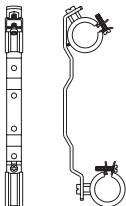
Heat exchanger, diaphragm expansion tank
 (3 l), pressure gauge, safety valve.



2.1 Single components for distributors/collectors

Content

Individual components for distributor systems	2.74
Accessories	2.75

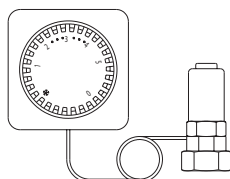
Article	Packing unit	Article-No.	Hint
Individual components for distributor systems			Distributor systems for central heating systems.
	Brass automatic airvent with automatic shut off		If not stated otherwise, all products are made of brass.
	G 3/8	(10) 1088303	
	Vent plug G 3/8		
	self sealing, set = 10 pieces	1400392	
	self sealing, with couternut, with hose connection (soft seal) and cap		
	DN 10	(50) 1033313	
	Flow valve "AZ" for thermostatic control		Valve for the flow distributor of surface heating systems.
	DN 15 G 3/4 M x G 3/4 F	(25) 1400164	
	Return flow lockshield valve "Combi 2" with presetting and isolating facility		Lockshield valve for the return collector of underfloor heating systems.
	DN 15 G 3/4 M x G 3/4 F	(25) 1401194	
	Brass terminal distributor/collector G 1 female thread		
	G 3/4 male thread for circuit connection		
	G 3/8 female thread for airvent connection		
	4 outlets	(2) 1400554	
	Brass distributor/collector G 1 female thread x G 1 male thread		
	G 3/4 male thread for circuit connection		
	2 outlets	(2) 1400652	
	3 outlets		
	(2) 1400653		
	4 outlets		
	(2) 1400654		
	Terminal cap G 1 female thread		
	G 3/8 female thread for airvent connection	(10) 1400691	
	G 1/2 female thread for fill and drain ball valve connection		
	Ball valve DN 25 with coupling flat sealing		
	(10) 1406394		
	Bracket		Bracket with mounting clip.
	steel, galvanised	(25) 1401061	For the installation of the distributor/collector into the cabinet or onto the wall.
			Sound absorbing as per DIN 4109.

Article

Packing
unit Article-No.

Hint

Accessories



Thermostat with remote control "Uni FH" white

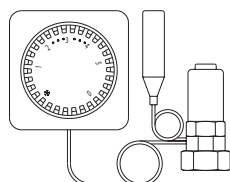
capillary 2 m long **1012295**
capillary 5 m long **1012296**
capillary 10 m long **1012297**

Thermostats with remote control and with remote transmission are especially suitable for trench heaters, encased radiators and surface heating systems.

Max. heating water temperature: 120 °C

with '0' setting

white,
with additional remote sensor



capillary 2 m long **1012395**
capillary 5 m long **1012396**

with '0' setting

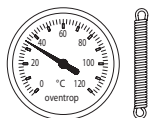
For further information see
"Technical information":



Manual heads white

connection thread M 30 x 1.5 (10) **1012565**

The manual head allows the subsequent conversion to actuators or thermostats without the necessity to drain the system.



Contact thermometer
for distributors/collectors (50) **1404095**



Coupling
DN 15 (G ¾ c/nut x R ½ M) (50) **1019304**



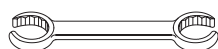
Blind plug G ½
self sealing (100) **1401704**

Cap G ¾ female thread
(not illustr.) **1400692**

To close outlets not in use.

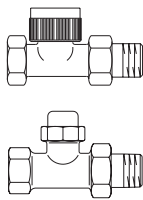
Cap G 1 female thread
(not illustr.) (10) **1400693**

Can be used instead of the cap, but does not allow the connection of an airvent or a fill and drain ball valve.



Ring spanner
Spanner size 30/32 **1401091**

For the installation of the compression fittings.



2.m Regulating sets for surface heating systems

Content

Regulating sets for surface heating systems	2.78
---	------

Article

Article-No.

Hint

Regulating sets for surface heating systems with bypass valve

Set no. 1

for surfaces up to 85 m²

1144251

consisting of:

Valve DN 15, brass, nickel plated
straight pattern
item no. 1180104 (M 30 x 1.5)

Bypass valve DN 20, brass, nickel plated
straight pattern
item no. 1027666

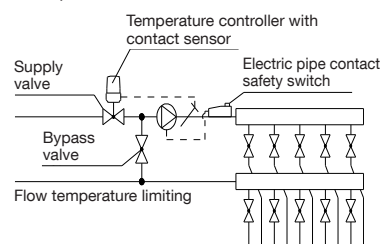
Temperature controller
with contact sensor
and heat transfer unit
capillary 2 m long
control range 20–50 °C
item no. 1142861 (M 30 x 1.5)

Electric pipe contact safety switch
with concealed temperature setting
control range 20–90 °C
item no. 1143000

Application:

The regulating set with bypass valve is required for the control of the flow temperature of a surface heating system, for instance in combined radiator/surface heating systems. The required flow temperature is set at the temperature controller. The electric pipe contact safety switch switches the circulation pump off as soon as the set flow temperature is exceeded. The bypass valve serves to regulate the flow rate of the surface heating circuit.

Example:



For further information see
"Technical information":



Set no. 2

for surfaces up to 120 m²

1144252

consisting of:

Valve DN 20, brass, nickel plated
straight pattern
item no. 1187106 (M 30 x 1,5)

Bypass valve DN 25, brass, nickel plated
straight pattern
item no. 1027668

Temperature controller
with contact sensor
and heat transfer unit
capillary 2 m long
control range 20–50 °C
item no. 1142861 (M 30 x 1.5)

Electric pipe contact safety switch
with concealed temperature setting
control range 20–90 °C
item no. 1143000

Article

Article-No.

Hint

Regulating set for surface heating systems with "Tri-D TR" three-way diverting valve

Set no. 3

for surfaces up to 200 m²

1144253

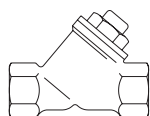
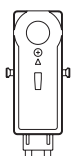
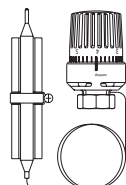
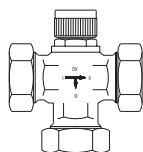
consisting of:

Three-way diverting valve „Tri-D TR“
DN 20 bronze
item no. 1130206 (M 30 x 1.5)

Temperature controller
with contact sensor
and heat transfer unit
capillary 2 m long
control range 20–50 °C
item no. 1142861 (M 30 x 1.5)

Electric pipe contact safety switch
with concealed temperature setting
control range 20–90 °C
item no. 1143000

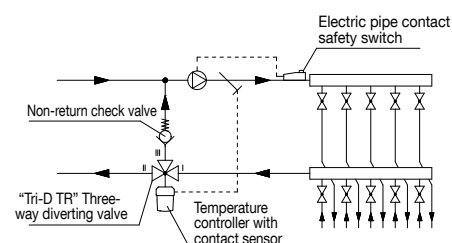
Piston type spring assisted check valve DN 20
bronze/brass
item no. 1072006

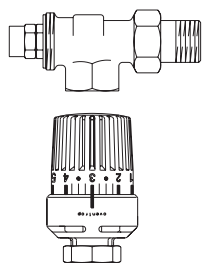


Application:

The regulating set with "Tri-D TR" three-way diverting valve is required for the control of the flow temperature of a surface heating system, for instance in combined radiator/surface heating systems. The required flow temperature is set at the temperature controller. The electric pipe contact safety switch switches the pump off as soon as the set flow temperature is exceeded. Depending on the setting of the temperature controller, the three-way diverting valve divides the volume flow into a return flow and a bypass flow. The check valve installed in the bypass prevents a wrong flow against the three-way diverting valve.

Example:



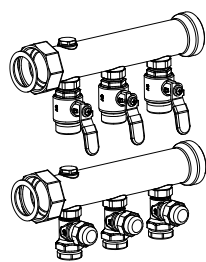


2.n Return temperature limiter set

Content

Return temperature limiter set	2.82
Return temperature limiters	2.82
Thermostat "Uni RTLH"	2.82
Thermostat "Uni RTL"	2.82
Valve inserts	2.82
Gland nut	2.82

Article	kv at 2K P-dev.	Packing unit	Article-No.	Hint
Return temperature limiter set				
Reversed angle connection consisting of:				Application: Central heating systems, combined radiator/surface heating. Max. operating pressure p _s : 10 bar (PN 10)
Reversed angle pattern valve for the return pipe and thermostat "Uni RTLH"				Valve insert with double disc prevents inadvertent overheating, with frost protection. Thermostat "Uni RTLH" with '0' setting, may be limited or locked. Control range: 10 °C-40 °C factory setting (return temperature) max be increased to 50 °C by cancelling the limitation (40 °C).
	0.30		1028364	
Straight pattern connection consisting of:				For further information see "Technical information":
Straight pattern valve for the return pipe and thermostat "Uni RTLH"				
DN 15	0.30		1028464	
Return temperature limiters				
Valves for thermostats "Uni RTLH" connection thread M 30 x 1.5 brass, nickel plated				
Reversed angle pattern valve for the return pipe				
DN 10	0.30	(25)	1024363	Application: Central heating systems, combined radiator/surface heating systems. Max. oprating pressure p _s : 10 bar (PN 10)
DN 15	0.30	(25)	1024364	Valve insert with double disc prevents inadvertent overheating, with frost protection.
Straight pattern valve for the return pipe				
DN 10	0.30	(25)	1024463	
DN 15	0.30	(25)	1024464	
Thermostat "Uni RTLH" connection thread M 30 x 1.5				
white		(25)	1027165	With '0' setting, may be limited or locked. 10-40 °C factory setting (return temperature) may be increased to 50 °C by cancelling the limitation (40 °C).
chrome plated		(25)	1027172	
Thermostat "Uni RTL" connection thread M 30 x 1.5				
white		(25)	1027100	With '0' setting, may be limited or locked. RTL valves with connection thread M 30 x 1.0 are no longer produced.
Valve inserts				
for return flow valves connection thread M 30 x 1.5		(100)	1026981	Valve insert with double disc. Prevents inadvertent overheating, with frost protection.
Gland nut for all RTLH valves				
Set = 5 pieces		(10)	1026986	



2.o Components for concrete core activation

Content	
"Multidis SF" Stainless steel distributor/collector	2.84
PE-Xc "Copex" Plastic pipes	2.84
"Cofit S" Compression fittings	2.84
"Multidis SFI" Brass distributor/collector for industrial surface heating/concrete core activation	2.85
PE-Xc "Copex" Plastic pipes	2.85
"Cofit S" Compression fittings	2.85
"Optiflex" Ball valve	2.86

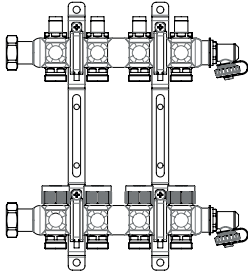
Article

Packing
unit

Article-No.

Hint

"Multidis SF" Stainless steel distributor/collector for surface heating systems/concrete core activation with integrated regulating inserts (flow distributor)
 flat sealing, with valve inserts M 30 x 1.5
 for thermostatic and electronic control



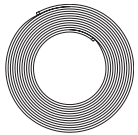
for 2 circuits
 for 3 circuits
 for 4 circuits
 for 5 circuits
 for 6 circuits
 for 7 circuits
 for 8 circuits
 for 9 circuits
 for 10 circuits
 for 11 circuits
 for 12 circuits

1405552*
1405553*
1405554*
1405555*
1405556*
1405557*
1405558*
1405559*
1405560*
1405561*
1405562*

Application:
 Stainless steel distributor/collector for surface heating and cooling systems.
 Max. operating pressure p_s : 6 bar (PN 6)
 Max. operating temperature t_s : 80 °C

Description:
 Distributor/collector pre-assembled. With fill and drain valves. Heating circuit connections G 3/4 male thread for Oventrop compression fittings.
 Flow distributor with integrated regulating inserts.
 Return collector with integrated valve inserts.
 Bracket (loosely added) sound-absorbing according to DIN 4109.

Further distributors/collectors for surface heating systems: page 2.56



PE-Xc "Copex" Plastic pipes
 with oxygen barrier

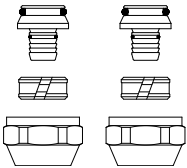
rolls

Dimension 17 x 2 mm

length per roll 120 m (120) **1400251**
 length per roll 240 m (240) **1400252**
 length per roll 600 m (600) **1400254**

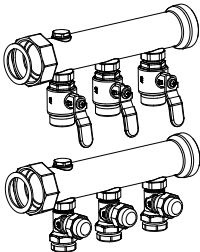
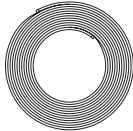
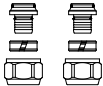
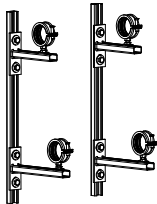

Application:
 Surface heating and cooling.
 Pipes according to DIN 16892/DIN 16893/
 DIN EN ISO 15875/EN 1265-4.
 Oxygen tight according to DIN 4726 (all dimensions).
 Further dimensions: page 2.48
 Max. operating pressure p_s :
 6 bar at 90 °C
 10 bar at 60 °C

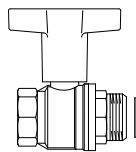
"Cofit S" Compression fittings
 for "Copex" PE-Xc plastic pipes,
 2-fold, metal to metal sealing plus O-ring,
 outlet made of bronze,
 brass compression ring and collar nut,
 collar nut nickel plated



17 x 2.0 mm x G 3/4 collar nut (10) **1507937**

For the connection of the "Copex" PE-Xc plastic pipes to the distributor/collector and for couplings.

Article	Packing unit	Article-No.	Hint
"Multidis SFI" Brass distributor/collector for industrial surface heating/concrete core activation Distributor/collector modules flat sealing, flow distributor with ball valves, return collector with regulating valves, extension to max. 20 circuits by connecting the distributor/collector modules			Application: Brass distributor/collector for surface heating and cooling systems. Max. operating pressure p_s : 6 bar (PN 6) Max. operating temperature t_s : 90 °C Description: Distributor/collector modules pre-assembled. One port G 2 male thread, one port G 2 collar nut with G 1/2 blind plug. Flow distributor with ball valves. Return collector with regulating valves. Heating circuit connections with G 1 male thread for Oventrop compression fittings.
	for 2 circuits	1414452	
	for 3 circuits	1414453	
	for 4 circuits	1414454	
	for 5 circuits	1414455	
	for 6 circuits	1414456	
	PE-Xc "Copex" Plastic pipes with oxygen barrier		Application: Surface heating and cooling. Pipes according to DIN 16892/DIN 16893/ DIN EN ISO 15875/EN 1264-4 (except for dimension 26). Oxygen tight according to DIN 4726 (all dimensions). Max. operating pressure p_s : 6 bar at 90 °C 8 bar at 70 °C Max. operating pressure p_s : 6 bar at 90 °C 10 bar at 60 °C Max. operating pressure p_s : 6 bar at 90 °C 8 bar at 60 °C 10 bar at 20 °C
	rolls		
	Dimension 20 x 2 mm		
	length per roll 240 m	(240)	1400352
	length per roll 600 m	(600)	1400354
	Dimension 26 x 3 mm		
	length per roll 50 m	(50)	1400560
	length per roll 200 m	(200)	1400562
	length per roll 300 m	(300)	1400563
	Dimension 32 x 3 mm		
	length per roll 50 m	(50)	1400660
"Cofit S" Compression fittings for "Copex" PE-Xc plastic pipes, 2-fold, metal to metal sealing plus O-ring, outlet bronze / brass resistant to dezincification, brass compression ring, brass collar nut, unplated			For the connection of "Copex" PE-Xc plastic pipes to the distributor/collector and for couplings.
	20 x 3.0 mm x G 1 collar nut	(10)	1507969
	26 x 3.0 mm x G 1 collar nut	(10)	1507979
	Console for "Multidis SFI" brass distributor/collector 2-fold, steel galvanised, adjustable height and depth		1414490 Consoles with 2 pipe clamps each including sound insulation supports and quick acting lock. Wall attachment included.
	Cap G 2 female thread for "Multidis SFI" brass distributor/collector, 2-fold, brass		1414493 For closing the distributor/collector.

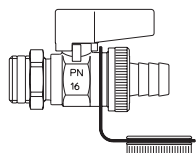


Ball valve
flat sealing

DN 50
G 2 F x G 2 M

1406586

For the isolation of the flow distributors and return collectors.



"Optiflex" Ball valve
brass, handle with stop

self sealing, with couternut,
with hose connection (soft seal)
and cap

DN 15

(50) **1033314**

For filling and venting.