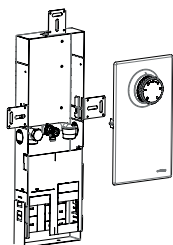


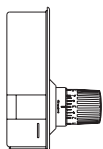
2.a System summary

Content	2.05
System summary	2.06



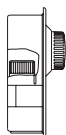
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Fixing channel with isolating facility	2.14
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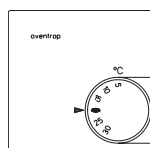
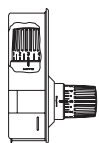
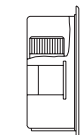
2.c "Unibox" Room temperature control with "Q-Tech" for automatic hydronic balancing

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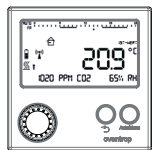
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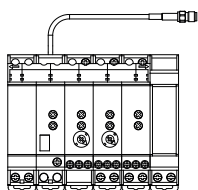
2.e Room thermostats

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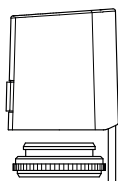
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"RP-S F" Wireless repeater	2.34
"RP-C F" Wireless repeater	2.34
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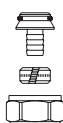
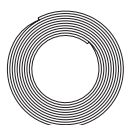
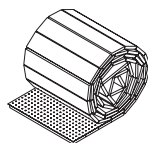
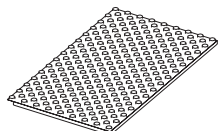
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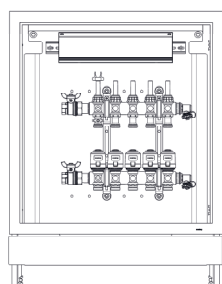
2.h "Cofloor" Systems, "Copex" Pipes and accessories

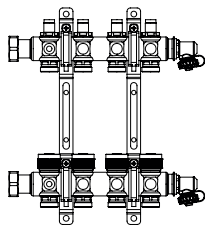
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2.i "Multidis Fix" Distributor/collector systems

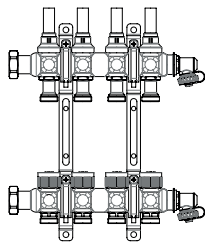
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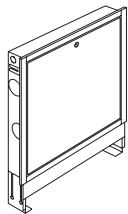
2.j "Multidis SFQ" distributor/collector with "Q-Tech" for automatic hydronic balancing

Content	2.55
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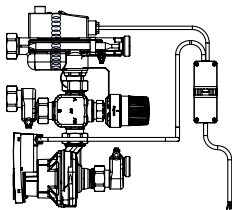


2.k "Multidis SF/SFB/SFI" Distributors/collectors for surface heating and cooling systems

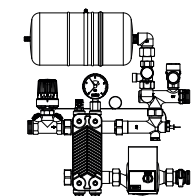
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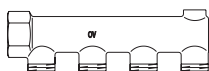
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2.m Single components for distributors/collectors

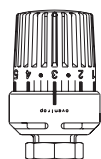
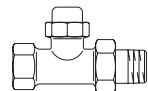
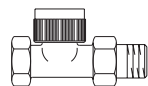


Content	2.75
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2.n Regulating sets for surface heating systems

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Regulating sets for surface heating systems	2.80

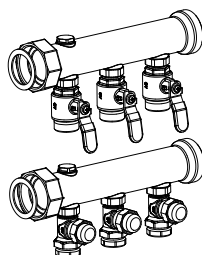


2.o Return temperature limiter set

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2.p Components for concrete core activation

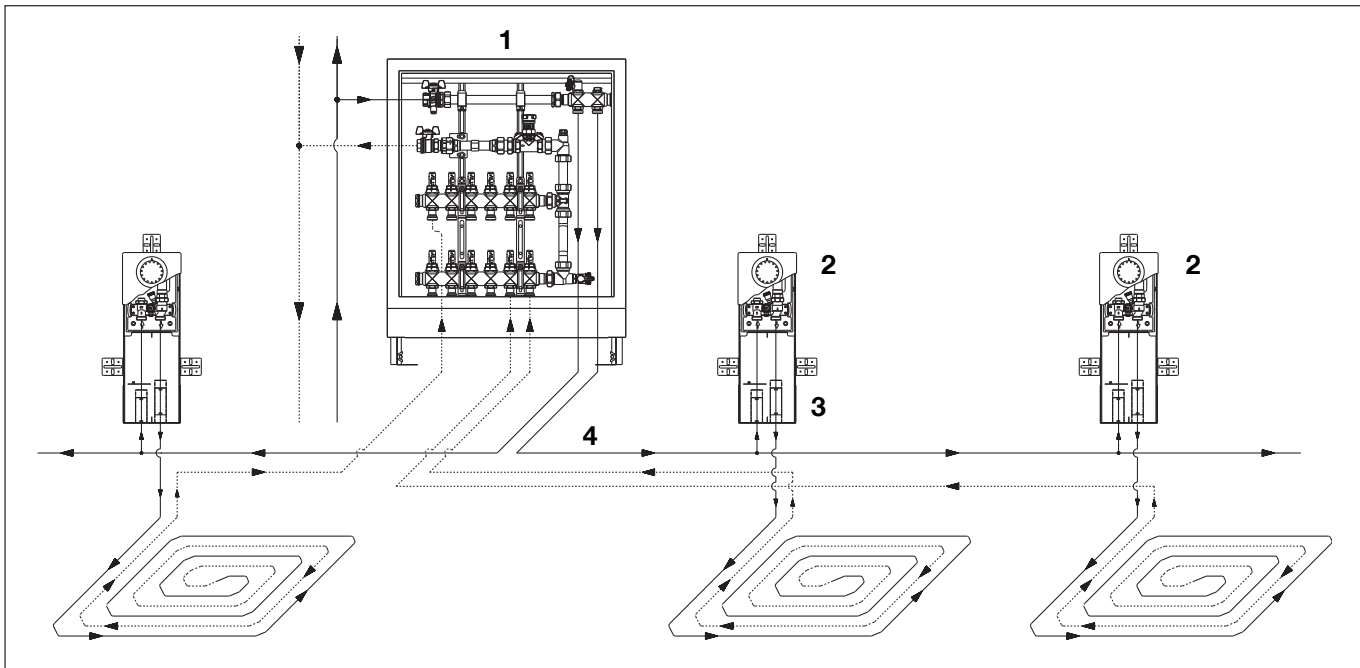
Content	2.85
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PE-Xc "Copex" Plastic pipes	2.87
"Cofit S" Compression fittings	2.87
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2.a System summary

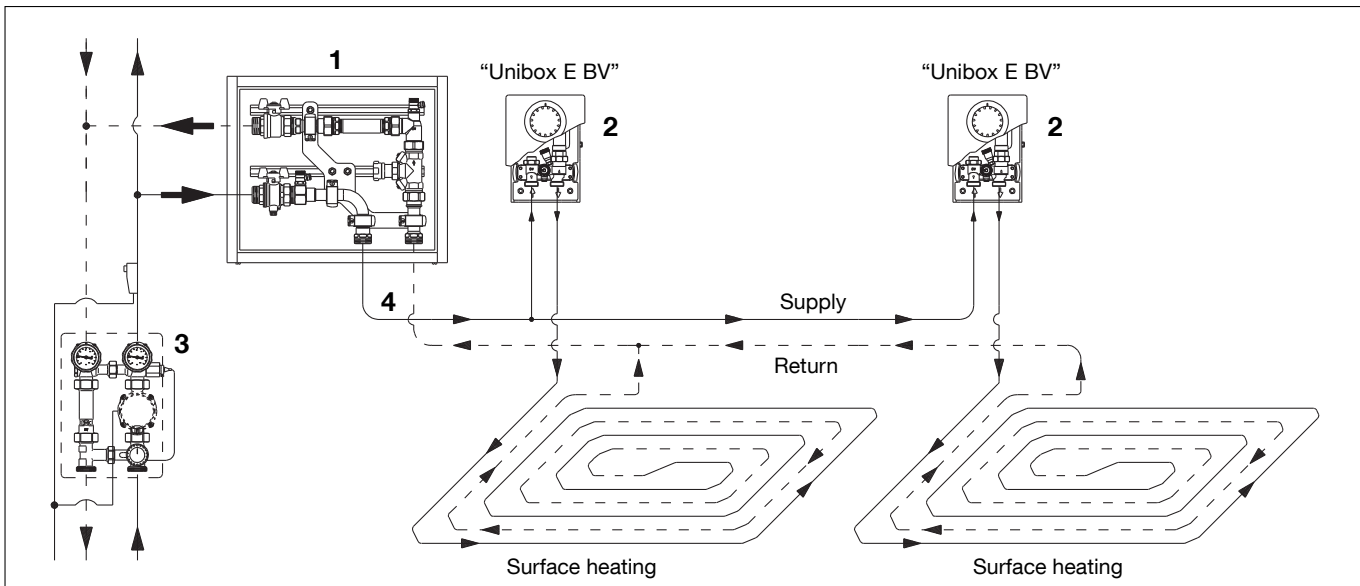
Content

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

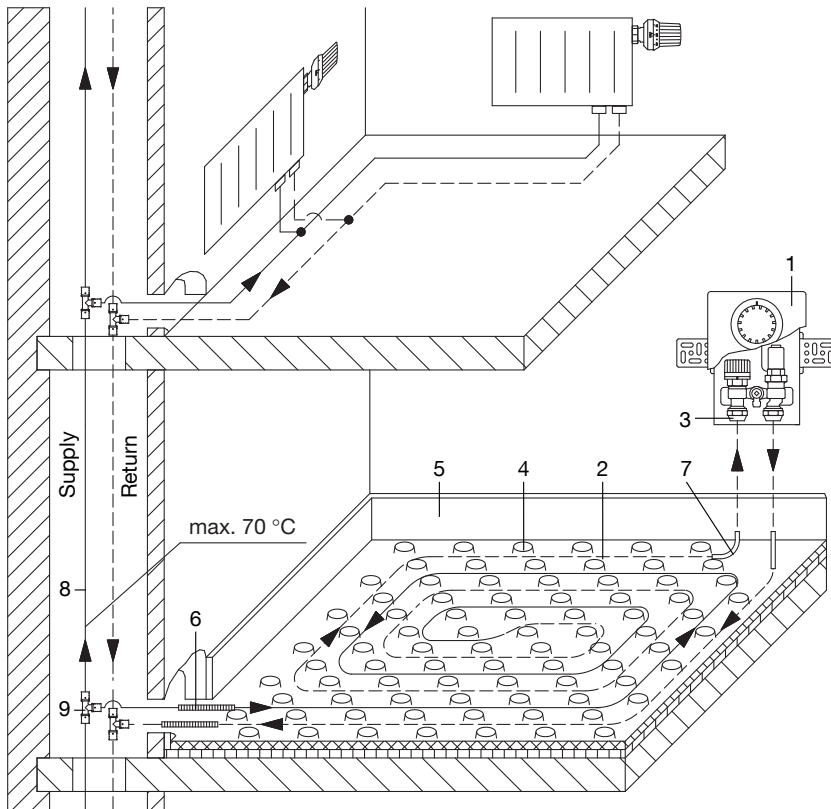
- 1 "Floorbox MH" Return collector
- 2 "Unibox E BV"
- 3 Fixing channel
- 4 "Copipe" Composition pipe
"Copex" PE-Xc pipe
"Copert" PE-RT pipe



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

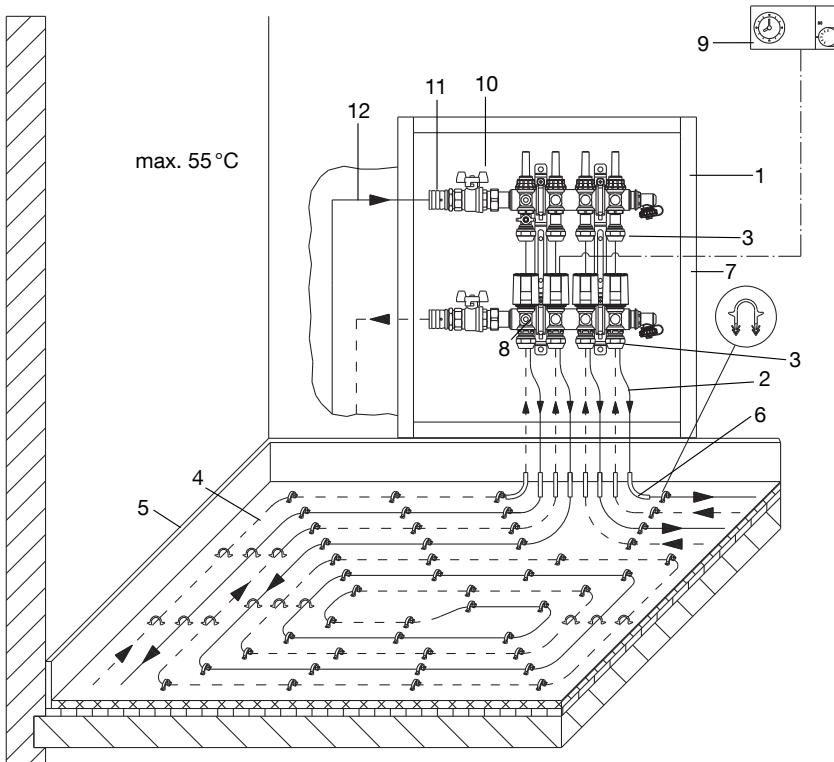
Examples of the application (further examples see product ranges "Unibox", "Multidis" stainless steel distributors/collectors and "Combi-System")



"Cofloor" Surface heating with "Unibox E plus" individual room temperature control

consisting of the Oventrop components:

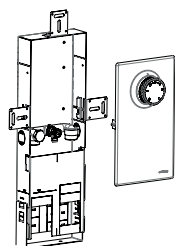
- 1 "Unibox E plus" Installation set
- 2 "Copex" PE-Xc pipe
- 3 "Ofix K" Compression fittings
- 4 Base mat
- 5 Edge insulating strip
- 6 Protection pipe, slit
- 7 Pipe guiding elbow
- 8 "Copipe HSC" Composition pipe
- 9 "Cofit P" Press T-piece



"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



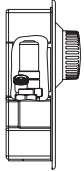
2.b "Unidis" Surface heating system with local flow distribution

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
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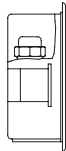
"Unibox E BV" Room temperature control with bypass (exclusive)
 Combination room temperature control
 and presettable bypass
 Depth: 57 mm



0.81	0.34	0.57	1022662
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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 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).

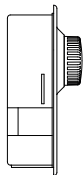
I-57-I



"Unibox RLA" Flush-mounted box for isolation
 Combination isolating and regulating function

Installation set for the isolation of surface heating circuits in combination with "Uniboxes".

Page 2.20.

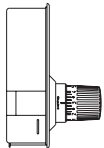


"Unibox E T" Room temperature control (exclusive)
 Room temperature control

Installation set consisting of:
 Wall box unit with presettable thermostatic valve, venting and flushing valve.

Page 2.20.

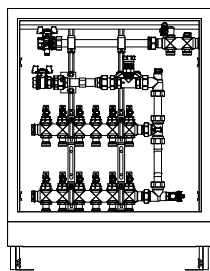
I-57-I



"Unibox T" Room temperature control
 Room temperature control
 with thermostat "Uni LH"

Installation set consisting of:
 Wall box unit with presettable thermostatic valve, venting and flushing valve, cover plate and thermostat "Uni LH".

Page 2.20.

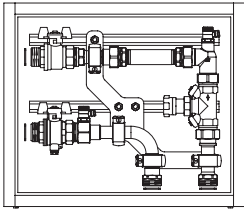


Article	Article-No.	Hint
<p>"Floorbox MH" Return collector for "Unidis" surface heating</p>		<p>The "Floorbox MH" is used for central consolidation of the individual heating circuit returns together with "Uniboxes". (Riser connection from the right and left hand side)</p>
<p>Central consolidation of heating circuit returns in the "Unibox" system, lateral riser connection</p>		
<p>with one return collector (6-fold) for 6 circuits</p>	<p>1027053°</p>	<p>Installation set consisting of:</p>
<p>with two return collectors (4-fold each) for 8 circuits</p>	<p>1027054°</p>	<p>-Cabinet</p>
<p>with two return collectors (5-fold each) for 10 circuits</p>	<p>1027055°</p>	<p>Supply:</p>
<p>with two return collectors (6-fold each) for 12 circuits</p>	<p>1027056°</p>	<p>- Ball valve with temperature sensor connection - 2-fold distributor for the connection of two supply pipes to the boxes</p>
		<p>Return:</p>
		<p>- Two return collectors (with flow measuring and regulating inserts)</p>
		<p>- Fill and drain cock</p>
		<p>- Vent plug</p>
		<p>- "Hycoccon VTZ" Double regulating and commissioning valve</p>
		<p>- Meter stool piece</p>
		<p>- Ball valve</p>

Article	Article-No.	Hint
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"Floorbox U"
Connection without distributor/collector
for surface heating systems

The "Floorbox" serves to connect each dwelling to the surface heating system together with the installation sets "Unibox".



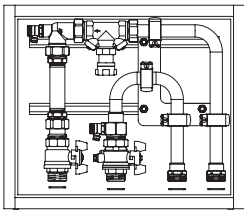
"Floorbox UH" lateral riser connection **1022668**

Installation set consisting of:

Supply:
- Ball valve G 1 with temperature sensor connection

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

lateral connection



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

Depth: 110 - 145 mm
Width: 400 mm
Height: 350 mm

System illustration: page 2.06

For further information see "Technical information":



lower connection

Article

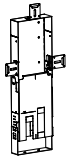
Article-No.

Hint

Fixing channel

for "Unibox", depth: 57 mm

1022653

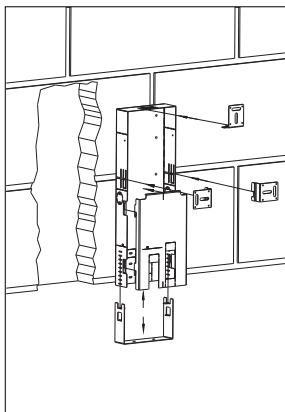


For heavyweight and lightweight walls, made of galvanised steel sheet for pipework installation out of the ground into the wall to the "Unibox". An additionally required installation set of the "Unibox" range has to be ordered separately and has to be installed in the fixing channel. Assembly without 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.

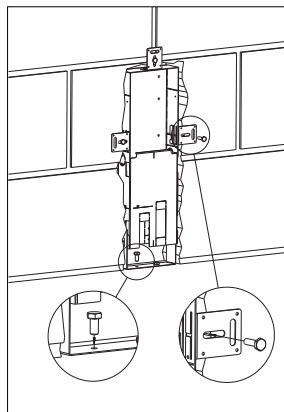
An exact installation of the "Unibox" is guaranteed by the variable installation options. The connection openings (rated break points) of the fixing channel allow the connection of all remote controls, remote sensors (mechanical or electric).

Height: 440 - 490 mm (extendible)
Width: 160 mm

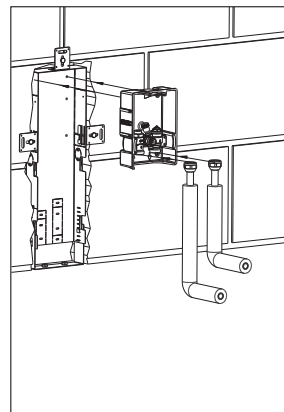
Sequence of installation (summary):



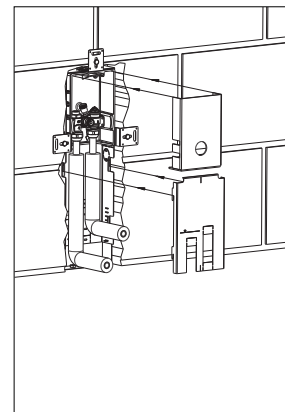
1 Adjust depth and height, align with wall recess



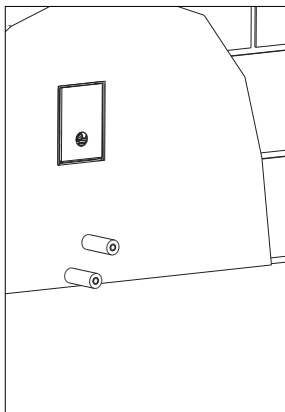
2 Place fixing channel into the wall



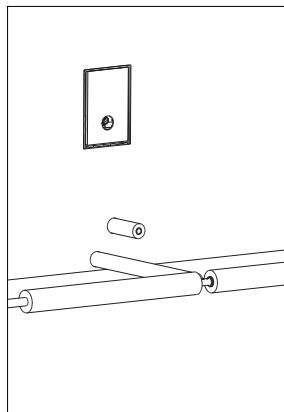
3 Mount "Unibox" and both supply connection pieces



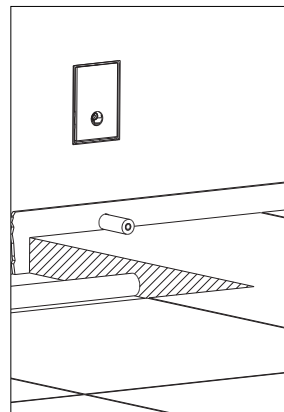
4 Mount protection cover of the "Unibox" and of the fixing channel



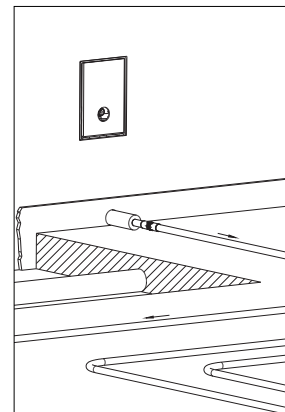
5 Carry out wall plastering



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

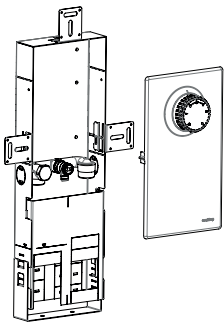


7 Lay edge insulating strip and system board



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

Article	Article-No.	Hint
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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).

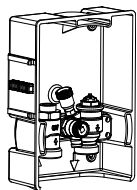
For the connection without distributors/collectors and the room to room isolation of surface heating circuits.

Isolating facility consisting of:
 Isolating valve, venting and flushing valve.
 Valve connection G 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

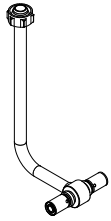
according to DIN EN 1264.

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 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
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Pipe connection press T-piece

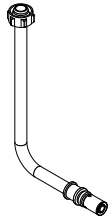
Pipe made of stainless steel, fitting made of brass for composition pipe "Copipe", with "Ofix CEP" - Snap & Seal - compression fitting for male thread G 3/4 according to DIN EN 16313 (cone "Euro")

16 x 2.0 mm	1515153
20 x 2.5 mm	1515156

Height: 321 mm
 Stainless steel pipe: Ø 15 x 1.0 mm

For a simple connection of the "Unibox" to the supply pipe or the heating loop via the fixing channel.

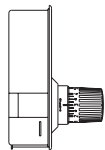
The pipes have to be shortened according to the required installation height.



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 3/4 according to DIN EN 16313 (cone "Euro")

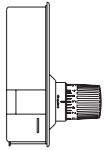
16 x 2.0 mm	1515353
20 x 2.5 mm	1515356



**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



Article	Article-No.
<p>"Unibox TQ" Room temperature control with "Q-Tech" for automatic hydronic balancing Room temperature control with thermostat "Uni LH" Depth: 57 mm</p> <p>white</p>	1022686

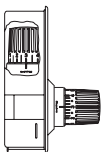
Application:
For installations with flow temperatures suitable for surface heating systems according to DIN EN 1264.

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 3/4 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".



<p>"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</p> <p>white</p>	1022684
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"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 3/4 for Oventrop compression fittings.

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

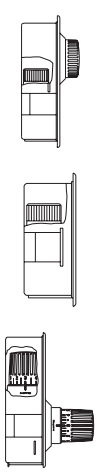
For room temperature control and return temperature limitation.

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

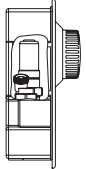
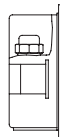
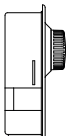
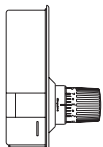
Presetting is carried out by using the presetting key supplied with the "Unibox".



2.d "Unibox" Room temperature control

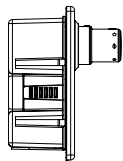
Content

"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
<p>"Unibox E BV" Room temperature control with bypass (exclusive) Combination room temperature control and presettable bypass Depth: 57 mm</p> <p>white</p> 	0.81	0.34	0.57	1022662	<p>"Unibox E" (exclusive model) and "Unibox" individual room temperature control for surface heating systems</p> <p>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 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).</p>
<p>"Unibox RLA" Flush-mounted box for isolation Combination isolating and regulating function Depth: 57 mm</p> <p>white</p> 				1022663	<p>Installation set consisting of: Wall box unit with isolating valve, venting and flushing valve and closed cover plate. Valve connection G 3/4 for Oventrop compression fittings. For the isolation of surface heating circuits in combination with the installation sets "Unibox".</p>
<p>"Unibox E T" Room temperature control (exclusive) Room temperature control Depth: 57 mm</p> <p>white</p> 	0.81	0.34	0.57	1022632	<p>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 3/4 for Oventrop compression fittings. For room temperature control.</p> <p>Temperature range: 7 - 28 °C (room temperature)</p>
<p>"Unibox T" Room temperature control Room temperature control with thermostat "Uni LH" Depth: 57 mm</p> <p>white chrome plated</p> 	1.10 1.10	0.36 0.36	0.67 0.67	1022636 1022646°	<p>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 3/4 for Oventrop compression fittings. For room temperature control.</p> <p>Temperature range: 7 - 28 °C (room temperature)</p> <p>The models "Unibox E T", "Unibox T" and "Unibox TSH" comply with the requirements of the German Energy Saving Directive (EnEV § 14).</p>

Article	kvs	kv at 1K P-dev.	kv at 2K P-dev.	Article-No.	Hint
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"Unibox TSH" Room temperature control with "Uni SH"
 Room temperature control
 with thermostat "Uni SH"
 Depth: 57 mm



white	0.81	0.34	0.57	1022612	
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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).

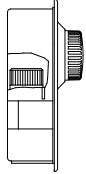
For further information see "Technical information":



Article	kvs	kv at 1K P-dev.	kv at 2K P-dev.	Article-No.	Hint
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"Unibox E plus" Room and return temperature control (exclusive)

Combination room temperature control and limitation of return temperature
Depth: 57 mm



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)

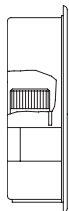
20-40 °C (return temperature)



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 2.77)

or:

- **room thermostat (page 2.28) and actuator** (page 3.89)

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)

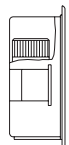
Room temperature depending on the used control.

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

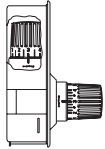
- "Unibox E plus"

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

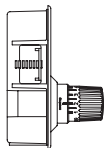


white	1.10	0.67	1022637	
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„Unibox" individual room temperature control and limitation of return temperature for surface heating systems.

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 Trophee du Design
 Interclima Paris Concours de l'Innovation

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





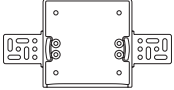

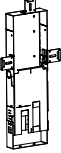

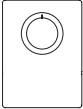
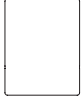




white			1022635	
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Installation set consisting of:
 Wall box unit with RTLH valve, venting and flushing valve, cover plate and thermostat "Uni RTLH" with '0' setting. Valve connection G 3/4 for Oventrop compression fittings.
 The RTLH valve insert with 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).

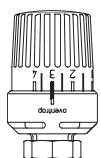
The models
 – "Unibox plus"
 – "Unibox vario"
 comply with the requirements of the German Energy Saving Directive (EnEV § 14).

For further information see "Technical information":



Article	Packing unit	Article-No.	Hint
Conversion set "Unibox T"			
		1022639	Position 1 - 4 are used for the conversion of a "Unibox E RTL" to a "Unibox T".
	for "Unibox E RTL" consisting of: 1 Presettable thermostatic valve 2 Thermostat "Uni LH" 3 Spacer, screws 4 White cover plate		
	5 Wall box unit 6 Bracket 7 Protection cover plate		
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
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Thermostat "Uni RTLH"

white	(25)	1027165
chrome plated	(25)	1027172

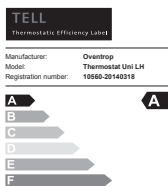
With '0' setting, may be limited or locked. Temperature range: 10 °C - 40 °C factory setting (return temperature) may be increased to 50 °C by cancelling the limitation (40 °C).

Thermostat "Uni LH"



white	(10)	1011465
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with '0' setting
 Busse Design Ulm
 Longlife Design Award

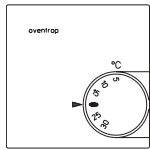


Information: www.tell-online.eu
 A Label of EUnited Valves
 European Valve Manufacturers Association

chrome plated with collar nut cover	(25)	1011469
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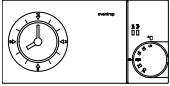
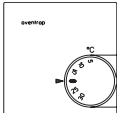


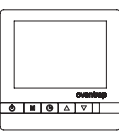
Article	kv at 2K P-dev.	Packing unit	Article-No.	Hint
Valve inserts				
	"AV 9, CV 9, RFV 9, E" and "Multiblock T-RTL" (manufactured since 2016)	0.67	(100) 1187047#	Also for "Hycoccon ETZ" (manufactured since 2016).
	for return flow valves connection thread M 30 x 1.5		(100) 1026981	Valve insert with double disc. Prevents inadvertent overheating, with frost protection.
	"AV 6, RFV 6, E" and "Multiblock T-RTL" (manufactured up to 2015)	0.65	(100) 1187057#	Also for "Hycoccon ETZ" (manufactured up to 2015 inclusive). #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: <ul style="list-style-type: none"> - "Multiblock T/TU/TFU" - "Unibox E T" - "Unibox E plus" - "Unibox E vario" - "Unibox E BV" In case of reversed direction of flow for: <ul style="list-style-type: none"> - "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)
	"AV6U" 0.52		(100) 1187077°	
	"AV9U" 0.57		(100) 1187078	
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 3/4 collar nut 2 x G 3/4 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

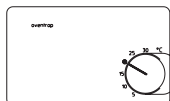
Article	Packing unit	Article-No.	Hint	
Room thermostats (heating)				
Room thermostat-clock - surface mounting (heating)				
	with daily setting		<p>The electric room thermostat-clock is required for individual room temperature control of heating systems in combination with the electrothermal actuators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

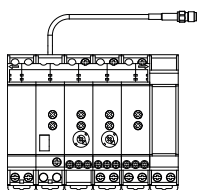
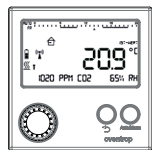


24 V

(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":

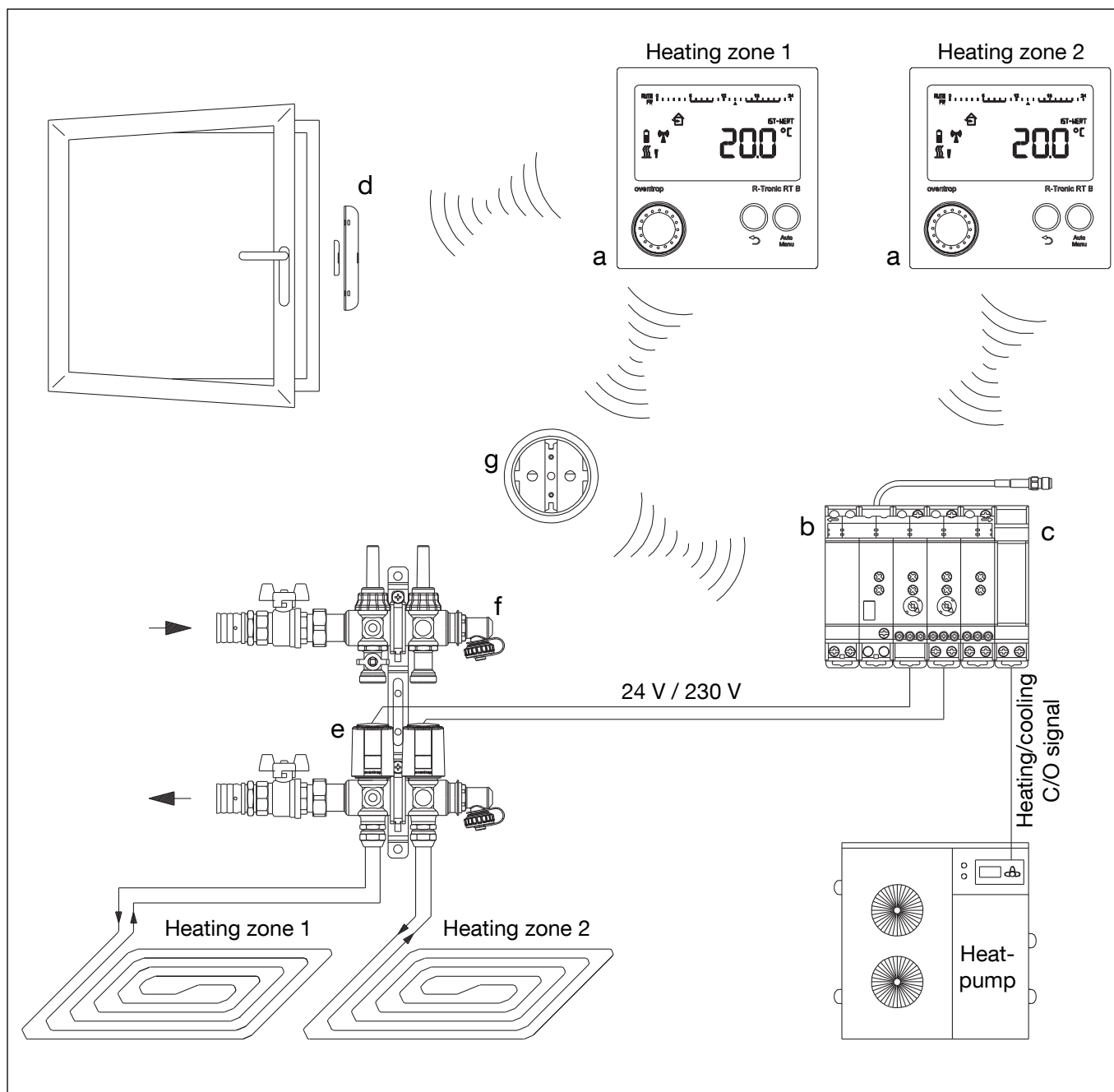




2.f Room thermostats with wireless transmitter, wireless receivers

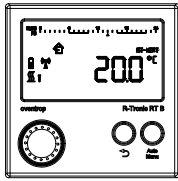
Content

"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

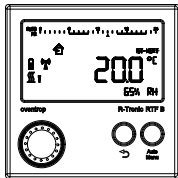
Wireless thermostat with bi-directional wireless communication, battery operated, surface mounting

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

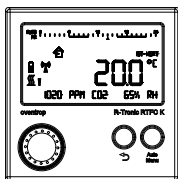
Wireless thermostat with bi-directional wireless communication and integrated humidity sensor, battery operated, surface mounting

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

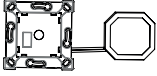
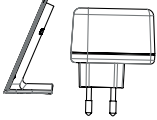

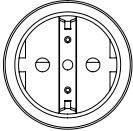

1150682°
1150882#

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

1150684°
1150884#

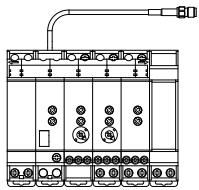
Electronic wireless thermostat "R-Tronic RTFC K" for room temperature control according to adjustable timed programmes. The nominal and actual temperature of the room can be displayed. An integrated humidity sensor supplies information on the relative humidity RH in % and an integrated CO₂ sensor on 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"

Article	Packing unit	Article-No.	Hint
Accessories			
		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).
		1150694	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"
		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.
		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".
	(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.



Article	Article-No.	Hint
<p>"Synet CR" Gateway</p> <p>Centre for the connection of up to 16 "R-Tronic" climate display devices/controls and for regulation in combination with "Q-Tech" valves</p> <p>In preparation.</p>	<p>1150687</p>	<p>Centre for the simple networking, visualization and parameterization of "R-Tronic" climate display devices/contols. 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.</p> <p>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.</p> <p>Access options: -Local access in the building -Worldwide mobile remote access via Internet</p> <p>User interfaces: -Integrated web interface -App for iOS and Android terminals</p> <p>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</p> <p>Installation options: - Wall attachment with the help of the supplied fixing plate. - Table stand with mains adaptor see accessories, page 1.37.</p>



"R-Con" Wireless receiver

230 V, without plug, wiring on site

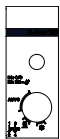
4 channels with logic module	1150770
4 channels without logic module	1150771
8 channels with logic module	1150772
8 channels without logic module	1150773

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.

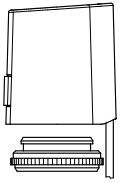


"R-Con HC"

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

1150774

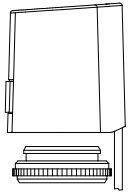
The extension module is connected to the wireless receiver "R-Con" and is used for switching between heating and cooling operation via a C/O signal (change-over input). The C/O signal is provided by a reversible heat pump (voltage free). Furthermore, the "R-Con HC" module features an input for dew point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



2.g Actuators

Content

"Aktor T" Electrothermal actuators	2.38
Accessories	2.38



Article	Packing unit	Article-No.	Hint
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"Aktor T 2P" Electrothermal actuators (two point connection thread M 30 x 1.5)

"H NC", closed with current "off", 230 V	(25)	1012415	
"L NC", closed with current "off", 24 V	(25)	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.

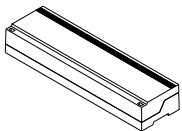
With "First-Open" function and stroke index.

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

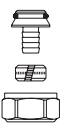
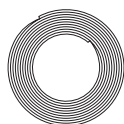
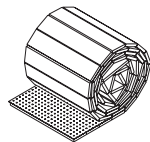
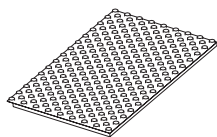


Connecting block (6 control zones)
for room thermostats and actuators

24 V/ 230 V, heating	(25)	1400980	
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Connecting block (10 control zones)
for room thermostats and actuators

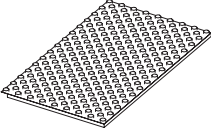
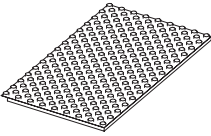
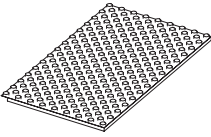
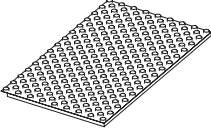
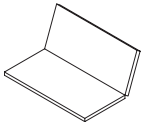
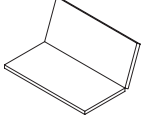
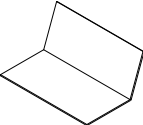
230 V, heating/cooling, pump control	(25)	1400981	
24 V, heating/cooling, pump control	(25)	1400982	

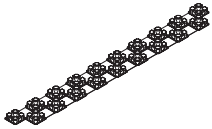
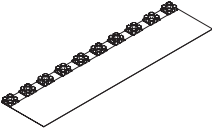
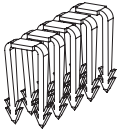


2.h "Cofloor" Systems, "Copex" Pipes and accessories

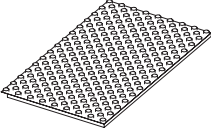
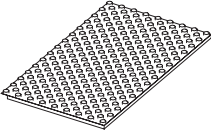
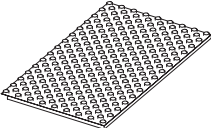
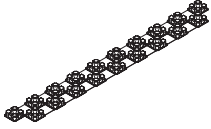
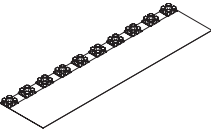
Content

"Cofloor" Base mat system	2.40
"Cofloor" Base mat system NP-R	2.43
"Cofloor" Tacker system	2.44
"Cofloor" Clamping rail system	2.45
"Cofloor" Dry-build system	2.46
Accessories	2.47
PE-Xc "Copex" Plastic pipes	2.49
PE-RT/AL/PE-RT "Copipe HSC" Composition pipes	2.49
PE-RT "Copert" Plastic pipes	2.50
"Ofix K" Compression fittings	2.51
"Cofit S" Compression fittings	2.51
Double nipples	2.52
"Cofit P" Press couplings	2.52

Article	Packing unit	Article-No.	Hint
<p>"Cofloor" Base mat system for fixing 14 and 16 mm pipes with the possibility of 45° diagonal laying without auxiliary material</p> <p>Laying distances 5, 10, 15, 20, 25, 30 cm</p>			Suitable for concrete and liquid screed complying with standards.
		<p>Base mat NP-35 1.0 x 1.0 m = 1.0 m² 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</p> <p>Max. load: 5 kN/m²</p>	<p>Thermal resistivity: R = 0.85 (m² K)/W.</p> <p>Only sold in units of 10 base mats per box.</p>
		<p>Base mat NP-30 1.0 x 1.0 m = 1.0 m² 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</p> <p>Max. load: 5 kN/m²</p>	<p>Thermal resistivity: R = 0.75 (m² K)/W.</p> <p>Only sold in units of 10 base mats per box.</p>
		<p>Base mat NP-11 1.0 x 1.0 = 1.0 m² 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</p> <p>Max. load: 50 kN/m²</p>	<p>Thermal resistivity: R = 0.314 (m² K)/W.</p> <p>Only sold in units of 10 base mats per box.</p>
		<p>Base mat NP 1.0 x 1.0 m = 1.0 m² without thermal insulation made of made of moulded polystyrene foil</p>	<p>Only sold in units of 18 base mats per box.</p>
		<p>Compensation element 35 1.0 x 1.0 m folded, made of expanded polystyrene, thermal conductivity group 040, thickness: 35-2 mm, covered with foil</p>	<p>For fixing of the connection pipes in front of the distributor/collector and for laying in doorways.</p>
		<p>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</p>	
		<p>Compensation element 11 1.0 x 1.0 m folded, made of expanded polystyrene, thermal conductivity group 035, thickness: 11 mm, covered with foil</p>	

Article	Packing unit	Article-No.	Hint
	(10)	1402391	For the connection of butt-jointed base mats.
	(10)	1402392	For use in doorways and the distributor/collector area.
	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
<p>"Cofloor" Base mat system for fixing 14, 16 and 17 mm pipes with the possibility of 45° diagonal laying without auxiliary material</p> <p>Laying distances 6, 12, 18, 24, 30 cm</p>			Suitable for concrete and liquid screed complying with standards.
 <p>Base mat NP-30 1.44 x 0.84 m = 1.2 m² 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</p>			Thermal resistivity: R = 0.75 (m ² K)/W.
Max. load: 5 kN/m ²	(8)	1402430*	Only sold in units of 8 base mats per box.
 <p>Base mat NP-11 1.44 x 0.84 = 1.2 m² 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</p>			Thermal resistivity: R = 0.314 (m ² K)/W.
Max. load: 45 kN/m ²	(8)	1402330*	Only sold in units of 8 base mats per box.
 <p>Base mat NP 1.44 x 0.84 m = 1.2 m² made of moulded polystyrene foil</p>	(14)	1402130*	Only sold in units of 14 base mats per box.
 <p>Connection element for base mat</p>	(10)	1402393*	For the connection of butt-jointed base mats.
 <p>Door and distributor/collector connection element</p>	(10)	1402394*	For use in doorways and the distributor/ collector area.

Article	Packing unit	Article-No.	Hint
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**"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 Alphadur 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!

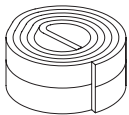
The laying advice must be observed.



Base mat NP-R
 1.0 x 1.0 m = 1.0 m²
 without thermal insulation
 made of moulded polystyrene foil,
 with adhesive layer on reverse

(10) 1402010

Only sold in units of 10 base mats per box.

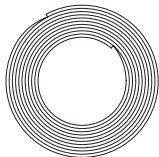


Edge insulating strip
 with adhesive edge
 and integrated fleece back
 height: 50 mm, thickness: 5 mm

length per roll 20 m

(5) 1401990

Only sold in units of 5 rolls per bag.



PE-RT "Copert" Plastic pipe
 with oxygen barrier

rolls

Dimension 12 x 2.0 mm

length per roll 200 m

(200) 1401952

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

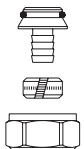
Duo connection piece



1 x G 3/4 collar nut 2 x G 3/4 male thread 1022655

For the connection of two heating circuits.

"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

Article	Packing unit	Article-No.	Hint
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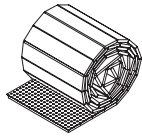
"Cofloor" Tacker system

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



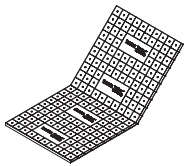
Base mat roll

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

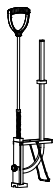
2.0 x 1.0 m = 2.0 m²

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

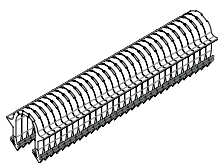
Only sold in units of 5 boards per foil bag.



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


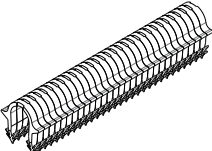
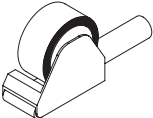

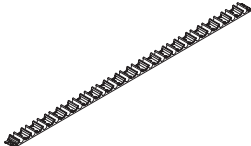
1 magazine = 30 pieces	(10)	1402591
10 magazines = 300 pieces	(20)	1402592

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":



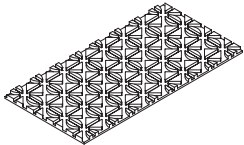
Article	Packing unit	Article-No.	Hint
		1402596*	For fixing the heating pipes onto the base mat roll or folded board by use of tacker hooks.
	10 magazines = 300 pieces	(20) 1402594*	For fixing the heating pipes onto the base mat roll or folded board by use of the tacker machine. Only sold in packing units.
		1402598	For bonding the linings of the base mat rolls or insulation boards.
		(36) 1402599	For bonding the linings of the base mat rolls or insulation boards to prevent penetration of screed water.
"Cofloor" Clamping rail system			
		(100) 1402580	For fixing the heating pipes onto the insulation.
	for 14 mm pipe		
	for 16 mm pipe	(100) 1402581	

Article	Packing unit	Article-No.	Hint
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"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 (m²K)/W.

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

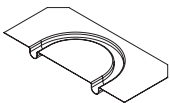


Heat conducting strip
998 x 122 x 0.4 mm
made of galvanised sheet steel

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.

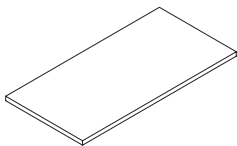


Heat conducting elbow
110 x 245 x 0.5 mm

made of galvanised sheet steel (25) **1402855**

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

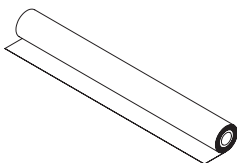
Only sold in units of 25 elbows per box.



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**

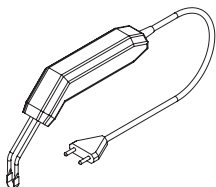
Only sold in units of 19 panels wrapped up in a plastic foil.



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.

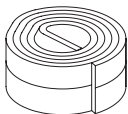

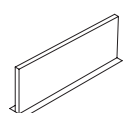

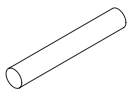





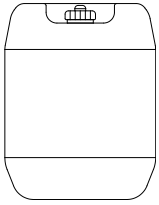
Hot cutting machine **1402891**

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

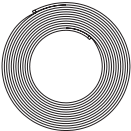
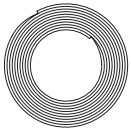
For further information see "Technical information":



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 : 6 bar at 90 °C 10 bar at 60 °C
	length per roll 120 m	(120) 1400051	
	length per roll 240 m	(240) 1400052	
	length per roll 600 m	(600) 1400054	
	Dimension 16 x 2 mm		Max. operating pressure p _s : 6 bar at 90 °C 10 bar at 60 °C
	length per roll 120 m	(120) 1400151	
	length per roll 240 m	(240) 1400152	
	length per roll 600 m	(600) 1400154	
	Dimension 17 x 2 mm		Max. operating pressure p _s : 6 bar at 90 °C 10 bar at 60 °C
	length per roll 120 m	(120) 1400251	
	length per roll 240 m	(240) 1400252	
	length per roll 600 m	(600) 1400254	
Dimension 20 x 2 mm		Max. operating pressure p _s : 6 bar at 90 °C 8 bar at 70 °C	
length per roll 240 m	(240) 1400352		
length per roll 600 m	(600) 1400354		
Dimension 26 x 3 mm		Max. operating pressure p _s : 6 bar at 90 °C 10 bar at 60 °C	
length per roll 50 m	(50) 1400560		
length per roll 200 m	(200) 1400562		
length per roll 300 m	(300) 1400563		
PE-RT/AL/PE-RT "Copipe HSC" Composition pipes			Application: Central heating systems with circulation pump, surface heating and cooling systems as well as sanitary installations.
rolls			
	Dimension 14 x 2 mm		DVGW tested (dimensions 14 x 2.0 mm and 17 x 2.0 mm). DVGW approved (dimensions 16 x 2.0 mm and 20 x 2.5 mm). DVGW reg.-no.: DW-8501 AT2407
	length per roll 50 m	(50) 1541054	
	length per roll 100 m	(100) 1540154	
	length per roll 200 m	(200) 1540254	
	Dimension 16 x 2 mm		Max. operating pressure p _s : 6 bar at 90 °C 10 bar at 70 °C
	length per roll 50 m	(50) 1541055	
	length per roll 100 m	(100) 1540155	
	length per roll 200 m	(200) 1540255	Oxygen tight three-layered composition pipe – 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 500 m	(500) 1540555	
	Dimension 17 x 2 mm		
	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		

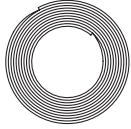
Article	Packing unit	Article-No.	Hint
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PE-RT "Copert" Plastic pipes
with oxygen barrier

Application:
Surface heating and cooling.

rolls

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



Dimension 14 x 2 mm

length per roll 240 m (240) **1402052**
length per roll 600 m (600) **1402054**

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

Dimension 16 x 2 mm

length per roll 240 m (240) **1402152**
length per roll 600 m (600) **1402154**

Dimension 17 x 2 mm

length per roll 240 m (240) **1402252**
length per roll 600 m (600) **1402254**

Dimension 20 x 2 mm

length per roll 240 m (240) **1402352**

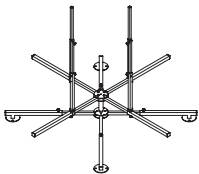
Other sizes, for instance for the installation of risers: page 13.06.

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

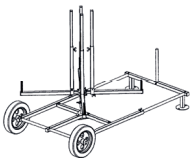
For rolls up to 600 m.
Completely dismountable and collapsible.



fixed (240) **1402096**

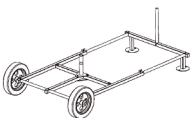
mobile

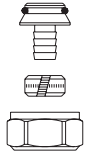
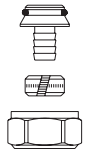
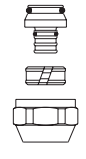
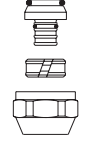
1402098



Transport chart

1402099

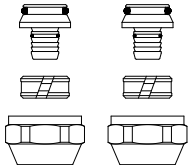


Article	Packing unit	Article-No.	Hint	
"Ofix K" Compression fittings				
for G 3/4 male thread according to DIN EN 16313 (cone "Euro")				
		"Ofix K" for plastic pipes according to DIN 4726, PE-X according to DIN 16892/16893, PB according to DIN 16968, PP according to DIN 8078 A1, collar nut nickel plated , metal to metal sealing plus O-ring	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).	
	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 3/4 male thread according to DIN EN 16313 (cone "Euro"), for "Copipe" 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				
	Collar nut nickel plated			
	14	x 2.0 mm	x G 3/4 c/nut	(10) 1507954
	16	x 2.0 mm	x G 3/4 c/nut	(10) 1507955
	17	x 2.0 mm	x G 3/4 c/nut	(10) 1507959
	Collar nut unplated			
	14	x 2.0 mm	x G 3/4 c/nut	(10) 1507974
	16	x 2.0 mm	x G 3/4 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
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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
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"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

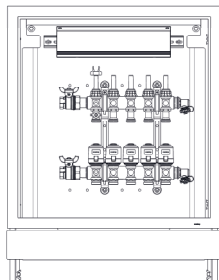
Suitable press bits:

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)

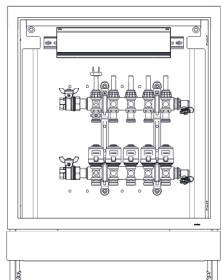
2.i "Multidis Fix" Distributor/collector systems

Content

"Multidis Fix B" Pre-assembled stainless steel distributor/collector fixed in a cabinet	2.54
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Article	Article-No.	Hint
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"Multidis Fix B" Pre-assembled stainless steel distributor/collector fixed in a cabinet
 for surface heating and cooling systems (basic configuration)

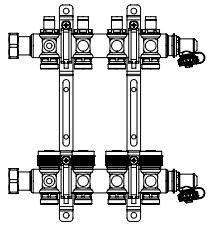
Pre-assembled and ready for connection with stainless steel distributor/connector "Multidis SF", ball valves, actuators, connecting block for actuators, fixed in a flush-mounted cabinet

- | | |
|-----------------|-----------------|
| for 2 circuits | 1406152* |
| for 3 circuits | 1406153* |
| for 4 circuits | 1406154* |
| for 5 circuits | 1406155* |
| for 6 circuits | 1406156* |
| for 7 circuits | 1406157* |
| for 8 circuits | 1406158* |
| for 9 circuits | 1406159* |
| for 10 circuits | 1406160* |
| for 11 circuits | 1406161* |
| for 12 circuits | 1406162* |

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

Installation set consisting of:

- Flush-mounted cabinet
- Stainless steel distributor/collector "Multidis SF" with integrated flow measuring and regulating devices 0 - 5 l/min in the flow distributor
- Ball valves DN 20
- "Aktor T 2P" electrothermal actuators, closed with current "off", 230 V
- Connecting block



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

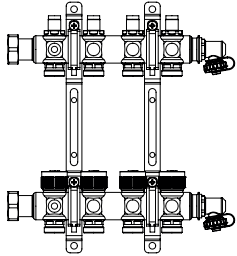
Content

"Multidis SFQ" Stainless steel distributor/collector	2.56
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Article	Article-No.	Hint
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"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
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

1404752
1404753
1404754
1404755
1404756
1404757
1404758
1404759
1404760
1404761
1404762

Application:

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

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

Max. operating temperature t_s : 80° C

Flow range: 0,5 - 5 l/min

Description:

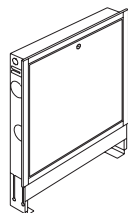
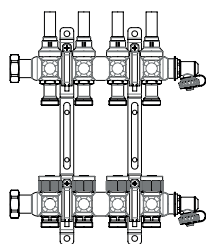
Distributor/collector pre-assembled. With fill and drain valves.

Heating circuit connections G 3/4 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 2.62



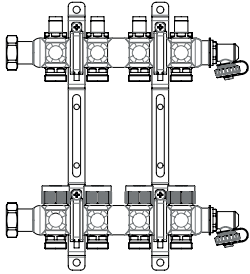
2.k "Multidis SF/SFB/SFI" Distributors/collectors for surface heating and cooling systems

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"Hycocon DTZ" Differential pressure regulator	2.65

Article	Article-No.	Hint
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"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



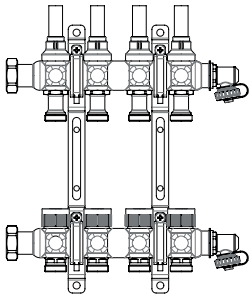
for 2 circuits	1405552
for 3 circuits	1405553
for 4 circuits	1405554
for 5 circuits	1405555
for 6 circuits	1405556
for 7 circuits	1405557
for 8 circuits	1405558
for 9 circuits	1405559
for 10 circuits	1405560
for 11 circuits	1405561
for 12 circuits	1405562

Application:
Stainless steel distributor/collector for surface heating and cooling systems.
Max. operating pressure p_g : 6 bar (PN 6)
Max. operating temperature t_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. Brackets (loosely added) sound-absorbing according to DIN 4109.

Cabinets and dimension chart: page 2.62

"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

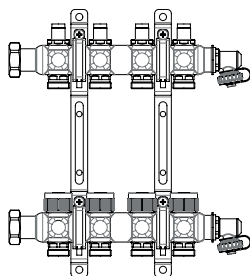


for 2 circuits	1405352
for 3 circuits	1405353
for 4 circuits	1405354
for 5 circuits	1405355
for 6 circuits	1405356
for 7 circuits	1405357
for 8 circuits	1405358
for 9 circuits	1405359
for 10 circuits	1405360
for 11 circuits	1405361
for 12 circuits	1405362

Article	Article-No.	Hint
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"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

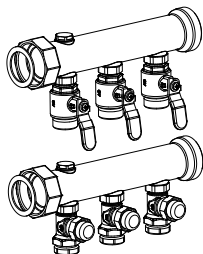
Application:
Stainless steel distributor/collector for surface heating and cooling systems.
Max. operating pressure p_s : 6 bar (PN 6)
Max. operating temperature t_s : 80°C
Setting of a minimum volume flow via the bypass at the heating circuit valve guaranteeing a perfect operation of heat pumps and 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 $\frac{3}{4}$ 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 2.62

"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



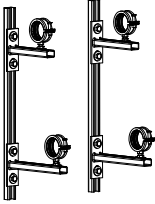
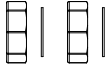
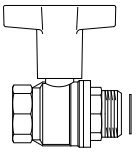
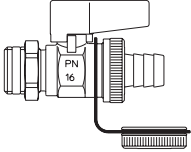


for 2 circuits	1414452
for 3 circuits	1414453
for 4 circuits	1414454
for 5 circuits	1414455
for 6 circuits	1414456

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 $\frac{1}{2}$ blind plug.
Flow distributor with ball valves. Return collector with regulating valves.
Heating circuit connections with G 1 male thread for Oventrop compression fittings.

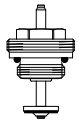
For further information see "Technical information":



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

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

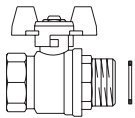
nickel plated

G 3/4 male x G 1 male	(50)	1407206	
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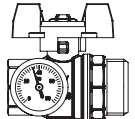
For the connection of two stainless steel distributors/collectors "Multidis SF" (do not exceed a maximum of 12 heating circuits in total).

Ball valves

flat sealing



DN 20	G 3/4 F x G 1 M	(10)	1406383
DN 25	G 1 F x G 1 M	(10)	1406384

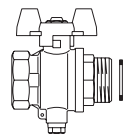


flat sealing, with thermometer (0–80°C)
with red T-handle

DN 20	G 3/4 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 3/4 F x G 1 M	1406583
DN 25	G 1 F x G 1 M	1406584

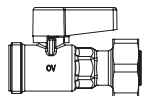


flat sealing,
with sensor connection M 10 x 1.0

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

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



with cone "Euro"

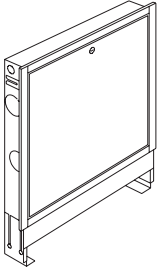
G 3/4 male x G 3/4 collar nut	(50)	1406504
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Ball valve for the isolation of the heating circuits at the distributor/collector. Heating circuit connection G 3/4 male thread according to DIN EN 16313 (cone "Euro") for Oventrop compression fittings. Distributor/collector connection with collar nut G 3/4 and O-ring seal.

Article Article-No. Hint

Flush-mounted cabinets

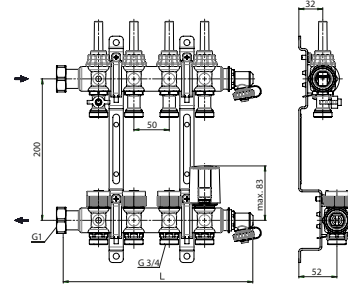
steel, galvanised, frame and doors white lacquered
removable screen



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.

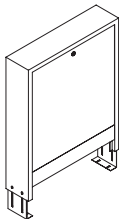


Outlet	Length (L)	No. ^{oo}	Length (L) with ball valve 1406384	No. ^{oo}
2	168 mm	1	248 mm	1
3	218 mm	1	298 mm	1
4	268 mm	1	348 mm	1
5	318 mm	1	398 mm	1
6	368 mm	1	448 mm	1
7	418 mm	1	498 mm	2
8	468 mm	2	548 mm	2
9	518 mm	2	598 mm	3
10	568 mm	2	648 mm	3
11	618 mm	3	698 mm	3
12	668 mm	3	748 mm	3

^{oo}No. of cabinets

Surface-mounted cabinets

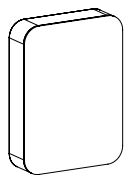
Surface-mounted model
steel, galvanised, frame and doors white lacquered



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.



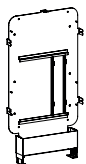
"Regubox" Exclusive cabinet
with white, frameless, opaque and lockable glass door

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.

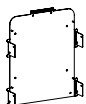
Awards:
DESIGN PLUS ISH Frankfurt 2015
 **ICONIC AWARDS** 2015
 **GERMAN DESIGN AWARD SPECIAL** 2016
 **iF Design Award** 2016



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

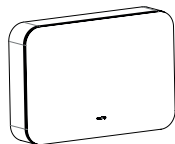
Floor-standing installation, adjustable height **1341099**

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.



Surface-mounted model **1341298***
for stainless steel distributors/collectors "Multidis SF" with a maximum of 9 heating circuit connections (angle pattern connection set, item no. 1404780, taken into account)

Dimensions (W x H x D):
900 mm x 600 mm 170 mm
The mounting set for installation during construction for floor-standing installation (item no. 1341099) is to be ordered separately.

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

Only for "Regubox", item no. 1341298.

Floor-standing installation adjustable height **1341299***



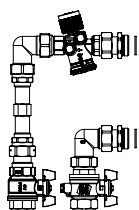
Cylinder lock
with key

for surface-mounted cabinets (1401171-74) **1401190**

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

for flush-mounted cabinets (1401151-54) **1401191**

Article	Article-No.	Hint
<p>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</p>		
	<p>Set no. 1 with double regulating and commissioning valve "Hycococon VTZ"</p> <p>Angle pattern:</p> <p>with ball valves DN 20 1404578 with ball valves DN 25 1404580</p>	<p>Heat meter connection sets are suitable for left and right hand side connection to the distributor/collector.</p> <p>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</p>
<p>Straight pattern:</p> <p>with ball valves DN 20 1404579 with ball valves DN 25 1404581</p>	<p>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</p>	
	<p>Set no. 2 with differential pressure regulator "Hycococon DTZ"</p> <p>Angle pattern:</p> <p>with ball valves DN 25 1404680</p>	<p>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</p>
<p>Straight pattern:</p> <p>with ball valves DN 25 1404681</p>	<p>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</p>	
	<p>Set no. 3 with pressure independent control valve „Cocon QTZ“</p> <p>Angle pattern:</p> <p>DN 25, 150 - 1050 l/h 1404880 DN 25, 180 - 1300 l/h 1404882*</p>	<p>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</p>
<p>Straight pattern:</p> <p>DN 25, 150 - 1050 l/h 1404881 DN 25, 180 - 1300 l/h 1404883*</p>	<p>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</p>	



Set no. 4
 with pressure independent control valve "Cocon QTZ"
 and connection fitting G 1 male x G 1 collar nut

Angle pattern

DN 25, 150 - 1050 l/h **1694890***
 DN 25, 180 - 1300 l/h **1694892***

Set no. 4 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

Note:
**Not suitable for Oventrop distributors/
 collectors.**

Straight pattern:

DN 25, 150 - 1050 l/h **1694891***
 DN 25, 180 - 1300 l/h **1694893***



Differential pressure relief device
 for "Multidis SF/SFB" stainless steel distributors/collectors

G 3/4 male thread **1404790**

Differential pressure relief device for the right
 hand side connection to the distributor/
 collector.
 To avoid flow noises.

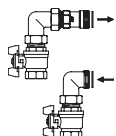
Control range: 50-400 mbar

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

1404780

Angle pattern connection set for a bottom
 connection to the distributor/collector when
 using surface-mounted cabinets.



**"Hycococon VTZ" Double regulating and commissioning valve
 with infinitely adjustable presetting**

"eco" measuring technique

both ports with integrated pressure test points and drain valves

both ports male thread, flat sealing

DN 20 2.70 (10) **1061856**

"eco" measuring technique:

Information: page 3.98.

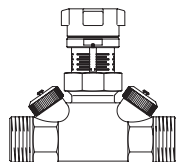
Operating temperature:

-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

both ports male thread without collar nut

DN 20 2.70 **1062156**

"eco" measuring technique:

Information: page 3.98.

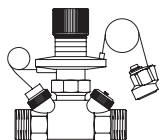
Operating temperature:

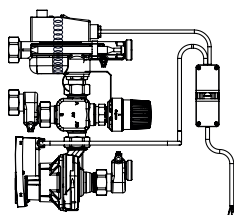
-10 °C up to +120 °C

General information:

Body and bonnet made of brass resistant to
 dezincification.

Male thread G 1.

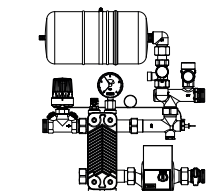


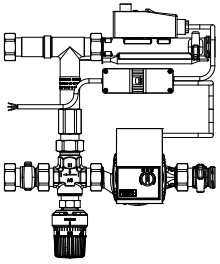
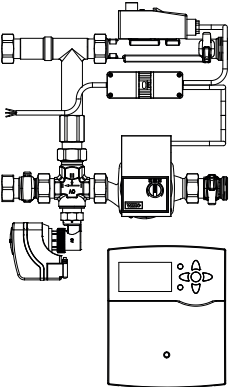
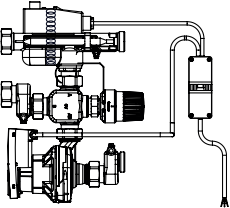


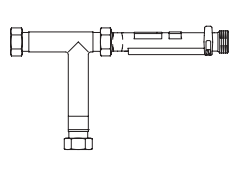
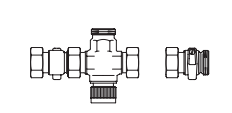
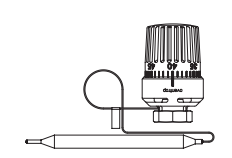
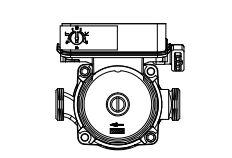
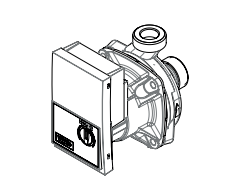
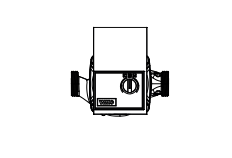
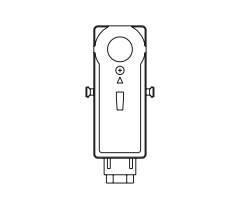
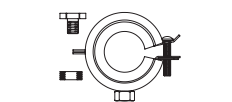
2.1 "Regufloor" Control units

Content

"Regufloor H"	2.68
"Regufloor HW"	2.68
"Regufloor HN"	2.68
System components	2.69
"Regtronic EH" Heating circuit controller	2.70
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"Regufloor HC"	2.72
System components for "Regufloor HC"	2.72
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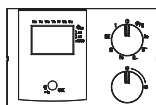


Article	Packing unit	Article-No.	Hint
		<p>"Regufloor H" Control unit DN 25 Heating for connection to the stainless steel distributor/collector</p> <p>with high-efficiency pump (5) 1151300 Wilo-Yonos PARA RS 15/6, 130 mm (Energy Efficiency Index EEI ≤ 0.23 according to EC Regulation 641/2009)</p> <p>with Wilo pump E15/ 1-5 1151000 (export model, only for sales outside the European Union)</p>	<p>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</p>
		<p>"Regufloor HW" Control unit DN 25 Heating as above, but with weather guided control for connection to the stainless steel distributor/collector</p> <p>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)</p> <p>with Wilo pump E15/1-5 and 1151500 heating circuit controller "Regtronic EH" (export model, only for sales outside the European Union)</p>	<p>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.</p> <p>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.</p>
		<p>"Regufloor HN" Control unit DN 25 Heating for connection to the stainless steel distributor/collector</p> <p>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)</p>	<p>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</p> <p>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.</p>

	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	1151085	T-connection piece

Article Article-No. Hint

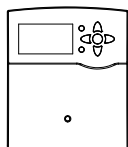
"Regtronic EH" Heating circuit controller



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 **1152093**
 and 3 additional sensors (PT 1000)

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).

with 1 outdoor sensor, **1152090**
 2 additional sensors (PT 1000)
 and remote control including room temperature sensor (PT 1000)

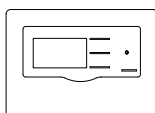
Basic functions: 1 variable and 1 constant temperature heating circuit with heat demand. Extendable by "Regtronic EM". The status can be viewed via a full graphic display. Interfaces: S-bus, SD-card slot for data recording

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

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 (volt 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 6.74.

"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
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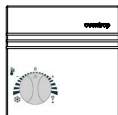
Accessories



Room temperature sensor
PT 1000

1152095

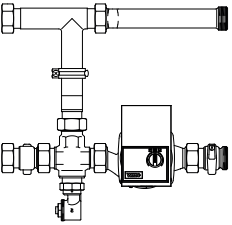
Room temperature sensor for fixing on level surfaces (surface mounting).



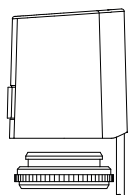
Remote control with
room temperature sensor
PT 1000

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".

Article	Article-No.	Hint	
	"Regufloor HC" Control unit DN 25 Heating/Cooling for connection to the stainless steel distributor/collector	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.	
	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	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
	with Wilo pump E15/1-5 (export model only for sales outside the European Union)	1152000	

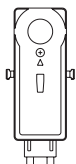
System components for "Regufloor HC"



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

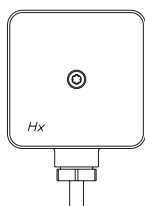
"H NC", closed with current "off", 230 V **1012415**
 "L NC", closed with current "off", 24 V **1012416**

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.



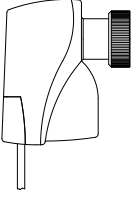
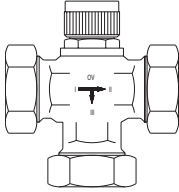
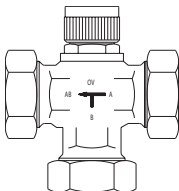
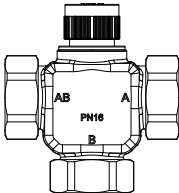
Electric pipe contact safety switch **1151087**

Including cabling for Wilo pump E15/1-5.

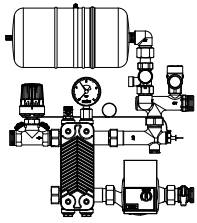


"Sensor GA FD" Dew point control 24 V
 with alternating contact **1141951**

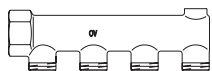
Is required in combination with room thermostats to protect chilled ceilings against condensation.
 An actuator interrupting the cooling water flow is for instance activated in combination with the "Regufloor HC".
 Connection to the cooling water supply.
 Connecting cable 1 m.

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	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.
	"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	
"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°	
	"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



Article	Article-No.	Hint
<p>"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.</p>		<p>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.</p>
<p>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)</p>	<p>1151065</p>	<p>Connection of 2-12 heating circuits. Max. operating pressure: Primary side: 6 bar Secondary side: 3 bar</p>
<p>with Wilo pump E15/1-5 (export model, only for sales outside the European Union)</p>	<p>1151060</p>	<p>Max. flow temperature: Primary side: 90 °C Secondary side: 50 °C Control range temperature controller: 20–50 °C</p>
		<p>Description: Pre-assembled and tested fixed value control unit with electronic pump (plastic body).</p>
		<p>Heat exchanger, diaphragm expansion tank (3 l), pressure gauge, safety valve.</p>

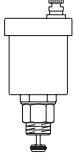

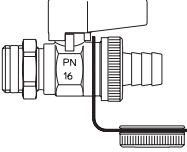
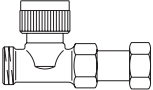
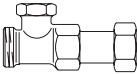
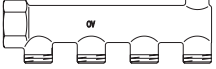
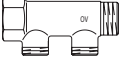
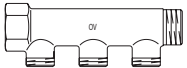
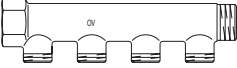

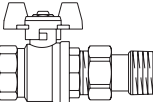
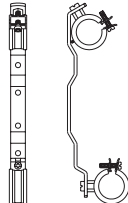


2.m Single components for distributors/collectors

Content

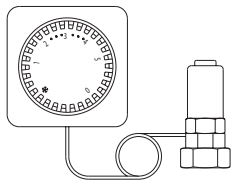
Individual components for distributor systems 2.76

Accessories 2.77

Article	Packing unit	Article-No.	Hint
Individual components for distributor systems			
	Brass automatic airvent with automatic shut off		Distributor systems for central heating systems. 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 3/8 M x G 3/8 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 3/8 M x G 3/8 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 G 1/2 female thread for fill and drain ball valve connection	(10)	1400691
	Ball valve DN 25 with coupling flat sealing	(10)	1406394
	Bracket steel, galvanised		Bracket with mounting clip. For the installation of the distributor/collector into the cabinet or onto the wall. Sound absorbing as per DIN 4109.
		1401061	

Article	Packing unit	Article-No.	Hint
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Accessories



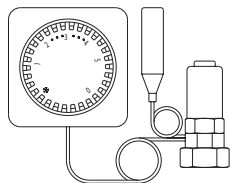
Thermostat with remote control "Uni FH"
white

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

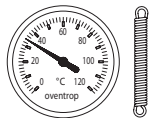
with '0' setting
For further information see
"Technical information":



Manual heads
white

connection thread M 30 x 1.5	(10)	1012565
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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
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Coupling DN 15 (G 3/4 c/nut x R 1/2 M)	(50)	1019304
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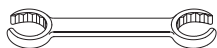
Blind plug G 1/2 self sealing	(100)	1401704
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Cap G 3/4 female thread (not illustr.)		1400692
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To close outlets not in use.

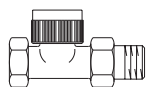
Cap G 1 female thread (not illustr.)	(10)	1400693
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Can be used instead of the cap, but does not allow the connection of an airvent or a fill and drain ball valve.



Ring spanner Spanner size 30/32		1401091
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For the installation of the compression fittings.

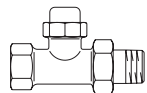


2.n Regulating sets for surface heating systems

Content

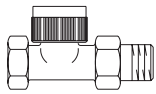
Regulating sets for surface heating systems

2.80



Article	Article-No.	Hint
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Regulating sets for surface heating systems with bypass valve

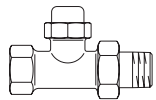


Set no. 1

for surfaces up to 85 m²

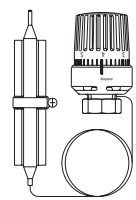
1144251

consisting of:



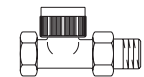
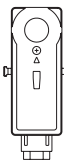
Valve DN 15, brass, nickel plated
straight pattern
item no. 1180104 (M 30 x 1.5)

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



Set no. 2

for surfaces up to 120 m²

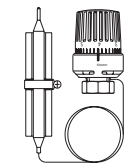
1144252

consisting of:



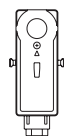
Valve DN 20, brass, nickel plated
straight pattern
item no. 1187106 (M 30 x 1,5)

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)

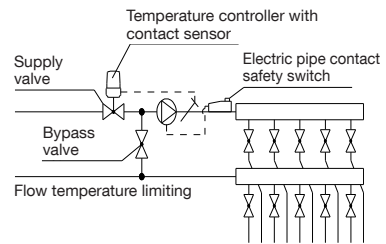
Electric pipe contact safety switch
with concealed temperature setting
control range 20–90 °C
item no. 1143000



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":



Article	Article-No.	Hint
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Regulating set for surface heating systems with "Tri-D TR" three-way diverting valve

Set no. 3
for surfaces up to 200 m² 1144253

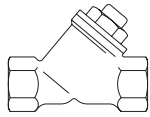
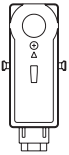
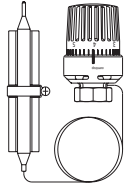
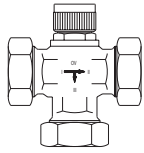
consisting of:

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)

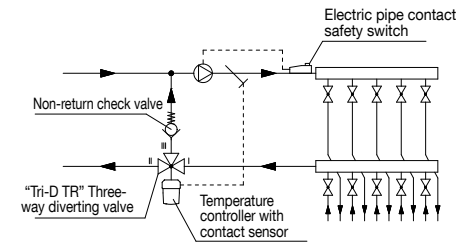
Electric pipe contact safety switch
 with concealed temperature setting
 control range 20–90 °C
 item no. 1143000

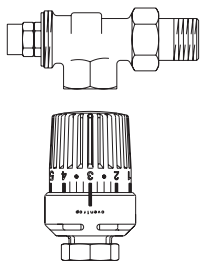
Piston type spring assisted check valve DN 20
 bronze/brass
 item no. 1072006



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:

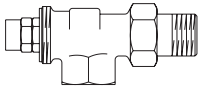

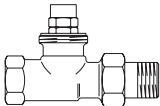

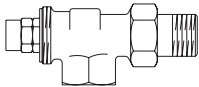
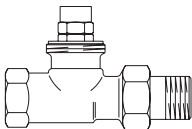
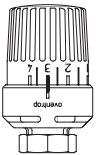







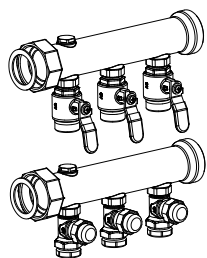
2.o Return temperature limiter set

Content

Return temperature limiter set	2.84
Return temperature limiters	2.84
Thermostat "Uni RTLH"	2.84
Thermostat "Uni RTL"	2.84
Valve inserts	2.84
Gland nut	2.84

Article	kv at 2K P-dev.	Packing unit	Article-No.	Hint
Return temperature limiter set				
	Reversed angle connection consisting of:			
	Reversed angle pattern valve for the return pipe and thermostat "Uni RTLH"			
	0.30		1028364	Application: Central heating systems, combined radiator/surface heating. Max. operating pressure p_s : 10 bar (PN 10)
	Straight pattern connection consisting of:			
	Straight pattern valve for the return pipe and thermostat "Uni RTLH"			
DN 15	0.30		1028464	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).
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. operating pressure p_s : 10 bar (PN 10)
DN 15	0.30	(25)	1024364	
	Straight pattern valve for the return pipe			
DN 10	0.30	(25)	1024463	Valve insert with double disc prevents inadvertent overheating, with frost protection.
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	





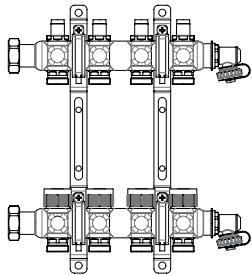
2.p Components for concrete core activation

Content

"Multidis SF" Stainless steel distributor/collector	2.86
PE-Xc "Copex" Plastic pipes	2.86
"Cofit S" Compression fittings	2.86
"Multidis SFI" Brass distributor/collector for industrial surface heating/concrete core activation	2.87
PE-Xc "Copex" Plastic pipes	2.87
"Cofit S" Compression fittings	2.87
"Optiflex" Ball valve	2.88

Article	Packing unit	Article-No.	Hint
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"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

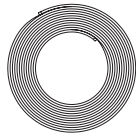


for 2 circuits		1405552
for 3 circuits		1405553
for 4 circuits		1405554
for 5 circuits		1405555
for 6 circuits		1405556
for 7 circuits		1405557
for 8 circuits		1405558
for 9 circuits		1405559
for 10 circuits		1405560
for 11 circuits		1405561
for 12 circuits		1405562

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 2.58



PE-Xc "Copex" Plastic pipes
 with oxygen barrier

rolls

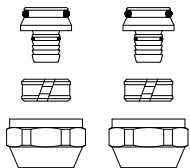
Dimension 17 x 2 mm

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

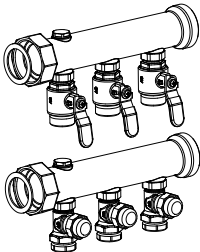
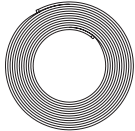
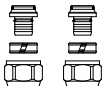
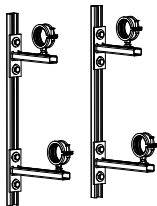

Application:
 Surface heating and cooling.
 Pipes according to DIN 16892/DIN 16893/
 DIN EN ISO 15875/EN 1265-4.
 Oxygen tight according to DIN 4726 (all dimensions).
 Further dimensions: page 2.49
 Max. operating pressure p_s :
 6 bar at 90 °C
 10 bar at 60 °C

"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

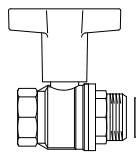
For the connection of the "Copex" PE-Xc plastic pipes to the distributor/collector and for couplings.



17 x 2.0 mm x G 3/4 collar nut	(10)	1507937
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Article	Packing unit	Article-No.	Hint	
<p>"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</p>			<p>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</p> <p>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.</p>	
	for 2 circuits	1414452		
	for 3 circuits	1414453		
	for 4 circuits	1414454		
	for 5 circuits	1414455		
	for 6 circuits	1414456		
	<p>PE-Xc "Copex" Plastic pipes with oxygen barrier</p>		<p>Application: Surface heating and cooling. Pipes according to DIN 16892/DIN 16893/ DIN EN ISO 15875/EN 1264-4 (except for dimension 26).</p> <p>Oxygen tight according to DIN 4726 (all dimensions). Max. operating pressure p_s: 6 bar at 90 °C 8 bar at 70 °C</p>	
	rolls			
	Dimension 20 x 2 mm			<p>Max. operating pressure p_s: 6 bar at 90 °C 10 bar at 60 °C</p>
	length per roll 240 m	(240)	1400352	
	length per roll 600 m	(600)	1400354	
	Dimension 26 x 3 mm			<p>Max. operating pressure p_s: 6 bar at 90 °C 10 bar at 60 °C</p>
	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			<p>Max. operating pressure p_s: 6 bar at 90 °C 8 bar at 60 °C 10 bar at 20 °C</p>
	length per roll 50 m	(50)	1400660	
	<p>"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</p>			<p>For the connection of "Copex" PE-Xc plastic pipes to the distributor/collector and for couplings.</p>
	20 x 3.0 mm x G 1 collar nut	(10) 1507969		
	26 x 3.0 mm x G 1 collar nut	(10) 1507979		
	<p>Console</p>		<p>Consoles with 2 pipe clamps each including sound insulation supports and quick acting lock. Wall attachment included.</p>	
	for "Multidis SFI" brass distributor/collector 2-fold, steel galvanised, adjustable height and depth	1414490		
	<p>Cap G 2 female thread</p>		<p>For closing the distributor/collector.</p>	
	for "Multidis SFI" brass distributor/collector, 2-fold, brass	1414493		

Article	Packing unit	Article-No.	Hint
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Ball valve
flat sealing

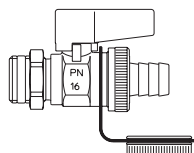
DN 50
G 2 F x G 2 M

1406586

For the isolation of the flow distributors and return collectors.

"Optiflex" Ball valve
brass, handle with stop

For filling and venting.



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

DN 15

(50) **1033314**